



## Clinical trial results:

### **A Phase 3b, Open Label, Controlled, Multi-Center, Extension Study to Assess the Persistence of Bactericidal Activity at 4 to 7.5 Years After Two Dose Primary Series of GlaxoSmithKline Biologicals Meningococcal B Recombinant Vaccine and the Response to a Third Dose in Adolescents and Young Adult Subjects who Previously Participated in Parent Studies V72\_41 and V72P10, Compared to Naïve Healthy Controls** **Summary**

EudraCT number	2017-000093-11
Trial protocol	Outside EU/EEA
Global end of trial date	23 September 2016

#### **Results information**

Result version number	v4 (current)
This version publication date	24 October 2018
First version publication date	14 October 2017
Version creation reason	

#### **Trial information**

##### **Trial identification**

Sponsor protocol code	205218
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##### **Additional study identifiers**

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT02446743
WHO universal trial number (UTN)	-

Notes:

#### **Sponsors**

Sponsor organisation name	GlaxoSmithKline Biologicals
Sponsor organisation address	Rue de l'Institut 89, Rixensart, Belgium, B-1330
Public contact	Clinical Trials Call Center, GlaxoSmithKline Biologicals, 44 2089904466, GSKClinicalSupportHD@gsk.com
Scientific contact	Clinical Trials Call Center, GlaxoSmithKline Biologicals, 44 2089904466, GSKClinicalSupportHD@gsk.com

Notes:

#### **Paediatric regulatory details**

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	Yes

Notes:

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**Results analysis stage**

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Analysis stage	Final
Date of interim/final analysis	22 June 2017
Is this the analysis of the primary completion data?	Yes
Primary completion date	23 September 2016
Global end of trial reached?	Yes
Global end of trial date	23 September 2016
Was the trial ended prematurely?	No

Notes:

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**General information about the trial**

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Main objective of the trial:

- To assess and compare the safety and tolerability of a single dose (booster) of rMenB+OMV NZ administered to follow-on subjects approximately 4 to 7.5 years after a 2 dose primary series, with that of two doses of rMenB+OMV NZ administered to naïve subjects according to a 0, 1-month schedule.
- To assess serum bactericidal activity at approximately 4 to 7.5 years following a 2 dose primary series (persistence) compared to serum bactericidal activity at baseline in vaccination-naïve subjects.

Protection of trial subjects:

The subjects were observed closely for at least 30 minutes following the administration of vaccine(s), with appropriate medical treatment readily available in case of a rare anaphylactic reaction.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	17 November 2015
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

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**Population of trial subjects**

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**Subjects enrolled per country**

Country: Number of subjects enrolled	Australia: 63
Country: Number of subjects enrolled	Canada: 187
Country: Number of subjects enrolled	Chile: 281
Worldwide total number of subjects	531
EEA total number of subjects	0

Notes:

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**Subjects enrolled per age group**

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In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	122
Adults (18-64 years)	409

From 65 to 84 years	0
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

Subjects were recruited from 4 sites in Australia, 6 sites in Canada & 2 sites in Chile. Analysis were performed on the study population (Groups 3B and B\_0\_1), but also repeated & stratified by parent study (i.e., V72\_41 subjects using naïve subjects in Australia and Canada as controls, and V72P10 subjects using naïve subjects in Chile as controls)

### Pre-assignment

Screening details:

All enrolled subjects were included in the study. Only groups 3B & B\_0\_1 were accounted for enrollment number as subjects from parent studies are included in the group 3B.

### Period 1

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

Blinding implementation details:

The study was an open-labelled study. Therefore, no blinding procedures were utilized.

### Arms

Are arms mutually exclusive?	Yes
<b>Arm title</b>	Group 3B

Arm description:

Subjects who received two doses of rMenB+OMV NZ administered at 0, 1 or 0,2 or 0,6 month schedule in study V72P10 (NCT00661713) and at 0,1 month schedule in study V72\_41(NCT0142384), and who received a third dose booster of rMenB+OMV NZ at 4 to 7.5 years after the last dose received during parent studies, and had blood collected at baseline and at 3, 7 and 30 days after the third dose booster.

Arm type	Experimental
Investigational medicinal product name	GlaxoSmithKline Meningococcal group B multicomponent recombinant adsorbed vaccine
Investigational medicinal product code	
Other name	rMenB+OMV NZ
Pharmaceutical forms	Suspension for injection in pre-filled syringe
Routes of administration	Intramuscular use

Dosage and administration details:

One dose (0.5 mL) vaccine administered by intramuscular (IM) injection in the deltoid area of the nondominant arm

<b>Arm title</b>	Group B_0_1
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Arm description:

Naïve subjects from Australia, Canada and Chile, who received two doses of rMenB+OMV NZ at a 0 and 1 month schedule and had blood collected at baseline, 30 days after the first dose and 3 or 7, and 30 days after the second dose

Arm type	Active comparator
Investigational medicinal product name	GlaxoSmithKline Meningococcal group B multicomponent recombinant adsorbed vaccine
Investigational medicinal product code	
Other name	rMenB+OMV NZ
Pharmaceutical forms	Suspension for injection in pre-filled syringe
Routes of administration	Intramuscular use

Dosage and administration details:

One dose (0.5 mL) vaccine administered by intramuscular (IM) injection in the deltoid area of the nondominant arm

<b>Number of subjects in period 1</b>	Group 3B	Group B_0_1
Started	276	255
Completed	271	250
Not completed	5	5
Consent withdrawn by subject	1	1
Adverse event, non-fatal	1	1
Unspecified	2	3
Lost to follow-up	1	-

## Baseline characteristics

### Reporting groups

Reporting group title	Group 3B
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Reporting group description:

Subjects who received two doses of rMenB+OMV NZ administered at 0, 1 or 0,2 or 0,6 month schedule in study V72P10 (NCT00661713) and at 0,1 month schedule in study V72\_41(NCT0142384), and who received a third dose booster of rMenB+OMV NZ at 4 to 7.5 years after the last dose received during parent studies, and had blood collected at baseline and at 3, 7 and 30 days after the third dose booster.

Reporting group title	Group B_0_1
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Reporting group description:

Naive subjects from Australia,Canada and Chile, who received two doses of rMenB+OMV NZ at a 0 and 1 month schedule and had blood collected at baseline, 30 days after the first dose and 3 or 7, and 30 days after the second dose

Reporting group values	Group 3B	Group B_0_1	Total
Number of subjects	276	255	531
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)	0	0	0
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	65	57	122
Adults (18-64 years)	211	198	409
From 65-84 years	0	0	0
85 years and over	0	0	0
Age continuous			
Units: years			
arithmetic mean	19.5	20.0	
standard deviation	± 2.42	± 2.69	-
Gender categorical			
Units: Subjects			
Female	133	128	261
Male	143	127	270
Race/Ethnicity, Customized			
Units: Subjects			
Race/Ethnicity American Indian or Alaska Native	11	1	12
Race/Ethnicity Asian	22	18	40
Race/Ethnicity Black or African American	3	2	5
Race/Ethnicity Native Hawaiian/Pacific Islander	3	8	11
Race/Ethnicity White	98	74	172
Race/Ethnicity Other	139	152	291

## End points

### End points reporting groups

Reporting group title	Group 3B
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Reporting group description:

Subjects who received two doses of rMenB+OMV NZ administered at 0, 1 or 0,2 or 0,6 month schedule in study V72P10 (NCT00661713) and at 0,1 month schedule in study V72\_41(NCT0142384), and who received a third dose booster of rMenB+OMV NZ at 4 to 7.5 years after the last dose received during parent studies, and had blood collected at baseline and at 3, 7 and 30 days after the third dose booster.

Reporting group title	Group B_0_1
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Reporting group description:

Naive subjects from Australia, Canada and Chile, who received two doses of rMenB+OMV NZ at a 0 and 1 month schedule and had blood collected at baseline, 30 days after the first dose and 3 or 7, and 30 days after the second dose

Subject analysis set title	Group 3B (V72_41)
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Subject analysis set type	Sub-group analysis
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Subject analysis set description:

Subjects who received two doses of rMenB+OMV NZ administered at 0,1-month schedule in study V72\_41 (NCT0142384) and who received a third dose booster of rMenB+OMV NZ at 4 to 7.5 years after the last dose received during study V72\_41, and had blood collected at baseline and at 3, 7 and 30 days after the third dose booster.

Subject analysis set title	Group 3B (V72P10)
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Subject analysis set type	Sub-group analysis
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Subject analysis set description:

Subjects who received two doses of rMenB+OMV NZ administered at 0,1 or 0,2 or 0,6 month schedule in study V72P10 (NCT00661713) and who received a third dose booster of rMenB+OMV NZ at 4 to 7.5 years after the last dose received during study V72P10, and had blood collected at baseline and at 3, 7 and 30 days after the third dose booster.

Subject analysis set title	Group B_0_1 (V72_41)
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Subject analysis set type	Sub-group analysis
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Subject analysis set description:

Naive subjects from Australia and Canada, who received two doses of rMenB+OMV NZ at a 0 and 1 month schedule in this study and had blood collected at baseline, 30 days after the first dose and 3 or 7, and 30 days after the second dose.

Subject analysis set title	Group B_0_1 (V72P10)
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Subject analysis set type	Sub-group analysis
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Subject analysis set description:

Naive subjects from Chile, who received two doses of rMenB+OMV NZ at a 0 and 1 month schedule in this study and had blood collected at baseline, 30 days after the first dose and 3 or 7, and 30 days after the second dose.

### Primary: Percentage of subjects with Human Serum Bactericidal Activity (hSBA) $\geq 1:4$

End point title	Percentage of subjects with Human Serum Bactericidal Activity (hSBA) $\geq 1:4$
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End point description:

Bactericidal activity was measured against the N. meningitidis group B indicator strains 5/99, NZ98/254. Analysis was performed on the Full analysis set (FAS) persistence. The FAS included all follow-on subjects (Group 3B) in the All Enrolled Set, & all naïve subjects (group B\_0\_1) in the All Enrolled Set who provided evaluable immunogenicity result at day 1, for at least one indicator strain. This outcome measure was assessed only for strains 5/99 & NZ98/254.

End point type	Primary
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End point timeframe:

Group 3B: Day 1 (prior to booster dose); Group B\_0\_1: Day 1 (prior to first dose).

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	273	253	144	129
Units: Percentage of subjects				
number (confidence interval 95%)				
5/99 (N-254,239,134,120,100,139)	84 (79.2 to 88.5)	17 (12.2 to 22.1)	84 (77 to 90)	84 (76.4 to 90.2)
NZ98/254 (N-273,253,144,129,105,148)	18 (13.9 to 23.4)	8 (5.2 to 12.4)	9 (4.9 to 14.9)	29 (21.1 to 37.3)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	148	105		
Units: Percentage of subjects				
number (confidence interval 95%)				
5/99 (N-254,239,134,120,100,139)	24 (16.9 to 31.7)	7 (2.9 to 13.9)		
NZ98/254 (N-273,253,144,129,105,148)	14 (9 to 20.9)	0 (0 to 3.5)		

## Statistical analyses

Statistical analysis title	Statistical Analysis 1
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	292
Analysis specification	Pre-specified
Analysis type	other <sup>[1]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	77
Confidence interval	
level	95 %
sides	2-sided
lower limit	68.1
upper limit	84.1

Notes:

[1] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [(Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41))]



<b>Statistical analysis title</b>	Statistical Analysis 2
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis group B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	234
Analysis specification	Pre-specified
Analysis type	other <sup>[2]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	60
Confidence interval	
level	95 %
sides	2-sided
lower limit	49.9
upper limit	69.2

Notes:

[2] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical Analysis 3
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis group B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	526
Analysis specification	Pre-specified
Analysis type	other <sup>[3]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	68
Confidence interval	
level	95 %
sides	2-sided
lower limit	60.5
upper limit	73.5

Notes:

[3] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical Analysis 4
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis group B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)

Number of subjects included in analysis	292
Analysis specification	Pre-specified
Analysis type	other <sup>[4]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	9
Confidence interval	
level	95 %
sides	2-sided
lower limit	5.3
upper limit	14.8

Notes:

[4] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical Analysis 5
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	234
Analysis specification	Pre-specified
Analysis type	other <sup>[5]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	14
Confidence interval	
level	95 %
sides	2-sided
lower limit	4.9
upper limit	24.2

Notes:

[5] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical Analysis 6
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	526
Analysis specification	Pre-specified
Analysis type	other <sup>[6]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	10

Confidence interval	
level	95 %
sides	2-sided
lower limit	4.3
upper limit	15.9

Notes:

[6] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

### Primary: Percentage of subjects with human serum bactericidal activity (hSBA) $\geq 1:5$

End point title	Percentage of subjects with human serum bactericidal activity (hSBA) $\geq 1:5$
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End point description:

Bactericidal activity was measured against each of the *N. meningitidis* group B indicator strains H44/76 and M10713. Analysis was performed on the Full analysis set (FAS) persistence. The FAS included all follow-on subjects (Group 3B) in the All Enrolled Set, and all naïve subjects (group B\_0\_1) in the All Enrolled Set who provided evaluable immunogenicity result at day 1, for at least one indicator strain. This outcome measure was assessed only for strains H44/76 & M10713.

End point type	Primary
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End point timeframe:

Group 3B: Day 1 (prior to booster dose); Group B\_0\_1: Day 1 (prior to first dose).

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	275	255	144	131
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76 (N-275,255,144,131,105,150)	33 (27.9 to 39.4)	9 (5.5 to 12.8)	26 (19.4 to 34.4)	41 (32.7 to 50.2)
M10713(N-274,255,143,131,105,150)	74 (68.9 to 79.5)	70 (64.2 to 75.7)	71 (63.2 to 78.6)	78 (69.8 to 84.6)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	105	150		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76 (N-275,255,144,131,105,150)	5 (1.6 to 10.8)	11 (6.7 to 17.5)		
M10713(N-274,255,143,131,105,150)	59 (49.0 to 68.5)	78 (70.5 to 84.3)		

### Statistical analyses

<b>Statistical analysis title</b>	Statistical analysis 1
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis group B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[7]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	25
Confidence interval	
level	95 %
sides	2-sided
lower limit	18.2
upper limit	31.4

Notes:

[7] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 2
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis group B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[8]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine groups difference
Point estimate	22
Confidence interval	
level	95 %
sides	2-sided
lower limit	13.2
upper limit	30.1

Notes:

[8] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [(Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41))]

<b>Statistical analysis title</b>	Statistical analysis 3
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis group B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)

Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[9]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	30
Confidence interval	
level	95 %
sides	2-sided
lower limit	20
upper limit	39.6

Notes:

[9] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 4
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[10]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.4
upper limit	11.9

Notes:

[10] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 5
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[11]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group differences
Point estimate	12
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.33
upper limit	24.2

Notes:

[11] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1(V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 6
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis group B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[12]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-10
upper limit	9.5

Notes:

[12] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1(V72P10)]

### **Primary: Percentage of subjects with hSBA titers $\geq$ 1:5 in parent studies- V72P10 and V72\_41**

End point title	Percentage of subjects with hSBA titers $\geq$ 1:5 in parent studies- V72P10 and V72_41 <sup>[13]</sup>
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End point description:

Bactericidal activity was measured against the N. meningitidis group B indicator strains H44/76 and M10713. Analysis was performed on the FAS persistence. The FAS included all follow-on subjects (Group 3B) in the All Enrolled Set, and all naïve subjects (group B\_0\_1) in the All Enrolled Set who provided evaluable immunogenicity result at day 1, for at least one indicator strain.

End point type	Primary
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End point timeframe:

At one month after last vaccination in parent studies- V72P10 (Month 7) and V72\_41 (Month 2)

Notes:

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

Justification: The scope of this primary end point was descriptive, no statistical hypothesis test was performed.

<b>End point values</b>	Group 3B (V72_41)	Group 3B (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	144	131		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76- Baseline in Parent study(N-144,131)	1 (0.17 to 4.9)	23 (16 to 31.1)		
H44/76-1MTHafterlastvacc in Parentstudy(N-144,131)	99 (95.1 to 99.83)	100 (97.2 to 100)		
M10713- Baseline in Parent study(N-143,131)	34 (25.9 to 41.9)	73 (64 to 80)		

M10713-1MTHafterlastvacc in Parentstudy(N=140,131)	68 (59.4 to 75.5)	98 (94.6 to 99.81)		
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## Statistical analyses

No statistical analyses for this end point

### Primary: Percentage of subjects with hSBA $\geq$ 1:8

End point title	Percentage of subjects with hSBA $\geq$ 1:8
End point description:	
Bactericidal activity was measured against each of the N. meningitidis group B indicator strains H44/76,5/99,NZ98/254 and M10713. Analysis was performed on the Full analysis set (FAS) persistence. The FAS included all follow-on subjects (Group 3B) in the All Enrolled Set, and all naïve subjects (B_0_1) in the All Enrolled Set who provided evaluable immunogenicity result at day 1, for at least one indicator strain.	
End point type	Primary
End point timeframe:	
Group 3B: Day 1 (prior to booster dose); Group B_0_1: Day 1 (prior to first dose).	

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	275	255	144	131
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N=275,255,144,131,105,150)	28 (23.1 to 34.1)	6 (3.3 to 9.5)	22 (15.7 to 29.9)	35 (27.0 to 43.9)
5/99(N=254,239,134,120,100,139)	81 (75.3 to 85.4)	13 (9.0 to 17.9)	78 (70.4 to 85.0)	83 (75.4 to 89.5)
NZ98/254(N=273,253,144,129,105,148)	14 (10.4 to 19.0)	6 (3.1 to 9.1)	7 (3.4 to 12.4)	22 (15.6 to 30.7)
M10713(N=274,255,143,131,105,150)	68 (62.0 to 73.4)	63 (56.9 to 69.1)	62 (53.0 to 69.5)	75 (66.5 to 82.0)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	105	150		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N=275,255,144,131,105,150)	1 (0.02 to 5.2)	9 (5.2 to 15.2)		
5/99(N=254,239,134,120,100,139)	4 (1.1 to 9.9)	19 (13.2 to 27.0)		
NZ98/254(N=273,253,144,129,105,148)	0 (0.0 to 3.5)	9 (5.3 to 15.4)		
M10713(N=274,255,143,131,105,150)	52 (42.4 to 62.2)	71 (62.7 to 77.8)		

## Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis group B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[14]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	22
Confidence interval	
level	95 %
sides	2-sided
lower limit	16.5
upper limit	28.6

Notes:

[14] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

Statistical analysis title	Statistical analysis 2
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis group B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[15]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	21
Confidence interval	
level	95 %
sides	2-sided
lower limit	14.6
upper limit	28.9

Notes:

[15] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

Statistical analysis title	Statistical analysis 3
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis group B indicator	



strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[16]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	26
Confidence interval	
level	95 %
sides	2-sided
lower limit	16.4
upper limit	35.3

Notes:

[16] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 4
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[17]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	68
Confidence interval	
level	95 %
sides	2-sided
lower limit	60.8
upper limit	73.7

Notes:

[17] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 5
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[18]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	74

Confidence interval	
level	95 %
sides	2-sided
lower limit	65.3
upper limit	81.3

Notes:

[18] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 6
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[19]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	64
Confidence interval	
level	95 %
sides	2-sided
lower limit	53.6
upper limit	72.3

Notes:

[19] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 7
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[20]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	9
Confidence interval	
level	95 %
sides	2-sided
lower limit	3.7
upper limit	14

Notes:

[20] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 8
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator

strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[21]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	7
Confidence interval	
level	95 %
sides	2-sided
lower limit	3.3
upper limit	12.3

Notes:

[21] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 9
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[22]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	13
Confidence interval	
level	95 %
sides	2-sided
lower limit	4.5
upper limit	22

Notes:

[22] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 10
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[23]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	5

Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.4
upper limit	12.8

Notes:

[23] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 11
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[24]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	9
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.3
upper limit	21.4

Notes:

[24] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 12
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis group B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[25]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.4
upper limit	14.5

Notes:

[25] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

### Primary: Percentage of subjects with hSBA $\geq$ 1:16

End point title	Percentage of subjects with hSBA $\geq$ 1:16
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**End point description:**

Bactericidal activity was measured against each of the N. meningitidis group B Indicator strains H44/76,5/99,NZ98/254 and M10713. Analysis was performed on the Full analysis set (FAS) persistence. The FAS included all follow-on subjects (Group 3B) in the All Enrolled Set, and all naïve subjects (B\_0\_1) in the All Enrolled Set who provided evaluable immunogenicity result at day 1, for at least one indicator strain.

End point type	Primary
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**End point timeframe:**

Group 3B: Day 1 (prior to booster dose); Group B\_0\_1: Day 1 (prior to first dose).

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	275	255	144	131
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N=275,255,144,131,105,150)	20 (15.1 to 24.8)	4 (2.2 to 7.6)	12 (7.0 to 18.2)	28 (20.7 to 36.8)
5/99(N=254,239,134,120,100,139)	75 (69.0 to 80.0)	8 (5.2 to 12.6)	72 (63.2 to 79.1)	78 (69.9 to 85.3)
NZ98/254(N=273,253,144,129,105,148)	11 (7.8 to 15.7)	2 (0.9 to 5.1)	5 (2.0 to 9.8)	19 (12.3 to 26.4)
M10713(N=274,255,143,131,105,150)	57 (51.2 to 63.2)	56 (49.4 to 61.9)	50 (41.9 to 58.8)	65 (56.1 to 73.0)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	105	150		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N=275,255,144,131,105,150)	0 (0.0 to 3.5)	7 (3.7 to 12.7)		
5/99(N=254,239,134,120,100,139)	2 (0.24 to 7.0)	13 (7.9 to 19.7)		
NZ98/254(N=273,253,144,129,105,148)	0 (0.0 to 3.5)	4 (1.5 to 8.6)		
M10713(N=274,255,143,131,105,150)	48 (37.8 to 57.6)	61 (53.0 to 69.2)		

**Statistical analyses**

Statistical analysis title	Statistical analysis 1
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**Statistical analysis description:**

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
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Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[26]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	15
Confidence interval	
level	95 %
sides	2-sided
lower limit	10.1
upper limit	20.9

Notes:

[26] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 2
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[27]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	12
Confidence interval	
level	95 %
sides	2-sided
lower limit	7.5
upper limit	18.1

Notes:

[27] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 3
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[28]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	21
Confidence interval	
level	95 %
sides	2-sided
lower limit	12.3
upper limit	29.9

Notes:

[28] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

Statistical analysis title	Statistical analysis 4
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[29]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	66
Confidence interval	
level	95 %
sides	2-sided
lower limit	59.6
upper limit	72.4

Notes:

[29] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

Statistical analysis title	Statistical analysis 5
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[30]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	70
Confidence interval	
level	95 %
sides	2-sided
lower limit	60.8
upper limit	77

Notes:

[30] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

Statistical analysis title	Statistical analysis 6
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)

Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[31]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	65
Confidence interval	
level	95 %
sides	2-sided
lower limit	55.2
upper limit	73.7

Notes:

[31] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 7
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[32]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	9
Confidence interval	
level	95 %
sides	2-sided
lower limit	4.9
upper limit	13.6

Notes:

[32] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 8
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[33]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	5
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.2
upper limit	9.7



Notes:

[33] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

Statistical analysis title	Statistical analysis 9
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[34]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	15
Confidence interval	
level	95 %
sides	2-sided
lower limit	7.5
upper limit	22.6

Notes:

[34] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

Statistical analysis title	Statistical analysis 10
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[35]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.8
upper limit	10

Notes:

[35] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

Statistical analysis title	Statistical analysis 11
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)

Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[36]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-9.8
upper limit	15.2

Notes:

[36] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 12
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[37]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-7.8
upper limit	14.7

Notes:

[37] - Vaccine comparison at Persistence at 4/7.5 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

### **Primary: hSBA Geometric Mean Titers (GMTs) after the last dose of rMenB+OMV NZ vaccination in the parent study.**

End point title	hSBA Geometric Mean Titers (GMTs) after the last dose of rMenB+OMV NZ vaccination in the parent study.
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End point description:

Bactericidal activity was measured against each of the N. meningitidis group B indicator strains H44/76,5/99, NZ98/254 and M10713. Analysis was performed on the Full analysis set (FAS) persistence. The FAS included all follow-on subjects (Group 3B) in the All Enrolled Set, and all naïve subjects (B\_0\_1) in the All Enrolled Set who provided evaluable immunogenicity result at day 1, for at least one indicator strain.

1 month post last vaccination in parent study was abbreviated as 1MTHLastvaccPRNTSTDY in the endpoint categories.

End point type	Primary
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End point timeframe:

Group 3B: 1 month after the last rMenB+OMV NZ vaccination in parent study and Day 1(prior to booster dose); Group B\_0\_1: Day 1(prior to first dose)

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	275	255	144	131
Units: Titers				
geometric mean (confidence interval 95%)				
H44/76(1MTHLastvaccPRNTSTDY)N-275,0,144,131,0,0	124 (108 to 143)	0 (0 to 0)	99 (82 to 119)	197 (165 to 235)
H44/76( Day 1)N-275,255,144,131,105,150	3.05 (2.61 to 3.56)	1.20 (1.02 to 1.42)	2.43 (2.04 to 2.89)	4.51 (3.57 to 5.69)
5/99(1MTHLastvaccPRNTSTDY)N-254,0,134,120,0,0	270 (234 to 311)	0 (0 to 0)	180 (153 to 211)	606 (492 to 746)
5/99 (Day 1)N-254,239,134,120,100,139	26 (21 to 31)	1.57 (1.26 to 1.95)	24 (19 to 30)	31 (23 to 42)
NZ98/254(1MTHLastvaccPRNTSTDY)N273,0,144,129,0,0	22 (19 to 27)	0 (0 to 0)	11 (8.67 to 14)	93 (75 to 117)
NZ98/254( Day 1)N-273,253,144,129,105,148	1.66 (1.46 to 1.89)	1.11 (0.97 to 1.27)	1.31 (1.17 to 1.45)	2.56 (2.07 to 3.17)
M10713(1MTHLastvaccPRNTSTDY)N-271,0,140,131,0,0	19 (16 to 24)	0 (0 to 0)	10 (7.65 to 14)	66 (53 to 81)
M10713(Day 1)N-271,255,140,131,105,150	16 (13 to 20)	12 (9.86 to 16)	13 (9.86 to 18)	22 (16 to 29)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	105	150		
Units: Titers				
geometric mean (confidence interval 95%)				
H44/76(1MTHLastvaccPRNTSTDY)N-275,0,144,131,0,0	0 (0 to 0)	0 (0 to 0)		
H44/76( Day 1)N-275,255,144,131,105,150	1.14 (0.93 to 1.40)	1.52 (1.23 to 1.90)		
5/99(1MTHLastvaccPRNTSTDY)N-254,0,134,120,0,0	0 (0 to 0)	0 (0 to 0)		
5/99 (Day 1)N-254,239,134,120,100,139	1.20 (0.91 to 1.58)	2.30 (1.75 to 3.04)		
NZ98/254(1MTHLastvaccPRNTSTDY)N273,0,144,129,0,0	0 (0 to 0)	0 (0 to 0)		
NZ98/254( Day 1)N-273,253,144,129,105,148	1.01 (0.89 to 1.14)	1.50 (1.23 to 1.84)		
M10713(1MTHLastvaccPRNTSTDY)N-271,0,140,131,0,0	0 (0 to 0)	0 (0 to 0)		
M10713(Day 1)N-271,255,140,131,105,150	10 (7.13 to 15)	18 (14 to 24)		

## Statistical analyses

<b>Statistical analysis title</b>	Statistical analysis 1
Statistical analysis description:	
Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[38]</sup>
Method	ANOVA
Parameter estimate	vaccine group ratio of GMTs
Point estimate	2.54
Confidence interval	
level	95 %
sides	2-sided
lower limit	2.07
upper limit	3.12

Notes:

[38] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 2
Statistical analysis description:	
Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[39]</sup>
Method	ANOVA
Parameter estimate	vaccine group ratio of GMTs
Point estimate	2.13
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.66
upper limit	2.72

Notes:

[39] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 3
Statistical analysis description:	
Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)

Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[40]</sup>
Method	ANOVA
Parameter estimate	vaccine group ratio of GMTs
Point estimate	2.96
Confidence interval	
level	95 %
sides	2-sided
lower limit	2.15
upper limit	4.07

Notes:

[40] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 4
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Statistical analysis description:

Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[41]</sup>
Method	ANOVA
Parameter estimate	Vaccine group ratio of GMTs
Point estimate	16
Confidence interval	
level	95 %
sides	2-sided
lower limit	12
upper limit	21

Notes:

[41] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 5
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Statistical analysis description:

Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[42]</sup>
Method	ANOVA
Parameter estimate	vaccine group ratio of GMTs
Point estimate	20
Confidence interval	
level	95 %
sides	2-sided
lower limit	14
upper limit	28

Notes:

[42] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

Statistical analysis title	Statistical analysis 6
Statistical analysis description:	
Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[43]</sup>
Method	ANOVA
Parameter estimate	vaccine group ratio of GMTs
Point estimate	14
Confidence interval	
level	95 %
sides	2-sided
lower limit	9.05
upper limit	20

Notes:

[43] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

Statistical analysis title	Statistical analysis 7
Statistical analysis description:	
Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[44]</sup>
Method	ANOVA
Parameter estimate	Vaccine group ratio of GMTs
Point estimate	1.5
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.26
upper limit	1.78

Notes:

[44] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

Statistical analysis title	Statistical analysis 8
Statistical analysis description:	
Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)

Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[45]</sup>
Method	ANOVA
Parameter estimate	vaccine group ratio of GMTs
Point estimate	1.3
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.11
upper limit	1.51

Notes:

[45] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 9
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Statistical analysis description:

Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[46]</sup>
Method	ANOVA
Parameter estimate	vaccine group ratio of GMTs
Point estimate	1.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.27
upper limit	2.28

Notes:

[46] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 10
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Statistical analysis description:

Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	530
Analysis specification	Pre-specified
Analysis type	other <sup>[47]</sup>
Method	ANOVA
Parameter estimate	Vaccine group ratio of GMTs
Point estimate	1.26
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.94
upper limit	1.68

Notes:

[47] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 (Group 3B vs. Group B\_0\_1)

Statistical analysis title	Statistical analysis 11
Statistical analysis description:	
Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	249
Analysis specification	Pre-specified
Analysis type	other <sup>[48]</sup>
Method	ANOVA
Parameter estimate	vaccine group ratio of GMTs
Point estimate	1.32
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.85
upper limit	2.05

Notes:

[48] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

Statistical analysis title	Statistical analysis 12
Statistical analysis description:	
Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	281
Analysis specification	Pre-specified
Analysis type	other <sup>[49]</sup>
Method	ANOVA
Parameter estimate	vaccine group ratio of GMTs
Point estimate	1.2
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.81
upper limit	1.78

Notes:

[49] - Vaccine Comparison at Persistence at 4 years/Baseline in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

### **Primary: Geometric Mean Ratios (GMRs) of GMTs after the last dose of rMenB+OMV NZ Vaccination in the Parent Study versus day 1**

End point title	Geometric Mean Ratios (GMRs) of GMTs after the last dose of rMenB+OMV NZ Vaccination in the Parent Study versus day 1 <sup>[50][51]</sup>
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End point description:

The GMRs of GMTs at Day 1 versus one month after the last dose of rMenB+OMV NZ vaccination in the parent study were calculated. Bactericidal activity was measured against each of the N. meningitidis group B indicator strains H44/76, 5/99,NZ98/254 and M10713. Analysis was performed on the Full analysis set (FAS) persistence. The FAS included all follow-on subjects (Group 3B) in the All Enrolled



Set, and all naïve subjects (B\_0\_1) in the All Enrolled Set who provided evaluable immunogenicity result at day 1, for at least one indicator strain.

End point type	Primary
End point timeframe:	
Group 3B: 1 month after the last vaccination in parent study and Day 1 (prior to booster dose)	

Notes:

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

Justification: The scope of this primary end point was descriptive, no statistical hypothesis test was performed.

[51] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The results in this study were tabulated by age group and study period. Hence for each related endpoint, they are presented for only the respective groups in the baseline period, while the results for multiple endpoints account for all baseline groups.

End point values	Group 3B	Group 3B (V72_41)	Group 3B (V72P10)	
Subject group type	Reporting group	Subject analysis set	Subject analysis set	
Number of subjects analysed	275	144	131	
Units: Ratio				
geometric mean (confidence interval 95%)				
H44/76(N-275,144,131)	0.025 (0.020 to 0.030)	0.026 (0.020 to 0.033)	0.023 (0.018 to 0.029)	
5/99(N-254,134,120)	0.098 (0.079 to 0.12)	0.13 (0.10 to 0.18)	0.052 (0.039 to 0.068)	
NZ98/254(N-273,144,129)	0.073 (0.059 to 0.089)	0.12 (0.092 to 0.15)	0.027 (0.021 to 0.036)	
M10713(N-271,140,131)	0.81 (0.65 to 1.01)	1.26 (0.92 to 1.73)	0.33 (0.25 to 0.43)	

## Statistical analyses

No statistical analyses for this end point

## Primary: Number of subjects with solicited local and systemic AEs.

End point title	Number of subjects with solicited local and systemic AEs. <sup>[52]</sup>
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End point description:

Solicited adverse events are signs and symptoms derived from organized data collection systems, such as Subject Diaries or interview. The percentage and frequencies of subjects reporting solicited local and systemic AEs were tabulated. Threshold for any Erythema, Swelling and Induration:  $\geq 25$  mm

Note: Vaccination 2 was performed only on group B\_0\_1 subjects. Threshold for any Erythema, Swelling and Induration:  $\geq 25$  mm. The analysis was done on the Solicited Safety Set. The solicited safety set included all subjects in the exposed set with any solicited adverse event data and/indicators of solicited adverse events.

End point type	Primary
End point timeframe:	
7 days (including the day of vaccination) after each vaccination	

Notes:

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

Justification: The scope of this primary end point was descriptive, no statistical hypothesis test was performed.

<b>End point values</b>	Group 3B	Group B_0_1		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	266	254		
Units: Subjects				
Any (N-266,254)	263	251		
Any Local (vaccination 1) (N-266,253)	258	247		
Injection site pain (vaccination 1) (N-264,252)	258	247		
Erythema (vaccination 1) (N-261,248)	54	18		
Swelling (vaccination 1)(261,249)	60	34		
Induration (vaccination 1)(N-261,248)	54	26		
Any systemic (vaccination 1)(N-266,253)	203	163		
Fever ( $\geq 38.0^{\circ}\text{C}$ ) (vaccination 1)(N-265,253)	16	4		
High fever ( $\geq 39.5^{\circ}\text{C}$ ) (vaccination 1)(N-265,253)	0	0		
Nausea (vaccination 1)(N-264,252)	56	30		
Fatigue (vaccination 1)(N-266,252)	155	110		
Myalgia (vaccination 1)(N-265,252)	120	71		
Arthralgia (vaccination 1)(N-265,252)	84	47		
Headache (vaccination 1)(N-266,253)	146	94		
Any Local (vaccination 2)(N-0,248)	0	226		
Injection site pain (vaccination 2)(N-0,247)	0	226		
Erythema (vaccination 2)(N-0,247)	0	21		
Swelling (vaccination 2)(N-0,248)	0	32		
Induration (vaccination 2)(N-0,247)	0	31		
Any systemic (vaccination 2)(N-0,248)	0	140		
Fever ( $\geq 38.0^{\circ}\text{C}$ ) (vaccination 2)(N-0,248)	0	5		
High fever ( $\geq 39.5^{\circ}\text{C}$ ) (vaccination 2)(N-0,248)	0	0		
Nausea (vaccination 2)(N-0,248)	0	33		
Fatigue (vaccination 2)(N-0,248)	0	92		
Myalgia (vaccination 2)(N-0,248)	0	64		
Arthralgia (vaccination 2)(N-0,248)	0	36		
Headache (vaccination 2)(N-0,248)	0	84		

## Statistical analyses

No statistical analyses for this end point

## Primary: Number of subjects with any unsolicited adverse events (AEs).

End point title	Number of subjects with any unsolicited adverse events
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**End point description:**

An unsolicited adverse event is an adverse event that was not solicited using a subject Diary and that was spontaneously communicated by a subject and/or parent(s)/legal guardian(s) who has signed the informed consent. Note : Vaccination 2 was performed only on group B\_0\_1 subjects. Analysis was performed on the unsolicited safety set. The unsolicited safety set included all subjects who received a study vaccination with unsolicited adverse event data.

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End point type	Primary
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**End point timeframe:**

30 days (including the day of vaccination) after each vaccination.

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**Notes:**

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

Justification: The scope of this primary end point was descriptive, no statistical hypothesis test was performed.

End point values	Group 3B	Group B_0_1		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	275	255		
Units: Subjects				
Any(N=275,255)	87	131		
Any unsolicited AEs ( vaccination 1)(N=275,255)	87	96		
Any unsolicited AEs (vaccination 2)(N=0,250)	0	73		

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**Statistical analyses**

No statistical analyses for this end point

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**Primary: Number of subjects with any SAEs, AEs leading to withdrawal and medically attended AEs.**

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End point title	Number of subjects with any SAEs, AEs leading to withdrawal and medically attended AEs. <sup>[54]</sup>
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**End point description:**

A serious adverse event is any untoward medical occurrence that at any dose results in death or is life threatening or requires prolonged hospitalization, leads to Persistent or significant disability/incapacity. Analysis was performed on the Overall safety set. The overall safety set included all screened subjects in the solicited and unsolicited safety set who provided informed consent and provided demographic and/or baseline screening assessments, regardless of the subject's randomization and treatment status in the study and received a Subject ID.

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End point type	Primary
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**End point timeframe:**

Group 3B: from Day 1 to Day 31 (study termination visit) and Group B\_0\_1: from Day 1 to Day 61 (study termination visit)

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**Notes:**

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

Justification: The scope of this primary end point was descriptive, no statistical hypothesis test was performed.

End point values	Group 3B	Group B_0_1		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	275	255		
Units: Subjects				
Any SAEs(N-275,255)	0	1		
Any Medically Attended AEs(N-275,255)	17	34		
Any AEs leading to premature withdrawal(N-275,255)	0	1		

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percentage of subjects with hSBA $\geq 1:4$ after booster dose/first vaccination of rMenB+OMV NZ.

End point title	Percentage of subjects with hSBA $\geq 1:4$ after booster dose/first vaccination of rMenB+OMV NZ.
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End point description:

Bactericidal activity was measured against the N. meningitidis group B indicator strains 5/99 and NZ98/254.

Analysis was performed on the Full Analysis set( FAS) booster. The FAS booster included all follow on subjects and all naive subjects in the All enrolled set who received vaccination at day 1 and provided evaluable immunogenicity result at day 31 for at least one indicator strain. This outcome measure was assessed only for strains 5/99 & NZ98/254.

End point type	Secondary
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End point timeframe:

Group 3B: 30 days after booster dose, Group B\_0\_1 : 30 days after first vaccination.

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	262	251	142	120
Units: Percentage of subjects				
number (confidence interval 95%)				
5/99 (N-226,234,124,102,97,137)	100 (98.4 to 100.0)	85 (79.8 to 89.4)	100 (97.1 to 100.0)	100 (96.4 to 100.0)
NZ98/254 (N-262,251,142,120,103,148)	94 (90.3 to 96.5)	53 (47.0 to 59.7)	94 (89.2 to 97.5)	93 (87.3 to 97.1)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	103	148		
Units: Percentage of subjects				
number (confidence interval 95%)				

5/99 (N-226,234,124,102,97,137)	87 (78.2 to 92.7)	84 (76.7 to 89.7)		
NZ98/254 (N-262,251,142,120,103,148)	41 (31.2 to 50.9)	62 (53.8 to 70.0)		

## Statistical analyses

Statistical analysis title	Statistical Analysis 1
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	245
Analysis specification	Pre-specified
Analysis type	other <sup>[55]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	13
Confidence interval	
level	95 %
sides	2-sided
lower limit	8
upper limit	21.6

Notes:

[55] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

Statistical analysis title	Statistical Analysis 2
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	268
Analysis specification	Pre-specified
Analysis type	other <sup>[56]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	16
Confidence interval	
level	95 %
sides	2-sided
lower limit	10.8
upper limit	23.1

Notes:

[56] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 3
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	513
Analysis specification	Pre-specified
Analysis type	other <sup>[57]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	15
Confidence interval	
level	95 %
sides	2-sided
lower limit	11
upper limit	20.1

Notes:

[57] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical Analysis 4
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	245
Analysis specification	Pre-specified
Analysis type	other <sup>[58]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	54
Confidence interval	
level	95 %
sides	2-sided
lower limit	43
upper limit	63.3

Notes:

[58] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical Analysis 5
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)

Number of subjects included in analysis	268
Analysis specification	Pre-specified
Analysis type	other <sup>[59]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	31
Confidence interval	
level	95 %
sides	2-sided
lower limit	22
upper limit	40.1

Notes:

[59] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical Analysis 6
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	513
Analysis specification	Pre-specified
Analysis type	other <sup>[60]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	41
Confidence interval	
level	95 %
sides	2-sided
lower limit	33.6
upper limit	47.2

Notes:

[60] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

### **Secondary: Percentage of subjects with hSBA $\geq$ 1:5 after booster dose/first vaccination of rMenB+OMV NZ.**

End point title	Percentage of subjects with hSBA $\geq$ 1:5 after booster dose/first vaccination of rMenB+OMV NZ.
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End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76 and M10713. Analysis was performed on the Full Analysis set( FAS) booster. The FAS booster included all follow on subjects and all naive subjects in the All enrolled set who received vaccination at day 1 and provided evaluable immunogenicity result at day 31 for at least one indicator strain. This outcome measure was assessed only for strains H44/76 & M10713.

End point type	Secondary
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End point timeframe:

Group 3B: 30 days after booster dose, Group B\_0\_1 : 30 days after first vaccination.

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	268	253	142	127
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N- 268,253,141,127,104,149)	99 (96.8 to 99.77)	79 (73.5 to 83.9)	98 (93.9 to 99.56)	100 (97.1 to 100.0)
M10713(N- 268,252,141,127,103,149)	99 (96.8 to 99.77)	87 (82.1 to 90.8)	99 (96.1 to 99.98)	98 (94.4 to 99.81)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	104	149		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N- 268,253,141,127,104,149)	80 (70.8 to 87.0)	79 (71.1 to 84.8)		
M10713(N- 268,252,141,127,103,149)	80 (70.5 to 86.9)	92 (86.4 to 95.8)		

## Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[61]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	20
Confidence interval	
level	95 %
sides	2-sided
lower limit	15
upper limit	25.4

Notes:

[61] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

Statistical analysis title	Statistical analysis 2
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	



Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[62]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	18
Confidence interval	
level	95 %
sides	2-sided
lower limit	10.7
upper limit	27

Notes:

[62] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 3
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[63]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	21
Confidence interval	
level	95 %
sides	2-sided
lower limit	15.6
upper limit	28.8

Notes:

[63] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 4
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[64]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	12
Confidence interval	
level	95 %
sides	2-sided
lower limit	8
upper limit	16.8

Notes:

[64] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

Statistical analysis title	Statistical analysis 5
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[65]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	20
Confidence interval	
level	95 %
sides	2-sided
lower limit	12.8
upper limit	28.6

Notes:

[65] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

Statistical analysis title	Statistical analysis 6
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[66]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	6
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.5
upper limit	12.2

Notes:

[66] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

### **Secondary: Percentage of subjects with hSBA $\geq$ 1:8 after booster dose/first vaccination of rMenB+OMV NZ**

End point title	Percentage of subjects with hSBA $\geq$ 1:8 after booster dose/first vaccination of rMenB+OMV NZ
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End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76,5/99,NZ98/254 and M10713. Analysis was performed on the Full Analysis set (FAS) booster. The FAS booster included all follow on subjects and all naive subjects in the All enrolled set who received vaccination at day 1 and provided evaluable immunogenicity result at day 31 for atleast one indicator

strain.

End point type	Secondary
End point timeframe:	
Group 3B : 30 days after booster dose, Group B_0_1 : 30 days after first vaccination.	

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	268	253	142	127
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N-268,253,141,127,104,149)	99 (96.8 to 99.77)	72 (65.6 to 77.0)	98 (93.9 to 99.56)	100 (97.1 to 100.0)
5/99(N-226,234,124,102,97,137)	100 (98.4 to 100.0)	81 (75.6 to 86.0)	100 (97.1 to 100)	100 (96.4 to 100)
NZ98/254(N-262,251,142,120,103,148)	87 (82.8 to 91.2)	45 (38.4 to 51.0)	86 (79.1 to 91.2)	89 (82.2 to 94.1)
M10713(N- 268,252,141,127,103,149)	98 (95.7 to 99.4)	85 (79.9 to 89.1)	99 (95.0 to 99.83)	98 (93.3 to 99.51)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	104	149		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N-268,253,141,127,104,149)	67 (57.4 to 76.2)	74 (66.7 to 81.3)		
5/99(N-226,234,124,102,97,137)	81 (72.3 to 88.6)	81 (73.4 to 87.2)		
NZ98/254(N-262,251,142,120,103,148)	28 (19.7 to 37.9)	56 (47.7 to 64.2)		
M10713(N- 268,252,141,127,103,149)	79 (69.5 to 86.1)	89 (83.1 to 93.7)		

## Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B

Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[67]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	27
Confidence interval	
level	95 %
sides	2-sided
lower limit	21.9
upper limit	33.3

Notes:

[67] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 2
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[68]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	31
Confidence interval	
level	95 %
sides	2-sided
lower limit	21.8
upper limit	40.3

Notes:

[68] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 3
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[69]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	26
Confidence interval	
level	95 %
sides	2-sided
lower limit	19.2
upper limit	33.1

Notes:

[69] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

Statistical analysis title	Statistical analysis 4
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[70]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	19
Confidence interval	
level	95 %
sides	2-sided
lower limit	14.3
upper limit	24.3

Notes:

[70] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

Statistical analysis title	Statistical analysis 5
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[71]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	19
Confidence interval	
level	95 %
sides	2-sided
lower limit	12.1
upper limit	27.5

Notes:

[71] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

Statistical analysis title	Statistical analysis 6
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)

Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[72]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	19
Confidence interval	
level	95 %
sides	2-sided
lower limit	13.3
upper limit	26.4

Notes:

[72] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 7
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[73]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	43
Confidence interval	
level	95 %
sides	2-sided
lower limit	35.2
upper limit	49.9

Notes:

[73] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 8
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[74]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	58
Confidence interval	
level	95 %
sides	2-sided
lower limit	46.6
upper limit	67.3

Notes:

[74] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

Statistical analysis title	Statistical analysis 9
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[75]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	33
Confidence interval	
level	95 %
sides	2-sided
lower limit	23
upper limit	42.5

Notes:

[75] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

Statistical analysis title	Statistical analysis 10
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[76]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	13
Confidence interval	
level	95 %
sides	2-sided
lower limit	8.8
upper limit	18.3

Notes:

[76] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

Statistical analysis title	Statistical analysis 11
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)

Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[77]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	20
Confidence interval	
level	95 %
sides	2-sided
lower limit	12.6
upper limit	29

Notes:

[77] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 12
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference were calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[78]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	8
Confidence interval	
level	95 %
sides	2-sided
lower limit	2.7
upper limit	14.7

Notes:

[78] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

## **Secondary: Percentage of subjects with hSBA $\geq$ 1:16 after booster dose/first vaccination of rMenB+OMV NZ**

End point title	Percentage of subjects with hSBA $\geq$ 1:16 after booster dose/first vaccination of rMenB+OMV NZ
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End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76, 5/99, NZ98/254 & M10713. Analysis was performed on the Full Analysis set (FAS) booster. The FAS booster included all follow on subjects and all naive subjects in the All enrolled set who received vaccination at day 1 and provided evaluable immunogenicity result at day 31 for atleast one indicator strain.

End point type	Secondary
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End point timeframe:

Group 3B: 30 days after booster dose, Group B\_0\_1 : 30 days after first vaccination.



End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	268	253	142	127
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N- 268,253,141,127,104,149)	99 (96.2 to 99.59)	58 (52.2 to 64.6)	98 (93.9 to 99.56)	99 (95.7 to 99.98)
5/99(N-226,234,124,102,97,137)	100 (98.4 to 100.0)	73 (66.9 to 78.6)	100 (97.1 to 100)	100 (96.4 to 100)
NZ98/254(N- 262,251,142,120,103,148)	79 (73.6 to 83.8)	36 (29.9 to 42.1)	73 (65.2 to 80.3)	86 (78.3 to 91.5)
M10713(N- 268,252,141,127,103,149)	95 (91.8 to 97.4)	77 (70.9 to 81.7)	94 (88.2 to 97.0)	97 (92.1 to 99.1)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	104	149		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N- 268,253,141,127,104,149)	49 (39.1 to 59.0)	65 (56.9 to 72.7)		
5/99(N-226,234,124,102,97,137)	77 (67.7 to 85.2)	70 (61.7 to 77.6)		
NZ98/254(N- 262,251,142,120,103,148)	22 (14.7 to 31.6)	45 (37.1 to 53.7)		
M10713(N- 268,252,141,127,103,149)	66 (56.0 to 75.1)	84 (77.0 to 89.4)		

## Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[79]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	40
Confidence interval	
level	95 %
sides	2-sided
lower limit	33.9
upper limit	46.3

Notes:

[79] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

Statistical analysis title	Statistical analysis 2
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[80]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	49
Confidence interval	
level	95 %
sides	2-sided
lower limit	38.9
upper limit	58.5

Notes:

[80] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

Statistical analysis title	Statistical analysis 3
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[81]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	34
Confidence interval	
level	95 %
sides	2-sided
lower limit	26.6
upper limit	42.2

Notes:

[81] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

Statistical analysis title	Statistical analysis 4
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B

Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[82]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	27
Confidence interval	
level	95 %
sides	2-sided
lower limit	21.6
upper limit	33

Notes:

[82] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 5
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[83]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	23
Confidence interval	
level	95 %
sides	2-sided
lower limit	15.5
upper limit	32

Notes:

[83] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 6
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[84]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	30
Confidence interval	
level	95 %
sides	2-sided
lower limit	22.9
upper limit	38.1

Notes:

[84] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

Statistical analysis title	Statistical analysis 7
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[85]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	43
Confidence interval	
level	95 %
sides	2-sided
lower limit	35.1
upper limit	50.6

Notes:

[85] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

Statistical analysis title	Statistical analysis 8
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[86]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	51
Confidence interval	
level	95 %
sides	2-sided
lower limit	39.3
upper limit	60.9

Notes:

[86] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

Statistical analysis title	Statistical analysis 9
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)

Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[87]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	41
Confidence interval	
level	95 %
sides	2-sided
lower limit	29.9
upper limit	50.2

Notes:

[87] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 10
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[88]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	19
Confidence interval	
level	95 %
sides	2-sided
lower limit	12.9
upper limit	24.6

Notes:

[88] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 11
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[89]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	28
Confidence interval	
level	95 %
sides	2-sided
lower limit	17.9
upper limit	37.8

Notes:

[89] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 12
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[90]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	13
Confidence interval	
level	95 %
sides	2-sided
lower limit	6.4
upper limit	20.1

Notes:

[90] - Vaccine comparison at 1 month after booster /1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

### **Secondary: hSBA Geometric Mean Titers prior to booster/first dose of vaccination & post booster/first dose of vaccination.**

End point title	hSBA Geometric Mean Titers prior to booster/first dose of vaccination & post booster/first dose of vaccination.
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End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76, 5/99,NZ98/254 and M10713.

Analysis was performed on the Full Analysis set (FAS) booster. The FAS booster included all follow on subjects and all naive subjects in the All enrolled set who received vaccination at day 1 and provided evaluable immunogenicity result at day 31 for atleast one indicator strain.

pre booster/pre first dose was abbreviated as Pre B/1st dose and post booster/post first dose was abbreviated as Post B/1st dose in the endpoint category respectively.

End point type	Secondary
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End point timeframe:

Group 3B subjects: Day 1(pre-booster dose) and 30 days post-booster dose. Group B\_0\_1: Day 1 (pre-first dose) and 30 days post-first dose.

<b>End point values</b>	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	268	253	142	127
Units: Titers				
geometric mean (confidence interval 95%)				
H44/76-PreB/1stdose(N-268,253,141,127,104,149)	3.10 (2.65 to 3.62)	1.19 (1.01 to 1.41)	2.45 (2.06 to 2.92)	4.65 (3.66 to 5.89)
H44/76-1MTHpostB/1stdose(N268,253,141,127,	188 (155 to 228)	16 (13 to 20)	158 (123 to 204)	269 (206 to 351)

5/99-PreB/1stdose(N-211,225,118,93,96,129)	24 (19 to 30)	1.51 (1.21 to 1.88)	22 (17 to 28)	31 (22 to 43)
5/99-1MTHpostB/1stdose(N-226,234,124,102,97,137)	2089 (1690 to 2582)	31 (25 to 38)	2191 (1681 to 2856)	1951 (1425 to 2671)
NZ98/254-PreB/1stdose(N-260,249,142,118,103,146)	1.64 (1.44 to 1.86)	1.11 (0.97 to 1.28)	1.31 (1.18 to 1.46)	2.48 (1.99 to 3.09)
NZ98/254-1MTHpostB/1dose(N-262,251,142,120,103,148)	32 (26 to 39)	5.39 (4.33 to 6.72)	30 (23 to 38)	41 (30 to 56)
M10713-PreB/1stdose(N-267,252,140,127,103,149)	16 (13 to 20)	12 (9.62 to 15)	14 (10 to 19)	22 (16 to 29)
M10713-1MTHpostB/1dose(N-268,252,141,127,103,149)	78 (66 to 92)	30 (25 to 36)	65 (52 to 81)	113 (90 to 142)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	104	149		
Units: Titers				
geometric mean (confidence interval 95%)				
H44/76-PreB/1stdose(N-268,253,141,127,104,149)	1.13 (0.92 to 1.38)	1.53 (1.23 to 1.90)		
H44/76-1MTHpostB/1stdose(N268,253,141,127,	13 (10 to 18)	24 (19 to 31)		
5/99-PreB/1stdose(N-211,225,118,93,96,129)	1.19 (0.89 to 1.59)	2.19 (1.65 to 2.92)		
5/99-1MTHpostB/1stdose(N-226,234,124,102,97,137)	30 (22 to 40)	31 (24 to 41)		
NZ98/254-PreB/1stdose(N-260,249,142,118,103,146)	1.00 (0.88 to 1.13)	1.51 (1.24 to 1.84)		
NZ98/254-1MTHpostB/1dose(N-262,251,142,120,103,148)	3.58 (2.70 to 4.76)	9.43 (7.15 to 12)		
M10713-PreB/1stdose(N-267,252,140,127,103,149)	9.82 (6.87 to 14)	18 (14 to 23)		
M10713-1MTHpostB/1dose(N-268,252,141,127,103,149)	23 (18 to 30)	46 (37 to 57)		

## Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
Pre booster/Pre first dose-Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[91]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	2.6

Confidence interval	
level	95 %
sides	2-sided
lower limit	2.11
upper limit	3.2

Notes:

[91] - Vaccine comparison Pre-booster or pre-1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 2
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Statistical analysis description:

Post booster/Post first dose-Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[92]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	11
Confidence interval	
level	95 %
sides	2-sided
lower limit	8.85
upper limit	15

Notes:

[92] - Vaccine comparison Post-booster or post-1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 3
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Statistical analysis description:

Pre booster/Pre first dose-Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[93]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	2.18
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.7
upper limit	2.79

Notes:

[93] - Vaccine comparison-Pre-booster or pre-1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 4
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**Statistical analysis description:**

Post booster/Post first dose-Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[94]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	12
Confidence interval	
level	95 %
sides	2-sided
lower limit	8.22
upper limit	17

**Notes:**

[94] - Vaccine comparison-post-booster or post-1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 5
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**Statistical analysis description:**

Pre booster/Pre first dose-Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[95]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	3.04
Confidence interval	
level	95 %
sides	2-sided
lower limit	2.2
upper limit	4.2

**Notes:**

[95] - Vaccine comparison- Pre-booster or pre-1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 6
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**Statistical analysis description:**

Post booster/Post first dose-Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
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Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[96]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	11
Confidence interval	
level	95 %
sides	2-sided
lower limit	7.75
upper limit	16

Notes:

[96] - Vaccine comparison- post-booster or post-1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 7
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Statistical analysis description:

Pre booster/Pre first dose-Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[97]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	16
Confidence interval	
level	95 %
sides	2-sided
lower limit	12
upper limit	21

Notes:

[97] - Vaccine comparison Pre-booster or pre-1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 8
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Statistical analysis description:

Post booster/Post first dose-Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[98]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	68

Confidence interval	
level	95 %
sides	2-sided
lower limit	51
upper limit	90

Notes:

[98] - Vaccine comparison Post-booster or post-1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 9
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Statistical analysis description:

Pre booster/Pre first dose-Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[99]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	18
Confidence interval	
level	95 %
sides	2-sided
lower limit	13
upper limit	26

Notes:

[99] - Vaccine comparison- Pre-booster or pre-1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 10
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Statistical analysis description:

Post booster/Post first dose-Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[100]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	74
Confidence interval	
level	95 %
sides	2-sided
lower limit	51
upper limit	107

Notes:

[100] - Vaccine comparison- post-booster or post-1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 11
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**Statistical analysis description:**

Pre booster/Pre first dose-Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[101]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	14
Confidence interval	
level	95 %
sides	2-sided
lower limit	8.99
upper limit	22

**Notes:**

[101] - Vaccine comparison- Pre-booster or pre-1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 12
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**Statistical analysis description:**

Post booster/Post first dose-Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[102]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	63
Confidence interval	
level	95 %
sides	2-sided
lower limit	41
upper limit	95

**Notes:**

[102] - Vaccine comparison- post-booster or post-1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 13
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**Statistical analysis description:**

Pre booster/Pre first dose-Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group 3B v Group B_0_1
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Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[103]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	1.48
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.24
upper limit	1.75

Notes:

[103] - Vaccine comparison Pre-booster or pre-1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 14
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Statistical analysis description:

Post booster dose/ post first dose-Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[104]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	5.9
Confidence interval	
level	95 %
sides	2-sided
lower limit	4.49
upper limit	7.76

Notes:

[104] - Vaccine comparison Post-booster or post-1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 15
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Statistical analysis description:

Pre booster/Pre first dose-Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[105]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	1.32

Confidence interval	
level	95 %
sides	2-sided
lower limit	1.13
upper limit	1.54

Notes:

[105] - Vaccine comparison- Pre-booster or pre-1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 16
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Statistical analysis description:

Post booster/Post first dose-Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[106]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	8.27
Confidence interval	
level	95 %
sides	2-sided
lower limit	5.83
upper limit	12

Notes:

[106] - Vaccine comparison- post-booster or post-1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 17
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Statistical analysis description:

Pre booster/Pre first dose-Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[107]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	1.64
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.22
upper limit	2.2

Notes:

[107] - Vaccine comparison- Pre-booster or pre-1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 18
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**Statistical analysis description:**

Post booster/Post first dose-Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[108]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	4.36
Confidence interval	
level	95 %
sides	2-sided
lower limit	2.88
upper limit	6.58

**Notes:**

[108] - Vaccine comparison- post-booster or post-1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 19
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**Statistical analysis description:**

Pre booster/Pre first dose-Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[109]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	1.3
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.97
upper limit	1.75

**Notes:**

[109] - Vaccine comparison Pre-booster or pre-1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 20
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**Statistical analysis description:**

Post booster/Post first dose-Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group 3B v Group B_0_1
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Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[110]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	2.6
Confidence interval	
level	95 %
sides	2-sided
lower limit	2.08
upper limit	3.25

Notes:

[110] - Vaccine comparison Post-booster or post-1st dose in V72\_75 (Group 3B vs. Group B\_0\_1)

<b>Statistical analysis title</b>	Statistical analysis 21
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Statistical analysis description:

Pre booster/Pre first dose-Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[111]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	1.4
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.9
upper limit	2.18

Notes:

[111] - Vaccine comparison- Pre-booster or pre-1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 22
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Statistical analysis description:

Post booster/Post first dose-Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[112]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	2.79



Confidence interval	
level	95 %
sides	2-sided
lower limit	2.04
upper limit	3.81

Notes:

[112] - Vaccine comparison- post-booster or post-1st dose in V72\_75 [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)]

<b>Statistical analysis title</b>	Statistical analysis 23
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Statistical analysis description:

Pre booster/Pre first dose-Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[113]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	1.23
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.82
upper limit	1.82

Notes:

[113] - Vaccine comparison- Pre-booster or pre-1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

<b>Statistical analysis title</b>	Statistical analysis 24
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Statistical analysis description:

Post booster/Post first dose-Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[114]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	2.45
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.79
upper limit	3.36

Notes:

[114] - Vaccine comparison- post-booster or post-1st dose in V72\_75 [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)]

## Secondary: Geometric mean ratio (GMRs) of GMTs after booster dose/first rMenB+OMV NZ vaccination versus day 1.

End point title	Geometric mean ratio (GMRs) of GMTs after booster dose/first rMenB+OMV NZ vaccination versus day 1.
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End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76,5/99,NZ98/254 and M10713 by calculating the GMRs of GMTs one month post-vaccination of a booster dose versus pre-booster dose (follow-on subjects) or first dose of rMenB+OMV NZ versus prefirst dose (naïve subjects) to each N. meningitidis group B indicator strain. Analysis was performed on the Full Analysis set (FAS) booster. The FAS booster included all follow on subjects and all naïve subjects in the All enrolled set who received vaccination at day 1 and provided evaluable immunogenicity result at day 31 for at least one indicator strain.

End point type	Secondary
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End point timeframe:

At Day 31 (30 days post booster dose/first dose of vaccination) versus Day 1 (prior to booster dose/first dose of vaccination).

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	268	253	142	127
Units: Ratio				
geometric mean (confidence interval 95%)				
H44/76(N-268,253,141,127,104,149)	61 (50 to 74)	14 (11 to 17)	65 (49 to 85)	58 (44 to 76)
5/99(N-211,225,118,93,96,129)	87 (67 to 112)	20 (16 to 26)	100 (72 to 139)	64 (44 to 93)
NZ98/254(N-260,249,142,118,103,146)	19 (16 to 24)	4.92 (3.97 to 6.10)	23 (18 to 29)	16 (12 to 22)
M10713(N-267,252,140,127,103,149)	4.85 (4.10 to 5.72)	2.44 (2.04 to 2.91)	4.69 (3.72 to 5.92)	5.16 (4.14 to 6.42)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	104	149		
Units: Ratio				
geometric mean (confidence interval 95%)				
H44/76(N-268,253,141,127,104,149)	12 (8.69 to 16)	16 (12 to 20)		
5/99(N-211,225,118,93,96,129)	25 (18 to 36)	14 (9.90 to 19)		
NZ98/254(N-260,249,142,118,103,146)	3.60 (2.69 to 4.81)	6.43 (4.95 to 8.34)		
M10713(N-267,252,140,127,103,149)	2.37 (1.81 to 3.10)	2.58 (2.11 to 3.16)		

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percentages of subjects with at least 4-fold increase in hSBA titers pre vaccination compared to one month post-booster/first rMenB+OMV NZ vaccination

End point title	Percentages of subjects with at least 4-fold increase in hSBA titers pre vaccination compared to one month post-booster/first rMenB+OMV NZ vaccination
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End point description:

The percentage of subjects with 4-fold rise at one month post-vaccination with a booster dose (follow-on subjects) /first dose (naïve subjects) of rMenB+OMV NZ with respect to day 1 (follow-on subjects) / pre-first dose of rMenB+OMV NZ (naïve subjects). Percentage of subjects with four-fold rise in hSBA titers relative to baseline were defined as: • for a pre-vaccination titer < 4, a post-vaccination titer of at least 16; • for a pre-vaccination titer ≥ 4 but <LLOQ, a post vaccination titer of at least fourfold the LLOQ; • for a pre-vaccination titer ≥LLOQ, a post vaccination titer of at least fourfold the pre-vaccination titer. Analysis was performed on the Full Analysis set (FAS) booster. The FAS booster included all follow on subjects and all naïve subjects in the All enrolled set who received vaccination at day 1 and provided evaluable immunogenicity result at day 31 for atleast one indicator strain.

End point type	Secondary
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End point timeframe:

Group 3B: 1 month after booster dose; Group B\_0\_1: 1 month after first vaccination

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	268	253	142	127
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N-268,253,141,127,104,149)	96 (93.2 to 98.2)	70 (63.5 to 75.2)	95 (90.0 to 98.0)	98 (93.3 to 99.51)
5/99(N-211,225,118,93,96,129)	98 (94.6 to 99.2)	76 (69.9 to 81.4)	98 (94.0 to 99.79)	97 (90.9 to 99.3)
NZ98/254(N-260,249,142,118,103,146)	80 (75.0 to 85.0)	43 (36.3 to 49.0)	83 (75.9 to 88.9)	77 (68.5 to 84.3)
M10713(N-267,252,140,127,103,149)	49 (42.6 to 54.9)	26 (20.5 to 31.7)	49 (40.0 to 57.2)	49 (39.9 to 57.8)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	104	149		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N-268,253,141,127,104,149)	66 (56.4 to 75.3)	72 (63.9 to 78.9)		
5/99(N-211,225,118,93,96,129)	79 (69.7 to 86.8)	74 (65.2 to 81.0)		
NZ98/254(N-260,249,142,118,103,146)	28 (19.7 to 37.9)	53 (44.3 to 61.1)		
M10713(N-267,252,140,127,103,149)	24 (16.4 to 33.7)	27 (19.9 to 34.7)		

## Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[115]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	27
Confidence interval	
level	95 %
sides	2-sided
lower limit	20.7
upper limit	33

Notes:

[115] - 1 month post booster/first dose of vaccination: Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

Statistical analysis title	Statistical analysis 2
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[116]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	29
Confidence interval	
level	95 %
sides	2-sided
lower limit	19.3
upper limit	38.7

Notes:

[116] - 1 month post booster/first dose of vaccination: Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41) Difference

Statistical analysis title	Statistical analysis 3
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)

Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[117]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	26
Confidence interval	
level	95 %
sides	2-sided
lower limit	18.3
upper limit	33.9

Notes:

[117] - 1 month post booster/first dose of vaccination: Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10) Difference

<b>Statistical analysis title</b>	Statistical analysis 4
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval or the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[118]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	22
Confidence interval	
level	95 %
sides	2-sided
lower limit	15.9
upper limit	27.9

Notes:

[118] - 1 month post booster/first dose of vaccination: Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 5
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[119]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	19
Confidence interval	
level	95 %
sides	2-sided
lower limit	11.5
upper limit	28.5

Notes:

[119] - 1 month post booster/first dose of vaccination: Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41) Difference

Statistical analysis title	Statistical analysis 6
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[120]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	23
Confidence interval	
level	95 %
sides	2-sided
lower limit	14.6
upper limit	31.9

Notes:

[120] - 1 month post booster/first dose of vaccination: Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10) Difference

Statistical analysis title	Statistical analysis 7
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[121]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	38
Confidence interval	
level	95 %
sides	2-sided
lower limit	29.8
upper limit	45.4

Notes:

[121] - 1 month post booster/first dose of vaccination: Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

Statistical analysis title	Statistical analysis 8
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)

Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[122]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	55
Confidence interval	
level	95 %
sides	2-sided
lower limit	43.5
upper limit	64.7

Notes:

[122] - 1 month post booster/first dose of vaccination: Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41) Difference

<b>Statistical analysis title</b>	Statistical analysis 9
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[123]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	24
Confidence interval	
level	95 %
sides	2-sided
lower limit	12.9
upper limit	35.1

Notes:

[123] - 1 month post booster/first dose of vaccination: Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10) Difference

<b>Statistical analysis title</b>	Statistical analysis 10
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Statistical analysis description:

The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	521
Analysis specification	Pre-specified
Analysis type	other <sup>[124]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	23
Confidence interval	
level	95 %
sides	2-sided
lower limit	14.7
upper limit	30.8

Notes:

[124] - 1 month post booster/first dose of vaccination: Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

Statistical analysis title	Statistical analysis 11
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	246
Analysis specification	Pre-specified
Analysis type	other <sup>[125]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	24
Confidence interval	
level	95 %
sides	2-sided
lower limit	12.2
upper limit	35.5

Notes:

[125] - 1 month post booster/first dose of vaccination: Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41) Difference

Statistical analysis title	Statistical analysis 12
Statistical analysis description: The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	276
Analysis specification	Pre-specified
Analysis type	other <sup>[126]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	22
Confidence interval	
level	95 %
sides	2-sided
lower limit	10.6
upper limit	32.9

Notes:

[126] - 1 month post booster/first dose of vaccination: Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10) Difference

### Secondary: Percentage of Subjects With hSBA $\geq$ 1:4 After Booster Dose/Second Vaccination of rMenB+OMV NZ

End point title	Percentage of Subjects With hSBA $\geq$ 1:4 After Booster Dose/Second Vaccination of rMenB+OMV NZ
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End point description:

Bactericidal activity was measured against the N. meningitidis group B indicator strains 5/99 and NZ98/254. On day 1, subjects in the Group B\_0\_1 were to be randomized into 2 different blood draw schedules according to a 1:1 ratio : 2 blood samples at different time points: Group B\_0\_1\_1: blood draws at 3 and 30 days after the second dose. Group B\_0\_1\_2: blood draws at 7 and 30 days after the



second dose. Analysis was performed on PPS kinetics which included all subjects who correctly received the vaccination at day 1/ day 1 & day 31 (naive subjects) & provided evaluable immunogenicity result at all of days 4, 8 & 31 (for follow-on subjects) or at all of days 34,38 and 61 (naive subjects). This outcome measure was assessed only for strains 5/99 & NZ98/254.

Days post vaccination has been abbreviated as DPV in the endpoint categories.

Month post vaccination has been abbreviated as MPV in the endpoint categories.

End point type	Secondary
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End point timeframe:

Group 3B: 3, 7 and 30 days after third dose booster; Group B\_0\_1: At 3 (group B\_0\_1\_1 only), 7 (sub-group B\_0\_1\_2 only) and 30 days post-second dose.

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	233	203	130	103
Units: Percentage of subjects				
number (confidence interval 95%)				
5/99-3 days post vaccination(N-185,86,103,82,44,42)	79 (72.3 to 84.6)	85 (75.5 to 91.7)	78 (68.4 to 85.3)	80 (70.3 to 88.4)
5/99-7 days post vaccination(N-185,88,103,82,40,48)	100 (98.0 to 100.0)	99 (93.8 to 99.97)	100 (96.5 to 100.0)	100 (95.6 to 100.0)
5/99-1 MTH post vaccination(N-185,174,103,82,84,90)	100 (98.0 to 100.0)	99 (95.9 to 99.86)	100 (96.5 to 100.0)	100 (95.6 to 100.0)
NZ98/254-3 days post vacc(N-233,105,130,103,50,55)	19 (14.1 to 24.5)	47 (36.9 to 56.7)	12 (6.6 to 18.3)	28 (19.7 to 37.9)
NZ98/254- 7 days post vacc(N-233,98,130,103,44,54)	76 (70.0 to 81.3)	81 (71.4 to 87.9)	73 (64.6 to 80.5)	80 (70.5 to 86.9)
NZ98/254-1 MTH post vacc(N-233,203,130,103,94,109)	94 (90.1 to 96.7)	80 (74.1 to 85.5)	94 (88.2 to 97.3)	94 (87.8 to 97.8)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	94	109		
Units: Percentage of subjects				
number (confidence interval 95%)				
5/99-3 days post vaccination(N-185,86,103,82,44,42)	82 (67.3 to 91.8)	88 (74.4 to 96.0)		
5/99-7 days post vaccination(N-185,88,103,82,40,48)	100 (95.7 to 100.0)	98 (92.2 to 99.73)		
5/99-1 MTH post vaccination(N-185,174,103,82,84,90)	100 (95.7 to 100.0)	98 (92.2 to 99.73)		
NZ98/254-3 days post vacc(N-233,105,130,103,50,55)	32 (19.5 to 46.7)	60 (45.9 to 73.0)		
NZ98/254- 7 days post vacc(N-233,98,130,103,44,54)	80 (64.7 to 90.2)	81 (68.6 to 90.7)		
NZ98/254-1 MTH post vacc(N-233,203,130,103,94,109)	82 (72.6 to 89.1)	79 (70.0 to 86.1)		

## Statistical analyses

<b>Statistical analysis title</b>	Statistical Analysis - 1
Statistical analysis description:	
3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	436
Analysis specification	Pre-specified
Analysis type	other <sup>[127]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	-6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-15
upper limit	4.5

Notes:

[127] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 2
Statistical analysis description:	
3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[128]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	-4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-17
upper limit	11.4

Notes:

[128] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 3
Statistical analysis description:	
3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)

Number of subjects included in analysis	212
Analysis specification	Pre-specified
Analysis type	other <sup>[129]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	-8
Confidence interval	
level	95 %
sides	2-sided
lower limit	-20
upper limit	7.3

Notes:

[129] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 4
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	436
Analysis specification	Pre-specified
Analysis type	other <sup>[130]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.9
upper limit	6.2

Notes:

[130] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 5
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[131]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	0

Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.6
upper limit	8.8

Notes:

[131] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 6
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	212
Analysis specification	Pre-specified
Analysis type	other <sup>[132]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.5
upper limit	11

Notes:

[132] - Vaccine comparison at Day 8 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 7
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	436
Analysis specification	Pre-specified
Analysis type	other <sup>[133]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.9
upper limit	4.1

Notes:

[133] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 8
Statistical analysis description:	
1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[134]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.6
upper limit	4.4

Notes:

[134] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1(V72\_41) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis - 9
Statistical analysis description:	
1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	212
Analysis specification	Pre-specified
Analysis type	other <sup>[135]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.3
upper limit	7.8

Notes:

[135] - Vaccine comparison at Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis - 10
Statistical analysis description:	
3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B v Group B_0_1

Number of subjects included in analysis	436
Analysis specification	Pre-specified
Analysis type	other <sup>[136]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	-28
Confidence interval	
level	95 %
sides	2-sided
lower limit	-38.4
upper limit	-17.1

Notes:

[136] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis-11
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[137]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	-20
Confidence interval	
level	95 %
sides	2-sided
lower limit	-35.2
upper limit	-7.5

Notes:

[137] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 12
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	212
Analysis specification	Pre-specified
Analysis type	other <sup>[138]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	-32

Confidence interval	
level	95 %
sides	2-sided
lower limit	-46.5
upper limit	-15.7

Notes:

[138] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 13
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	436
Analysis specification	Pre-specified
Analysis type	other <sup>[139]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	-5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-13.6
upper limit	5.6

Notes:

[139] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 14
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[140]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	-6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-19.2
upper limit	9.2

Notes:

[140] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 15
Statistical analysis description:	
7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	212
Analysis specification	Pre-specified
Analysis type	other <sup>[141]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	-2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-14.1
upper limit	12.3

Notes:

[141] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 16
Statistical analysis description:	
1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	436
Analysis specification	Pre-specified
Analysis type	other <sup>[142]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	14
Confidence interval	
level	95 %
sides	2-sided
lower limit	7.6
upper limit	20.3

Notes:

[142] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 17
Statistical analysis description:	
1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)



Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[143]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	12
Confidence interval	
level	95 %
sides	2-sided
lower limit	3.6
upper limit	21.6

Notes:

[143] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical Analysis 18
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	212
Analysis specification	Pre-specified
Analysis type	other <sup>[144]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine Group Difference
Point estimate	15
Confidence interval	
level	95 %
sides	2-sided
lower limit	6.4
upper limit	24.6

Notes:

[144] - Vaccine comparison at Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month after booster or 2nd dose)

## **Secondary: Percentage of subjects with hSBA $\geq$ 1:5 after booster dose/second vaccination of rMenB+OMV NZ**

End point title	Percentage of subjects with hSBA $\geq$ 1:5 after booster dose/second vaccination of rMenB+OMV NZ
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End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76 and M10713. On day 1, subjects in the Group B\_0\_1 were to be randomized into 2 different blood draw schedules according to a 1:1 ratio : 2 blood samples at different time points: Group B\_0\_1\_1: blood draws at 3 and 30 days after the second dose. Group B\_0\_1\_2: blood draws at 7 and 30 days after the second dose. Analysis was performed on the PPS kinetics which included all subjects who correctly received the vaccination at day 1/ day 1 & day 31 (naive subjects) & provided evaluable immunogenicity result at all of days 4, 8 & 31 (for follow-on subjects) or at all of days 34,38 & 61 (naive subjects). This outcome measure was assessed only for strains H44/76 & M10713.

Days post vaccination has been abbreviated as DPV in the endpoint categories.

Month post vaccination has been abbreviated as MPV in the endpoint categories.

End point type	Secondary
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End point timeframe:

Group 3B: 3, 7 and 30 days after third dose booster; Group B\_0\_1: At 3 (group B\_0\_1\_1 only), 7 (sub-

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	242	203	130	112
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76- 3 DPV (N-242,105,130,112,50,55)	36 (30.3 to 42.8)	80 (71.1 to 87.2)	28 (20.9 to 37.0)	46 (36.1 to 55.2)
H44/76- 7 DPV(N-242,98,130,112,44,54)	98 (95.2 to 99.3)	99 (94.4 to 99.97)	97 (92.3 to 99.2)	99 (95.1 to 99.98)
H44/76- 1MPV(N-242,203,130,112,94,109)	99 (96.4 to 99.74)	99 (96.5 to 99.88)	98 (93.4 to 99.52)	100 (96.8 to 100.0)
M10713- 3 DPV(N-241,105,129,112,50,55)	78 (72.2 to 83.1)	82 (73.2 to 88.7)	71 (62.7 to 78.9)	86 (77.8 to 91.6)
M10713- 7 DPV(N-241,98,129,112,44,54)	98 (94.7 to 99.1)	96 (89.9 to 98.9)	98 (93.4 to 99.52)	97 (92.4 to 99.4)
M10713- 1 MPV(N-241,203,129,112,94,109)	99 (97.0 to 99.90)	93 (88.7 to 96.2)	99 (95.8 to 99.98)	99 (95.1 to 99.98)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	94	109		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76- 3 DPV (N-242,105,130,112,50,55)	74 (59.7 to 85.4)	85 (73.3 to 93.5)		
H44/76- 7 DPV(N-242,98,130,112,44,54)	100 (92.0 to 100.0)	98 (90.1 to 99.95)		
H44/76- 1MPV(N-242,203,130,112,94,109)	99 (94.2 to 99.97)	99 (95.0 to 99.98)		
M10713- 3 DPV(N-241,105,129,112,50,55)	76 (61.8 to 86.9)	87 (75.5 to 94.7)		
M10713- 7 DPV(N-241,98,129,112,44,54)	95 (84.5 to 99.4)	96 (87.3 to 99.55)		
M10713- 1 MPV(N-241,203,129,112,94,109)	90 (82.6 to 95.5)	95 (89.6 to 98.5)		

## Statistical analyses

### Statistical analysis title

Statistical analysis 1

Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups

Group 3B v Group B\_0\_1

Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[145]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-44
Confidence interval	
level	95 %
sides	2-sided
lower limit	-52.7
upper limit	-33.1

Notes:

[145] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 2
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[146]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.9
upper limit	3.6

Notes:

[146] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 3
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[147]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.7
upper limit	2.4

Notes:

[147] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 4
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[148]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-46
Confidence interval	
level	95 %
sides	2-sided
lower limit	-58.4
upper limit	-29.8

Notes:

[148] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 5
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[149]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-7.7
upper limit	5.1

Notes:

[149] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 6
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)

Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[150]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-5.7
upper limit	3.7

Notes:

[150] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 7
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[151]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	-40
Confidence interval	
level	95 %
sides	2-sided
lower limit	-51.8
upper limit	-25.4

Notes:

[151] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 8
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[152]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.3
upper limit	9

Notes:

[152] - Vaccine comparison at Day 8 Group 3B (V72P10) vs Day 38 Group B\_0\_1 (V72P10) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 9
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[153]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.4
upper limit	5

Notes:

[153] - Vaccine comparison at Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 10
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[154]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-12.4
upper limit	5.8

Notes:

[154] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 11
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B v Group B_0_1

Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[155]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.2
upper limit	7.7

Notes:

[155] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 12
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B v Group B_0_1
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[156]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	6
Confidence interval	
level	95 %
sides	2-sided
lower limit	2.8
upper limit	10.5

Notes:

[156] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 13
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[157]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-17.8
upper limit	10.6

Notes:

[157] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 14
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[158]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.2
upper limit	13

Notes:

[158] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 15
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[159]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	9
Confidence interval	
level	95 %
sides	2-sided
lower limit	3.7
upper limit	16.5

Notes:

[159] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 16
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)



Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[160]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-11.8
upper limit	11

Notes:

[160] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 17
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[161]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.6
upper limit	10.1

Notes:

[161] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 18
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[162]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.8
upper limit	9.5

Notes:

[162] - Vaccine comparison at Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month days after booster or 2nd dose)

## Secondary: Percentage of subjects with hSBA $\geq 1:8$ after booster dose/second vaccination of rMenB+OMV NZ

End point title	Percentage of subjects with hSBA $\geq 1:8$ after booster dose/second vaccination of rMenB+OMV NZ
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End point description:

Bactericidal activity was measured against each of the four *N. meningitidis* group B indicator strains H44/76,5/99,NZ98/254 and M10713. On day 1, subjects in the Group B\_0\_1 were to be randomized into 2 different blood draw schedules according to a 1:1 ratio : 2 blood samples at different time points: Group B\_0\_1\_1: blood draws at 3 and 30 days after the second dose. Group B\_0\_1\_2: blood draws at 7 and 30 days after the second dose. Analysis was performed on PPS kinetics which included all subjects who had no protocol deviations/any other reason defined prior to analysis, leading to exclusion & correctly received the vaccination at day 1/day 31 & day 1 & provided evaluable immunogenicity result at all of days 4, 8 & 31 (follow-on subjects) or at all of days 34, 38 & 61 (naive)

Days post vaccination has been abbreviated as DPV in the endpoint categories.

Month post vaccination has been abbreviated as MPV in the endpoint categories.

End point type	Secondary
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End point timeframe:

Group 3B: 3, 7 and 30 days after third dose booster; Group B\_0\_1: At 3 (group B\_0\_1\_1 only), 7 (sub-group B\_0\_1\_2 only) and 30 days post-second dose.

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	242	203	130	112
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76 3 DPV(N-242,105,130,112,50,55)	30 (24.5 to 36.4)	75 (65.9 to 83.1)	22 (15.5 to 30.4)	39 (30.2 to 49.0)
H44/76 7 DPV(N-242,98,130,112,44,54)	96 (93.1 to 98.3)	97 (91.3 to 99.4)	95 (89.2 to 97.8)	98 (93.7 to 99.78)
H44/76 1 MPV(N-242,203,130,112,94,109)	99 (96.4 to 99.74)	98 (95.0 to 99.5)	98 (93.4 to 99.52)	100 (96.8 to 100.0)
5/99- 3 DPV(N-185,86,103,82,44,42)	76 (69.4 to 82.2)	83 (72.9 to 89.9)	74 (64.2 to 82.0)	79 (68.9 to 87.4)
5/99- 7 DPV(N-185,88,103,82,40,48)	100 (98.0 to 100.0)	99 (93.8 to 99.97)	100 (96.5 to 100.0)	100 (95.6 to 100.0)
5/99- 1 MPV(N-185,174,103,82,84,90)	100 (98.0 to 100.0)	99 (95.9 to 99.86)	100 (96.5 to 100.0)	100 (95.6 to 100.0)
NZ98/254- 3DPV(N-233,105,130,103,50,55)	16 (11.4 to 21.2)	42 (32.3 to 51.9)	10 (5.4 to 16.5)	23 (15.5 to 32.7)
NZ98/254- 7 DPV(N-233,98,130,103,44,54)	67 (60.1 to 72.6)	69 (59.3 to 78.3)	61 (51.8 to 69.2)	74 (64.2 to 82.0)
NZ98/254- 1 MPV(N-233,203,130,103,94,109)	88 (82.6 to 91.5)	67 (60.1 to 73.4)	85 (77.2 to 90.3)	91 (84.1 to 95.9)
M10713- 3DPV(N-241,105,129,112,50,55)	70 (63.5 to 75.4)	73 (63.8 to 81.5)	62 (53.1 to 70.4)	79 (69.8 to 85.8)
M10713- 7 DPV(N-241,98,129,112,44,54)	95 (92.0 to 97.7)	94 (87.1 to 97.7)	95 (90.2 to 98.3)	96 (89.9 to 98.5)
M10713- 1 MPV(N-241,203,129,112,94,109)	98 (95.8 to 99.55)	90 (85.2 to 93.9)	98 (94.5 to 99.81)	98 (93.7 to 99.78)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	94	109		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76 3 DPV(N-242,105,130,112,50,55)	70 (55.4 to 82.1)	80 (67.0 to 89.6)		
H44/76 7 DPV(N-242,98,130,112,44,54)	95 (84.5 to 99.4)	98 (90.1 to 99.95)		
H44/76 1 MPV(N-242,203,130,112,94,109)	99 (94.2 to 99.97)	97 (92.2 to 99.4)		
5/99- 3 DPV(N-185,86,103,82,44,42)	80 (64.7 to 90.2)	86 (71.5 to 94.6)		
5/99- 7 DPV(N-185,88,103,82,40,48)	100 (91.2 to 100.0)	98 (88.9 to 99.95)		
5/99- 1 MPV(N-185,174,103,82,84,90)	100 (95.7 to 100.0)	98 (92.2 to 99.73)		
NZ98/254- 3DPV(N-233,105,130,103,50,55)	28 (16.2 to 42.5)	55 (40.6 to 68.0)		
NZ98/254- 7 DPV(N-233,98,130,103,44,54)	68 (52.4 to 81.4)	70 (56.4 to 82.0)		
NZ98/254- 1 MPV(N-233,203,130,103,94,109)	65 (54.4 to 74.5)	69 (59.2 to 77.3)		
M10713- 3DPV(N-241,105,129,112,50,55)	62 (47.2 to 75.3)	84 (71.2 to 92.2)		
M10713- 7 DPV(N-241,98,129,112,44,54)	93 (81.3 to 98.6)	94 (84.6 to 98.8)		
M10713- 1 MPV(N-241,203,129,112,94,109)	86 (77.5 to 92.4)	94 (87.2 to 97.4)		

## Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[163]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-45
Confidence interval	
level	95 %
sides	2-sided
lower limit	-54.4
upper limit	-34.3

Notes:

[163] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 2
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[164]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.5
upper limit	5.2

Notes:

[164] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 3
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[165]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.9
upper limit	3.9

Notes:

[165] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 4
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)

Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[166]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-48
Confidence interval	
level	95 %
sides	2-sided
lower limit	-60.8
upper limit	-32

Notes:

[166] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 5
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[167]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-7.3
upper limit	10.1

Notes:

[167] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 6
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[168]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-5.7
upper limit	3.7

Notes:

[168] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 7
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[169]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-41
Confidence interval	
level	95 %
sides	2-sided
lower limit	-53.3
upper limit	-25.5

Notes:

[169] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 8
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[170]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.8
upper limit	8.1

Notes:

[170] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 9
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)

Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[171]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.6
upper limit	7.8

Notes:

[171] - Vaccine comparison at Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 10
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[172]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-15.9
upper limit	4.6

Notes:

[172] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 11
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[173]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.9
upper limit	6.2

Notes:

[173] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 12
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[174]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.9
upper limit	4.1

Notes:

[174] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 13
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[175]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-19.2
upper limit	10.3

Notes:

[175] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 14
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)



Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[176]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.6
upper limit	8.8

Notes:

[176] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 15
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[177]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.6
upper limit	4.4

Notes:

[177] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 16
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[178]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-19.4
upper limit	9.1

Notes:

[178] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 17
Statistical analysis description:	
7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[179]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.5
upper limit	11

Notes:

[179] - Vaccine comparison at Day 8 Group 3B (V72P10) vs Day 38 Group B\_0\_1 (V72P10) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 18
Statistical analysis description:	
1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[180]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.3
upper limit	7.8

Notes:

[180] - Vaccine comparison at Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 19
Statistical analysis description:	
3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B

Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[181]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-26
Confidence interval	
level	95 %
sides	2-sided
lower limit	-36.6
upper limit	-15.7

Notes:

[181] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 20
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[182]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-13.3
upper limit	8.5

Notes:

[182] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 21
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[183]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	21
Confidence interval	
level	95 %
sides	2-sided
lower limit	12.8
upper limit	28.3

Notes:

[183] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 22
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[184]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-18
Confidence interval	
level	95 %
sides	2-sided
lower limit	-32.5
upper limit	-5.8

Notes:

[184] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 23
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[185]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-7
Confidence interval	
level	95 %
sides	2-sided
lower limit	-22.3
upper limit	9.5

Notes:

[185] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 24
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)

Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[186]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	20
Confidence interval	
level	95 %
sides	2-sided
lower limit	8.4
upper limit	31.3

Notes:

[186] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 25
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[187]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-31
Confidence interval	
level	95 %
sides	2-sided
lower limit	-46
upper limit	-15.5

Notes:

[187] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 26
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[188]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-10.8
upper limit	18.8

Notes:

[188] - Vaccine comparison at Day 8 Group 3B (V72P10) vs Day 38 Group B\_0\_1 (V72P10) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 27
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[189]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	22
Confidence interval	
level	95 %
sides	2-sided
lower limit	12.1
upper limit	32.8

Notes:

[189] - Vaccine comparison at Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 28
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[190]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-13.4
upper limit	7.1

Notes:

[190] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 29
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B

Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[191]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.2
upper limit	8.5

Notes:

[191] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 30
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[192]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	8
Confidence interval	
level	95 %
sides	2-sided
lower limit	4.2
upper limit	13.2

Notes:

[192] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 31
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[193]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-15.1
upper limit	16.1

Notes:

[193] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 32
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[194]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.7
upper limit	13.9

Notes:

[194] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 33
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[195]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	12
Confidence interval	
level	95 %
sides	2-sided
lower limit	5.9
upper limit	20.9

Notes:

[195] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 34
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)



Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[196]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-16.7
upper limit	8.6

Notes:

[196] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 35
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[197]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-5.7
upper limit	11.1

Notes:

[197] - Vaccine comparison at Day 8 Group 3B (V72P10) vs Day 38 Group B\_0\_1 (V72P10) (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 36
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[198]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.7
upper limit	11.1

Notes:

[198] - Vaccine comparison at Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month after booster or 2nd dose)

## Secondary: Percentage of subjects with hSBA $\geq 1:16$ after booster dose/second vaccination of rMenB+OMV NZ

End point title	Percentage of subjects with hSBA $\geq 1:16$ after booster dose/second vaccination of rMenB+OMV NZ
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End point description:

Bactericidal activity was measured against each of the four *N. meningitidis* group B indicator strains H44/76,5/99,NZ98/254 and M10713. On day 1, subjects in the Group B\_0\_1 were to be randomized into 2 different blood draw schedules according to a 1:1 ratio : 2 blood samples at different time points: Group B\_0\_1\_1: blood draws at 3 and 30 days after the second dose. Group B\_0\_1\_2: blood draws at 7 and 30 days after the second dose. Analysis was performed on PPS kinetics which included all subjects who had no protocol deviations/any other reason defined prior to analysis, leading to exclusion & correctly received the vaccination at day 1/day 31 & day 1 & provided evaluable immunogenicity result at all of days 4, 8 & 31 (follow-on subjects) or at all of days 34, 38 & 61 (naive)

Days post vaccination has been abbreviated as DPV in the endpoint categories.

Month post vaccination has been abbreviated as MPV in the endpoint categories.

End point type	Secondary
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End point timeframe:

Group 3B: 3, 7 and 30 days after third dose booster; Group B\_0\_1: At 3 (group B\_0\_1\_1 only), 7 (sub-group B\_0\_1\_2 only) and 30 days post-second dose

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	242	203	130	112
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76 3 DPV(N-242,105,130,112,50,55)	21 (15.7 to 26.3)	50 (40.5 to 60.4)	13 (7.8 to 20.1)	29 (21.2 to 38.8)
H44/76 7 DPV(N-242,98,130,112,44,54)	95 (91.0 to 97.1)	92 (84.5 to 96.4)	92 (85.4 to 95.7)	98 (93.7 to 99.78)
H44/76 1 MPV(N-242,203,130,112,94,109)	99 (96.4 to 99.74)	91 (86.3 to 94.7)	98 (93.4 to 99.52)	100 (96.8 to 100.0)
5/99- 3 DPV(N-185,86,103,82,44,42)	70 (63.1 to 76.8)	76 (65.1 to 84.2)	69 (59.1 to 77.7)	72 (60.9 to 81.3)
5/99- 7 DPV(N-185,88,103,82,40,48)	100 (98.0 to 100.0)	99 (93.8 to 99.97)	100 (96.5 to 100)	100 (95.6 to 100)
5/99- 1 MPV(N-185,174,103,82,84,90)	100 (98.0 to 100.0)	98 (95.0 to 99.64)	100 (96.5 to 100.0)	100 (95.6 to 100.0)
NZ98/254- 3 DPV(N-233,105,130,103,50,55)	9 (6.0 to 13.9)	30 (21.0 to 39.2)	5 (2.2 to 10.8)	15 (8.4 to 22.9)
NZ98/254- 7 DPV(N-233,98,130,103,44,54)	51 (44.5 to 57.7)	47 (36.8 to 57.3)	41 (32.2 to 49.7)	64 (54.0 to 73.3)
NZ98/254- 1 MPV(N-233,203,130,103,94,109)	81 (75.0 to 85.6)	49 (41.7 to 55.9)	74 (65.4 to 81.2)	89 (81.7 to 94.5)
M10713- 3 DPV(N-241,105,129,112,50,55)	59 (52.0 to 64.8)	64 (53.9 to 73.0)	48 (39.2 to 57.0)	71 (61.2 to 78.8)
M10713- 7 DPV(N-241,98,129,112,44,54)	88 (83.2 to 91.8)	88 (79.6 to 93.5)	85 (78.0 to 90.9)	91 (84.2 to 95.6)
M10713- 1 MPV(N-241,203,129,112,94,109)	95 (91.5 to 97.4)	84 (78.5 to 89.0)	93 (87.2 to 96.8)	97 (92.4 to 99.4)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	94	109		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76 3 DPV(N-242,105,130,112,50,55)	40 (26.4 to 54.8)	60 (45.9 to 73.0)		
H44/76 7 DPV(N-242,98,130,112,44,54)	89 (75.4 to 96.2)	94 (84.6 to 98.8)		
H44/76 1 MPV(N-242,203,130,112,94,109)	90 (82.6 to 95.5)	92 (84.9 to 96.2)		
5/99- 3 DPV(N-185,86,103,82,44,42)	75 (59.7 to 86.8)	76 (60.5 to 87.9)		
5/99- 7 DPV(N-185,88,103,82,40,48)	100 (91.2 to 100)	98 (88.9 to 99.95)		
5/99- 1 MPV(N-185,174,103,82,84,90)	100 (95.7 to 100.0)	97 (90.6 to 99.3)		
NZ98/254- 3 DPV(N-233,105,130,103,50,55)	18 (8.6 to 31.4)	40 (27.0 to 54.1)		
NZ98/254- 7 DPV(N-233,98,130,103,44,54)	41 (26.3 to 56.8)	52 (37.8 to 65.7)		
NZ98/254- 1 MPV(N-233,203,130,103,94,109)	40 (30.4 to 51.0)	56 (46.1 to 65.5)		
M10713- 3 DPV(N-241,105,129,112,50,55)	50 (35.5 to 64.5)	76 (63.0 to 86.8)		
M10713- 7 DPV(N-241,98,129,112,44,54)	84 (69.9 to 93.4)	91 (79.7 to 96.9)		
M10713- 1 MPV(N-241,203,129,112,94,109)	76 (65.6 to 83.8)	92 (84.9 to 96.2)		

## Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[199]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-30
Confidence interval	
level	95 %
sides	2-sided
lower limit	-40.4
upper limit	-19

Notes:

[199] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 2
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[200]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.6
upper limit	10.3

Notes:

[200] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 3
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[201]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	8
Confidence interval	
level	95 %
sides	2-sided
lower limit	3.9
upper limit	12.5

Notes:

[201] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 4
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)

Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[202]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-27
Confidence interval	
level	95 %
sides	2-sided
lower limit	-41.8
upper limit	-12.9

Notes:

[202] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 5
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[203]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6
upper limit	16.2

Notes:

[203] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 6
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[204]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	7
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.4
upper limit	15.2

Notes:

[204] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 7
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[205]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-31
Confidence interval	
level	95 %
sides	2-sided
lower limit	-45.1
upper limit	-14.6

Notes:

[205] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 8
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[206]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	4
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.9
upper limit	13.5

Notes:

[206] - Vaccine comparison at Day 8 Group 3B (V72P10) vs Day 38 Group B\_0\_1 (V72P10) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 9
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)

Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[207]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	8
Confidence interval	
level	95 %
sides	2-sided
lower limit	4.4
upper limit	15

Notes:

[207] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 10
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[208]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-16
upper limit	6.5

Notes:

[208] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 11
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[209]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.9
upper limit	6.2

Notes:

[209] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 12
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[210]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.33
upper limit	5

Notes:

[210] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 13
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[211]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-20.5
upper limit	10.6

Notes:

[211] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 14
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)



Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[212]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.6
upper limit	8.8

Notes:

[212] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 15
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[213]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.6
upper limit	4.4

Notes:

[213] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 16
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[214]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-19.4
upper limit	13

Notes:

[214] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 17
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[215]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.5
upper limit	11

Notes:

[215] - Vaccine comparison at Day 8 Group 3B (V72P10) vs Day 38 Group B\_0\_1 (V72P10) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 18
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[216]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.2
upper limit	9.4

Notes:

[216] - Vaccine comparison at Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 19
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 v Group 3B

Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[217]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-20
Confidence interval	
level	95 %
sides	2-sided
lower limit	-30
upper limit	-11.1

Notes:

[217] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 20
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[218]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-7.6
upper limit	15.7

Notes:

[218] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 21
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[219]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	32
Confidence interval	
level	95 %
sides	2-sided
lower limit	23.2
upper limit	40.2

Notes:

[219] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 22
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[220]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-13
Confidence interval	
level	95 %
sides	2-sided
lower limit	-25.9
upper limit	-3

Notes:

[220] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 23
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[221]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-17.1
upper limit	15.9

Notes:

[221] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 24
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)

Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[222]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	33
Confidence interval	
level	95 %
sides	2-sided
lower limit	20.5
upper limit	45.3

Notes:

[222] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 25
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[223]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-25
Confidence interval	
level	95 %
sides	2-sided
lower limit	-40.1
upper limit	-11.2

Notes:

[223] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 26
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[224]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	12
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.9
upper limit	28.1

Notes:

[224] - Vaccine comparison at Day 8 Group 3B (V72P10) vs Day 38 Group B\_0\_1 (V72P10) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 27
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[225]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	33
Confidence interval	
level	95 %
sides	2-sided
lower limit	22
upper limit	44.1

Notes:

[225] - Vaccine comparison at Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 28
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[226]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-16
upper limit	6

Notes:

[226] - Vaccine comparison at Day 4 Group 3B vs Day 34 Group B\_0\_1 (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 29
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 v Group 3B

Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[227]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-6.8
upper limit	8.9

Notes:

[227] - Vaccine comparison at Day 8 Group 3B vs Day 38 Group B\_0\_1 (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 30
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[228]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	11
Confidence interval	
level	95 %
sides	2-sided
lower limit	5.3
upper limit	16.9

Notes:

[228] - Vaccine comparison at Day 31 Group 3B vs Day 61 Group B\_0\_1 (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 31
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[229]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-18
upper limit	14.1

Notes:

[229] - Vaccine comparison at Day 4 Group 3B (V72\_41) vs Day 34 Group B\_0\_1 (V72\_41) (3 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 32
Statistical analysis description: 7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[230]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-9.7
upper limit	15.7

Notes:

[230] - Vaccine comparison at Day 8 Group 3B (V72\_41) vs Day 38 Group B\_0\_1 (V72\_41) (7 days after booster or 2nd dose)

Statistical analysis title	Statistical analysis 33
Statistical analysis description: 1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen	
Comparison groups	Group B_0_1 (V72_41) v Group 3B (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[231]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	17
Confidence interval	
level	95 %
sides	2-sided
lower limit	8.2
upper limit	27.8

Notes:

[231] - Vaccine comparison at Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 34
Statistical analysis description: 3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.	
Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)



Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[232]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-19.1
upper limit	9.1

Notes:

[232] - Vaccine comparison at Day 4 Group 3B (V72P10) vs Day 34 Group B\_0\_1 (V72P10) (3 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 35
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[233]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-8.4
upper limit	11.8

Notes:

[233] - Vaccine comparison at Day 8 Group 3B (V72P10) vs Day 38 Group B\_0\_1 (V72P10) (7 days after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 36
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[234]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-0.47
upper limit	12.6

Notes:

[234] - Vaccine comparison at Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month after booster or 2nd dose)

## Secondary: hSBA Geometric Mean Titers prior to booster/second dose of vaccination & post booster/second dose of vaccination.

End point title	hSBA Geometric Mean Titers prior to booster/second dose of vaccination & post booster/second dose of vaccination.
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End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76,5/99,NZ98/254 and M10713. On day 1, subjects in the Group B\_0\_1 were to be randomized into 2 different blood draw schedules according to a 1:1 ratio : 2 blood samples at different time points: Group B\_0\_1\_1: blood draws at 3 and 30 days after the second dose. Group B\_0\_1\_2: blood draws at 7 and 30 days after the second dose. Analysis was performed on PPS kinetics which included all subjects who had no protocol deviations/any other reason defined prior to analysis, leading to exclusion & correctly received the vaccination at day 1/day 31 & day 1 & provided evaluable immunogenicity result at all of days 4, 8 & 31 (follow-on subjects) or at all of days 34, 38 & 61 (naive)

Days post vaccination has been abbreviated as DPV in the endpoint categories.  
Month post vaccination has been abbreviated as MPV in the endpoint categories.

End point type	Secondary
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End point timeframe:

Group 3B: Day 1 (pre-booster dose) and 3, 7 and 30 days after third dose booster; Group B\_0\_1: Pre 2nd dose and at 3 (group B\_0\_1\_1 only), 7 (group B\_0\_1\_2 only) and 30 days post second dose.

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	242	203	130	112
Units: Titers				
geometric mean (confidence interval 95%)				
H44/76 -Pre Vacc(N-242,203,130,112,94,109)	2.99 (2.41 to 3.70)	17 (14 to 22)	2.41 (1.86 to 3.13)	4.61 (3.34 to 6.38)
H44/76 - 3 DPV(N-242,105,130,112,50,55)	3.20 (2.60 to 3.94)	17 (13 to 23)	2.68 (2.06 to 3.48)	4.57 (3.38 to 6.18)
H44/76 - 7 DPV(N-242,98,130,112,44,54)	115 (98 to 136)	57 (44 to 73)	97 (77 to 123)	153 (123 to 191)
H44/76 - 1 MPV(N-242,203,130,112,94,109)	196 (170 to 228)	56 (48 to 66)	157 (127 to 193)	285 (234 to 345)
5/99-Pre Vacc(N-175,169,100,75,82,87)	24 (18 to 32)	31 (23 to 41)	20 (14 to 29)	30 (20 to 47)
5/99- 3 DPV(N-185,86,103,82,44,42)	24 (18 to 31)	27 (19 to 41)	23 (16 to 34)	25 (17 to 35)
5/99- 7 DPV(N-185,88,103,82,40,48)	1787 (1477 to 2162)	337 (257 to 442)	1969 (1516 to 2556)	1547 (1191 to 2009)
5/99- 1 MPV(N-185,174,103,82,84,90)	2026 (1714 to 2395)	248 (208 to 295)	2147 (1749 to 2635)	1903 (1469 to 2466)
NZ98/254-Pre Vacc(N-231,201,130,101,93,108)	1.57 (1.29 to 1.92)	5.11 (4.10 to 6.38)	1.31 (1.06 to 1.63)	2.40 (1.72 to 3.37)
NZ98/254- 3 DPV(N-233,105,130,103,50,55)	1.62 (1.35 to 1.96)	4.45 (3.38 to 5.84)	1.40 (1.15 to 1.70)	2.34 (1.72 to 3.20)
NZ98/254- 7 DPV(N-233,98,130,103,44,54)	12 (10 to 15)	12 (8.46 to 16)	10 (7.80 to 13)	18 (13 to 25)
NZ98/254- 1 MPV(N-233,203,130,103,94,109)	35 (29 to 42)	14 (11 to 17)	32 (25 to 40)	44 (33 to 59)
M10713-Pre Vacc(N-240,202,128,112,93,109)	15 (12 to 19)	32 (25 to 41)	13 (9.76 to 18)	22 (16 to 29)

M10713- 3DPV(N-241,105,129,112,50,55)	16 (13 to 21)	23 (17 to 33)	14 (9.96 to 19)	24 (18 to 32)
M10713- 7 DPV(N-241,98,129,112,44,54)	54 (46 to 62)	45 (36 to 57)	48 (39 to 59)	68 (56 to 82)
M10713- 1 MPV(N-241,203,129,112,94,109)	78 (67 to 92)	41 (35 to 49)	64 (52 to 80)	116 (94 to 143)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	94	109		
Units: Titers				
geometric mean (confidence interval 95%)				
H44/76 -Pre Vacc(N-242,203,130,112,94,109)	14 (10 to 19)	27 (19 to 37)		
H44/76 - 3 DPV(N-242,105,130,112,50,55)	14 (9.55 to 22)	24 (16 to 37)		
H44/76 - 7 DPV(N-242,98,130,112,44,54)	62 (42 to 90)	60 (44 to 83)		
H44/76 - 1 MPV(N-242,203,130,112,94,109)	57 (45 to 73)	64 (52 to 78)		
5/99-Pre Vacc(N-175,169,100,75,82,87)	33 (23 to 50)	30 (20 to 44)		
5/99- 3 DPV(N-185,86,103,82,44,42)	27 (15 to 49)	28 (17 to 47)		
5/99- 7 DPV(N-185,88,103,82,40,48)	294 (197 to 439)	365 (259 to 514)		
5/99- 1 MPV(N-185,174,103,82,84,90)	224 (179 to 281)	276 (215 to 353)		
NZ98/254-Pre Vacc(N-231,201,130,101,93,108)	3.44 (2.66 to 4.43)	9.79 (7.07 to 14)		
NZ98/254- 3 DPV(N-233,105,130,103,50,55)	2.75 (2.02 to 3.74)	8.94 (5.84 to 14)		
NZ98/254- 7 DPV(N-233,98,130,103,44,54)	11 (6.96 to 17)	15 (9.79 to 24)		
NZ98/254- 1 MPV(N-233,203,130,103,94,109)	12 (9.04 to 16)	17 (13 to 23)		
M10713-Pre Vacc(N-240,202,128,112,93,109)	25 (18 to 35)	50 (38 to 67)		
M10713- 3DPV(N-241,105,129,112,50,55)	18 (11 to 30)	37 (24 to 56)		
M10713- 7 DPV(N-241,98,129,112,44,54)	42 (30 to 59)	56 (42 to 73)		
M10713- 1 MPV(N-241,203,129,112,94,109)	34 (26 to 44)	61 (49 to 75)		

## Statistical analyses

Statistical analysis title	Statistical analysis 1
Statistical analysis description:	
Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.	
Comparison groups	Group B_0_1 v Group 3B

Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[235]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	3.49
Confidence interval	
level	95 %
sides	2-sided
lower limit	2.85
upper limit	4.29

Notes:

[235] - Vaccine Comparison Day 31 Group 3B vs Day 61 Group B\_0\_1(1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 2
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Statistical analysis description:

Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[236]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	2.73
Confidence interval	
level	95 %
sides	2-sided
lower limit	2.02
upper limit	3.69

Notes:

[236] - Vaccine Comparison Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 3
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Statistical analysis description:

Adjusted geometric mean titers for H44/76 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[237]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	4.46
Confidence interval	
level	95 %
sides	2-sided
lower limit	3.38
upper limit	5.88

Notes:

[237] - Vaccine Comparison Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 4
Statistical analysis description: Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[238]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	8.18
Confidence interval	
level	95 %
sides	2-sided
lower limit	6.51
upper limit	10

Notes:

[238] - Vaccine Comparison Day 31 Group 3B vs Day 61 Group B\_0\_1(1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 5
Statistical analysis description: Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[239]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	9.58
Confidence interval	
level	95 %
sides	2-sided
lower limit	7.17
upper limit	13

Notes:

[239] - Vaccine Comparison Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 6
Statistical analysis description: Adjusted geometric mean titers for 5/99 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)

Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[240]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	6.9
Confidence interval	
level	95 %
sides	2-sided
lower limit	4.82
upper limit	9.87

Notes:

[240] - Vaccine Comparison Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 7
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Statistical analysis description:

Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[241]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	2.58
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.98
upper limit	3.36

Notes:

[241] - Vaccine Comparison Day 31 Group 3B vs Day 61 Group B\_0\_1(1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 8
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Statistical analysis description:

Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[242]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	2.65
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.89
upper limit	3.73

Notes:

[242] - Vaccine Comparison Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 9
Statistical analysis description: Adjusted geometric mean titers for NZ98/254 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.	
Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[243]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	2.51
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.67
upper limit	3.78

Notes:

[243] - Vaccine Comparison Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 10
Statistical analysis description: Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country	
Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[244]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	1.9
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.52
upper limit	2.36

Notes:

[244] - Vaccine Comparison Day 31 Group 3B vs Day 61 Group B\_0\_1(1 month after booster or 2nd dose)

Statistical analysis title	Statistical analysis 11
Statistical analysis description: Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.	
Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)

Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[245]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	1.88
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.37
upper limit	2.59

Notes:

[245] - Vaccine Comparison Day 31 Group 3B (V72\_41) vs Day 61 Group B\_0\_1 (V72\_41) (1 month after booster or 2nd dose)

<b>Statistical analysis title</b>	Statistical analysis 12
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Statistical analysis description:

Adjusted geometric mean titers for M10713 indicator strain were obtained by exponentiating (base 10) the least square means and the lower and upper limits of the 95% confidence intervals of the log-transformed titers obtained from an ANOVA estimation adjusting for vaccine group and country.

Comparison groups	Group 3B (V72P10) v Group B_0_1 (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[246]</sup>
Method	ANOVA
Parameter estimate	Ratio of GMTs
Point estimate	1.91
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.41
upper limit	2.58

Notes:

[246] - Vaccine Comparison Day 31 Group 3B (V72P10) vs Day 61 Group B\_0\_1 (V72P10) (1 month after booster or 2nd dose)

### **Secondary: Geometric Mean Ratios (GMRs) of GMTs after booster/second vaccination versus before booster/second vaccination.**

End point title	Geometric Mean Ratios (GMRs) of GMTs after booster/second vaccination versus before booster/second vaccination.
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End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76, 5/99, NZ98/254 and M10713 by calculating the GMRs of GMTs post-vaccination with a booster dose (Group 3B) versus pre-booster dose or second dose (Group B\_0\_1) of vaccination versus pre second dose. Analysis was performed on PPS kinetics which included all subjects who had no protocol deviations/any other reason defined prior to analysis, leading to exclusion & correctly received the vaccination at day 1/day 31 & day 1 & provided evaluable immunogenicity result at all of days 4, 8 & 31 (follow-on subjects) or at all of days 34, 38 & 61 (naive)

End point type	Secondary
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End point timeframe:

Group 3B: Day 1 and 30 days after third dose booster; Group B\_0\_1: 30 days post-first dose and at 30 days post-second dose



End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	242	203	130	112
Units: Ratio				
geometric mean (confidence interval 95%)				
H44/76(N-242,203,130,112,94,109)	66 (55 to 79)	3.27 (2.66 to 4.03)	65 (49 to 85)	62 (49 to 78)
5/99(N-175,169,100,75,82,87)	85 (65 to 111)	8.10 (6.12 to 11)	105 (76 to 145)	62 (41 to 96)
NZ98/25(N-231,201,130,101,93,108)	22 (19 to 27)	2.63 (2.15 to 3.21)	24 (19 to 30)	18 (14 to 24)
M10713(N-240,202,128,112,93,109)	5.07 (4.33 to 5.94)	1.27 (1.07 to 1.52)	4.87 (3.92 to 6.05)	5.30 (4.29 to 6.55)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	94	109		
Units: Ratio				
geometric mean (confidence interval 95%)				
H44/76(N-242,203,130,112,94,109)	4.21 (3.05 to 5.80)	2.37 (1.87 to 3.00)		
5/99(N-175,169,100,75,82,87)	6.86 (4.82 to 9.78)	9.09 (6.10 to 14)		
NZ98/25(N-231,201,130,101,93,108)	3.42 (2.59 to 4.51)	1.76 (1.36 to 2.29)		
M10713(N-240,202,128,112,93,109)	1.36 (1.06 to 1.75)	1.20 (0.97 to 1.49)		

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percentages of Subjects with at Least Four-fold Increase in hSBA Titers Pre-booster/Second dose vaccination- compared to 3, 7 and 30 Days Post-booster/Second Vaccination

End point title	Percentages of Subjects with at Least Four-fold Increase in hSBA Titers Pre-booster/Second dose vaccination- compared to 3, 7 and 30 Days Post- booster/Second Vaccination
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End point description:

The percentage of subjects with 4-fold rise at 3, 7, 30 days post-vaccination with a booster dose (follow-on subjects) /second dose (naïve subjects) of rMenB+OMV NZ with respect to day 1 (follow-on subjects) / pre-second dose of rMenB+OMV NZ (naïve subjects). Percentage of subjects with four-fold rise in hSBA titers relative to baseline were defined as: • for a pre-vaccination titer < 4, a post-vaccination titer of at least 16; • for a pre-vaccination titer ≥ 4 but <LLOQ, a post vaccination titer of at least fourfold the LLOQ; • for a pre-vaccination titer ≥LLOQ, a post vaccination titer of at least fourfold the pre-

vaccination titer.

Days post vaccination has been abbreviated as DPV in the endpoint categories.

Month post vaccination has been abbreviated as MPV in the endpoint categories.

End point type	Secondary
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End point timeframe:

Group 3B: at 3, 7 and 30 days after third dose booster; Group B\_0\_1: at 3 (group B\_0\_1\_1 only), 7 (group B\_0\_1\_2 only) and 30 days post second dose

End point values	Group 3B	Group B_0_1	Group 3B (V72_41)	Group 3B (V72P10)
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	242	203	130	112
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76 3 DPV (N-242,105,130,112,50,55)	2 (0.7 to 4.8)	4 (1.0 to 9.5)	2 (0.48 to 6.6)	2 (0.22 to 6.3)
H44/76 - 7 DPV(N-242,98,130,112,44,54)	88 (82.8 to 91.5)	35 (25.4 to 45.0)	89 (82.6 to 94.0)	86 (77.8 to 91.6)
H44/76 - 1 MPV(N-242,203,130,112,94,109)	96 (93.1 to 98.3)	38 (31.7 to 45.5)	95 (89.2 to 97.8)	98 (93.7 to 99.78)
5/99-3 MPV(N-175,83,100,75,44,39)	5 (2.0 to 8.8)	6 (2.0 to 13.5)	7 (2.9 to 13.9)	1 (0.03 to 7.2)
5/99- 7 DPV(N-175,86,100,75,38,48)	97 (92.7 to 98.7)	59 (48.2 to 69.8)	98 (93.0 to 99.76)	95 (86.9 to 98.5)
5/99- 1 MPV(N-175,169,100,75,82,87)	97 (93.5 to 99.1)	64 (56.8 to 71.7)	98 (93.0 to 99.76)	96 (88.8 to 99.2)
NZ98/254-3 DPV(N-231,104,130,101,50,54)	2 (0.7 to 5.0)	2 (0.23 to 6.8)	2 (0.48 to 6.6)	2 (0.24 to 7.0)
NZ98/254- 7 DPV(N-231,97,130,101,43,54)	55 (48.3 to 61.5)	19 (11.4 to 27.7)	55 (45.7 to 63.4)	55 (45.2 to 65.3)
NZ98/254- 1 MPV(N-231,201,130,101,93,108)	81 (75.3 to 85.8)	27 (21.3 to 34.1)	82 (73.8 to 87.8)	80 (71.1 to 87.5)
M10713- 3 DPV(N-240,105,128,112,50,55)	3 (0.9 to 5.4)	0 (0.0 to 3.5)	2 (0.49 to 6.7)	3 (0.6 to 7.6)
M10713- 7 DPV(N-240,97,128,112,43,54)	34 (27.8 to 40.1)	6 (2.3 to 13.0)	39 (30.6 to 48.1)	28 (19.6 to 36.9)
M10713- 1 MPV(N-240,202,128,112,93,109)	49 (42.3 to 55.3)	9 (5.8 to 14.3)	48 (39.5 to 57.4)	49 (39.5 to 58.7)

End point values	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	94	109		
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76 3 DPV (N-242,105,130,112,50,55)	6 (1.3 to 16.5)	2 (0.05 to 9.7)		
H44/76 - 7 DPV(N-242,98,130,112,44,54)	45 (30.4 to 61.2)	26 (15.0 to 39.7)		
H44/76 - 1 MPV(N-242,203,130,112,94,109)	51 (40.5 to 61.5)	28 (19.4 to 36.9)		
5/99-3 MPV(N-175,83,100,75,44,39)	5 (0.6 to 15.5)	8 (1.6 to 20.9)		
5/99- 7 DPV(N-175,86,100,75,38,48)	55 (38.3 to 71.4)	63 (47.4 to 76.0)		

5/99- 1 MPV(N-175,169,100,75,82,87)	56 (44.7 to 67.0)	72 (61.8 to 81.5)		
NZ98/254-3 DPV(N-231,104,130,101,50,54)	2 (0.05 to 10.6)	2 (0.05 to 9.9)		
NZ98/254- 7 DPV(N-231,97,130,101,43,54)	26 (13.5 to 41.2)	13 (5.4 to 24.9)		
NZ98/254- 1 MPV(N-231,201,130,101,93,108)	35 (25.8 to 46.1)	20 (13.2 to 29.2)		
M10713- 3 DPV(N-240,105,128,112,50,55)	0 (0.0 to 7.1)	0 (0.0 to 6.5)		
M10713- 7 DPV(N-240,97,128,112,43,54)	14 (5.3 to 27.9)	0 (0.0 to 6.6)		
M10713- 1 MPV(N-240,202,128,112,93,109)	12 (6.1 to 20.2)	7 (3.2 to 14.0)		

## Statistical analyses

Statistical analysis title	Statistical analysis 1
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[247]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	-2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-7.5
upper limit	1.8

Notes:

[247] - 3 Days Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

Statistical analysis title	Statistical analysis 2
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[248]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	53

Confidence interval	
level	95 %
sides	2-sided
lower limit	42.1
upper limit	62.5

Notes:

[248] - 7 Days Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 3
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[249]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	58
Confidence interval	
level	95 %
sides	2-sided
lower limit	50.5
upper limit	64.7

Notes:

[249] - 1 Month Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 4
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[250]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-14.1
upper limit	2

Notes:

[250] - 3 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 5
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N.

meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[251]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	44
Confidence interval	
level	95 %
sides	2-sided
lower limit	28.1
upper limit	58.5

Notes:

[251] - 7 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 6
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[252]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	44
Confidence interval	
level	95 %
sides	2-sided
lower limit	32.7
upper limit	54.1

Notes:

[252] - 1 month Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 7
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[253]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0

Confidence interval	
level	95 %
sides	2-sided
lower limit	-8
upper limit	4.8

Notes:

[253] - 3 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

<b>Statistical analysis title</b>	Statistical analysis 8
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[254]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	60
Confidence interval	
level	95 %
sides	2-sided
lower limit	45
upper limit	71.5

Notes:

[254] - 7 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

<b>Statistical analysis title</b>	Statistical analysis 9
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain H44/76 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[255]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	71
Confidence interval	
level	95 %
sides	2-sided
lower limit	61.2
upper limit	78.5

Notes:

[255] - 1 month Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

<b>Statistical analysis title</b>	Statistical analysis 10
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N.

meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[256]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-1
Confidence interval	
level	95 %
sides	2-sided
lower limit	-9.1
upper limit	4

Notes:

[256] - 3 Days Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 11
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[257]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	37
Confidence interval	
level	95 %
sides	2-sided
lower limit	27
upper limit	48.1

Notes:

[257] - 7 Days Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 12
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[258]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	33

Confidence interval	
level	95 %
sides	2-sided
lower limit	25.2
upper limit	40.4

Notes:

[258] - 1 Month Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 13
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[259]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-8.7
upper limit	10.2

Notes:

[259] - 3 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 14
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[260]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	43
Confidence interval	
level	95 %
sides	2-sided
lower limit	27.7
upper limit	58.6

Notes:

[260] - 7 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 15
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N.



meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[261]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	42
Confidence interval	
level	95 %
sides	2-sided
lower limit	31.1
upper limit	53

Notes:

[261] - 1 month Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 16
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[262]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	-6
Confidence interval	
level	95 %
sides	2-sided
lower limit	-19.2
upper limit	0.9

Notes:

[262] - 3 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

<b>Statistical analysis title</b>	Statistical analysis 17
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[263]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	32

Confidence interval	
level	95 %
sides	2-sided
lower limit	18.2
upper limit	47

Notes:

[263] - 7 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

<b>Statistical analysis title</b>	Statistical analysis 18
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain 5/99 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[264]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	24
Confidence interval	
level	95 %
sides	2-sided
lower limit	13.2
upper limit	34.4

Notes:

[264] - 1 month Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

<b>Statistical analysis title</b>	Statistical analysis 19
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[265]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.7
upper limit	3.4

Notes:

[265] - 3 Days Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 20
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N.

meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[266]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	36
Confidence interval	
level	95 %
sides	2-sided
lower limit	25.6
upper limit	45.7

Notes:

[266] - 7 Days Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 21
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[267]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	54
Confidence interval	
level	95 %
sides	2-sided
lower limit	45.2
upper limit	61.1

Notes:

[267] - 1 Month Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 22
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[268]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	0

Confidence interval	
level	95 %
sides	2-sided
lower limit	-8.4
upper limit	5

Notes:

[268] - 3 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 23
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[269]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	29
Confidence interval	
level	95 %
sides	2-sided
lower limit	12.1
upper limit	43

Notes:

[269] - 7 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 24
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/154 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[270]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	46
Confidence interval	
level	95 %
sides	2-sided
lower limit	33.6
upper limit	57.1

Notes:

[270] - 1 month Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 25
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N.

meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[271]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	-8
upper limit	5.4

Notes:

[271] - 3 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

<b>Statistical analysis title</b>	Statistical analysis 26
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[272]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	42
Confidence interval	
level	95 %
sides	2-sided
lower limit	27.8
upper limit	54.5

Notes:

[272] - 7 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

<b>Statistical analysis title</b>	Statistical analysis 27
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain NZ98/254 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[273]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	60

Confidence interval	
level	95 %
sides	2-sided
lower limit	47.9
upper limit	69.6

Notes:

[273] - 1 month Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

<b>Statistical analysis title</b>	Statistical analysis 28
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[274]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.1
upper limit	5.4

Notes:

[274] - 3 Days Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 29
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen.

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[275]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	28
Confidence interval	
level	95 %
sides	2-sided
lower limit	19.1
upper limit	34.9

Notes:

[275] - 7 Days Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 30
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N.

meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 v Group 3B
Number of subjects included in analysis	445
Analysis specification	Pre-specified
Analysis type	other <sup>[276]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	vaccine group difference
Point estimate	39
Confidence interval	
level	95 %
sides	2-sided
lower limit	31.6
upper limit	46.6

Notes:

[276] - 1 Month Post Booster/Second Vaccination. Four-fold Increase (Group 3B vs. Group B\_0\_1) Difference

<b>Statistical analysis title</b>	Statistical analysis 31
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[277]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.9
upper limit	6.7

Notes:

[277] - 3 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 32
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[278]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	25

Confidence interval	
level	95 %
sides	2-sided
lower limit	9.7
upper limit	37.1

Notes:

[278] - 7 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 33
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group 3B (V72_41) v Group B_0_1 (V72_41)
Number of subjects included in analysis	224
Analysis specification	Pre-specified
Analysis type	other <sup>[279]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	37
Confidence interval	
level	95 %
sides	2-sided
lower limit	25.1
upper limit	47

Notes:

[279] - 1 month Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72\_41) vs. Group B\_0\_1 (V72\_41)] Difference

<b>Statistical analysis title</b>	Statistical analysis 34
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Statistical analysis description:

3 days post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[280]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.9
upper limit	7.6

Notes:

[280] - 3 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

<b>Statistical analysis title</b>	Statistical analysis 35
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Statistical analysis description:

7 days post vaccination-The group difference in percentages of subjects with response against N.



meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[281]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	28
Confidence interval	
level	95 %
sides	2-sided
lower limit	20.2
upper limit	36.6

Notes:

[281] - 7 Days Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

<b>Statistical analysis title</b>	Statistical analysis 36
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Statistical analysis description:

1 month post vaccination-The group difference in percentages of subjects with response against N. meningitidis serogroup B indicator strain M10713 and the associated confidence interval for the difference was calculated using the method of Miettinen and Nurminen

Comparison groups	Group B_0_1 (V72P10) v Group 3B (V72P10)
Number of subjects included in analysis	221
Analysis specification	Pre-specified
Analysis type	other <sup>[282]</sup>
Method	Miettinen and Nurminen score method
Parameter estimate	Vaccine group difference
Point estimate	42
Confidence interval	
level	95 %
sides	2-sided
lower limit	31
upper limit	51.9

Notes:

[282] - 1 month Post Booster/Second Vaccination. Four-fold Increase [Group 3B (V72P10) vs. Group B\_0\_1 (V72P10)] Difference

## **Secondary: Percentage of subjects with hSBA $\geq 1:4$ after second vaccination of rMenB+OMV NZ**

End point title	Percentage of subjects with hSBA $\geq 1:4$ after second vaccination of rMenB+OMV NZ <sup>[283]</sup>
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End point description:

Bactericidal activity was measured against the N. meningitidis group B indicator strains 5/99 and NZ98/254. Only subjects receiving a second vaccination (group B\_0\_1) were assessed for this outcome measure. Analysis was performed on the PPS( per protocol set) catch up. The PPS catch up included all subjects who were randomized to group B\_0\_1 who correctly received two vaccinations at day 1 and day 31 & provided evaluable immunogenicity result at day 61 for atleast one indicator strain. The analysis was performed only on strains 5/99 and NZ98/254.

End point type	Secondary
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End point timeframe:

At Day 61 (30 days post second dose of vaccination.)

Notes:

[283] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The results in this study were tabulated by age group and study period. Hence for each related endpoint, they are presented for only the respective groups in the baseline period, while the results for multiple endpoints account for all baseline groups.

End point values	Group B_0_1	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)	
Subject group type	Reporting group	Subject analysis set	Subject analysis set	
Number of subjects analysed	215	98	117	
Units: Percentage of subjects				
number (confidence interval 95%)				
5/99 (N-195,91,104)	98 (95.6 to 99.68)	100 (96.0 to 100.0)	97 (91.8 to 99.4)	
NZ98/254 (N-215,98,117)	80 (74.5 to 85.5)	82 (72.5 to 88.7)	79 (71.0 to 86.4)	

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percentage of subjects with hSBA $\geq 1:5$ after second vaccination of rMenB+OMV NZ

End point title	Percentage of subjects with hSBA $\geq 1:5$ after second vaccination of rMenB+OMV NZ <sup>[284]</sup>
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End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76 and M10713. Only subjects receiving a second vaccination (group B\_0\_1) were assessed for this outcome measure. Analysis was performed on the PPS( per protocol set) catch up. The PPS catch up included all subjects who were randomized to group B\_0\_1 who correctly received two vaccinations at day 1 and day 31 & provided evaluable immunogenicity result at day 61 for atleast one indicator strain.

End point type	Secondary
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End point timeframe:

At Day 61 (30 days post second dose of vaccination.)

Notes:

[284] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The results in this study were tabulated by age group and study period. Hence for each related endpoint, they are presented for only the respective groups in the baseline period, while the results for multiple endpoints account for all baseline groups.

End point values	Group B_0_1	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)	
Subject group type	Reporting group	Subject analysis set	Subject analysis set	
Number of subjects analysed	215	98	117	
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N-215,98,117)	99 (96.7 to 99.89)	99 (94.4 to 99.97)	99 (95.3 to 99.98)	

M10713(N-214,98,116)	93 (88.7 to 96.0)	90 (82.0 to 95.0)	96 (90.2 to 98.6)	
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## Statistical analyses

No statistical analyses for this end point

## Secondary: Percentage of subjects with hSBA $\geq 1:8$ after second vaccination of rMenB+OMV NZ.

End point title	Percentage of subjects with hSBA $\geq 1:8$ after second vaccination of rMenB+OMV NZ. <sup>[285]</sup>
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End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76,5/99,NZ98/254 and M10713. Only subjects receiving a second vaccination (group B\_0\_1) were assessed for this outcome measure. Analysis was performed on the PPS( per protocol set) catch up. The PPS catch up included all subjects who were randomized to group B\_0\_1 who correctly received two vaccinations at day 1 and day 31 & provided evaluable immunogenicity result at day 61 for atleast one indicator strain.

End point type	Secondary
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End point timeframe:

At Day 61 (30 days post second vaccination)

Notes:

[285] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The results in this study were tabulated by age group and study period. Hence for each related endpoint, they are presented for only the respective groups in the baseline period, while the results for multiple endpoints account for all baseline groups.

End point values	Group B_0_1	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)	
Subject group type	Reporting group	Subject analysis set	Subject analysis set	
Number of subjects analysed	215	98	117	
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N-215,98,117)	98 (95.3 to 99.5)	99 (94.4 to 99.97)	97 (92.7 to 99.5)	
5/99(N-195,91,104)	98 (95.6 to 99.68)	100 (96.0 to 100.0)	97 (91.8 to 99.4)	
NZ98/254(N-215,98,117)	67 (60.3 to 73.2)	64 (54.0 to 73.7)	69 (60.0 to 77.4)	
M10713(N-214,98,116)	90 (85.4 to 93.8)	86 (77.2 to 92.0)	94 (88.0 to 97.5)	

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percentage of subjects with hSBA $\geq 1:16$ after second vaccination of

**rMenB+OMV NZ.**

End point title	Percentage of subjects with hSBA $\geq$ 1:16 after second vaccination of rMenB+OMV NZ. <sup>[286]</sup>
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## End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76,5/99,NZ98/254 and M10713. Only subjects receiving a second vaccination (group B\_0\_1) were assessed for this outcome measure. Analysis was performed on the PPS( per protocol set) catch up. The PPS catch up included all subjects who were randomized to group B\_0\_1 who correctly received two vaccinations at day 1 and day 31 & provided evaluable immunogenicity result at day 61 for atleast one indicator strain.

End point type	Secondary
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## End point timeframe:

At Day 61 (30 days post second vaccination)

## Notes:

[286] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The results in this study were tabulated by age group and study period. Hence for each related endpoint, they are presented for only the respective groups in the baseline period, while the results for multiple endpoints account for all baseline groups.

End point values	Group B_0_1	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)	
Subject group type	Reporting group	Subject analysis set	Subject analysis set	
Number of subjects analysed	215	98	117	
Units: Percentage of subjects				
number (confidence interval 95%)				
H44/76(N-215,98,117)	91 (86.0 to 94.2)	91 (83.3 to 95.7)	91 (83.8 to 95.2)	
5/99(N-195,91,104)	98 (94.8 to 99.4)	100 (96.0 to 100)	96 (90.4 to 98.9)	
NZ98/254(N-215,98,117)	48 (41.5 to 55.3)	40 (30.0 to 50.2)	56 (46.1 to 64.7)	
M10713(N-214,98,116)	84 (78.5 to 88.7)	74 (64.7 to 82.8)	92 (85.8 to 96.4)	

**Statistical analyses**

No statistical analyses for this end point

**Secondary: hSBA Geometric Mean Titers (GMTs) after second vaccination of rMenB+OMV NZ.**

End point title	hSBA Geometric Mean Titers (GMTs) after second vaccination of rMenB+OMV NZ. <sup>[287]</sup>
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## End point description:

Bactericidal activity was measured against each of the four N. meningitidis group B indicator strains H44/76,5/99,NZ98/254 and M10713. Only subjects receiving a second vaccination (group B\_0\_1) were assessed for this outcome measure. Analysis was performed on the PPS( per protocol set) catch up. The PPS catch up included all subjects who were randomized to group B\_0\_1 who correctly received two vaccinations at day 1 and day 31 & provided evaluable immunogenicity result at day 61 for atleast one indicator strain.

End point type	Secondary
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End point timeframe:

At Day 1 & Day 61 (30 days post second dose of vaccination)

Notes:

[287] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The results in this study were tabulated by age group and study period. Hence for each related endpoint, they are presented for only the respective groups in the baseline period, while the results for multiple endpoints account for all baseline groups.

End point values	Group B_0_1	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)	
Subject group type	Reporting group	Subject analysis set	Subject analysis set	
Number of subjects analysed	215	98	117	
Units: Titers				
geometric mean (confidence interval 95%)				
H44/76-Day 1(N-215,98,117)	1.32 (1.18 to 1.47)	1.08 (1.00 to 1.17)	1.56 (1.29 to 1.89)	
H44/76-1MTH post 2nd vacc(N-215,98,117)	61 (53 to 70)	57 (47 to 68)	64 (53 to 78)	
5/99-Day 1(N-181,86,95)	1.63 (1.35 to 1.96)	1.18 (1.03 to 1.35)	2.18 (1.58 to 3.00)	
5/99-1 MTH post 2nd vacc(N-195,91,104)	257 (217 to 305)	239 (200 to 285)	274 (207 to 363)	
NZ98/254-Day 1(N-213,98,115)	1.28 (1.15 to 1.42)	1.00 (1.00 to 1.00)	1.58 (1.30 to 1.91)	
NZ98/254-1MTH post 2nd vacc(N-215,98,117)	14 (11 to 17)	11 (8.41 to 14)	18 (13 to 24)	
M10713-Day 1(N-214,98,116)	14 (11 to 18)	10 (7.13 to 15)	19 (14 to 26)	
M10713-1 MTH post 2nd vacc(N-214,98,116)	46 (38 to 55)	33 (25 to 44)	60 (48 to 75)	

## Statistical analyses

No statistical analyses for this end point

## Secondary: Geometric mean ratio (GMRs) of GMTs one month post second vaccination versus pre vaccination at Day 1

End point title	Geometric mean ratio (GMRs) of GMTs one month post second vaccination versus pre vaccination at Day 1 <sup>[288]</sup>
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End point description:

Bactericidal activity was measured against each of the four *N. meningitidis* group B indicator strains H44/76, 5/99, NZ98/254 and M10713. Only subjects receiving a second vaccination (group B\_0\_1) were assessed for this outcome measure. Analysis was performed on the PPS( per protocol set) catch up. The PPS catch up included all subjects who were randomized to group B\_0\_1 who correctly received two vaccinations at day 1 and day 31 & provided evaluable immunogenicity result at day 61 for atleast one indicator strain.

End point type	Secondary
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End point timeframe:

At Day 1 & Day 61 (30 days post 2nd vaccination)

Notes:

[288] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The results in this study were tabulated by age group and study period. Hence for each related endpoint, they are presented for only the respective groups in the baseline period, while the results for multiple endpoints account for all baseline groups.

End point values	Group B_0_1	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)	
Subject group type	Reporting group	Subject analysis set	Subject analysis set	
Number of subjects analysed	215	98	117	
Units: Ratio				
geometric mean (confidence interval 95%)				
H44/76(N-215,98,117)	46 (39 to 54)	52 (42 to 65)	41 (33 to 51)	
5/99(N-181,86,95)	156 (117 to 209)	204 (162 to 257)	123 (74 to 204)	
NZ98/254(N-213,98,115)	11 (8.88 to 14)	11 (8.41 to 14)	11 (7.94 to 16)	
M10713(N-214,98,116)	3.23 (2.76 to 3.77)	3.24 (2.57 to 4.08)	3.22 (2.60 to 3.98)	

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percentages of Subjects with at Least Four-fold Increase in hSBA Titers at pre-First Vaccination compared to One Month Post-Second Vaccination

End point title	Percentages of Subjects with at Least Four-fold Increase in hSBA Titers at pre-First Vaccination compared to One Month Post-Second Vaccination <sup>[289]</sup>
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End point description:

The percentage of subjects with 4-fold rise at one month post-vaccination with a second dose (naïve subjects) of rMenB+OMV NZ with respect to day 1, to each and any one, two, three or all 4 indicator strains. Percentage of subjects with four-fold rise in hSBA titers relative to baseline were defined as: • for a pre-vaccination titer < 4, a post-vaccination titer of at least 16; • for a pre-vaccination titer ≥ 4 but <LLOQ, a post vaccination titer of at least fourfold the LLOQ; • for a pre-vaccination titer ≥LLOQ, a post vaccination titer of at least fourfold the pre-vaccination titer. Only subjects receiving the second dose of vaccination(group B\_0\_1) were considered for this outcome measure. Analysis was performed on the PPS( per protocol set) catch up. The PPS catch up included all subjects who were randomized to group B\_0\_1 who correctly received two vaccinations at day 1 and day 31 & provided evaluable immunogenicity result at day 61 for atleast one indicator strain.

End point type	Secondary
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End point timeframe:

At Day 61 (30 days post second dose of vaccination)

Notes:

[289] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The results in this study were tabulated by age group and study period. Hence for each related endpoint, they are presented for only the respective groups in the baseline period, while the results for multiple endpoints account for all baseline groups.

End point values	Group B_0_1	Group B_0_1 (V72_41)	Group B_0_1 (V72P10)	
Subject group type	Reporting group	Subject analysis set	Subject analysis set	
Number of subjects analysed	215	98	117	
Units: Percentage of Subjects				
number (confidence interval 95%)				
H44/76(N-215,98,117)	95 (91.6 to 97.7)	97 (91.3 to 99.4)	94 (88.1 to 97.6)	
5/99(N-181,86,95)	97 (92.9 to 98.8)	100 (95.8 to 100)	94 (86.8 to 97.6)	
NZ98/254(N-213,98,115)	67 (59.9 to 73)	64 (54.0 to 73.7)	69 (59.4 to 77.0)	
M10713(N-214,98,116)	35 (28.2 to 41.4)	37 (27.2 to 47.1)	33 (24.3 to 42.1)	

### Statistical analyses

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

Solicited AEs were collected until 7 days after vaccinations. Unsolicited AEs were collected 30 days after each vaccination at day 31 (all subjects) and at day 61 (group B\_0\_1 subjects only).

Adverse event reporting additional description:

Serious Adverse Events (SAEs) were collected until study termination (1 month for group 3B subjects/ 2 months for group B\_0\_1 subjects)

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	20.0
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### Reporting groups

Reporting group title	Group 3B
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Reporting group description:

Subjects who received two doses of rMenB+OMV NZ administered at 0, 1 or 0,2 or 0,6 month schedule in study V72P10 (NCT00661713) and at 0,1 month schedule in study V72\_41(NCT0142384), and who received a third dose booster of rMenB+OMV NZ at 4 to 7.5 years after the last dose received during parent studies, and had blood collected at baseline and at 3, 7 and 30 days after the third dose booster.

Reporting group title	Group B_0_1
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Reporting group description:

Naive subjects from Australia, Canada and Chile, who received two doses of rMenB+OMV NZ at a 0 and 1 month schedule and had blood collected at baseline, 30 days after the first dose and 3 or 7, and 30 days after the second dose

Serious adverse events	Group 3B	Group B_0_1	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 275 (0.00%)	1 / 255 (0.39%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events			
Infections and infestations			
Appendicitis			
subjects affected / exposed	0 / 275 (0.00%)	1 / 255 (0.39%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

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

Non-serious adverse events	Group 3B	Group B_0_1	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	266 / 275 (96.73%)	253 / 255 (99.22%)	



Nervous system disorders			
Headache			
subjects affected / exposed	150 / 275 (54.55%)	126 / 255 (49.41%)	
occurrences (all)	361	442	
General disorders and administration site conditions			
Injection site pain			
subjects affected / exposed	259 / 275 (94.18%)	251 / 255 (98.43%)	
occurrences (all)	1088	2029	
Injection site erythema			
subjects affected / exposed	162 / 275 (58.91%)	135 / 255 (52.94%)	
occurrences (all)	575	724	
Fatigue			
subjects affected / exposed	156 / 275 (56.73%)	141 / 255 (55.29%)	
occurrences (all)	394	489	
Injection site induration			
subjects affected / exposed	135 / 275 (49.09%)	136 / 255 (53.33%)	
occurrences (all)	548	834	
Injection site swelling			
subjects affected / exposed	123 / 275 (44.73%)	111 / 255 (43.53%)	
occurrences (all)	475	675	
Pyrexia			
subjects affected / exposed	17 / 275 (6.18%)	9 / 255 (3.53%)	
occurrences (all)	22	16	
Gastrointestinal disorders			
Nausea			
subjects affected / exposed	56 / 275 (20.36%)	53 / 255 (20.78%)	
occurrences (all)	113	128	
Musculoskeletal and connective tissue disorders			
Myalgia			
subjects affected / exposed	121 / 275 (44.00%)	100 / 255 (39.22%)	
occurrences (all)	291	313	
Arthralgia			
subjects affected / exposed	85 / 275 (30.91%)	63 / 255 (24.71%)	
occurrences (all)	203	212	
Infections and infestations			

Viral upper respiratory tract infection subjects affected / exposed occurrences (all)	13 / 275 (4.73%) 13	23 / 255 (9.02%) 26	
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## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported