Clinical trial results:
A Phase 2, Randomized, Placebo-Controlled, Single-blind Trial to Assess the Safety, Tolerability, and Immunogenicity of Bivalent rLP2086 Vaccine When Administered in Either 2- or 3-Dose Regimens in Healthy Subjects Aged 11 to <19 Years

Summary

EudraCT number	2009-014493-18
Trial protocol	SE CZ ES PL DE FI DK
Global end of trial date	18 September 2012

Results information

Result version number	v1 (current)
This version publication date	29 June 2016
First version publication date	01 August 2015

Trial information

Trial identification

Sponsor protocol code	B1971012 (6108A1-2003-EU)

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01299480
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Pfizer Inc.
Sponsor organisation address	235 E 42nd Street, New York, United States, NY 10017
Public contact	Clinical Trials.gov Call Center, Pfizer Inc., 001 800-718-1021, ClinicalTrials.govCallCenter@pfizer.com
Scientific contact	Clinical Trials.gov Call Center, Pfizer Inc., 001 800-718-1021, ClinicalTrials.govCallCenter@pfizer.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	Yes
EMA paediatric investigation plan number(s)	EMEA-001037-PIP02-11
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?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	03 December 2013
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	18 September 2012
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

Co-Primary Objectives:

To assess the immune response as measured by serum bactericidal assay performed with MnB strains expressing LP2086 subfamily A and B proteins, measured 1 month after the third vaccination with bivalent rLP2086 vaccine among group 1 subjects.

To assess the immune response as measured by serum bactericidal assay performed with MnB strains expressing LP2086 subfamily A and B proteins, measured 1 month after the third vaccination with bivalent rLP2086 vaccine among group 2 subjects.

Protection of trial subjects:

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

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	03 March 2011
Long term follow-up planned	Yes
Long term follow-up rationale	Safety
Long term follow-up duration	6 Months
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Poland: 239
Country: Number of subjects enrolled	Spain: 176
Country: Number of subjects enrolled	Sweden: 133
Country: Number of subjects enrolled	Czech Republic: 330
Country: Number of subjects enrolled	Denmark: 302
Country: Number of subjects enrolled	Finland: 368
Country: Number of subjects enrolled	Germany: 164
Worldwide total number of subjects	1712
EEA total number of subjects	1712

Notes:

Subjects enrolled per age group	
In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	220
Adolescents (12-17 years)	1325
Adults (18-64 years)	167
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

A total of 1714 subjects were enrolled in this study. Of these, 1 subject was not randomized but was vaccinated with Saline at Injection 1. This subject was included in safety population and not intent-to-treat population.

Period 1

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

Arms

Are arms mutually exclusive?	Yes
Arm title	Group 1:rLP2086(0-, 1-, 6-Month) + Saline(2-Month)

Arm description:

Randomized to receive rLP2086 on a 0-, 1-, 6- month and 0.9% normal saline on a 2- month schedule.

Arm type	Experimental
Investigational medicinal product name	Bivalent Recombinant lipoprotein 2086 (rLP2086)
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received rLP2086 120 mcg on a 0-, 1-, 6- month schedule.

Investigational medicinal product name	Saline (0.9% sodium chloride)
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received 0.9% saline on a 2- month schedule.

Arm title	Group 2:rLP2086(0-, 2-, 6-Month) +Saline(1-Month)

Arm description:

Randomized to receive rLP2086 on a 0-, 2-, 6- month and 0.9% normal saline on a 1- month schedule.

Arm type	Experimental
Investigational medicinal product name	Bivalent Recombinant lipoprotein 2086 (rLP2086)
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received rLP2086 120 mcg on a 0-, 2-, 6- month schedule.

Investigational medicinal product name	Saline (0.9% sodium chloride)
Investigational medicinal product code	
Other name	

Pharmaceutical forms	Solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received 0.9% saline on a 1- month schedule.

Arm title	Group 3:rLP2086(0-, 6-Month) +Saline(1-, 2-Month)

Arm description:

Randomized to receive rLP2086 on a 0-, 6- month and 0.9% normal saline on a 1-, 2- month schedule.

Arm type	Experimental
Investigational medicinal product name	Bivalent Recombinant lipoprotein 2086 (rLP2086)
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received rLP2086 120 mcg on a 0-, 6- month schedule.

Investigational medicinal product name	Saline (0.9% sodium chloride)
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received 0.9% saline on a 1-, 2-month schedule.

Arm title	Group 4:rLP2086(0-, 2-Month) + Saline(1-, 6-Month)

Arm description:

Randomized to receive rLP2086 on a 0-, 2- month and 0.9% normal saline on a 1-, 6- month schedule.

Arm type	Experimental
Investigational medicinal product name	Bivalent Recombinant lipoprotein 2086 (rLP2086)
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received rLP2086 120 mcg on a 0-, 2- month schedule.

Investigational medicinal product name	Saline (0.9% sodium chloride)
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received 0.9% saline on a 1-, 6-month schedule.

Arm title	Group 5:rLP2086(2-, 6-Month) + Saline(0-, 1-Month)

Arm description:

Randomized to receive rLP2086 on a 2-, 6- month and 0.9% normal saline on a 0-, 1- month schedule.

Arm type	Experimental
Investigational medicinal product name	Bivalent Recombinant lipoprotein 2086 (rLP2086)
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details: Subjects received rLP2086 on a 2-, 6- month schedule.	
Investigational medicinal product name	Saline (0.9% sodium chloride)
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received 0.9% saline on a 0-, 1-month schedule.

Number of subjects in period 1	Group 1:rLP2086(0-, 1-, 6-Month) + Saline(2-Month)	Group 2:rLP2086(0-, 2-, 6-Month) +Saline(1-Month)	Group 3:rLP2086(0-, 6-Month) +Saline(1-, 2-Month)
Started	427	430	426
Randomized and Treated	427	430	426
Completed	385	395	386
Not completed	42	35	40
Withdrawal due to pregnancy	-	1	1
Consent withdrawn by subject	3	4	7
Physician decision	1	1	-
Adverse event	6	4	5
Treated but not randomized	-	-	-
No longer willing to participate	19	17	14
Unspecified	3	2	3
Protocol Violation	7	5	8
Lost to follow-up	3	1	2

Number of subjects in period 1	Group 4:rLP2086(0-, 2-Month) + Saline(1-, 6-Month)	Group 5:rLP2086(2-, 6-Month) + Saline(0-, 1-Month)
Started	285	144
Randomized and Treated	285	143
Completed	261	123
Not completed	24	21
Withdrawal due to pregnancy	-	-
Consent withdrawn by subject	3	4
Physician decision	2	-
Adverse event	4	-
Treated but not randomized	-	1
No longer willing to participate	13	10
Unspecified	-	3
Protocol Violation	1	1
Lost to follow-up	1	2

Baseline characteristics

Reporting groups	
Reporting group title	Overall Study
Reporting group description:	
Baseline characteristics are represented for safety population.	

Reporting group values	Overall Study	Total	
Number of subjects	1712	1712	
Age categorical			
Some subjects randomized to receive vaccination as per Groups 1, 2 or 4 schedules actually received vaccination as per Group 3 schedule. One subject was not randomized but received Saline at Injection 1 and was included in Group 5. Subjects have been presented as per actual administration schedule received.			
Units: Subjects			
11- less than (<) 14 years	627	627	
14 - <19 years	1085	1085	
Gender categorical Units: Subjects			
Female	870	870	
Male	842	842	

Subject analysis sets	
Subject analysis set title	Group 1:rLP2086(0 -,1-,6- Month) +Saline(2-Month):Safety
Subject analysis set type	Safety analysis
Subject analysis set description:	
Randomized to receive rLP2086 on a 0-, 1-, 6-month and 0.9% normal saline on a 2- month schedule.	
Subject analysis set title	Group 2:rLP2086(0-,2-,6-Month)+Saline(1- Month):Safety
Subject analysis set type	Safety analysis
Subject analysis set description:	
Randomized to receive rLP2086 on a 0-, 2-, 6-month and 0.9% normal saline on a 1- month schedule.	
Subject analysis set title	Group 3: rLP2086(0-, 6-Month) +Saline(1-,2-Month):Safety
Subject analysis set type	Safety analysis
Subject analysis set description:	
Randomized to receive rLP2086 on a 0-, 6- month and 0.9% normal saline on a 1-, 2- month schedule.	
Subject analysis set title	Group 4:rLP2086(0-,2- Month) +Saline(1-,6-Month):Safety
Subject analysis set type	Safety analysis
Subject analysis set description:	
Randomized to receive rLP2086 on a 0-, 2- month and 0.9% normal saline on a 1-, 6- month schedule.	
Subject analysis set title	Group 5:rLP2086(2-,6- Month)+ Saline(0-,1- Month): Safety
Subject analysis set type	Safety analysis
Subject analysis set description:	
Randomized to receive rLP2086 on a 2-, 6- month and 0.9% normal saline on a 0-, 1- month schedule.	

Reporting group values	Group 1:rLP2086(0 -,1-,6- Month) +Saline(2-Month):Safety	Group 2:rLP2086(0-,2-,6-Month)+Saline(1-Month):Safety	Group 3: rLP2086(0-, 6-Month) +Saline(1-,2-Month):Safety
Number of subjects	426	414	451

Age categorical			
Some subjects randomized to receive vaccination as per Groups 1, 2 or 4 schedules actually received vaccination as per Group 3 schedule. One subject was not randomized but received Saline at Injection 1 and was included in Group 5. Subjects have been presented as per actual administration schedule received.			
Units: Subjects			
11- less than (<) 14 years	155	154	164
14 - <19 years	271	260	287
Gender categorical Units: Subjects			
Female	212	217	227
Male	214	197	224

Reporting group values	Group 4:rLP2086(0-,2- Month) +Saline(1-,6-Month):Safety	Group 5:rLP2086(2-,6- Month)+ Saline(0-,1-Month): Safety	
Number of subjects	277	144	
Age categorical			
Some subjects randomized to receive vaccination as per Groups 1, 2 or 4 schedules actually received vaccination as per Group 3 schedule. One subject was not randomized but received Saline at Injection 1 and was included in Group 5. Subjects have been presented as per actual administration schedule received.			
Units: Subjects			
11- less than (<) 14 years	101	53	
14 - <19 years	176	91	
Gender categorical Units: Subjects			
Female	135	79	
Male	142	65	

End points

End points reporting groups

Reporting group title	Group 1:rLP2086(0-, 1-, 6-Month) + Saline(2-Month)
Reporting group description: Randomized to receive rLP2086 on a 0-, 1-, 6- month and 0.9% normal saline on a 2- month schedule.	
Reporting group title	Group 2:rLP2086(0-, 2-, 6-Month) +Saline(1-Month)
Reporting group description: Randomized to receive rLP2086 on a 0-, 2-, 6- month and 0.9% normal saline on a 1- month schedule.	
Reporting group title	Group 3:rLP2086(0-, 6-Month) +Saline(1-, 2-Month)
Reporting group description: Randomized to receive rLP2086 on a 0-, 6- month and 0.9% normal saline on a 1-, 2- month schedule.	
Reporting group title	Group 4:rLP2086(0-, 2-Month) + Saline(1-, 6-Month)
Reporting group description: Randomized to receive rLP2086 on a 0-, 2- month and 0.9% normal saline on a 1-, 6- month schedule.	
Reporting group title	Group 5:rLP2086(2-, 6-Month) + Saline(0-, 1-Month)
Reporting group description: Randomized to receive rLP2086 on a 2-, 6- month and 0.9% normal saline on a 0-, 1- month schedule.	
Subject analysis set title	Group 1:rLP2086(0 -,1-,6- Month) +Saline(2-Month):Safety
Subject analysis set type	Safety analysis
Subject analysis set description: Randomized to receive rLP2086 on a 0-, 1-, 6-month and 0.9% normal saline on a 2- month schedule.	
Subject analysis set title	Group 2:rLP2086(0-,2-,6-Month)+Saline(1- Month):Safety
Subject analysis set type	Safety analysis
Subject analysis set description: Randomized to receive rLP2086 on a 0-, 2-, 6-month and 0.9% normal saline on a 1- month schedule.	
Subject analysis set title	Group 3: rLP2086(0-, 6-Month) +Saline(1-,2-Month):Safety
Subject analysis set type	Safety analysis
Subject analysis set description: Randomized to receive rLP2086 on a 0-, 6- month and 0.9% normal saline on a 1-, 2- month schedule.	
Subject analysis set title	Group 4:rLP2086(0-,2- Month) +Saline(1-,6-Month):Safety
Subject analysis set type	Safety analysis
Subject analysis set description: Randomized to receive rLP2086 on a 0-, 2- month and 0.9% normal saline on a 1-, 6- month schedule.	
Subject analysis set title	Group 5:rLP2086(2-,6- Month)+ Saline(0-,1- Month): Safety
Subject analysis set type	Safety analysis
Subject analysis set description: Randomized to receive rLP2086 on a 2-, 6- month and 0.9% normal saline on a 0-, 1- month schedule.	

Primary: Percentage of Subjects Achieving Serum Bactericidal Assay Using Human Complement (hSBA) Titer Greater Than or Equal to (>=) Lower Limit of Quantitation: Group 1 and 2 Subjects

End point title	Percentage of Subjects Achieving Serum Bactericidal Assay Using Human Complement (hSBA) Titer Greater Than or Equal to (>=) Lower Limit of Quantitation: Group 1 and 2 Subjects[1][2]
End point description:	
End point type	Primary
End point timeframe: 1 month after Injection 4	

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: Statistical Analysis has been provided in the form of attachment.

[2] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: The endpoint was planned to be reported for reporting group Group 1: rLP2086(0-, 1-, 6-Month) + Saline(2-Month) and Group 2: rLP2086(0-, 2-, 6-Month) +Saline(1-Month) only.

End point values	Group 1:rLP2086(0-, 1-, 6-Month) + Saline(2-Month)	Group 2:rLP2086(0-, 2-, 6-Month) +Saline(1-Month)		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	365	360		
Units: percentage of subjects				
number (not applicable)				
PMB80 [A22] 1:8 (N=360,357)	91.7	95		
PMB2001 [A56] 1:8 (N=362, 359)	99.4	98.9		
PMB2948 [B24] 1:8 (N=354, 354)	89	88.4		
PMB2707 [B44] 1:8 (N=356, 352)	88.5	86.1		

Attachments (see zip file)	Statistical Analysis for Primary Endpoint/Statistical Analysis for

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects Reporting At Least 1 Adverse Event (AE)

End point title	Percentage of Subjects Reporting At Least 1 Adverse Event (AE)[3]

End point description:

Some subjects randomized to receive vaccination as per Groups 1, 2 or 4 schedules actually received vaccination as per Group 3 schedule. One subject was not randomized but received Saline at Injection 1 and was included in Group 5. Subjects have been presented as per actual administration schedule received.

End point type	Primary

End point timeframe:

Injection 1 up to 1 month after Injection 4

Notes:

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

End point values	Group 1:rLP2086(0 -,1-,6- Month) +Saline(2-Month):Safety	Group 2:rLP2086(0-,2-,6-Month)+Saline(1-	Group 3: rLP2086(0-, 6-Month) +Saline(1-,2-Month):Safety	Group 4:rLP2086(0-,2- Month) +Saline(1-,6-Month):Safety
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	426	414	451	277
Units: percentage of subjects				
number (not applicable)	36.9	35.7	35.5	35.7

End point values	Group 5:rLP2086(2-,6- Month)+ Saline(0-,1-Month): Safety			
Subject group type	Subject analysis set			
Number of subjects analysed	144			
Units: percentage of subjects				
number (not applicable)	37.5			

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Achieving hSBA Titer >=LLOQ: Group 3 Subjects

End point title	Percentage of Subjects Achieving hSBA Titer >=LLOQ: Group 3 Subjects[4]

End point description:

End point type	Secondary

End point timeframe:

1 month after Injection 4

Notes:

[4] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period. Justification: The endpoint was planned to be reported for reporting group Group 3:rLP2086(0-, 6-Month) +Saline(1-, 2-Month) only.

End point values	Group 3:rLP2086(0-, 6-Month) +Saline(1-, 2-			
Subject group type	Reporting group			
Number of subjects analysed	371			
Units: percentage of subjects				
number (not applicable)				
PMB80 [A22] 1:8 (N=369)	93.5			
PMB2001 [A56] 1: 8 (N=370)	98.4			
PMB2948 [B24] 1:8 (N=359)	81.1			
PMB2707 [B44] 1:8 (N=356)	77.5			

Attachments (see zip file)	Statistical Analysis for Secondary Endpoint/Statistical analysis

Statistical analyses

No statistical analyses for this end point

Secondary: Serum Bactericidal Assay Using Human Complement (hSBA) Geometric Mean Titers (GMTs)

End point title	Serum Bactericidal Assay Using Human Complement (hSBA) Geometric Mean Titers (GMTs)

End point description:

End point type	Secondary

End point timeframe:

Before Injection (Inj) 1, 1 Month (M) after (aft) Injection 2, 3, 4

End point values	Group 1:rLP2086(0-, 1-, 6-Month) + Saline(2-Month)	Group 2:rLP2086(0-, 2-, 6-Month) +Saline(1-Month)	Group 3:rLP2086(0-, 6-Month) +Saline(1-, 2-	Group 4:rLP2086(0-, 2-Month) + Saline(1-, 6-Month)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	365	360	371	241
Units: Titer				
geometric mean (confidence interval 95%)				
Before Inj1: PMB80 [A22]; N=356,352,364,235,108	7.1 (6.41 to 7.87)	6.3 (5.72 to 6.95)	6.4 (5.84 to 7.02)	6.4 (5.66 to 7.22)
1M aft Inj2: PMB80 [A22]; N=351,345,351,224,110	24.4 (21.25 to 27.94)	10.7 (9.44 to 12.09)	12 (10.58 to 13.6)	13.3 (11.21 to 15.76)
1M aft Inj3: PMB80 [A22]; N=332,344,340,238,102	17.7 (15.28 to 20.47)	32.9 (29.34 to 36.92)	10.3 (9.09 to 11.68)	37.1 (32.23 to 42.76)
1M aft Inj4: PMB80 [A22]; N=360,357,369,234,111	55.1 (48.87 to 62.07)	56.3 (50.91 to 62.27)	48.4 (43.45 to 53.86)	14.2 (12.08 to 16.73)
Before Inj1: PMB2001 [A56]; N=350,348,355,231,107	6.8 (6.06 to 7.64)	6.1 (5.54 to 6.77)	6.7 (6 to 7.48)	6.3 (5.54 to 7.15)
1M aft Inj2: PMB2001 [A56]; N=353,329,335,218,102	77.3 (68.54 to 87.12)	17 (14.56 to 19.96)	18.5 (15.81 to 21.63)	17.7 (14.45 to 21.58)
1M aft Inj3: PMB2001 [A56]; N=329,339,320,240,102	48.3 (41.96 to 55.5)	94.6 (84.64 to 105.68)	15.1 (12.89 to 17.74)	104.9 (93.16 to 118.05)
1M aft Inj4: PMB2001 [A56]; N=362,359,370,228,113	152.9 (137.23 to 170.47)	155.6 (140.39 to 172.38)	125.6 (112.59 to 140.17)	26.5 (22.24 to 31.58)
Before Inj1: PMB2948 [B24]; N=362,356,369,241,112	5.3 (4.93 to 5.75)	5.1 (4.77 to 5.52)	5 (4.7 to 5.38)	4.9 (4.49 to 5.24)
1M aft Inj2: PMB2948 [B24]; N=344,345,352,223,110	13.8 (12.15 to 15.57)	8.2 (7.38 to 9.21)	9.2 (8.2 to 10.28)	9.8 (8.39 to 11.35)
1M aft Inj3: PMB2948 [B24]; N=328,337,340,237,102	11 (9.61 to 12.5)	14.9 (13.2 to 16.73)	7.5 (6.75 to 8.35)	17.7 (15.24 to 20.49)
1M aft Inj4: PMB2948 [B24]; N=354,354,359,228,110	29.1 (25.88 to 32.66)	25.6 (23.03 to 28.45)	20.6 (18.38 to 23.18)	8 (7.01 to 9.24)
Before Inj1: PMB2707 [B44]; N=363,357,370,241,113	4.4 (4.18 to 4.54)	4.5 (4.24 to 4.67)	4.5 (4.26 to 4.7)	4.6 (4.28 to 4.9)
1M aft Inj2: PMB2707 [B44]; N=341,345,349,225,111	13.1 (11.29 to 15.11)	5.5 (5.04 to 6.01)	5.7 (5.19 to 6.3)	5.9 (5.19 to 6.74)
1M aft Inj3: PMB2707 [B44]; N=333,331,341,234,105	8.4 (7.4 to 9.6)	15.5 (13.51 to 17.87)	5.2 (4.78 to 5.68)	19.1 (16.03 to 22.78)
1M aft Inj4: PMB2707 [B44]; N=356,352,356,230,111	40.3 (35.16 to 46.11)	35 (30.63 to 39.91)	22.5 (19.6 to 25.72)	6.2 (5.52 to 7.07)

End point values	Group 5:rLP2086(2-, 6-Month) + Saline(0-, 1-Month)			
Subject group type	Reporting group			
Number of subjects analysed	113			
Units: Titer				
geometric mean (confidence interval 95%)				
Before Inj1: PMB80 [A22]; N=356,352,364,235,108	6.8 (5.59 to 8.3)			
1M aft Inj2: PMB80 [A22]; N=351,345,351,224,110	7.1 (5.86 to 8.48)			
1M aft Inj3: PMB80 [A22]; N=332,344,340,238,102	16 (12.15 to 21.06)			
1M aft Inj4: PMB80 [A22]; N=360,357,369,234,111	39.6 (32.31 to 48.46)			
Before Inj1: PMB2001 [A56]; N=350,348,355,231,107	6.2 (5.1 to 7.47)			
1M aft Inj2: PMB2001 [A56]; N=353,329,335,218,102	6.8 (5.52 to 8.36)			
1M aft Inj3: PMB2001 [A56]; N=329,339,320,240,102	26.8 (19.48 to 36.92)			
1M aft Inj4: PMB2001 [A56]; N=362,359,370,228,113	111.8 (92.73 to 134.9)			
Before Inj1: PMB2948 [B24]; N=362,356,369,241,112	5.1 (4.51 to 5.82)			
1M aft Inj2: PMB2948 [B24]; N=344,345,352,223,110	5.3 (4.7 to 6.08)			
1M aft Inj3: PMB2948 [B24]; N=328,337,340,237,102	12.6 (10.01 to 15.89)			
1M aft Inj4: PMB2948 [B24]; N=354,354,359,228,110	14.7 (12.01 to 18.1)			
Before Inj1: PMB2707 [B44]; N=363,357,370,241,113	4.4 (4.04 to 4.76)			
1M aft Inj2: PMB2707 [B44]; N=341,345,349,225,111	4.4 (4.04 to 4.77)			
1M aft Inj3: PMB2707 [B44]; N=333,331,341,234,105	6.8 (5.45 to 8.55)			
1M aft Inj4: PMB2707 [B44]; N=356,352,356,230,111	17.8 (14.12 to 22.42)			

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Achieving hSBA Titer >=LLOQ

End point title	Percentage of Subjects Achieving hSBA Titer >=LLOQ

End point description:

End point type	Secondary

End point timeframe:
Before Injection 1, 1 Month after Injection 2, 3, 4

End point values	Group 1:rLP2086(0-, 1-, 6-Month) + Saline(2-Month)	Group 2:rLP2086(0-, 2-, 6-Month) +Saline(1-Month)	Group 3:rLP2086(0-, 6-Month) +Saline(1-, 2-	Group 4:rLP2086(0-, 2-Month) + Saline(1-, 6-Month)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	365	360	371	241
Units: percentage of subjects				
number (not applicable)				
Before Inj1: PMB80[A22] 1:8; N=356,352,364,235,108	28.1	21.9	24.7	22.6
1M aft Inj2:PMB80[A22]1:8; N=351,345,351,224,110	74.6	46.7	51.3	52.2
1M aft Inj3:PMB80[A22]1:8; N=332,344,340,238,102	63	88.7	44.7	90.8
1M aft Inj4:PMB80[A22]1:8; N=360,357,369,234,111	91.7	95	93.5	57.7
Before Inj1:PMB2001[A56]1:8; N=350,348,355,231,107	20.9	18.7	21.7	19
1M aft Inj2:PMB2001[A56]1:8; N=353,329,335,218,102	96.6	56.2	58.8	56
1M aft Inj3;PMB2001[A56]1:8; N=329,339,320,240,102	89.1	97.9	50.6	100
1M aft Inj4:PMB2001[A56]1:8; N=362,359,370,228,113	99.4	98.9	98.4	76.8
Before Inj1:PMB2948[B24]1:8; N=362,356,369,241,112	16.3	13.8	13	11.2
1M aft Inj2:PMB2948[B24]1:8; N=344,345,352,223,110	62.2	39.4	43.8	45.3
1M aft Inj3:PMB2948[B24]1:8; N=328,337,340,237,102	50.6	70.3	35.6	73
1M aft Inj4:PMB2948[B24]1:8; N=354,354,359,228,110	89	88.4	81.1	35.5
Before Inj1:PMB2707[B44]1:8; N=363,357,370,241,113	5.2	6.2	6.2	7.5
1M aft Inj2:PMB2707[B44]1:8; N=341,345,349,225,111	54	15.7	17.8	18.2
1M aft Inj3:PMB2707[B44]1:8; N=333,331,341,234,105	35.4	61.9	12.6	70.1
1M aft Inj4:PMB2707[B44]1:8; N=356,352,356,230,111	88.5	86.1	77.5	23.9

End point values	Group 5:rLP2086(2-, 6-Month) + Saline(0-, 1-Month)			
Subject group type	Reporting group			
Number of subjects analysed	113			
Units: percentage of subjects				
number (not applicable)				

Before Inj1: PMB80[A22] 1:8; N=356,352,364,235,108	25			
1M aft Inj2:PMB80[A22]1:8; N=351,345,351,224,110	28.2			
1M aft Inj3:PMB80[A22]1:8; N=332,344,340,238,102	55.9			
1M aft Inj4:PMB80[A22]1:8; N=360,357,369,234,111	91.9			
Before Inj1:PMB2001[A56]1:8; N=350,348,355,231,107	17.8			
1M aft Inj2:PMB2001[A56]1:8; N=353,329,335,218,102	22.5			
1M aft Inj3;PMB2001[A56]1:8; N=329,339,320,240,102	67.6			
1M aft Inj4:PMB2001[A56]1:8; N=362,359,370,228,113	99.1			
Before Inj1:PMB2948[B24]1:8; N=362,356,369,241,112	14.3			
1M aft Inj2:PMB2948[B24]1:8; N=344,345,352,223,110	18.2			
1M aft Inj3:PMB2948[B24]1:8; N=328,337,340,237,102	56.9			
1M aft Inj4:PMB2948[B24]1:8; N=354,354,359,228,110	69.1			
Before Inj1:PMB2707[B44]1:8; N=363,357,370,241,113	4.4			
1M aft Inj2:PMB2707[B44]1:8; N=341,345,349,225,111	4.5			
1M aft Inj3:PMB2707[B44]1:8; N=333,331,341,234,105	23.8			
1M aft Inj4:PMB2707[B44]1:8; N=356,352,356,230,111	73			

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects With Serum Bactericidal Assay Using Human Complement (hSBA) Titer >= Prespecified Titer Level

End point title	Percentage of Subjects With Serum Bactericidal Assay Using Human Complement (hSBA) Titer >= Prespecified Titer Level

End point description:

End point type	Secondary

End point timeframe:

Before Injection 1, 1 Month after Injection 2, 3, 4

End point values	Group 1:rLP2086(0-, 1-, 6-Month) + Saline(2-Month)	Group 2:rLP2086(0-, 2-, 6-Month) +Saline(1-Month)	Group 3:rLP2086(0-, 6-Month) +Saline(1-, 2-	Group 4:rLP2086(0-, 2-Month) + Saline(1-, 6-Month)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	365	360	371	241
Units: percentage of subjects				
number (not applicable)				
Before Inj1:PMB80[A22] 1:4; N=356,352,364,235,108	28.9	23.9	26.4	23.8
Before Inj1:PMB80[A22] 1:16; N=356,352,364,235,108	27.2	20.5	22.8	22.1
Before Inj1:PMB80[A22] 1:32; N=356,352,364,235,108	18.3	14.5	13.5	13.2
Before Inj1:PMB80[A22] 1:64; N=356,352,364,235,108	7.6	6.5	4.7	6.8
Before Inj1:PMB80[A22]1:128; N=356,352,364,235,108	1.4	2.3	1.6	2.6
1M aft Inj2:PMB80[A22] 1:4; N=351,345,351,224,110	74.9	47.8	51.3	52.2
1M aft Inj2:PMB80[A22] 1:16; N=351,345,351,224,110	73.5	45.8	50.7	51.8
1M aft Inj2:PMB80[A22] 1:32; N=351,345,351,224,110	58.4	28.7	34.5	37.9
1M aft Inj2:PMB80[A22] 1:64; N=351,345,351,224,110	30.8	14.5	14.5	19.6
1M aft Inj2:PMB80[A22]1:128; N=351,345,351,224,110	14.8	5.2	5.7	8.5
1M aft Inj3:PMB80[A22] 1:4; N=332,344,340,238,102	63.6	88.7	45.6	90.8
1M aft Inj3:PMB80[A22]1:16; N=332,344,340,238,102	62.3	88.1	42.4	90.8
1M aft Inj3:PMB80[A22]1:32; N=332,344,340,238,102	47.3	69.5	30.6	70.6
1M aft Inj3:PMB80[A22]1:64; N=332,344,340,238,102	22.3	35.8	12.4	39.1
1M aft Inj3:PMB80[A22]1:128; N=332,344,340,238,102	11.7	14.8	4.4	19.7
1M aft Inj4:PMB80[A22] 1:4; N=360,357,369,234,111	91.9	95	94	58.1
1M aft Inj4:PMB80[A22] 1:16; N=360,357,369,234,111	91.4	95	93.2	56
1M aft Inj4:PMB80[A22] 1:32; N=360,357,369,234,111	84.2	86.6	81.8	38
1M aft Inj4:PMB80[A22] 1:64;N=360,357,369,234,111	61.9	63.9	53.9	19.2
1M aft Inj4:PMB80[A22]1:128; N=360,357,369,234,111	31.7	32.5	25.7	8.5
Before Inj1:PMB2001[A56] 1:4;N=350,348,355,231,107	25.1	22.1	25.1	25.5
Before Inj1:PMB2001[A56]1:16;N=350,348,35	20	18.1	20.3	19
Before Inj1:PMB2001[A56]1:32;N=350,348,35	18	14.1	17.2	15.6
Before Inj1:PMB2001[A56]1:64;N=350,348,35	11.7	7.5	10.7	8.7
Before Inj1: PMB2001 1:128;N=350,348,355,231,107	4.3	2.3	3.7	2.6
1M aft Inj2:PMB2001[A56] 1:4;N=353,329,335,218,102	96.6	61.4	63.3	60.1

1M aft Inj2:PMB2001[A56]1:16;N=353,329,33	96.3	55	57.9	55.5
1M aft Inj2:PMB2001[A56]1:32;N=353,329,33	87.8	48	50.1	47.2
1M aft Inj2:PMB2001[A56]1:64;N=353,329,33	72.8	27.4	31	29.8
1M aft Inj2:PMB2001 1:128;N=353,329,335,218,102	41.1	14.3	14.9	15.6
1M aft Inj3:PMB2001[A56] 1:4;N=329,339,320,240,102	91.5	98.5	54.4	100
1M aft Inj3:PMB2001[A56]1:16;N=329,339,32	87.8	97.9	50	99.2
1M aft Inj3:PMB2001[A56]1:32;N=329,339,32	79.9	94.1	43.8	95
1M aft Inj3:PMB2001[A56]1:64;N=329,339,32	52.9	79.1	28.4	81.7
1M aft Inj3:PMB2001 1:128;N=329,339,320,240,102	26.7	50.4	13.1	57.1
1M aft Inj4:PMB2001[A56] 1:4;N=362,359,370,228,113	99.7	99.2	98.9	79.8
1M aft Inj4:PMB2001[A56]1:16;N=362,359,37	99.2	98.9	98.4	74.6
1M aft Inj4:PMB2001[A56]1:32;N=362,359,37	95.3	96.1	94.6	59.6
1M aft Inj4:PMB2001[A56]1:64;N=362,359,37	87.8	91.1	83.8	34.2
1M aft Inj4:PMB2001 1:128;N=362,359,370,228,113	72.4	73.5	65.9	15.8
Before Inj1:PMB2948[B24]1:4;N=362,356,369	18.5	15.4	14.4	13.3
Before Inj1:PMB2948[B24]1:16;N=362,356,36	12.7	11.5	10.8	8.7
Before Inj1:PMB2948[B24]1:32;N=362,356,36	7.2	6.2	6	5
Before Inj1:PMB2948[B24]1:64;N=362,356,36	2.8	3.1	2.2	2.1
Before Inj1:PMB2948 1:128;N=362,356,369,241,112	1.4	0.8	0.5	0.8
1M aft Inj2:PMB2948[B24]1:4;N=344,345,352	66.3	42.3	45.7	47.1
1M aft Inj2:PMB2948[B24]1:16;N=344,345,35	57.6	32.8	39.5	40.4
1M aft Inj2:PMB2948[B24]1:32;N=344,345,35	34.9	18.6	23.3	24.7
1M aft Inj2:PMB2948[B24]1:64;N=344,345,35	14	9	8.8	11.7
1M aft Inj2:PMB2948 1:128;N=344,345,352,223,110	6.1	3.5	2.6	4.5
1M aft Inj3:PMB2948[B24]1:4;N=328,337,340	52.1	72.1	37.6	75.5
1M aft Inj3:PMB2948[B24]1:16;N=328,337,34	45.1	63.5	29.7	67.1
1M aft Inj3:PMB2948[B24]1:32;N=328,337,34	23.8	32	15.9	43.5
1M aft Inj3:PMB2948[B24]1:64;N=328,337,34	15.5	13.6	5	19.4
1M aft Inj3:PMB2948 1:128;N=328,337,340,237,102	6.7	6.5	2.6	8.4
1M aft Inj4:PMB2948[B24]1:4;N=354,354,359	90.1	90.1	83	38.2
1M aft Inj4:PMB2948[B24]1:16;N=354,354,35	82.8	83.6	73.8	32.9

1M aft Inj4:PMB2948[B24]1:32;N=354,354,35	60.7	56.2	47.1	18
1M aft Inj4:PMB2948[B24]1:64;N=354,354,35	33.3	26.6	22.6	10.5
1M aft Inj4:PMB2948 1:128;N=354,354,359,228,110	13	10.5	7.2	3.1
Before Inj1:PMB2707[B44]1:4;N=363,357,370	7.7	7.8	7.8	8.3
Before Inj1:PMB2707[B44]1:16;N=363,357,37	3.6	5	4.9	6.6
Before Inj1:PMB2707[B44]1:32;N=363,357,37	3	2.5	3.5	2.9
Before Inj1:PMB2707[B44]1:64;N=363,357,37	0.6	1.4	1.4	1.2
Before Inj1:PMB2707 1:128;N=363,357,370,241,113	0	0.3	0.3	0.8
1M aftInj2:PMB2707[B44]1:4;N=341,345,3	57.5	17.7	20.6	20.4
1M aft Inj2:PMB2707[B44]1:16;N=341,345,34	47.2	13.6	14	14.2
1M aft Inj2:PMB2707[B44]1:32;N=341,345,34	32	9.9	8.3	9.8
1M aft Inj2:PMB2707[B44]1:64;N=341,345,34	18.8	4.1	5.2	6.2
1M aft Inj2:PMB2707 1:128;N=341,345,349,225,111	10	1.7	3.7	4
1M aft Inj3:PMB2707[B44]1:4;N=333,331,341	39	65.9	15.5	73.5
1M aft Inj3:PMB2707[B44]1:16;N=333,331,34	30.3	58.6	10.9	64.5
1M aft Inj3:PMB2707[B44]1:32;N=333,331,34	18.6	39	5.9	42.3
1M aft Inj3:PMB2707[B44]1:64;N=333,331,34	11.4	22.7	3.8	24.4
1M aft Inj3:PMB2707 1:128;N=333,331,341,234,105	6.3	7.9	2.6	14.1
1M aft Inj4:PMB2707[B44]1:4;N=356,352,356	89.3	87.8	78.9	26.1
1M aft Inj4:PMB2707[B44]1:16;N=356,352,35	84.8	83.8	70.8	19.1
1M aft Inj4:PMB2707[B44]1:32;N=356,352,35	68.5	65.3	49.2	10
1M aft Inj4:PMB2707[B44]1:64;N=356,352,35	46.6	42.3	27.8	5.2
1M aft Inj4:PMB2707 1:128;N=356,352,356,230,111	27.5	22.7	13.8	3.9

End point values	Group 5:rLP2086(2-, 6-Month) + Saline(0-, 1-Month)			
Subject group type	Reporting group			
Number of subjects analysed	113			
Units: percentage of subjects				
number (not applicable)				
Before Inj1:PMB80[A22] 1:4; N=356,352,364,235,108	25.9			

Before Inj1:PMB80[A22] 1:16; N=356,352,364,235,108	24.1			
Before Inj1:PMB80[A22] 1:32; N=356,352,364,235,108	15.7			
Before Inj1:PMB80[A22] 1:64; N=356,352,364,235,108	7.4			
Before Inj1:PMB80[A22]1:128; N=356,352,364,235,108	1.9			
1M aft Inj2:PMB80[A22] 1:4; N=351,345,351,224,110	29.1			
1M aft Inj2:PMB80[A22] 1:16; N=351,345,351,224,110	27.3			
1M aft Inj2:PMB80[A22] 1:32; N=351,345,351,224,110	18.2			
1M aft Inj2:PMB80[A22] 1:64; N=351,345,351,224,110	6.4			
1M aft Inj2:PMB80[A22]1:128; N=351,345,351,224,110	0.9			
1M aft Inj3:PMB80[A22] 1:4; N=332,344,340,238,102	55.9			
1M aft Inj3:PMB80[A22]1:16; N=332,344,340,238,102	55.9			
1M aft Inj3:PMB80[A22]1:32; N=332,344,340,238,102	45.1			
1M aft Inj3:PMB80[A22]1:64; N=332,344,340,238,102	22.5			
1M aft Inj3:PMB80[A22]1:128; N=332,344,340,238,102	14.7			
1M aft Inj4:PMB80[A22] 1:4; N=360,357,369,234,111	91.9			
1M aft Inj4:PMB80[A22] 1:16; N=360,357,369,234,111	91			
1M aft Inj4:PMB80[A22] 1:32; N=360,357,369,234,111	74.8			
1M aft Inj4:PMB80[A22] 1:64;N=360,357,369,234,111	42.3			
1M aft Inj4:PMB80[A22]1:128; N=360,357,369,234,111	20.7			
Before Inj1:PMB2001[A56] 1:4;N=350,348,355,231,107	25.2			
Before Inj1:PMB2001[A56]1:16;N=350,348,35	16.8			
Before Inj1:PMB2001[A56]1:32;N=350,348,35	15.9			
Before Inj1:PMB2001[A56]1:64;N=350,348,35	8.4			
Before Inj1: PMB2001 1:128;N=350,348,355,231,107	2.8			
1M aft Inj2:PMB2001[A56] 1:4;N=353,329,335,218,102	25.5			
1M aft Inj2:PMB2001[A56]1:16;N=353,329,33	21.6			
1M aft Inj2:PMB2001[A56]1:32;N=353,329,33	17.6			
1M aft Inj2:PMB2001[A56]1:64;N=353,329,33	10.8			
1M aft Inj2:PMB2001 1:128;N=353,329,335,218,102	2.9			
1M aft Inj3:PMB2001[A56] 1:4;N=329,339,320,240,102	72.5			
1M aft Inj3:PMB2001[A56]1:16;N=329,339,32	65.7			

1M aft Inj3:PMB2001[A56]1:32;N=329,339,32	55.9			
1M aft Inj3:PMB2001[A56]1:64;N=329,339,32	39.2			
1M aft Inj3:PMB2001 1:128;N=329,339,320,240,102	22.5			
1M aft Inj4:PMB2001[A56] 1:4;N=362,359,370,228,113	99.1			
1M aft Inj4:PMB2001[A56]1:16;N=362,359,37	99.1			
1M aft Inj4:PMB2001[A56]1:32;N=362,359,37	92.9			
1M aft Inj4:PMB2001[A56]1:64;N=362,359,37	85			
1M aft Inj4:PMB2001 1:128;N=362,359,370,228,113	60.2			
Before Inj1:PMB2948[B24]1:4;N=362,356,369	16.1			
Before Inj1:PMB2948[B24]1:16;N=362,356,36	12.5			
Before Inj1:PMB2948[B24]1:32;N=362,356,36	4.5			
Before Inj1:PMB2948[B24]1:64;N=362,356,36	2.7			
Before Inj1:PMB2948 1:128;N=362,356,369,241,112	1.8			
1M aft Inj2:PMB2948[B24]1:4;N=344,345,352	20			
1M aft Inj2:PMB2948[B24]1:16;N=344,345,35	14.5			
1M aft Inj2:PMB2948[B24]1:32;N=344,345,35	5.5			
1M aft Inj2:PMB2948[B24]1:64;N=344,345,35	3.6			
1M aft Inj2:PMB2948 1:128;N=344,345,352,223,110	0			
1M aft Inj3:PMB2948[B24]1:4;N=328,337,340	57.8			
1M aft Inj3:PMB2948[B24]1:16;N=328,337,34	52.9			
1M aft Inj3:PMB2948[B24]1:32;N=328,337,34	32.4			
1M aft Inj3:PMB2948[B24]1:64;N=328,337,34	15.7			
1M aft Inj3:PMB2948 1:128;N=328,337,340,237,102	6.9			
1M aft Inj4:PMB2948[B24]1:4;N=354,354,359	70.9			
1M aft Inj4:PMB2948[B24]1:16;N=354,354,35	64.5			
1M aft Inj4:PMB2948[B24]1:32;N=354,354,35	33.6			
1M aft Inj4:PMB2948[B24]1:64;N=354,354,35	12.7			
1M aft Inj4:PMB2948 1:128;N=354,354,359,228,110	6.4			
Before Inj1:PMB2707[B44]1:4;N=363,357,370	7.1			
Before Inj1:PMB2707[B44]1:16;N=363,357,37	4.4			
Before Inj1:PMB2707[B44]1:32;N=363,357,37	3.5			

Before Inj1:PMB2707[B44]1:64;N=363,357,37	0.9			
Before Inj1:PMB2707 1:128;N=363,357,370,241,113	0			
1M aftInj2:PMB2707[B44]1:4;N=341,345,3	5.4			
1M aft Inj2:PMB2707[B44]1:16;N=341,345,34	4.5			
1M aft Inj2:PMB2707[B44]1:32;N=341,345,34	3.6			
1M aft Inj2:PMB2707[B44]1:64;N=341,345,34	0.9			
1M aft Inj2:PMB2707 1:128;N=341,345,349,225,111	0			
1M aft Inj3:PMB2707[B44]1:4;N=333,331,341	28.6			
1M aft Inj3:PMB2707[B44]1:16;N=333,331,34	21			
1M aft Inj3:PMB2707[B44]1:32;N=333,331,34	13.3			
1M aft Inj3:PMB2707[B44]1:64;N=333,331,34	7.6			
1M aft Inj3:PMB2707 1:128;N=333,331,341,234,105	3.8			
1M aft Inj4:PMB2707[B44]1:4;N=356,352,356	73			
1M aft Inj4:PMB2707[B44]1:16;N=356,352,35	66.7			
1M aft Inj4:PMB2707[B44]1:32;N=356,352,35	39.6			
1M aft Inj4:PMB2707[B44]1:64;N=356,352,35	20.7			
1M aft Inj4:PMB2707 1:128;N=356,352,356,230,111	9			

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Percentage of Subjects Achieving At Least 4-fold Increase in hSBA Titer

End point title	Percentage of Subjects Achieving At Least 4-fold Increase in hSBA Titer

End point description:

Results were not reported because a decision was made a priori to remove the endpoint as a secondary outcome measure.

End point type	Other pre-specified

End point timeframe:

1 month after Injection 2, 3, 4

End point values	Group 1:rLP2086(0-, 1-, 6-Month) + Saline(2-Month)	Group 2:rLP2086(0-, 2-, 6-Month) +Saline(1-Month)	Group 3:rLP2086(0-, 6-Month) +Saline(1-, 2-	Group 4:rLP2086(0-, 2-Month) + Saline(1-, 6-Month)
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	0[5]	0[6]	0[7]	0[8]
Units: percentage of subjects				
number (not applicable)				

Notes:

[5] - Results not reported because the endpoint was removed as a secondary endpoint.

[6] - Results not reported because the endpoint was removed as a secondary endpoint.

[7] - Results not reported because the endpoint was removed as a secondary endpoint.

[8] - Results not reported because the endpoint was removed as a secondary endpoint.

End point values	Group 5:rLP2086(2-, 6-Month) + Saline(0-, 1-Month)			
Subject group type	Reporting group			
Number of subjects analysed	0[9]			
Units: percentage of subjects				
number (not applicable)				

Notes:

[9] - Results not reported because the endpoint was removed as a secondary endpoint.

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

AE reported from Injection 1 to 1 month after last administration of investigational product (bivalent rLP2086/saline). SAE reported from Injection 1 to 6 months after last of investigational product (bivalent rLP2086/saline)

Adverse event reporting additional description:

Some subjects randomized to receive vaccination as per Groups 1, 2 or 4 schedules actually received vaccination as per Group 3 schedule. One subject was not randomized but received Saline at Injection 1 and was included in Group 5. Subjects have been presented as per actual administration schedule received.

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	15.1

Reporting groups

Reporting group title	Group 1:rLP2086(0-,1-,6- Month)+Saline(2-Month)
Reporting group description:	
Randomized to receive rLP2086 and 0.9% normal saline.	
Reporting group title	Group 2:rLP2086(0 -,2-,6-Month) +Saline(1-Month)
Reporting group description:	
Randomized to receive rLP2086 and 0.9% normal saline.	
Reporting group title	Group 3: rLP2086(0- ,6-Month) +Saline(1-,2-Month)
Reporting group description:	
Randomized to receive rLP2086 and 0.9% normal saline.	
Reporting group title	Group 4: rLP2086(0-,2-Month) +Saline(1-,6 - Month)
Reporting group description:	
Randomized to receive rLP2086 and 0.9% normal saline.	
Reporting group title	Group 5: rLP2086(2- ,6-Month)+ Saline(0-, 1-Month)
Reporting group description:	
Randomized to receive rLP2086 and 0.9% normal saline.	

Serious adverse events	Group 1:rLP2086(0-,1-,6-Month)+Saline(2-	Group 2:rLP2086(0-,2-,6-Month) +Saline(1-Month)	Group 3: rLP2086(0- ,6-Month) +Saline(1-
Total subjects affected by serious adverse events			
subjects affected / exposed	12 / 426 (2.82%)	14 / 414 (3.38%)	7 / 451 (1.55%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0
Vascular disorders			
Deep vein thrombosis			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pregnancy, puerperium and perinatal			

conditions			
Abortion spontaneous			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
General disorders and administration site conditions			
Chills			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pyrexia			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Immune system disorders			
Hypersensitivity			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Reproductive system and breast disorders			
Ovarian cyst			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	1 / 451 (0.22%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory, thoracic and mediastinal disorders			
Allergic cough			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Injury, poisoning and procedural complications			
Concussion			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	1 / 451 (0.22%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Alcohol poisoning			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	1 / 451 (0.22%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Bone contusion			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Clavicle fracture			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Femur fracture			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Foreign body			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Hand fracture			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Head injury			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Lower limb fracture			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Near drowning			

subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	1 / 451 (0.22%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Poisoning			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Radius fracture			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Skeletal injury			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Nervous system disorders			
Headache			
subjects affected / exposed	0 / 426 (0.00%)	2 / 414 (0.48%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Migraine			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Ear and labyrinth disorders			
Vertigo			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	1 / 451 (0.22%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Aphthous stomatitis			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Constipation			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Crohn's disease			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastritis			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Vomiting			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Hepatobiliary disorders			
Hyperbilirubinaemia			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	1 / 451 (0.22%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Skin and subcutaneous tissue disorders			
Dermatitis contact			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Urticaria			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Musculoskeletal and connective tissue disorders			
Sympathetic posterior cervical syndrome			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Appendicitis			
subjects affected / exposed	0 / 426 (0.00%)	2 / 414 (0.48%)	1 / 451 (0.22%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastroenteritis			
subjects affected / exposed	2 / 426 (0.47%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 2	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Acute sinusitis			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infectious mononucleosis			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Localised infection			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Tonsillitis streptococcal			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Urethritis			

subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	1 / 451 (0.22%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Urinary tract infection			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Metabolism and nutrition disorders			
Decreased appetite			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	1 / 451 (0.22%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Type 2 diabetes mellitus			
subjects affected / exposed	0 / 426 (0.00%)	0 / 414 (0.00%)	1 / 451 (0.22%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Serious adverse events	Group 4: rLP2086(0-,2-Month) +Saline(1-,6 -	Group 5: rLP2086(2-,6-Month)+ Saline(0-, 1-Month)	
Total subjects affected by serious adverse events			
subjects affected / exposed	7 / 277 (2.53%)	3 / 144 (2.08%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	
Vascular disorders			
Deep vein thrombosis			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pregnancy, puerperium and perinatal conditions			
Abortion spontaneous			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
General disorders and administration site conditions			
Chills			

subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pyrexia			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Immune system disorders			
Hypersensitivity			
subjects affected / exposed	0 / 277 (0.00%)	1 / 144 (0.69%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Reproductive system and breast disorders			
Ovarian cyst			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Respiratory, thoracic and mediastinal disorders			
Allergic cough			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Injury, poisoning and procedural complications			
Concussion			
subjects affected / exposed	1 / 277 (0.36%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Alcohol poisoning			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Bone contusion			

subjects affected / exposed	1 / 277 (0.36%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Clavicle fracture			
subjects affected / exposed	1 / 277 (0.36%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Femur fracture			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Foreign body			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hand fracture			
subjects affected / exposed	1 / 277 (0.36%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Head injury			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Lower limb fracture			
subjects affected / exposed	0 / 277 (0.00%)	1 / 144 (0.69%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Near drowning			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Poisoning			

subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Radius fracture			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Skeletal injury			
subjects affected / exposed	0 / 277 (0.00%)	1 / 144 (0.69%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Nervous system disorders			
Headache			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Migraine			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Ear and labyrinth disorders			
Vertigo			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Aphthous stomatitis			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Constipation			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Crohn's disease			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastritis			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Vomiting			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hepatobiliary disorders			
Hyperbilirubinaemia			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Skin and subcutaneous tissue disorders			
Dermatitis contact			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Urticaria			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Musculoskeletal and connective tissue disorders			
Sympathetic posterior cervical syndrome			

subjects affected / exposed	1 / 277 (0.36%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infections and infestations			
Appendicitis			
subjects affected / exposed	1 / 277 (0.36%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastroenteritis			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Acute sinusitis			
subjects affected / exposed	1 / 277 (0.36%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infectious mononucleosis			
subjects affected / exposed	1 / 277 (0.36%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Localised infection			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Tonsillitis streptococcal			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Urethritis			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Urinary tract infection			

subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Metabolism and nutrition disorders			
Decreased appetite			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Type 2 diabetes mellitus			
subjects affected / exposed	0 / 277 (0.00%)	0 / 144 (0.00%)	
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: 1 %

Non-serious adverse events	Group 1:rLP2086(0-,1-,6-Month)+Saline(2-	Group 2:rLP2086(0-,2-,6-Month) +Saline(1-Month)	Group 3: rLP2086(0- ,6-Month) +Saline(1-
Total subjects affected by non-serious adverse events			
subjects affected / exposed	113 / 426 (26.53%)	115 / 414 (27.78%)	114 / 451 (25.28%)
Injury, poisoning and procedural complications			
Contusion			
subjects affected / exposed	2 / 426 (0.47%)	10 / 414 (2.42%)	3 / 451 (0.67%)
occurrences (all)	2	11	3
Fall			
subjects affected / exposed	1 / 426 (0.23%)	2 / 414 (0.48%)	4 / 451 (0.89%)
occurrences (all)	1	2	4
Foot fracture			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	0 / 451 (0.00%)
occurrences (all)	1	0	0
Nervous system disorders			
Headache			
subjects affected / exposed	13 / 426 (3.05%)	12 / 414 (2.90%)	11 / 451 (2.44%)
occurrences (all)	13	13	11
General disorders and administration site conditions			

Injection site pain			
subjects affected / exposed	6 / 426 (1.41%)	4 / 414 (0.97%)	3 / 451 (0.67%)
occurrences (all)	6	4	3
Pyrexia			
subjects affected / exposed	7 / 426 (1.64%)	3 / 414 (0.72%)	4 / 451 (0.89%)
occurrences (all)	7	3	4
Fatigue			
subjects affected / exposed	5 / 426 (1.17%)	5 / 414 (1.21%)	1 / 451 (0.22%)
occurrences (all)	5	5	1
Respiratory, thoracic and mediastinal disorders			
Oropharyngeal pain			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	2 / 451 (0.44%)
occurrences (all)	1	0	2
Skin and subcutaneous tissue disorders			
Dermatitis			
subjects affected / exposed	0 / 426 (0.00%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences (all)	0	1	0
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	4 / 426 (0.94%)	7 / 414 (1.69%)	2 / 451 (0.44%)
occurrences (all)	5	7	2
Infections and infestations			
Nasopharyngitis			
subjects affected / exposed	43 / 426 (10.09%)	32 / 414 (7.73%)	25 / 451 (5.54%)
occurrences (all)	56	33	31
Pharyngitis			
subjects affected / exposed	20 / 426 (4.69%)	21 / 414 (5.07%)	20 / 451 (4.43%)
occurrences (all)	20	23	26
Upper respiratory tract infection			
subjects affected / exposed	9 / 426 (2.11%)	14 / 414 (3.38%)	12 / 451 (2.66%)
occurrences (all)	9	15	13
Gastroenteritis			
subjects affected / exposed	10 / 426 (2.35%)	10 / 414 (2.42%)	14 / 451 (3.10%)
occurrences (all)	10	12	14
Tonsillitis			

subjects affected / exposed	10 / 426 (2.35%)	11 / 414 (2.66%)	9 / 451 (2.00%)
occurrences (all)	13	12	9
Sinusitis			
subjects affected / exposed	7 / 426 (1.64%)	6 / 414 (1.45%)	7 / 451 (1.55%)
occurrences (all)	7	6	8
Bronchitis			
subjects affected / exposed	4 / 426 (0.94%)	5 / 414 (1.21%)	9 / 451 (2.00%)
occurrences (all)	4	5	9
Urinary tract infection			
subjects affected / exposed	5 / 426 (1.17%)	4 / 414 (0.97%)	4 / 451 (0.89%)
occurrences (all)	5	4	4
Rhinitis			
subjects affected / exposed	3 / 426 (0.70%)	4 / 414 (0.97%)	3 / 451 (0.67%)
occurrences (all)	3	4	3
Otitis media			
subjects affected / exposed	0 / 426 (0.00%)	3 / 414 (0.72%)	4 / 451 (0.89%)
occurrences (all)	0	3	5
Acute tonsillitis			
subjects affected / exposed	0 / 426 (0.00%)	4 / 414 (0.97%)	1 / 451 (0.22%)
occurrences (all)	0	4	1
Tracheitis			
subjects affected / exposed	1 / 426 (0.23%)	0 / 414 (0.00%)	5 / 451 (1.11%)
occurrences (all)	1	0	5
Gastroenteritis viral			
subjects affected / exposed	2 / 426 (0.47%)	1 / 414 (0.24%)	0 / 451 (0.00%)
occurrences (all)	2	1	0

Non-serious adverse events	Group 4: rLP2086(0-,2-Month) +Saline(1-,6 -	Group 5: rLP2086(2-,6-Month)+ Saline(0-, 1-Month)	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	72 / 277 (25.99%)	43 / 144 (29.86%)	
Injury, poisoning and procedural complications			
Contusion			
subjects affected / exposed	5 / 277 (1.81%)	0 / 144 (0.00%)	
occurrences (all)	6	0	
Fall			

subjects affected / exposed	1 / 277 (0.36%)	2 / 144 (1.39%)	
occurrences (all)	1	2	
Foot fracture			
subjects affected / exposed	1 / 277 (0.36%)	2 / 144 (1.39%)	
occurrences (all)	1	2	
Nervous system disorders			
Headache			
subjects affected / exposed	6 / 277 (2.17%)	6 / 144 (4.17%)	
occurrences (all)	7	6	
General disorders and administration site conditions			
Injection site pain			
subjects affected / exposed	6 / 277 (2.17%)	1 / 144 (0.69%)	
occurrences (all)	6	1	
Pyrexia			
subjects affected / exposed	3 / 277 (1.08%)	3 / 144 (2.08%)	
occurrences (all)	3	3	
Fatigue			
subjects affected / exposed	2 / 277 (0.72%)	2 / 144 (1.39%)	
occurrences (all)	2	2	
Respiratory, thoracic and mediastinal disorders			
Oropharyngeal pain			
subjects affected / exposed	0 / 277 (0.00%)	2 / 144 (1.39%)	
occurrences (all)	0	2	
Skin and subcutaneous tissue disorders			
Dermatitis			
subjects affected / exposed	0 / 277 (0.00%)	2 / 144 (1.39%)	
occurrences (all)	0	2	
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	1 / 277 (0.36%)	2 / 144 (1.39%)	
occurrences (all)	1	2	
Infections and infestations			
Nasopharyngitis			
subjects affected / exposed	21 / 277 (7.58%)	8 / 144 (5.56%)	
occurrences (all)	27	10	
Pharyngitis			

subjects affected / exposed	14 / 277 (5.05%)	7 / 144 (4.86%)	
occurrences (all)	15	8	
Upper respiratory tract infection			
subjects affected / exposed	6 / 277 (2.17%)	3 / 144 (2.08%)	
occurrences (all)	6	3	
Gastroenteritis			
subjects affected / exposed	6 / 277 (2.17%)	3 / 144 (2.08%)	
occurrences (all)	6	3	
Tonsillitis			
subjects affected / exposed	8 / 277 (2.89%)	2 / 144 (1.39%)	
occurrences (all)	8	2	
Sinusitis			
subjects affected / exposed	2 / 277 (0.72%)	3 / 144 (2.08%)	
occurrences (all)	2	5	
Bronchitis			
subjects affected / exposed	0 / 277 (0.00%)	2 / 144 (1.39%)	
occurrences (all)	0	2	
Urinary tract infection			
subjects affected / exposed	2 / 277 (0.72%)	1 / 144 (0.69%)	
occurrences (all)	2	1	
Rhinitis			
subjects affected / exposed	3 / 277 (1.08%)	2 / 144 (1.39%)	
occurrences (all)	4	3	
Otitis media			
subjects affected / exposed	0 / 277 (0.00%)	2 / 144 (1.39%)	
occurrences (all)	0	2	
Acute tonsillitis			
subjects affected / exposed	3 / 277 (1.08%)	0 / 144 (0.00%)	
occurrences (all)	4	0	
Tracheitis			
subjects affected / exposed	0 / 277 (0.00%)	2 / 144 (1.39%)	
occurrences (all)	0	2	
Gastroenteritis viral			
subjects affected / exposed	0 / 277 (0.00%)	2 / 144 (1.39%)	
occurrences (all)	0	2	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
19 October 2010	1- The study design was changed, with vaccinations given at 0, 1, 2, and 6 months; previously vaccinations were designated to be given at 0, 2, 6, and 12 months. 2-The primary objective became 2 coprimary objectives. 3- Endpoints have been updated to reflect objectives. 4- Inclusion/ exclusion have also been updated. 5- Safety section became the current sponsor template text. 6- Statistics section updated to reflect the changes in objectives and endpoints. 7- Biological sample wording had been clarified. 8- Protocol text was updated to match the current template. 8- Protocol text was updated to match the current template.
15 July 2011	1-Visit windows for Visits 2, 3, and 5 at month 1, month 2 and month 5 updated to 28-132 days, 56-160 days and 105-156 days to allow subjects to continue in the study following the delay of study immunizations due to the study pause. 2- Duration of subject participation updated to 17 months and duration of study updated to 20 months. 3- Clinical experience has been updated. 4- Exclusion criteria added to exclude family members of study site and sponsor personnel. 5- Unscheduled telephone contact was added.
23 April 2012	Protocol text was amended to address following changes in safety reporting: 1- Revision of section on ongoing safety reviews performed. 2- Text had been amended to address changes in safety reporting exposure during pregnancy. 3- Medication errors language was updated to align with sponsor SOP. 4- Adverse Event Reporting section was updated due to alignment with sponsor SOP guidance and US FDA Final Rule. 5- Active reporting period and necessity to report all SAEs post- active reporting period clarifying language was added to align with sponsor SOP and Final Rule. Vaccine study reporting period language was also added. 6- Definition of AE was updated to align under sponsor SOP guidance, including addition of medication error. 7- Clarification was added regarding persistent or significant disability/incapacity in serious adverse events section to align under Final Rule definition 8- Medical device reporting criteria was clarified to align with EU and US legislation. 9- Causality Assessment section was updated to align with sponsor SOP guidance. 10- Minor administrative corrections were done.
24 April 2012	1- Immunogenicity exploratory objective and endpoints were added to be consistent with Phase 2/3 program. 2- Safety endpoints were updated to be consistent with Phase 3 program. 3- A clarification was added regarding exploratory analysis which was already performed. 4- Language was inserted to confirm sera drawn without prior vaccination which was not be assayed or analyzed.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? Yes

Date	Interruption	Restart date
01 July 2011	Injections were temporarily paused during investigation of a suspected unexpected serious adverse reaction (SUSAR). A comprehensive review of the case was performed by Pfizer's risk management committee (RMC), which recommended resumption of study immunization. The external data monitoring committee (EDMC) reviewed the case and agreed with the recommendation of the RMC that vaccinations were safe to resume without change to the benefit-risk profile. Subsequently, a decision was made to resume study immunizations.	01 November 2011

Notes:

Limitations and caveats

None reported