



Clinical trial results:

A Randomized, Observer-blind, First-in-Human Phase 1/2a Study to Evaluate the Safety, Reactogenicity and Immunogenicity of Three Different Doses of VAC52416 (ExPEC10V) in Adults Aged 60 to 85 Years in Stable Health

Summary

| | |
|--------------------------|------------------|
| EudraCT number | 2020-000657-27 |
| Trial protocol | FR BE NL |
| Global end of trial date | 17 December 2024 |

Results information

| | |
|--------------------------------|-----------------|
| Result version number | v1 (current) |
| This version publication date | 01 January 2026 |
| First version publication date | 01 January 2026 |

Trial information

Trial identification

| | |
|-----------------------|-----------------|
| Sponsor protocol code | VAC52416BAC1001 |
|-----------------------|-----------------|

Additional study identifiers

| | |
|------------------------------------|-------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT03819049 |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|---|
| Sponsor organisation name | Janssen Research & Development LLC |
| Sponsor organisation address | 920 Route 202 South Raritan, New Jersey, United States, 08869 |
| Public contact | Clinical Registry Group, Janssen Research & Development LLC, ClinicalTrialsEU@its.jnj.com |
| Scientific contact | Clinical Registry Group, Janssen Research & Development LLC, ClinicalTrialsEU@its.jnj.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? | No |

Notes:

Results analysis stage

| | |
|--|------------------|
| Analysis stage | Final |
| Date of interim/final analysis | 17 December 2024 |
| Is this the analysis of the primary completion data? | No |
| Global end of trial reached? | Yes |
| Global end of trial date | 17 December 2024 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

To evaluate the safety and reactogenicity of different doses of ExPEC10V and to evaluate the dose-dependent immunogenicity of ExPEC10V on Day 15 in participants greater than or equal to (\geq) 60 to less than or equal to (\leq) 85 years of age.

Protection of trial subjects:

This study was conducted in accordance with the ethical principles that have their origin in the Declaration of Helsinki and that are consistent with Good Clinical Practices and applicable regulatory requirements.

Background therapy: -

Evidence for comparator: -

| | |
|---|---------------------|
| Actual start date of recruitment | 06 June 2019 |
| Long term follow-up planned | Yes |
| Long term follow-up rationale | Scientific research |
| Long term follow-up duration | 5 Years |
| Independent data monitoring committee (IDMC) involvement? | Yes |

Notes:

Population of trial subjects

Subjects enrolled per country

| | |
|--------------------------------------|--------------------|
| Country: Number of subjects enrolled | Belgium: 64 |
| Country: Number of subjects enrolled | Spain: 42 |
| Country: Number of subjects enrolled | France: 60 |
| Country: Number of subjects enrolled | Netherlands: 51 |
| Country: Number of subjects enrolled | United States: 615 |
| Worldwide total number of subjects | 832 |
| EEA total number of subjects | 217 |

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) | 0 |
| Adolescents (12-17 years) | 0 |
| Adults (18-64 years) | 367 |
| From 65 to 84 years | 459 |
| 85 years and over | 6 |

Subject disposition

Recruitment

Recruitment details:

Total of 832 subjects were enrolled in this study, out of which 711 subjects completed the study.

Pre-assignment

Screening details:

Total of 832 subjects were enrolled in this study, out of which 711 subjects completed the study.

Period 1

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

Blinding implementation details:

Not blinded

Arms

| | |
|------------------------------|-----------------------------|
| Are arms mutually exclusive? | Yes |
| Arm title | Cohort 1: Low Dose ExPEC10V |

Arm description:

Participants aged greater than or equal to (\geq) 60 to less than or equal to (\leq) 85 years in stable health with or without a history of urinary tract infection (UTI) received a single 0.5 milliliter (mL) intramuscular (IM) injection of ExPEC10V low dose (88 micrograms polysaccharide per milliliter [mcg PS/mL]) on Day 1.

| | |
|--|-------------------|
| Arm type | Experimental |
| Investigational medicinal product name | ExPEC10V |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Injection |
| Routes of administration | Intramuscular use |

Dosage and administration details:

Participants aged greater than or equal to (\geq) 60 to less than or equal to (\leq) 85 years in stable health with or without a history of urinary tract infection (UTI) received a single 0.5 milliliter (mL) intramuscular (IM) injection of ExPEC10V low dose (88 micrograms polysaccharide per milliliter [mcg PS/mL]) on Day 1.

| | |
|------------------|--------------------------------|
| Arm title | Cohort 1: Medium Dose ExPEC10V |
|------------------|--------------------------------|

Arm description:

Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC10V medium dose (120 mcg PS/mL) on Day 1.

| | |
|--|-------------------|
| Arm type | Experimental |
| Investigational medicinal product name | ExPEC10V |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Injection |
| Routes of administration | Intramuscular use |

Dosage and administration details:

Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC10V medium dose (120 mcg PS/mL) on Day 1.

| | |
|------------------|------------------------------|
| Arm title | Cohort 1: High Dose ExPEC10V |
|------------------|------------------------------|

Arm description:

Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC10V high dose (176 mcg PS/mL) on Day 1.

| | |
|--|------------------------------|
| Arm type | Experimental |
| Investigational medicinal product name | ExPEC10V |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Injection |
| Routes of administration | Intramuscular use |
| Dosage and administration details: | |
| Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC10V high dose (176 mcg PS/mL) on Day 1. | |
| Arm title | Cohort 1: ExPEC4V |
| Arm description: | |
| Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC4V 40 mcg PS/mL on Day 1. | |
| Arm type | Experimental |
| Investigational medicinal product name | ExPEC4V |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Injection |
| Routes of administration | Intramuscular use |
| Dosage and administration details: | |
| Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC4V 40 mcg PS/mL on Day 1. | |
| Arm title | Cohort 1: Prevnar 13 |
| Arm description: | |
| Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of Prevnar 13 on Day 1. | |
| Arm type | Experimental |
| Investigational medicinal product name | Prevnar 13 |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Injection |
| Routes of administration | Intramuscular use |
| Dosage and administration details: | |
| Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of Prevnar 13 on Day 1. | |
| Arm title | Cohort 2: ExPEC10V High Dose |
| Arm description: | |
| Participants aged ≥ 60 years in stable health with a history of UTI received a single 0.5 mL IM injection of ExPEC10V high dose (176 mcg PS/mL) on Day 1. | |
| Arm type | Experimental |
| Investigational medicinal product name | ExPEC10V |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Injection |
| Routes of administration | Intramuscular use |
| Dosage and administration details: | |
| Participants aged ≥ 60 years in stable health with a history of UTI received a single 0.5 mL IM injection of ExPEC10V high dose (176 mcg PS/mL) on Day 1. | |
| Arm title | Cohort 2: Placebo |
| Arm description: | |
| Participants aged ≥ 60 years in stable health with a history of UTI received a single 0.5 mL IM injection of placebo (matched to ExPEC10V high dose) on Day 1. | |
| Arm type | Experimental |

| | |
|--|-------------------|
| Investigational medicinal product name | Placebo |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Injection |
| Routes of administration | Intramuscular use |

Dosage and administration details:

Participants aged ≥ 60 years in stable health with a history of UTI received a single 0.5 mL IM injection of placebo (matched to ExPEC10V high dose) on Day 1.

| Number of subjects in period 1 | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V |
|--------------------------------|-----------------------------|--------------------------------|------------------------------|
| Started | 104 | 102 | 104 |
| Completed | 103 | 100 | 35 |
| Not completed | 1 | 2 | 69 |
| Consent withdrawn by subject | - | - | 50 |
| Physician decision | - | - | - |
| Not Specified | - | - | 2 |
| Lost to follow-up | 1 | 2 | 17 |

| Number of subjects in period 1 | Cohort 1: ExPEC4V | Cohort 1: Prevnar 13 | Cohort 2: ExPEC10V High Dose |
|--------------------------------|-------------------|----------------------|------------------------------|
| Started | 52 | 54 | 278 |
| Completed | 52 | 17 | 268 |
| Not completed | 0 | 37 | 10 |
| Consent withdrawn by subject | - | 29 | 9 |
| Physician decision | - | - | - |
| Not Specified | - | 1 | - |
| Lost to follow-up | - | 7 | 1 |

| Number of subjects in period 1 | Cohort 2: Placebo |
|--------------------------------|-------------------|
| Started | 138 |
| Completed | 136 |
| Not completed | 2 |
| Consent withdrawn by subject | 1 |
| Physician decision | 1 |
| Not Specified | - |
| Lost to follow-up | - |

Baseline characteristics

Reporting groups

| | |
|---|--------------------------------|
| Reporting group title | Cohort 1: Low Dose ExPEC10V |
| Reporting group description: Participants aged greater than or equal to (\geq) 60 to less than or equal to (\leq) 85 years in stable health with or without a history of urinary tract infection (UTI) received a single 0.5 milliliter (mL) intramuscular (IM) injection of ExPEC10V low dose (88 micrograms polysaccharide per milliliter [mcg PS/mL]) on Day 1. | |
| Reporting group title | Cohort 1: Medium Dose ExPEC10V |
| Reporting group description: Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC10V medium dose (120 mcg PS/mL) on Day 1. | |
| Reporting group title | Cohort 1: High Dose ExPEC10V |
| Reporting group description: Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC10V high dose (176 mcg PS/mL) on Day 1. | |
| Reporting group title | Cohort 1: ExPEC4V |
| Reporting group description: Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC4V 40 mcg PS/mL on Day 1. | |
| Reporting group title | Cohort 1: Prevnar 13 |
| Reporting group description: Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of Prevnar 13 on Day 1. | |
| Reporting group title | Cohort 2: ExPEC10V High Dose |
| Reporting group description: Participants aged ≥ 60 years in stable health with a history of UTI received a single 0.5 mL IM injection of ExPEC10V high dose (176 mcg PS/mL) on Day 1. | |
| Reporting group title | Cohort 2: Placebo |
| Reporting group description: Participants aged ≥ 60 years in stable health with a history of UTI received a single 0.5 mL IM injection of placebo (matched to ExPEC10V high dose) on Day 1. | |

| Reporting group values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V |
|------------------------------------|-----------------------------|--------------------------------|------------------------------|
| Number of subjects | 104 | 102 | 104 |
| Age Categorical Units: Subjects | | | |

| | | | |
|---|--------------------|--------------------|--------------------|
| Age continuous Units: years arithmetic mean standard deviation | 66.2 ± 5.77 | 66.4 ± 5.17 | 65.1 ± 5.15 |
| Gender categorical Units: Subjects | | | |
| Male | 45 | 57 | 39 |
| Female | 59 | 45 | 65 |
| Age Categorical Units: Subjects | | | |
| Adults (18-64 years) | 57 | 48 | 63 |
| From 65 to 84 years | 46 | 54 | 41 |

| | | | |
|--------------------|---|---|---|
| 85 years and above | 1 | 0 | 0 |
|--------------------|---|---|---|

| Reporting group values | Cohort 1: ExPEC4V | Cohort 1: Prevnar 13 | Cohort 2: ExPEC10V High Dose |
|------------------------------------|-------------------|----------------------|---------------------------------|
| Number of subjects | 52 | 54 | 278 |
| Age Categorical Units: Subjects | | | |

| | | | |
|---|----------------|----------------|----------------|
| Age continuous Units: years arithmetic mean standard deviation | 64.8 ± 4.56 | 65.9 ± 5.44 | 68.7 ± 6.16 |
| Gender categorical Units: Subjects | | | |
| Male | 21 | 26 | 58 |
| Female | 31 | 28 | 220 |
| Age Categorical Units: Subjects | | | |
| Adults (18-64 years) | 32 | 29 | 90 |
| From 65 to 84 years | 20 | 25 | 185 |
| 85 years and above | 0 | 0 | 3 |

| Reporting group values | Cohort 2: Placebo | Total | |
|------------------------------------|-------------------|-------|--|
| Number of subjects | 138 | 832 | |
| Age Categorical Units: Subjects | | | |

| | | | |
|---|----------------|-----|--|
| Age continuous Units: years arithmetic mean standard deviation | 69.1 ± 7.21 | - | |
| Gender categorical Units: Subjects | | | |
| Male | 27 | 273 | |
| Female | 111 | 559 | |
| Age Categorical Units: Subjects | | | |
| Adults (18-64 years) | 48 | 367 | |
| From 65 to 84 years | 88 | 459 | |
| 85 years and above | 2 | 6 | |

End points

End points reporting groups

| | |
|---|--------------------------------|
| Reporting group title | Cohort 1: Low Dose ExPEC10V |
| Reporting group description: Participants aged greater than or equal to (\geq) 60 to less than or equal to (\leq) 85 years in stable health with or without a history of urinary tract infection (UTI) received a single 0.5 milliliter (mL) intramuscular (IM) injection of ExPEC10V low dose (88 micrograms polysaccharide per milliliter [mcg PS/mL]) on Day 1. | |
| Reporting group title | Cohort 1: Medium Dose ExPEC10V |
| Reporting group description: Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC10V medium dose (120 mcg PS/mL) on Day 1. | |
| Reporting group title | Cohort 1: High Dose ExPEC10V |
| Reporting group description: Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC10V high dose (176 mcg PS/mL) on Day 1. | |
| Reporting group title | Cohort 1: ExPEC4V |
| Reporting group description: Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC4V 40 mcg PS/mL on Day 1. | |
| Reporting group title | Cohort 1: Prevnar 13 |
| Reporting group description: Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of Prevnar 13 on Day 1. | |
| Reporting group title | Cohort 2: ExPEC10V High Dose |
| Reporting group description: Participants aged ≥ 60 years in stable health with a history of UTI received a single 0.5 mL IM injection of ExPEC10V high dose (176 mcg PS/mL) on Day 1. | |
| Reporting group title | Cohort 2: Placebo |
| Reporting group description: Participants aged ≥ 60 years in stable health with a history of UTI received a single 0.5 mL IM injection of placebo (matched to ExPEC10V high dose) on Day 1. | |

Primary: Cohort 1: Number of Participants With Solicited Local (Injection Site) Adverse Events (AEs) for 14 Days After Vaccination on Day 1

| | |
|--|--|
| End point title | Cohort 1: Number of Participants With Solicited Local (Injection Site) Adverse Events (AEs) for 14 Days After Vaccination on Day 1 ^{[1][2]} |
| End point description: Number of participants with solicited local AEs for 14 days after vaccination on Day 1 were reported. An AE is any untoward medical occurrence in a clinical study participant administered a medicinal (investigational or non-investigational) product. An AE does not necessarily have a causal relationship with the study vaccine. Solicited local AEs were precisely defined events that participants were specifically asked about and which were noted by participants in the diary. Solicited local (injection site) AEs included injection site pain/tenderness, erythema and swelling at the study vaccine injection site, were used to assess the reactogenicity of the study vaccine and were pre-defined local (injection site). All solicited AEs at the injection site (local) were considered related to the study vaccine administration. Full analysis set (FAS) included all randomized participants with a vaccine administration documented. | |
| End point type | Primary |
| End point timeframe: Up to 14 days post vaccination on Day 1 (from Day 1 up to Day 15) | |

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: No inferential statistics were planned. Only descriptive statistics were planned.

[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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|-----------------------------|-----------------------------|--------------------------------|------------------------------|-------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 104 | 102 | 104 | 52 |
| Units: Participants | 46 | 54 | 60 | 15 |

| End point values | Cohort 1: Prevnar 13 | | | |
|-----------------------------|----------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 54 | | | |
| Units: Participants | 40 | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 1: Number of Participants With Solicited Systemic Adverse Events (AEs) Collected for 14 Days After Vaccination on Day 1

| | |
|-----------------|--|
| End point title | Cohort 1: Number of Participants With Solicited Systemic Adverse Events (AEs) Collected for 14 Days After Vaccination on Day 1 ^[3] ^[4] |
|-----------------|--|

End point description:

Number of participants with solicited systemic AEs 14 days after vaccination on Day 1 were reported. An AE was any untoward medical occurrence in a clinical study administered a medicinal (investigational or non-investigational) product. An AE does not necessarily have a causal relationship with the study vaccine. Solicited systemic AEs included fatigue, headache, nausea, fever and myalgia, for which participants were specifically questioned, and which were noted by participants in their participant diary for 14 days post-vaccination (day of vaccination and the subsequent 14 days). FAS included all randomized participants with a vaccine administration documented.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Up to 14 days post vaccination on Day 1 (from Day 1 up to Day 15)

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: No inferential statistics were planned. Only descriptive statistics were planned.

[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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|-----------------------------|-----------------------------|--------------------------------|------------------------------|-------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 104 | 102 | 104 | 52 |
| Units: Participants | 41 | 47 | 47 | 17 |

| End point values | Cohort 1: Prevnar 13 | | | |
|-----------------------------|----------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 54 | | | |
| Units: Participants | 26 | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 1: Number of Participants With Serious Adverse Events (SAEs) up to Day 181

| | |
|-----------------|---|
| End point title | Cohort 1: Number of Participants With Serious Adverse Events (SAEs) up to Day 181 ^{[5][6]} |
|-----------------|---|

End point description:

Number of participants with SAEs up to Day 181 were reported. An AE was any untoward medical occurrence in a clinical study administered a medicinal (investigational or non-investigational) product. An AE does not necessarily have a causal relationship with the study vaccine. An SAE is an AE resulting in any of the following outcomes or deemed significant for any other reason: death; initial or prolonged inpatient hospitalization; life-threatening experience (immediate risk of dying); persistent or significant disability/incapacity; congenital anomaly/birth defect; suspected transmission of any infectious agent via a medicinal product or medically important. FAS included all randomized participants with a vaccine administration documented.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Day 1 (post vaccination) up to Day 181

Notes:

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

Justification: No inferential statistics were planned. Only descriptive statistics were planned.

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

Justification: The data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|-----------------------------|-----------------------------|--------------------------------|------------------------------|-------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 104 | 102 | 104 | 52 |
| Units: Participants | 2 | 2 | 0 | 0 |

| | | | | |
|-----------------------------|-------------------------|--|--|--|
| End point values | Cohort 1: Prevnar 13 | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 54 | | | |
| Units: Participants | 1 | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 1: Number of Participants With Unsolicited Adverse Events (AEs) up to 29 Days After Vaccination on Day 1

| | |
|-----------------|---|
| End point title | Cohort 1: Number of Participants With Unsolicited Adverse Events (AEs) up to 29 Days After Vaccination on Day 1 ^[7] ^[8] |
|-----------------|---|

End point description:

Number of participants with unsolicited AEs up to 29 days after vaccination on Day 1 were reported. An AE was any untoward medical occurrence in a clinical study administered a medicinal (investigational or non-investigational) product. An AE does not necessarily have a causal relationship with the study vaccine. Unsolicited AEs were all AEs for which the participant is not specifically questioned in the participant diary. FAS included all randomized participants with a vaccine administration documented.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Up to 29 days post vaccination on Day 1 (from Day 1 up to Day 30)

Notes:

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

Justification: No inferential statistics were planned. Only descriptive statistics were planned.

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

Justification: The data was planned for specified baseline arms only.

| | | | | |
|-----------------------------|-----------------------------------|--------------------------------------|------------------------------------|----------------------|
| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 104 | 102 | 104 | 52 |
| Units: Participants | 25 | 21 | 23 | 9 |

| | | | | |
|-----------------------------|-------------------------|--|--|--|
| End point values | Cohort 1: Prevnar 13 | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 54 | | | |
| Units: Participants | 15 | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 2: Number of Participants With Solicited Local (Injection Site) Adverse Events (AEs) Collected for 14 Days After Vaccination on Day 1

| | |
|-----------------|---|
| End point title | Cohort 2: Number of Participants With Solicited Local (Injection Site) Adverse Events (AEs) Collected for 14 Days After Vaccination on Day 1 ^[9] ^[10] |
|-----------------|---|

End point description:

Number of participants with solicited local AEs for 14 days after vaccination on Day 1 were reported. An AE is any untoward medical occurrence in a clinical study participant administered a medicinal (investigational or non-investigational) product. An AE does not necessarily have a causal relationship with the study vaccine. Solicited local AEs were precisely defined events that participants were specifically asked about and which were noted by participants in the diary. Solicited local (injection site) AEs included injection site pain/tenderness, erythema and swelling at the study vaccine injection site, were used to assess the reactogenicity of the study vaccine and were pre-defined local (injection site). All solicited AEs at the injection site (local) were considered related to the study vaccine administration. FAS included all randomized participants with a vaccine administration documented.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Up to 14 days post vaccination on Day 1 (from Day 1 up to Day 15)

Notes:

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

Justification: No inferential statistics were planned. Only descriptive statistics were planned.

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

Justification: The data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|-----------------------------|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 278 | 138 | | |
| Units: Participants | 139 | 22 | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 2: Number of Participants With Solicited Systemic Adverse Events (AEs) Collected for 14 Days After Vaccination on Day 1

| | |
|-----------------|--|
| End point title | Cohort 2: Number of Participants With Solicited Systemic Adverse Events (AEs) Collected for 14 Days After Vaccination on Day 1 ^[11] ^[12] |
|-----------------|--|

End point description:

Number of participants with solicited systemic AEs 14 days after vaccination on Day 1 were reported. An AE was any untoward medical occurrence in a clinical study administered a medicinal (investigational or non-investigational) product. An AE does not necessarily have a causal relationship with the study vaccine. Solicited systemic AEs included fatigue, headache, nausea, fever and myalgia, for which participants were specifically questioned, and which were noted by participants in their participant diary for 14 days post-vaccination (day of vaccination and the subsequent 14 days). FAS included all randomized participants with a vaccine administration documented.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Up to 14 days post vaccination on Day 1 (from Day 1 up to Day 15)

Notes:

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

Justification: No inferential statistics were planned. Only descriptive statistics were planned.

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

Justification: The data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|-----------------------------|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 278 | 138 | | |
| Units: Participants | 139 | 53 | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 1: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex Electrochemiluminescent (ECL) Based Immunoassay on Day 15

| | |
|-----------------|--|
| End point title | Cohort 1: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex Electrochemiluminescent (ECL) Based Immunoassay on Day 15 ^[13] ^[14] |
|-----------------|--|

End point description:

GMTs of serotype-specific total IgG serum antibodies as measured by multiplex ECL based immunoassay were reported. GMTs for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and exotoxin protein A (EPA) were determined in serum from collected blood samples. Per-protocol immunogenicity (PPI) analysis set: all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories. Here, "9999" signifies that geometric mean and lower limit of 95% CI could not be estimated as the value was below lower limit of quantification (LLOQ) that is for O1A: 69149, O2: 65287, O4: 67356, O6A: 150748, O8: 72196, O15: 66910, O16: 71586, O18A: 70519, O25B: 61990, O75: 133019, and EPA: 66165.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Day 15

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: No inferential statistics were planned. Only descriptive statistics were planned.

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

Justification: The data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 101 | 98 | 100 | 48 |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A (n=101, 98, 100, 48, 51) | 5350535.1 (4644976.0 to 6163266.7) | 6358232.9 (5664895.6 to 7136429.1) | 6421446.5 (5730738.4 to 7195403.5) | 6930697.9 (5823442.2 to 8248484.7) |
| Serotype O2 (n=101, 98, 100, 48, 51) | 4873016.8 (4116237.9 to 5768931.0) | 4787891.5 (4034593.8 to 5681837.2) | 6537864.9 (5861510.6 to 7292263.1) | 6196015.3 (4955643.7 to 7746845.5) |
| Serotype O4 (n=101, 98, 100, 48, 51) | 2906299.6 (2339299.2 to 3610729.8) | 2778764.0 (2281609.7 to 3384246.4) | 4140729.8 (3480255.9 to 4926546.7) | 503269.8 (409184.0 to 618989.3) |
| Serotype O6A (n=101, 98, 100, 48, 51) | 4349111.4 (3780753.5 to 5002910.0) | 5150333.2 (4384440.1 to 6050015.8) | 5834052.6 (5130881.4 to 6633591.3) | 5051389.0 (4030377.7 to 6331051.9) |
| Serotype O8 (n=101, 98, 100, 48, 51) | 5082460.4 (4435261.0 to 5824100.0) | 5605655.1 (4917150.4 to 6390564.9) | 6071895.4 (5414031.1 to 6809697.4) | 1738652.7 (1408103.9 to 2146796.9) |
| Serotype O15 (n=101, 98, 100, 48, 51) | 5151217.3 (4393448.3 to 6039684.0) | 4635317.8 (3976055.4 to 5403891.3) | 5414798.2 (4732722.1 to 6195174.6) | 898897.3 (694569.8 to 1163333.7) |
| Serotype O16 (n=101, 98, 100, 48, 51) | 4298055.1 (3664533.7 to 5041099.1) | 3972656.6 (3378225.9 to 4671682.9) | 5675420.6 (4957603.9 to 6497170.6) | 759403.5 (619027.4 to 931612.4) |
| Serotype O18A (n=101, 98, 100, 48, 51) | 3532498.2 (2965791.1 to 4207492.4) | 3585987.4 (3008355.6 to 4274529.8) | 4522807.6 (3883477.9 to 5267388.9) | 1015034.0 (840693.0 to 1225529.4) |
| Serotype O25B (n=101, 98, 99, 48, 51) | 1426991.8 (1113308.2 to 1829058.4) | 2265970.3 (1766736.9 to 2906273.8) | 2044257.9 (1617260.1 to 2583994.0) | 2174362.2 (1533603.8 to 3082837.4) |
| Serotype O75 (n=101, 98, 100, 48, 51) | 2932034.9 (2454267.7 to 3502807.9) | 3107132.4 (2627869.3 to 3673802.2) | 3963138.0 (3450884.5 to 4551430.9) | 1336846.1 (1060936.4 to 1684509.5) |
| Serotype EPA (n=101, 98, 100, 48, 51) | 1170226.6 (829684.5 to 1650543.4) | 1496999.3 (1016330.1 to 2204999.2) | 1542536.8 (1099718.5 to 2163662.7) | 1448761.2 (868026.8 to 2418023.4) |

| End point values | Cohort 1: Prevnar 13 | | | |
|--|---------------------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 51 | | | |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A (n=101, 98, 100, 48, 51) | 1606747.3 (1205014.3 to 2142411.9) | | | |
| Serotype O2 (n=101, 98, 100, 48, 51) | 447845.4 (343614.9 to 583692.7) | | | |
| Serotype O4 (n=101, 98, 100, 48, 51) | 545556.7 (415552.0 to 716233.0) | | | |

| | | | | |
|--|---------------------------------------|--|--|--|
| Serotype O6A (n=101, 98, 100, 48, 51) | 984170.4 (805275.1 to 1202807.9) | | | |
| Serotype O8 (n=101, 98, 100, 48, 51) | 1391481.0 (1093370.5 to 1770872.3) | | | |
| Serotype O15 (n=101, 98, 100, 48, 51) | 1202517.7 (893109.0 to 1619118.0) | | | |
| Serotype O16 (n=101, 98, 100, 48, 51) | 732969.6 (586564.3 to 915917.3) | | | |
| Serotype O18A (n=101, 98, 100, 48, 51) | 1100583.1 (846592.3 to 1430775.0) | | | |
| Serotype O25B (n=101, 98, 99, 48, 51) | 267879.1 (204166.3 to 351474.3) | | | |
| Serotype O75 (n=101, 98, 100, 48, 51) | 1363797.1 (1041800.4 to 1785315.7) | | | |
| Serotype EPA (n=101, 98, 100, 48, 51) | 9999 (-9999 to 74582.5) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 2: Number of Participants With Unsolicited Adverse Events (AEs) 29 Days After Vaccination on Day 1

| | |
|-----------------|---|
| End point title | Cohort 2: Number of Participants With Unsolicited Adverse Events (AEs) 29 Days After Vaccination on Day 1 ^{[15][16]} |
|-----------------|---|

End point description:

Number of participants with unsolicited AEs up to 29 days after vaccination on Day 1 were reported. An AE was any untoward medical occurrence in a clinical study administered a medicinal (investigational or non-investigational) product. An AE does not necessarily have a causal relationship with the study vaccine. Unsolicited AEs were all AEs for which the participant is not specifically questioned in the participant diary. FAS included all randomized participants with a vaccine administration documented.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Up to 29 days post vaccination on Day 1 (from Day 1 up to Day 30)

Notes:

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

Justification: No inferential statistics were planned. Only descriptive statistics were planned.

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

Justification: The data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|-----------------------------|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 278 | 138 | | |
| Units: Participants | 79 | 36 | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 2: Number of Participants With Serious Adverse Events (SAEs) up to Day 181

| | |
|-----------------|---|
| End point title | Cohort 2: Number of Participants With Serious Adverse Events (SAEs) up to Day 181 ^{[17][18]} |
|-----------------|---|

End point description:

Number of participants with SAEs up to Day 181 were reported. An AE was any untoward medical occurrence in a clinical study administered a medicinal (investigational or non-investigational) product. An AE does not necessarily have a causal relationship with the study vaccine. An SAE is an AE resulting in any of the following outcomes or deemed significant for any other reason: death; initial or prolonged inpatient hospitalization; life-threatening experience (immediate risk of dying); persistent or significant disability/incapacity; congenital anomaly/birth defect; suspected transmission of any infectious agent via a medicinal product or medically important. FAS included all randomized participants with a vaccine administration documented.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Day 1 (post vaccination) up to Day 181

Notes:

[17] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

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

Justification: The data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|-----------------------------|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 278 | 138 | | |
| Units: Participants | 9 | 6 | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype Specific Antibodies as Measured by Multiplex ECL Based Immunoassay on Day 15

| | |
|-----------------|--|
| End point title | Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype Specific Antibodies as Measured by Multiplex ECL Based Immunoassay on Day 15 ^{[19][20]} |
|-----------------|--|

End point description:

GMR of fold changes from baseline for serotype specific antibodies as measured by multiplex ECL based

immunoassay on Day 15 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA were determined in serum from collected blood samples by multiplex ECL based immunoassay. GMR of fold change from baseline was calculated as the ratio of GMTs on Day 15 and pre-vaccination (on Day 1). PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Day 15

Notes:

[19] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

[20] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|--|-----------------------------|--------------------------------|------------------------------|-------------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 101 | 98 | 100 | 48 |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A (n=101, 98, 100, 48, 51) | 4.41 (3.690 to 5.259) | 5.33 (4.429 to 6.406) | 5.26 (4.381 to 6.323) | 6.00 (4.472 to 8.061) |
| Serotype O2 (n=101, 98, 100, 48, 51) | 9.54 (8.014 to 11.360) | 10.05 (8.374 to 12.056) | 12.31 (10.564 to 14.334) | 12.80 (9.343 to 17.530) |
| Serotype O4 (n=101, 98, 100, 48, 51) | 6.28 (5.103 to 7.718) | 5.49 (4.528 to 6.656) | 9.17 (7.610 to 11.054) | 1.06 (1.005 to 1.127) |
| Serotype O6A (n=101, 98, 100, 48, 51) | 3.55 (3.039 to 4.141) | 4.48 (3.731 to 5.389) | 5.11 (4.408 to 5.918) | 4.31 (3.336 to 5.576) |
| Serotype O8 (n=101, 98, 100, 48, 51) | 3.34 (2.892 to 3.855) | 3.27 (2.791 to 3.826) | 3.90 (3.362 to 4.534) | 1.07 (1.033 to 1.116) |
| Serotype O15 (n=101, 98, 100, 48, 51) | 5.94 (4.966 to 7.104) | 5.32 (4.468 to 6.339) | 6.20 (5.248 to 7.329) | 1.01 (0.971 to 1.055) |
| Serotype O16 (n=101, 98, 100, 48, 51) | 5.04 (4.300 to 5.912) | 4.59 (3.822 to 5.502) | 7.02 (5.904 to 8.342) | 1.11 (0.987 to 1.254) |
| Serotype O18A (n=101, 98, 100, 48, 51) | 3.79 (3.220 to 4.456) | 3.64 (3.043 to 4.344) | 4.84 (4.132 to 5.675) | 1.04 (0.995 to 1.087) |
| Serotype O25B (n=101, 98, 99, 48, 51) | 5.80 (4.761 to 7.071) | 9.51 (7.463 to 12.126) | 8.24 (6.529 to 10.394) | 11.02 (7.889 to 15.388) |
| Serotype O75 (n=101, 98, 100, 48, 51) | 2.33 (2.013 to 2.701) | 2.38 (2.055 to 2.756) | 3.06 (2.622 to 3.563) | 1.14 (1.026 to 1.274) |
| Serotype EPA (n=101, 98, 100, 48, 51) | 11.31 (8.612 to 14.864) | 12.31 (9.112 to 16.622) | 11.84 (9.010 to 15.55) | 12.68 (8.282 to 19.426) |

| End point values | Cohort 1: Prevnar 13 | | | |
|-------------------------------------|----------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 51 | | | |
| Units: Ratio | | | | |
| geometric mean (confidence interval | | | | |

| | | | | |
|--|-----------------------|--|--|--|
| 95%) | | | | |
| Serotype O1A (n=101, 98, 100, 48, 51) | 1.26 (1.086 to 1.452) | | | |
| Serotype O2 (n=101, 98, 100, 48, 51) | 1.01 (0.953 to 1.064) | | | |
| Serotype O4 (n=101, 98, 100, 48, 51) | 1.27 (1.081 to 1.491) | | | |
| Serotype O6A (n=101, 98, 100, 48, 51) | 1.04 (0.990 to 1.088) | | | |
| Serotype O8 (n=101, 98, 100, 48, 51) | 1.06 (0.999 to 1.128) | | | |
| Serotype O15 (n=101, 98, 100, 48, 51) | 1.46 (1.223 to 1.753) | | | |
| Serotype O16 (n=101, 98, 100, 48, 51) | 1.08 (1.010 to 1.155) | | | |
| Serotype O18A (n=101, 98, 100, 48, 51) | 1.13 (1.027 to 1.241) | | | |
| Serotype O25B (n=101, 98, 99, 48, 51) | 1.02 (0.932 to 1.127) | | | |
| Serotype O75 (n=101, 98, 100, 48, 51) | 1.03 (0.945 to 1.131) | | | |
| Serotype EPA (n=101, 98, 100, 48, 51) | 0.99 (0.968 to 1.010) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 1: Percentage of Participants With a Greater Than or Equal to (\geq) 2-Fold and \geq 4-Fold Increase From Baseline in Serotype Specific Serum Antibody Titers as Measured by Multiplex ECL Based Immunoassay on Day 15

| | |
|-----------------|---|
| End point title | Cohort 1: Percentage of Participants With a Greater Than or Equal to (\geq) 2-Fold and \geq 4-Fold Increase From Baseline in Serotype Specific Serum Antibody Titers as Measured by Multiplex ECL Based Immunoassay on Day 15 ^[21] ^[22] |
|-----------------|---|

End point description:

Percentage of participants with a \geq 2-fold and \geq 4-fold increase (FI) from baseline in serotype specific serum antibody titers as measured by multiplex ECL based immunoassay on Day 15 was reported. The fold (\geq 2-fold and \geq 4-fold) increase from baseline to Day 15 for the serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA was calculated as the ratio of titer values of serum antibody on Day 15 and pre-vaccination (on day 1) that is Day 15/Day 1. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Day 15

Notes:

[21] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

[22] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|--|-----------------------------|--------------------------------|------------------------------|-----------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 101 | 98 | 100 | 48 |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A: ≥ 2 FI (n =101, 98, 100, 48, 51) | 78.2 (68.90 to 85.82) | 84.7 (76.01 to 91.17) | 82.0 (73.05 to 88.97) | 81.3 (67.37 to 91.05) |
| Serotype O1A: ≥ 4 FI (n =101, 98, 100, 48, 51) | 56.4 (46.20 to 66.28) | 62.2 (51.88 to 71.84) | 65.0 (54.82 to 74.27) | 66.7 (51.59 to 79.60) |
| Serotype O2: ≥ 2 FI (n =101, 98, 100, 48, 51) | 93.1 (86.24 to 97.17) | 93.9 (87.15 to 97.72) | 99.0 (94.5 to 99.97) | 89.6 (77.34 to 96.53) |
| Serotype O2: ≥ 4 FI (n =101, 98, 100, 48, 51) | 83.2 (74.42 to 89.88) | 83.7 (74.84 to 90.37) | 92.0 (84.84 to 96.48) | 81.3 (67.37 to 91.05) |
| Serotype O4: ≥ 2 FI (n =101, 98, 100, 48, 51) | 77.2 (67.82 to 84.98) | 81.6 (72.53 to 88.74) | 91.0 (83.60 to 95.80) | 2.1 (0.05 to 11.07) |
| Serotype O4: ≥ 4 FI (n =101, 98, 100, 48, 51) | 64.4 (54.21 to 73.64) | 63.3 (52.93 to 72.78) | 80.0 (70.82 to 87.33) | 0.0 (0.00 to 7.40) |
| Serotype O6A: ≥ 2 FI (n =101, 98, 100, 48, 51) | 72.3 (62.48 to 80.72) | 77.6 (68.01 to 85.36) | 86.0 (77.63 to 92.13) | 77.1 (62.69 to 87.97) |
| Serotype O6A: ≥ 4 FI (n =101, 98, 100, 48, 51) | 42.6 (32.79 to 52.81) | 53.1 (42.71 to 63.22) | 66.0 (55.85 to 75.18) | 52.1 (37.19 to 66.71) |
| Serotype O8: ≥ 2 FI (n =101, 98, 100, 48, 51) | 73.3 (63.54 to 81.59) | 73.5 (63.59 to 81.88) | 74.0 (64.27 to 82.26) | 0.0 (0.00 to 7.40) |
| Serotype O8: ≥ 4 FI (n =101, 98, 100, 48, 51) | 41.6 (31.86 to 51.82) | 38.8 (29.10 to 49.15) | 51.0 (40.80 to 61.14) | 0.0 (0.00 to 7.40) |
| Serotype O15: ≥ 2 FI (n =101, 98, 100, 48, 51) | 88.1 (80.17 to 93.71) | 82.7 (73.69 to 89.56) | 87.0 (78.80 to 92.89) | 0.0 (0.00 to 7.40) |
| Serotype O15: ≥ 4 FI (n =101, 98, 100, 48, 51) | 61.4 (51.18 to 70.91) | 63.3 (52.93 to 72.78) | 68.0 (57.92 to 76.98) | 0.0 (0.00 to 7.40) |
| Serotype O16: ≥ 2 FI (n =101, 98, 100, 48, 51) | 86.1 (77.84 to 92.21) | 77.6 (68.01 to 85.36) | 88.0 (79.98 to 93.64) | 2.1 (0.05 to 11.07) |
| Serotype O16: ≥ 4 FI (n =101, 98, 100, 48, 51) | 63.4 (53.19 to 72.73) | 57.1 (46.75 to 67.10) | 73.0 (63.20 to 81.39) | 2.1 (0.05 to 11.07) |
| Serotype O18A: ≥ 2 FI (n =101, 98, 100, 48, 51) | 72.3 (62.48 to 80.72) | 71.4 (61.42 to 80.10) | 84.0 (75.32 to 90.57) | 0.0 (0.00 to 7.40) |
| Serotype O18A: ≥ 4 FI (n =101, 98, 100, 48, 51) | 48.5 (38.45 to 58.67) | 41.8 (31.95 to 52.23) | 61.0 (50.73 to 70.60) | 0.0 (0.00 to 7.40) |
| Serotype O25B: ≥ 2 FI (n =101, 98, 99, 48, 51) | 82.2 (73.30 to 89.08) | 87.8 (79.59 to 93.51) | 84.8 (76.24 to 91.26) | 87.5 (74.75 to 95.27) |
| Serotype O25B: ≥ 4 FI (n =101, 98, 99, 48, 51) | 58.4 (48.18 to 68.14) | 75.5 (65.79 to 83.64) | 69.7 (59.65 to 78.53) | 79.2 (65.01 to 89.53) |
| Serotype O75: ≥ 2 FI (n =101, 98, 100, 48, 51) | 50.5 (40.36 to 60.60) | 49.0 (38.74 to 59.28) | 68.0 (57.92 to 76.98) | 6.3 (1.31 to 17.20) |
| Serotype O75: ≥ 4 FI (n =101, 98, 100, 48, 51) | 20.8 (13.36 to 30.01) | 25.5 (17.24 to 35.31) | 33.0 (23.92 to 43.12) | 4.2 (0.51 to 14.25) |
| Serotype EPA: ≥ 2 FI (n =101, 98, 100, 48, 51) | 87.1 (79.00 to 92.96) | 83.7 (74.84 to 90.37) | 85.0 (76.47 to 91.35) | 81.3 (67.37 to 91.05) |
| Serotype EPA: ≥ 4 FI (n =101, 98, 100, 48, 51) | 74.3 (64.60 to 82.44) | 74.5 (64.69 to 82.76) | 77.0 (67.51 to 84.83) | 72.9 (58.15 to 84.72) |

| End point values | Cohort 1: Prevnar 13 | | | |
|-----------------------------------|----------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 51 | | | |
| Units: Percentage of participants | | | | |

| number (confidence interval 95%) | | | | |
|--|-----------------------|--|--|--|
| Serotype O1A: ≥ 2 FI (n =101, 98, 100, 48, 51) | 9.8 (3.26 to 21.41) | | | |
| Serotype O1A: ≥ 4 FI (n =101, 98, 100, 48, 51) | 5.9 (1.23 to 16.24) | | | |
| Serotype O2: ≥ 2 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 6.98) | | | |
| Serotype O2: ≥ 4 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 6.98) | | | |
| Serotype O4: ≥ 2 FI (n =101, 98, 100, 48, 51) | 9.8 (3.26 to 21.41) | | | |
| Serotype O4: ≥ 4 FI (n =101, 98, 100, 48, 51) | 3.9 (0.48 to 13.46) | | | |
| Serotype O6A: ≥ 2 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 6.98) | | | |
| Serotype O6A: ≥ 4 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 6.98) | | | |
| Serotype O8: ≥ 2 FI (n =101, 98, 100, 48, 51) | 3.9 (0.48 to 13.46) | | | |
| Serotype O8: ≥ 4 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 6.98) | | | |
| Serotype O15: ≥ 2 FI (n =101, 98, 100, 48, 51) | 21.6 (11.29 to 35.32) | | | |
| Serotype O15: ≥ 4 FI (n =101, 98, 100, 48, 51) | 9.8 (3.26 to 21.41) | | | |
| Serotype O16: ≥ 2 FI (n =101, 98, 100, 48, 51) | 2.0 (0.05 to 10.45) | | | |
| Serotype O16: ≥ 4 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 6.98) | | | |
| Serotype O18A: ≥ 2 FI (n =101, 98, 100, 48, 51) | 3.9 (0.48 to 13.46) | | | |
| Serotype O18A: ≥ 4 FI (n =101, 98, 100, 48, 51) | 2.0 (0.05 to 10.45) | | | |
| Serotype O25B: ≥ 2 FI (n =101, 98, 99, 48, 51) | 3.9 (0.48 to 13.46) | | | |
| Serotype O25B: ≥ 4 FI (n =101, 98, 99, 48, 51) | 2.0 (0.05 to 10.45) | | | |
| Serotype O75: ≥ 2 FI (n =101, 98, 100, 48, 51) | 2.0 (0.05 to 10.45) | | | |
| Serotype O75: ≥ 4 FI (n =101, 98, 100, 48, 51) | 2.0 (0.05 to 10.45) | | | |
| Serotype EPA: ≥ 2 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 6.98) | | | |
| Serotype EPA: ≥ 4 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 6.98) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 1: Geometric Mean Titers (GMT) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex Opsonophagocytic Assay (MOPA) on Day 15

| | |
|-----------------|---|
| End point title | Cohort 1: Geometric Mean Titers (GMT) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex Opsonophagocytic Assay (MOPA) on Day 15 ^[23] ^[24] |
|-----------------|---|

End point description:

GMTs of serotype-specific total IgG serum antibodies as measured by MOPA were reported. GMTs for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B and O75 were determined in serum from collected blood samples. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories. Here, 99999 indicated that geometric mean, lower and upper limit of 95% CI could not be estimated as the value was below the LLOQ and 9.9999 indicated that geometric mean and lower limit of 95% CI could not be estimated as the value was below the LLOQ. LLOQ values were: O1A: 53, O2: 51, O4: 29, O6A: 47, O8: 196, O15: 37, O16: 54, O18A: 12, O25B: 65, and O75: 37.

| | |
|----------------------|---------|
| End point type | Primary |
| End point timeframe: | |
| Day 15 | |

Notes:

[23] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

[24] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|--|-----------------------------|--------------------------------|------------------------------|----------------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 100 | 98 | 100 | 48 |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A (n =101, 98, 100, 48, 51) | 654.3 (512.4 to 835.4) | 764.2 (590.3 to 989.5) | 1129.5 (842.3 to 1514.7) | 1377.3 (851.8 to 2227.0) |
| Serotype O2 (n =101, 98, 100, 48, 51) | 5538.4 (3884.7 to 7896.2) | 5359.8 (3689.3 to 7786.7) | 12473.2 (9082.9 to 17129.0) | 9629.4 (5960.7 to 15555.9) |
| Serotype O4 (n =101, 98, 100, 48, 51) | 376.3 (278.6 to 508.2) | 322.9 (239.7 to 434.9) | 505.7 (374.6 to 682.5) | 102.9 (74.1 to 142.8) |
| Serotype O6A (n =101, 98, 100, 48, 51) | 1495.9 (1133.1 to 1974.8) | 2256.5 (1725.5 to 2951.0) | 2217.2 (1690.8 to 2907.6) | 2009.8 (1344.6 to 3004.0) |
| Serotype O8 (n =101, 98, 100, 48, 51) | 1249.2 (979.3 to 1593.5) | 921.5 (702.3 to 1209.1) | 1037.6 (809.7 to 1329.6) | 712.9 (527.1 to 964.3) |
| Serotype O15 (n =101, 98, 100, 48, 51) | 3095.1 (2194.3 to 4365.6) | 3018.4 (2093.9 to 4351.1) | 3658.5 (2528.2 to 5294.1) | 650.2 (431.5 to 979.8) |
| Serotype O16 (n =101, 98, 100, 48, 51) | 1532.2 (1092.6 to 2148.8) | 1172.2 (822.4 to 1670.8) | 1853.8 (1353.2 to 2539.6) | 216.2 (147.0 to 317.9) |
| Serotype O18A (n =101, 98, 100, 48, 51) | 274.7 (202.2 to 373.2) | 276.2 (205.0 to 372.0) | 338.2 (245.3 to 466.3) | 65.7 (44.6 to 96.9) |
| Serotype O25B (n =101, 98, 99, 48, 51) | 415.5 (318.4 to 542.3) | 489.5 (373.3 to 641.9) | 403.7 (312.4 to 521.6) | 382.7 (268.7 to 545.0) |
| Serotype O75 (n =101, 98, 100, 48, 51) | 84.0 (65.8 to 107.1) | 58.0 (46.5 to 72.3) | 91.7 (66.5 to 126.5) | 99999 (-99999 to 99999) |

| | | | | |
|------------------|-----------|--|--|--|
| End point values | Cohort 1: | | | |
|------------------|-----------|--|--|--|

| Prevnam 13 | | | | |
|--|--------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 51 | | | |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A (n =101, 98, 100, 48, 51) | 244.6 (177.9 to 336.1) | | | |
| Serotype O2 (n =101, 98, 100, 48, 51) | 363.5 (274.0 to 482.3) | | | |
| Serotype O4 (n =101, 98, 100, 48, 51) | 102.5 (79.3 to 132.5) | | | |
| Serotype O6A (n =101, 98, 100, 48, 51) | 720.7 (513.8 to 1010.9) | | | |
| Serotype O8 (n =101, 98, 100, 48, 51) | 931.3 (720.7 to 1203.4) | | | |
| Serotype O15 (n =101, 98, 100, 48, 51) | 831.9 (542.2 to 1276.2) | | | |
| Serotype O16 (n =101, 98, 100, 48, 51) | 176.9 (134.4 to 232.9) | | | |
| Serotype O18A (n =101, 98, 100, 48, 51) | 62.2 (42.3 to 91.6) | | | |
| Serotype O25B (n =101, 98, 99, 48, 51) | 265.4 (173.1 to 406.8) | | | |
| Serotype O75 (n =101, 98, 100, 48, 51) | 9.9999 (-9.9999 to 45.3) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype Specific Antibodies as Measured by MOPA on Day 15

| | |
|-----------------|---|
| End point title | Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype Specific Antibodies as Measured by MOPA on Day 15 ^[25] ^[26] |
|-----------------|---|

End point description:

GMR of fold changes from baseline for serotype specific antibodies as measured by MOPA on Day 15 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B and O75 were determined in serum from collected blood samples by MOPA. GMR of fold change from baseline was calculated as the ratio of GMTs on Day 15 and pre-vaccination (on Day 1). PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Baseline (Day 1, pre-vaccination), Day 15

Notes:

[25] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

[26] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|--|-----------------------------|--------------------------------|------------------------------|--------------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 101 | 98 | 100 | 48 |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A (n =101, 98, 100, 48, 51) | 2.67 (2.103 to 3.389) | 4.29 (3.372 to 5.469) | 6.14 (4.546 to 8.287) | 5.34 (3.533 to 8.059) |
| Serotype O2 (n =101, 98, 100, 48, 51) | 14.39 (10.285 to 20.126) | 17.78 (12.567 to 25.168) | 30.19 (22.504 to 40.490) | 22.96 (13.310 to 39.589) |
| Serotype O4 (n =101, 98, 100, 48, 51) | 3.25 (2.489 to 4.240) | 3.47 (2.723 to 4.420) | 5.47 (4.169 to 7.178) | 0.98 (0.852 to 1.127) |
| Serotype O6A (n =101, 98, 100, 48, 51) | 2.30 (1.859 to 2.858) | 3.72 (2.740 to 5.046) | 3.54 (2.782 to 4.510) | 4.30 (2.840 to 6.514) |
| Serotype O8 (n =101, 98, 100, 48, 51) | 1.26 (1.078 to 1.468) | 1.22 (1.107 to 1.339) | 1.15 (0.995 to 1.324) | 0.97 (0.801 to 1.170) |
| Serotype O15 (n =100, 97, 100, 48, 50) | 4.91 (3.498 to 6.884) | 6.29 (4.285 to 9.247) | 6.87 (4.732 to 9.980) | 0.95 (0.695 to 1.289) |
| Serotype O16 (n =101, 98, 100, 48, 51) | 6.58 (4.806 to 9.018) | 5.86 (4.051 to 8.485) | 10.18 (7.527 to 13.755) | 0.94 (0.795 to 1.113) |
| Serotype O18A (n =101, 98, 100, 48, 51) | 4.05 (3.148 to 5.204) | 4.27 (3.192 to 5.721) | 6.20 (4.645 to 8.279) | 1.03 (0.869 to 1.217) |
| Serotype O25B (n =101, 98, 99, 48, 51) | 2.34 (1.883 to 2.903) | 2.77 (2.155 to 3.557) | 2.51 (2.033 to 3.096) | 2.48 (1.830 to 3.367) |
| Serotype O75 (n =101, 98, 100, 48, 51) | 1.92 (1.600 to 2.299) | 1.69 (1.440 to 1.991) | 2.58 (1.981 to 3.355) | 0.97 (0.879 to 1.064) |

| End point values | Cohort 1: Prevnar 13 | | | |
|--|-----------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 51 | | | |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A (n =101, 98, 100, 48, 51) | 1.18 (0.934 to 1.484) | | | |
| Serotype O2 (n =101, 98, 100, 48, 51) | 1.06 (0.923 to 1.228) | | | |
| Serotype O4 (n =101, 98, 100, 48, 51) | 1.08 (0.917 to 1.263) | | | |
| Serotype O6A (n =101, 98, 100, 48, 51) | 1.18 (1.019 to 1.368) | | | |
| Serotype O8 (n =101, 98, 100, 48, 51) | 1.07 (0.891 to 1.282) | | | |
| Serotype O15 (n =100, 97, 100, 48, 50) | 1.55 (1.076 to 2.246) | | | |
| Serotype O16 (n =101, 98, 100, 48, 51) | 0.97 (0.821 to 1.157) | | | |
| Serotype O18A (n =101, 98, 100, 48, 51) | 1.17 (0.941 to 1.458) | | | |
| Serotype O25B (n =101, 98, 99, 48, 51) | 1.44 (1.040 to 1.997) | | | |
| Serotype O75 (n =101, 98, 100, 48, 51) | 1.03 (0.930 to 1.133) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 1: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by MOPA on Day 15

| | |
|-----------------|--|
| End point title | Cohort 1: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by MOPA on Day 15 ^[27] ^[28] |
|-----------------|--|

End point description:

Percentage of participants with a ≥ 2 -fold and ≥ 4 -fold increase from baseline in serotype specific serum antibody titers as measured by MOPA on Day 15 was reported. The fold (≥ 2 -fold and ≥ 4 -fold) increase from baseline to Day 15 for the serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, and O75 was calculated as the ratio of titer values of serum antibody on Day 15 and pre-vaccination (on day 1) that is, Day 15/Day 1. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Day 15

Notes:

[27] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

[28] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|---|-----------------------------|--------------------------------|------------------------------|-----------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 101 | 98 | 100 | 48 |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A: ≥ 2 FI (n =101, 98, 100, 48, 51) | 49.5 (39.40 to 59.64) | 70.4 (60.34 to 79.21) | 72.0 (62.13 to 80.52) | 75.0 (60.40 to 86.36) |
| Serotype O1A: ≥ 4 FI (n =101, 98, 100, 48, 51) | 28.7 (20.15 to 38.57) | 46.9 (36.78 to 57.29) | 53.0 (42.76 to 63.06) | 52.1 (37.19 to 66.71) |
| Serotype O2: ≥ 2 FI (n =101, 98, 100, 48, 51) | 90.1 (82.54 to 95.15) | 86.5 (77.96 to 92.59) | 98.0 (92.89 to 99.75) | 87.5 (74.75 to 95.27) |
| Serotype O2: ≥ 4 FI (n =101, 98, 100, 48, 51) | 74.3 (64.60 to 82.44) | 78.1 (68.53 to 85.92) | 88.9 (80.99 to 94.32) | 77.1 (62.69 to 87.97) |
| Serotype O4: ≥ 2 FI (n =101, 98, 100, 48, 51) | 56.4 (46.20 to 66.28) | 60.2 (49.82 to 69.96) | 73.0 (63.20 to 81.39) | 4.2 (0.51 to 14.25) |
| Serotype O4: ≥ 4 FI (n =101, 98, 100, 48, 51) | 33.7 (24.56 to 43.75) | 38.8 (29.10 to 49.15) | 56.0 (45.72 to 65.92) | 2.1 (0.05 to 11.07) |
| Serotype O6A: ≥ 2 FI (n =101, 98, 100, 48, 51) | 47.5 (37.49 to 57.70) | 54.1 (43.71 to 64.20) | 63.0 (52.76 to 72.44) | 66.7 (51.59 to 79.60) |

| | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| Serotype O6A: >= 4 FI (n =101, 98, 100, 48, 51) | 23.8 (15.86 to 33.26) | 41.8 (31.95 to 52.23) | 40.0 (30.33 to 50.28) | 39.6 (25.77 to 54.73) |
| Serotype O8: >= 2 FI (n =101, 98, 100, 48, 51) | 19.8 (12.54 to 28.91) | 14.3 (8.04 to 22.81) | 10.0 (4.90 to 17.62) | 6.3 (1.31 to 17.20) |
| Serotype O8: >= 4 FI (n =101, 98, 100, 48, 51) | 5.9 (2.21 to 12.48) | 3.1 (0.64 to 8.69) | 4.0 (1.10 to 9.9) | 2.1 (0.05 to 11.07) |
| Serotype O15: >= 2 FI (n =100, 97, 100, 48, 50) | 61.0 (50.73 to 70.60) | 67.0 (56.73 to 76.22) | 70.0 (60.02 to 78.76) | 12.5 (4.73 to 25.25) |
| Serotype O15: >= 4 FI (n =100, 97, 100, 48, 50) | 41.0 (31.26 to 51.29) | 53.6 (43.19 to 63.80) | 57.0 (46.71 to 66.86) | 8.3 (2.32 to 19.9) |
| Serotype O16: >= 2 FI (n =101, 98, 100, 48, 51) | 76.2 (66.74 to 84.14) | 70.4 (60.34 to 79.21) | 85.0 (76.47 to 91.35) | 8.3 (2.32 to 19.9) |
| Serotype O16: >= 4 FI (n =101, 98, 100, 48, 51) | 55.4 (45.22 to 65.34) | 51.0 (40.72 to 61.26) | 76.0 (66.43 to 83.98) | 2.1 (0.05 to 11.07) |
| Serotype O18A: >= 2 FI (n =101, 98, 100, 48, 51) | 69.3 (59.34 to 78.10) | 66.3 (56.07 to 75.56) | 77.0 (67.51 to 84.83) | 6.3 (1.31 to 17.20) |
| Serotype O18A: >= 4 FI (n =101, 98, 100, 48, 51) | 45.5 (35.60 to 55.76) | 44.9 (34.83 to 55.28) | 58.0 (47.71 to 67.80) | 4.2 (0.51 to 14.25) |
| Serotype O25B: >= 2 FI (n =101, 98, 99, 48, 51) | 47.5 (37.49 to 57.70) | 50.0 (39.73 to 60.27) | 50.0 (39.83 to 60.17) | 50.0 (35.23 to 64.77) |
| Serotype O25B: >= 4 FI (n =101, 98, 99, 48, 51) | 24.8 (16.70 to 34.33) | 33.7 (24.44 to 43.93) | 31.0 (22.13 to 41.03) | 35.4 (22.16 to 50.54) |
| Serotype O75: >= 2 FI (n =101, 98, 100, 48, 51) | 36.0 (26.64 to 46.21) | 28.6 (19.9 to 38.58) | 38.0 (28.48 to 48.25) | 0.0 (0.00 to 7.40) |
| Serotype O75: >= 4 FI (n =101, 98, 100, 48, 51) | 16.0 (9.43 to 24.68) | 17.3 (10.44 to 26.31) | 25.0 (16.88 to 34.66) | 0.0 (0.00 to 7.40) |

| End point values | Cohort 1: Prevnam 13 | | | |
|---|-------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 51 | | | |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A: >= 2 FI (n =101, 98, 100, 48, 51) | 13.7 (5.70 to 26.26) | | | |
| Serotype O1A: >= 4 FI (n =101, 98, 100, 48, 51) | 3.9 (0.48 to 13.46) | | | |
| Serotype O2: >= 2 FI (n =101, 98, 100, 48, 51) | 11.8 (4.44 to 23.87) | | | |
| Serotype O2: >= 4 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 6.98) | | | |
| Serotype O4: >= 2 FI (n =101, 98, 100, 48, 51) | 11.8 (4.44 to 23.87) | | | |
| Serotype O4: >= 4 FI (n =101, 98, 100, 48, 51) | 3.9 (0.48 to 13.46) | | | |
| Serotype O6A: >= 2 FI (n =101, 98, 100, 48, 51) | 9.8 (3.26 to 21.41) | | | |
| Serotype O6A: >= 4 FI (n =101, 98, 100, 48, 51) | 2.0 (0.05 to 10.45) | | | |
| Serotype O8: >= 2 FI (n =101, 98, 100, 48, 51) | 11.8 (4.44 to 23.87) | | | |
| Serotype O8: >= 4 FI (n =101, 98, 100, 48, 51) | 3.9 (0.48 to 13.46) | | | |
| Serotype O15: >= 2 FI (n =100, 97, 100, 48, 50) | 28.0 (16.23 to 42.49) | | | |
| Serotype O15: >= 4 FI (n =100, 97, 100, 48, 50) | 14.0 (5.82 to 26.74) | | | |

| | | | | |
|--|----------------------|--|--|--|
| Serotype O16: ≥ 2 FI (n =101, 98, 100, 48, 51) | 9.8 (3.26 to 21.41) | | | |
| Serotype O16: ≥ 4 FI (n =101, 98, 100, 48, 51) | 3.9 (0.48 to 13.46) | | | |
| Serotype O18A: ≥ 2 FI (n =101, 98, 100, 48, 51) | 7.8 (2.18 to 18.88) | | | |
| Serotype O18A: ≥ 4 FI (n =101, 98, 100, 48, 51) | 5.9 (1.23 to 16.24) | | | |
| Serotype O25B: ≥ 2 FI (n =101, 98, 99, 48, 51) | 15.7 (7.02 to 28.59) | | | |
| Serotype O25B: ≥ 4 FI (n =101, 98, 99, 48, 51) | 5.9 (1.23 to 16.24) | | | |
| Serotype O75: ≥ 2 FI (n =101, 98, 100, 48, 51) | 3.9 (0.48 to 13.46) | | | |
| Serotype O75: ≥ 4 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 6.98) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 2: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex ECL Based Immunoassay on Day 30

| | |
|-----------------|--|
| End point title | Cohort 2: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex ECL Based Immunoassay on Day 30 ^[29] ^[30] |
|-----------------|--|

End point description:

GMTs of serotype-specific total IgG serum antibodies as measured by multiplex ECL based immunoassay were reported. GMTs for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA were determined in serum from collected blood samples. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (number of participants analyzed) signifies participants evaluable for this endpoint. Here, (9999) signifies that lower limit of 95% CI could not be estimated as the value was below the LLOQ, that is, O1A: 69149, O2: 65287, O4: 67356, O6A: 150748, O8: 72196, O15: 66910, O16: 71586, O18A: 70519, O25B: 61990, O75: 133019, and EPA: 66165.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

At Day 30

Notes:

[29] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

[30] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|--|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 129 | | |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |

| | | | | |
|---------------|---------------------------------------|---------------------------------------|--|--|
| Serotype O1A | 6341302.4 (5889782.4 to 6827436.7) | 1762724.3 (1505477.9 to 2063927.4) | | |
| Serotype O2 | 5957433.5 (5487954.2 to 6467075.6) | 749984.6 (628913.9 to 894362.5) | | |
| Serotype O4 | 3537556.6 (3153145.2 to 3968833.1) | 805295.5 (689894.4 to 940000.1) | | |
| Serotype O6A | 5461039.4 (4992165.2 to 5973951.2) | 1944280.6 (1664293.0 to 2271371.1) | | |
| Serotype O8 | 6240213.6 (5782238.7 to 6734461.7) | 2315932.9 (2011986.2 to 2665796.4) | | |
| Serotype O15 | 5724175.1 (5301709.2 to 6180305.1) | 1207724.5 (1028556.8 to 1418101.9) | | |
| Serotype O16 | 5158063.5 (4735530.7 to 5618297.2) | 1127584.4 (1001022.6 to 1270147.7) | | |
| Serotype O18 | 4046778.4 (3656809.6 to 4478334.1) | 1365154.9 (1196273.0 to 1557878.4) | | |
| Serotype O25B | 2117662.8 (1843164.1 to 2433042.1) | 375570.5 (316412.1 to 445789.5) | | |
| Serotype O75 | 3758021.3 (3419541.0 to 4130005.8) | 1577900.4 (1365705.2 to 1823065.1) | | |
| Serotype EPA | 780539.6 (622435.7 to 978803.3) | 75018.0 (9999 to 91880.8) | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes From Baseline For Serotype-specific Antibodies Measured by Multiplex ECL Based Immunoassay on Day 30

| | |
|-----------------|---|
| End point title | Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes From Baseline For Serotype-specific Antibodies Measured by Multiplex ECL Based Immunoassay on Day 30 ^{[31][32]} |
|-----------------|---|

End point description:

GMR of fold changes from baseline for serotype-specific antibodies as measured by multiplex ECL based immunoassay on Day 30 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA were determined in serum from collected blood samples by multiplex ECL based immunoassay. GMR of fold change from baseline was calculated as the ratio of GMTs on Day 30 and pre-vaccination (on Day 1). PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (number of participants analyzed) signifies participants evaluable for this endpoint.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Day 30

Notes:

[31] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

[32] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|--|------------------------------------|-----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 129 | | |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A | 4.40 (3.958 to 4.893) | 1.02 (0.955 to 1.095) | | |
| Serotype O2 | 8.18 (7.255 to 9.227) | 0.98 (0.909 to 1.055) | | |
| Serotype O4 | 5.31 (4.726 to 5.955) | 1.09 (1.014 to 1.168) | | |
| Serotype O6A | 3.64 (3.289 to 4.019) | 1.06 (0.993 to 1.138) | | |
| Serotype O8 | 2.92 (2.655 to 3.221) | 1.01 (0.965 to 1.058) | | |
| Serotype O15 | 5.00 (4.483 to 5.565) | 1.02 (0.961 to 1.077) | | |
| Serotype O16 | 5.04 (4.571 to 5.561) | 1.06 (0.993 to 1.126) | | |
| Serotype O18 | 3.40 (3.088 to 3.754) | 1.07 (1.017 to 1.132) | | |
| Serotype O25B | 5.59 (4.866 to 6.428) | 1.04 (0.963 to 1.115) | | |
| Serotype O75 | 2.33 (2.136 to 2.531) | 1.04 (0.979 to 1.110) | | |
| Serotype EPA | 8.06 (6.73 to 9.64) | 1.02 (0.97 to 1.08) | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 2: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase From Baseline in Serotype Specific Serum Antibody Titers as Measured by Multiplex ECL Based Immunoassay on Day 30

| | |
|-----------------|--|
| End point title | Cohort 2: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase From Baseline in Serotype Specific Serum Antibody Titers as Measured by Multiplex ECL Based Immunoassay on Day 30 ^{[33][34]} |
|-----------------|--|

End point description:

Percentage of participants with a ≥ 2 -fold and ≥ 4 -fold increase from baseline in serotype specific serum antibody titers as measured by multiplex ECL based immunoassay on Day 30 was reported. The fold (≥ 2 -fold and ≥ 4 -fold) increase from baseline to Day 30 for the serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA was calculated as the ratio of titer values of serum antibody on Day 30 and pre-vaccination (on day 1) that is, Day 30/Day 1. PPI analysis set included all randomized

and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (number of participants analyzed) signifies participants evaluable for this endpoint.

| | |
|--|---------|
| End point type | Primary |
| End point timeframe: | |
| Baseline (Day 1, pre-vaccination) and Day 30 | |

Notes:

[33] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

[34] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|---------------------------------------|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 129 | | |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A: ≥ 2 Fold Increase | 78.3 (72.76 to 83.17) | 1.6 (0.19 to 5.49) | | |
| Serotype O1A: ≥ 4 Fold Increase | 54.7 (48.36 to 60.84) | 0.8 (0.02 to 4.24) | | |
| Serotype O2: ≥ 2 Fold Increase | 89.1 (84.70 to 92.67) | 1.6 (0.19 to 5.49) | | |
| Serotype O2: ≥ 4 Fold Increase | 77.5 (71.93 to 82.46) | 1.6 (0.19 to 5.49) | | |
| Serotype O4: ≥ 2 Fold Increase | 81.4 (76.10 to 85.95) | 2.3 (0.48 to 6.65) | | |
| Serotype O4: ≥ 4 Fold Increase | 58.9 (52.64 to 64.98) | 1.6 (0.19 to 5.49) | | |
| Serotype O6A: ≥ 2 Fold Increase | 73.3 (67.41 to 78.56) | 2.3 (0.48 to 6.65) | | |
| Serotype O6A: ≥ 4 Fold Increase | 44.2 (38.03 to 50.48) | 0.8 (0.02 to 4.24) | | |
| Serotype O8: ≥ 2 Fold Increase | 64.0 (57.77 to 69.82) | 1.6 (0.19 to 5.49) | | |
| Serotype O8: ≥ 4 Fold Increase | 38.4 (32.41 to 44.61) | 1.6 (0.19 to 5.49) | | |
| Serotype O15: ≥ 2 Fold Increase | 84.1 (79.07 to 88.35) | 1.6 (0.19 to 5.49) | | |
| Serotype O15: ≥ 4 Fold Increase | 58.5 (52.25 to 64.60) | 0.8 (0.02 to 4.24) | | |
| Serotype O16: ≥ 2 Fold Increase | 86.0 (81.21 to 90.03) | 1.6 (0.19 to 5.49) | | |
| Serotype O16: ≥ 4 Fold Increase | 62.4 (56.18 to 68.33) | 1.6 (0.19 to 5.49) | | |
| Serotype O18: ≥ 2 Fold Increase | 69.0 (62.96 to 74.58) | 1.6 (0.19 to 5.49) | | |
| Serotype O18: ≥ 4 Fold Increase | 43.0 (36.90 to 49.31) | 0.8 (0.02 to 4.24) | | |
| Serotype O25B: ≥ 2 Fold Increase | 78.3 (72.76 to 83.17) | 2.3 (0.48 to 6.65) | | |
| Serotype O25B: ≥ 4 Fold Increase | 56.6 (50.30 to 62.72) | 1.6 (0.19 to 5.49) | | |
| Serotype O75: ≥ 2 Fold Increase | 51.2 (44.89 to 57.41) | 2.3 (0.48 to 6.65) | | |

| | | | | |
|--------------------------------------|-----------------------|--------------------|--|--|
| Serotype O75: ≥ 4 Fold Increase | 23.6 (18.59 to 29.31) | 2.3 (0.48 to 6.65) | | |
| Serotype EPA: ≥ 2 Fold Increase | 77.9 (72.34 to 82.82) | 1.6 (0.19 to 5.49) | | |
| Serotype EPA: ≥ 4 Fold Increase | 65.5 (59.36 to 71.29) | 1.6 (0.19 to 5.49) | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 2: Geometric Mean Titer (GMT) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex Opsonophagocytic Assay (MOPA) on Day 30

| | |
|-----------------|--|
| End point title | Cohort 2: Geometric Mean Titer (GMT) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex Opsonophagocytic Assay (MOPA) on Day 30 ^[35] ^[36] |
|-----------------|--|

End point description:

GMTs of serotype-specific total IgG serum antibodies as measured by MOPA were reported. GMTs for each antigen serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B, and O75 were determined in serum from collected blood samples. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories. Here, (9.9999) signifies that Geometric mean and lower limit of 95% CI could not be estimated as the value was below the LLOQ, that is, O1A: 33, O2: 42, O4: 12, O6A: 62, O15: 75, O16: 17, O18A: 44, O25B: 58, O75: 14.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

At Day 30

Notes:

[35] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

[36] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|--|------------------------------|------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 70 | | |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A (n=258, 70) | 703.0 (611.1 to 808.7) | 492.4 (382.9 to 633.2) | | |
| Serotype O2 (n=258, 70) | 3523.2 (2950.7 to 4206.7) | 502.4 (403.6 to 625.4) | | |
| Serotype O4 (n=258, 70) | 803.9 (683.3 to 945.7) | 178.7 (138.7 to 230.4) | | |

| | | | | |
|---------------------------|---------------------------|--------------------------|--|--|
| Serotype O6A (n=258, 70) | 1392.6 (1196.9 to 1620.3) | 557.0 (416.8 to 744.3) | | |
| Serotype O15 (n=258, 70) | 2773.8 (2347.4 to 3277.6) | 458.0 (338.4 to 619.9) | | |
| Serotype O16 (n=258, 70) | 1347.0 (1132.2 to 1602.5) | 116.0 (88.0 to 152.8) | | |
| Serotype O18 (n=258, 70) | 516.3 (446.2 to 597.3) | 168.2 (128.8 to 219.6) | | |
| Serotype O25B (n=258, 70) | 159.8 (135.4 to 188.5) | 9.9999 (-9.9999 to 69.6) | | |
| Serotype O75 (n=257, 69) | 201.0 (169.5 to 238.3) | 52.2 (39.2 to 69.6) | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype Specific Antibodies as Measured by MOPA on Day 30

| | |
|-----------------|---|
| End point title | Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype Specific Antibodies as Measured by MOPA on Day 30 ^[37] ^[38] |
|-----------------|---|

End point description:

GMR of fold changes from baseline for serotype specific antibodies as measured by MOPA on Day 30 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B and O75 were determined in serum from collected blood samples by MOPA. GMR of fold change from baseline was calculated as the ratio of GMTs on Day 30 and pre-vaccination (on Day 1). For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (number of participants analyzed) signifies participants evaluable for this outcome measure and "n" signifies those participants who were evaluable at specified categories.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Day 30

Notes:

[37] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

[38] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|--|------------------------------|-------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 70 | | |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |

| | | | | |
|---------------------------|------------------------|-----------------------|--|--|
| Serotype O1A (n=258, 70) | 1.81 (1.602 to 2.054) | 1.23 (1.036 to 1.451) | | |
| Serotype O2 (n=258, 70) | 8.04 (6.684 to 9.681) | 1.07 (0.901 to 1.265) | | |
| Serotype O4 (n=258, 70) | 4.26 (3.607 to 5.033) | 0.98 (0.827 to 1.162) | | |
| Serotype O6A (n=258, 70) | 2.57 (2.251 to 2.939) | 1.02 (0.870 to 1.192) | | |
| Serotype O15 (n=258, 70) | 6.70 (5.641 to 7.958) | 1.05 (0.807 to 1.376) | | |
| Serotype O16 (n=258, 70) | 9.68 (8.055 to 11.639) | 1.02 (0.841 to 1.227) | | |
| Serotype O18 (n=258, 70) | 2.88 (2.482 to 3.332) | 0.93 (0.805 to 1.083) | | |
| Serotype O25B (n=258, 70) | 2.05 (1.813 to 2.308) | 0.94 (0.841 to 1.045) | | |
| Serotype O75 (n=255, 68) | 3.21 (2.744 to 3.745) | 1.18 (0.973 to 1.438) | | |

Statistical analyses

No statistical analyses for this end point

Primary: Cohort 2: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibodies Titers Measured by MOPA on Day 30

| | |
|-----------------|--|
| End point title | Cohort 2: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibodies Titers Measured by MOPA on Day 30 ^[39] ^[40] |
|-----------------|--|

End point description:

Percentage of participants with a ≥ 2 -fold and ≥ 4 -fold increase from baseline in serotype specific serum antibodies titers as measured by MOPA on Day 30 was reported. The fold (≥ 2 -fold and ≥ 4 -fold increase from baseline to Day 30 for the serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B and O75 was calculated as the ratio of titer values of serum antibodies on Day 30 and pre-vaccination (on day 1 that is, Day 30/Day 1. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Day 30

Notes:

[39] - 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: No inferential statistics were planned. Only descriptive statistics were planned.

[40] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|--|------------------------------------|--------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 70 | | |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A: ≥ 2 Fold Increase (n=258, 70) | 41.5 (35.40 to 47.75) | 22.9 (13.67 to 34.45) | | |
| Serotype O1A: ≥ 4 Fold Increase (n=258, 70) | 17.8 (13.36 to 23.06) | 2.9 (0.35 to 9.94) | | |
| Serotype O2: ≥ 2 Fold Increase (n=258, 70) | 81.0 (75.68 to 85.61) | 18.6 (10.28 to 29.66) | | |
| Serotype O2: ≥ 4 Fold Increase (n=258, 70) | 63.6 (57.37 to 69.45) | 4.3 (0.89 to 12.02) | | |
| Serotype O4: ≥ 2 Fold Increase (n=258, 70) | 64.7 (58.56 to 70.55) | 14.3 (7.07 to 24.71) | | |
| Serotype O4: ≥ 4 Fold Increase (n=258, 70) | 45.7 (39.54 to 52.03) | 4.3 (0.89 to 12.02) | | |
| Serotype O6A: ≥ 2 Fold Increase (n=258, 70) | 54.3 (47.97 to 60.46) | 17.1 (9.18 to 28.03) | | |
| Serotype O6A: ≥ 4 Fold Increase (n=258, 70) | 32.9 (27.24 to 39.05) | 1.4 (0.04 to 7.70) | | |
| Serotype O15: ≥ 2 Fold Increase (n=258, 70) | 81.4 (76.10 to 85.95) | 22.9 (13.67 to 34.45) | | |
| Serotype O15: ≥ 4 Fold Increase (n=258, 70) | 62.8 (56.58 to 68.71) | 8.6 (3.21 to 17.73) | | |
| Serotype O16: ≥ 2 Fold Increase (n=258, 70) | 86.0 (81.21 to 90.03) | 18.6 (10.28 to 29.66) | | |
| Serotype O16: ≥ 4 Fold Increase (n=258, 70) | 70.9 (64.98 to 76.40) | 4.3 (0.89 to 12.02) | | |
| Serotype O18: ≥ 2 Fold Increase (n=258, 70) | 55.8 (49.52 to 61.97) | 14.3 (7.07 to 24.71) | | |
| Serotype O18: ≥ 4 Fold Increase (n=258, 70) | 34.5 (28.71 to 40.64) | 0.0 (0.00 to 5.13) | | |
| Serotype O25B: ≥ 2 Fold Increase (n=258, 70) | 41.1 (35.02 to 47.36) | 5.7 (1.58 to 13.99) | | |
| Serotype O25B: ≥ 4 Fold Increase (n=258, 70) | 21.3 (16.48 to 26.83) | 0.0 (0.00 to 5.13) | | |
| Serotype O75: ≥ 2 Fold Increase (n=255, 68) | 58.4 (52.12 to 64.55) | 23.5 (14.09 to 35.38) | | |
| Serotype O75: ≥ 4 Fold Increase (n=255, 68) | 36.9 (30.93 to 43.11) | 10.3 (4.24 to 20.07) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Correlation Between the Multiplex ECL-Based Immunoassay and the MOPA Functional Titers by Serotypes on Day 15

| | |
|-----------------|---|
| End point title | Cohort 1: Correlation Between the Multiplex ECL-Based Immunoassay and the MOPA Functional Titers by Serotypes on Day 15 ^[41] |
|-----------------|---|

End point description:

Correlation between the multiplex ECL-based immunoassay and the MOPA functional titers by serotypes (O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B and O75) on Day 15 were analyzed. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available

excluding participants with major protocol deviations expected to impact the immunogenicity endpoint. Here, "N" (Number of participants analyzed) signifies participants evaluable for this outcome measure and "n" signifies those participants who were evaluable at specified categories.

| | |
|----------------------|-----------|
| End point type | Secondary |
| End point timeframe: | |
| Day 15 | |

Notes:

[41] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|---|-----------------------------|--------------------------------|------------------------------|-----------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 101 | 98 | 100 | 48 |
| Units: correlation coefficient | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A (n =101, 98, 100, 48, 51) | 0.62 (0.49 to 0.73) | 0.51 (0.35 to 0.64) | 0.63 (0.49 to 0.73) | 0.57 (0.34 to 0.73) |
| Serotype O2 (n =101, 96, 99, 48, 51) | 0.72 (0.61 to 0.80) | 0.74 (0.63 to 0.82) | 0.64 (0.51 to 0.74) | 0.74 (0.58 to 0.85) |
| Serotype O4 (n =101, 98, 100, 48, 51) | 0.69 (0.58 to 0.78) | 0.65 (0.52 to 0.75) | 0.61 (0.47 to 0.72) | -0.12 (-0.39 to 0.17) |
| Serotype O6A (n =101, 98, 100, 48, 51) | 0.48 (0.31 to 0.62) | 0.53 (0.37 to 0.66) | 0.60 (0.46 to 0.72) | 0.67 (0.48 to 0.80) |
| Serotype O8 (n =101, 98, 100, 48, 51) | 0.29 (0.10 to 0.46) | 0.01 (-0.19 to 0.21) | 0.20 (0.00 to 0.38) | -0.01 (-0.29 to 0.28) |
| Serotype O15 (n =100, 98, 100, 48, 50) | 0.59 (0.44 to 0.70) | 0.58 (0.43 to 0.70) | 0.60 (0.46 to 0.71) | 0.17 (-0.12 to 0.43) |
| Serotype O16 (n =101, 98, 100, 48, 51) | 0.74 (0.64 to 0.82) | 0.67 (0.54 to 0.77) | 0.69 (0.58 to 0.78) | 0.52 (0.28 to 0.70) |
| Serotype O18A (n =101, 98, 100, 48, 51) | 0.69 (0.58 to 0.78) | 0.65 (0.52 to 0.75) | 0.72 (0.61 to 0.80) | 0.39 (0.12 to 0.61) |
| Serotype O25B (n =101, 98, 99, 48, 51) | 0.55 (0.40 to 0.68) | 0.57 (0.42 to 0.69) | 0.54 (0.38 to 0.66) | 0.46 (0.21 to 0.66) |
| Serotype O75 (n =100, 98, 100, 48, 51) | 0.60 (0.45 to 0.71) | 0.45 (0.27 to 0.59) | 0.64 (0.51 to 0.75) | 0.51 (0.26 to 0.69) |

| End point values | Cohort 1: Prevnar 13 | | | |
|--|----------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 51 | | | |
| Units: correlation coefficient | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A (n =101, 98, 100, 48, 51) | 0.51 (0.27 to 0.69) | | | |
| Serotype O2 (n =101, 96, 99, 48, 51) | 0.59 (0.38 to 0.75) | | | |
| Serotype O4 (n =101, 98, 100, 48, 51) | 0.47 (0.22 to 0.66) | | | |
| Serotype O6A (n =101, 98, 100, 48, 51) | 0.15 (-0.14 to 0.40) | | | |
| Serotype O8 (n =101, 98, 100, 48, 51) | 0.15 (-0.13 to 0.41) | | | |

| | | | | |
|---|-----------------------|--|--|--|
| Serotype O15 (n =100, 98, 100, 48, 50) | 0.41 (0.15 to 0.62) | | | |
| Serotype O16 (n =101, 98, 100, 48, 51) | 0.48 (0.24 to 0.67) | | | |
| Serotype O18A (n =101, 98, 100, 48, 51) | 0.55 (0.32 to 0.71) | | | |
| Serotype O25B (n =101, 98, 99, 48, 51) | -0.02 (-0.29 to 0.26) | | | |
| Serotype O75 (n =100, 98, 100, 48, 51) | 0.35 (0.08 to 0.57) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex ECL Based Immunoassay on Days 30 and 181

| | |
|-----------------|---|
| End point title | Cohort 1: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex ECL Based Immunoassay on Days 30 and 181 ^[42] |
|-----------------|---|

End point description:

GMTs of serotype-specific total IgG serum antibodies as measured by multiplex ECL based immunoassay on Days 30 and 181 were reported. GMTs for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA were determined in serum from collected blood samples. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories. Here, 9999.9 signifies that geometric mean and lower limit of 95% CI could not be estimated as the value was one-half of the LLOQ, that is, O1A: 69149, O2: 65287, O4: 67356, O6A: 150748, O8: 72196, O15: 66910, O16: 71586, O18A: 70519, O25B: 61990, O75: 133019, and EPA: 66165.

| | |
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| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 30 and 181

Notes:

[42] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 101 | 98 | 100 | 48 |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Day 30: Serotype O1A (n =101, 98, 100, 48, 51) | 5112484.0 (4410187.9 to 5926616.5) | 6188073.3 (5425498.1 to 7057831.4) | 6383997.2 (5633938.0 to 7233913.5) | 6070942.6 (4778712.5 to 7712609.5) |
| Day 30: Serotype O2 (n =101, 98, 100, 48, 51) | 4748963.2 (4012632.8 to 5620412.3) | 4270069.6 (3501400.5 to 5207486.0) | 6330528.7 (5614246.1 to 7138196.7) | 5413245.9 (4188560.3 to 6996015.3) |
| Day 30: Serotype O4 (n =101, 98, 100, 48, 51) | 2849977.5 (2298957.5 to 3533067.3) | 2286562.3 (1855540.8 to 2817705.3) | 3835055.2 (3183368.8 to 4620152.0) | 501717.6 (417216.6 to 603333.0) |

| | | | | |
|--|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| Day 30: Serotype O6A (n =101, 98, 100, 48, 51) | 3914979.5 (3360214.3 to 4561335.5) | 4675388.4 (3910364.2 to 5590082.1) | 5328088.3 (4595271.6 to 6177768.6) | 4648933.4 (3601807.2 to 6000482.7) |
| Day 30: Serotype O8 (n =101, 98, 100, 48, 51) | 5443708.3 (4750360.8 to 6238254.6) | 5717188.1 (4983597.2 to 6558764.4) | 6287045.5 (5617980.2 to 7035792.2) | 1684506.5 (1372618.1 to 2067262.5) |
| Day 30: Serotype O15 (n =101, 98, 100, 48, 51) | 4913158.9 (4214268.5 to 5727952.5) | 4267640.2 (3590342.0 to 5072707.0) | 5216657.6 (4496071.7 to 6052732.0) | 900296.6 (691458.3 to 1172209.6) |
| Day 30: Serotype O16 (n =101, 98, 100, 48, 51) | 4376021.6 (3720209.1 to 5147443.3) | 3525973.6 (2932681.9 to 4239290.3) | 5410106.5 (4684904.9 to 6247565.9) | 723757.2 (621819.1 to 842406.6) |
| Day 30: Serotype O18A (n =101, 98, 100, 48, 51) | 3500329.1 (2944423.4 to 4161189.5) | 3317876.1 (2741547.6 to 4015360.4) | 4518450.7 (3838422.1 to 5318955.6) | 1006196.4 (830764.7 to 1218673.8) |
| Day 30: Serotype O25B (n =101, 98, 100, 48, 51) | 1345602.7 (1045822.6 to 1731313.4) | 2067379.5 (1579663.8 to 2705675.7) | 1720048.6 (1357130.9 to 2180016.1) | 1651715.3 (1155425.4 to 2361176.7) |
| Day 30: Serotype O75 (n =101, 98, 100, 48, 51) | 2827912.3 (2357677.6 to 3391934.5) | 2640901.8 (2178489.5 to 3201466.9) | 3569256.9 (3057254.3 to 4167005.2) | 1180934.2 (941313.5 to 1481552.7) |
| Day 30: Serotype EPA (n =99, 93, 99, 48, 48) | 1019260.3 (727674.3 to 1427687.4) | 1306567.5 (877517.2 to 1945396.2) | 1344648.1 (957989.8 to 1887367.1) | 1107480.0 (641693.9 to 1911366.1) |
| Day 181: Serotype O1A (n =101, 98, 100, 48, 51) | 3583270.6 (2911726.7 to 4409695.6) | 4537954.7 (3685416.2 to 5587709.0) | 5046472.5 (4245661.9 to 5998330.9) | 4468702.4 (3299074.4 to 6053001.2) |
| Day 181: Serotype O2 (n =101, 98, 100, 48, 51) | 2970482.1 (2354313.7 to 3747913.3) | 3163734.9 (2474677.1 to 4044656.4) | 4729234.1 (3894909.1 to 5742279.2) | 4266510.5 (3102445.5 to 5867343.2) |
| Day 181: Serotype O4 (n =101, 98, 100, 48, 51) | 1719377.7 (1343456.0 to 2200488.7) | 1464137.0 (1147541.0 to 1868079.0) | 2063300.4 (1668018.7 to 2552254.6) | 501991.4 (406178.0 to 620406.3) |
| Day 181: Serotype O6A (n =101, 98, 100, 48, 51) | 2742527.1 (2289293.7 to 3285491.5) | 3187945.6 (2581356.0 to 3937077.1) | 3447910.8 (2852867.7 to 4167066.4) | 3334516.2 (2533469.4 to 4388842.5) |
| Day 181: Serotype O8 (n =101, 98, 100, 48, 51) | 3792115.2 (3159463.7 to 4551449.0) | 4351162.8 (3653295.9 to 5182338.9) | 4752992.0 (4056882.5 to 5568545.1) | 1757076.5 (1418223.5 to 2176891.0) |
| Day 181: Serotype O15 (n =101, 98, 100, 48, 51) | 3171754.0 (2567192.7 to 3918686.5) | 3172409.9 (2587224.3 to 3889954.4) | 3306905.3 (2719748.6 to 4020821.2) | 919201.8 (696966.2 to 1212299.8) |
| Day 181: Serotype O16 (n =101, 98, 100, 48, 51) | 2952055.2 (2380469.2 to 3660887.5) | 2527864.6 (2047268.5 to 3121280.6) | 3713051.1 (3064737.4 to 4498508.8) | 774950.8 (638278.5 to 940888.3) |
| Day 181: Serotype O18A (n =101, 98, 100, 48, 51) | 2219012.5 (1830470.2 to 2690028.3) | 2376169.7 (1917314.2 to 2944839.5) | 2586344.3 (2158196.6 to 3099428.8) | 943359.0 (785332.4 to 1133184.1) |
| Day 181: Serotype O25B (n =101, 98, 100, 48, 51) | 831345.5 (623871.7 to 1107816.5) | 1144537.9 (849494.3 to 1542055.0) | 939742.9 (725097.2 to 1217928.6) | 794017.4 (547313.1 to 1151925.0) |
| Day 181: Serotype O75 (n =101, 98, 100, 48, 51) | 1984426.0 (1622665.9 to 2426837.6) | 1882478.8 (1529846.4 to 2316393.5) | 2398218.7 (2000407.3 to 2875141.0) | 1034083.5 (835708.8 to 1279546.9) |
| Day 181: Serotype EPA (n =76, 75, 80, 43, 37) | 465763.6 (312682.1 to 693790.1) | 561582.3 (359386.0 to 877537.3) | 502960.6 (354918.2 to 712754.2) | 584874.1 (336014.2 to 1018045.1) |

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|-------------------------|-------------------------|--|--|--|
| End point values | Cohort 1: Prevmar 13 | | | |
|-------------------------|-------------------------|--|--|--|

| Subject group type | Reporting group | | | |
|--|---------------------------------------|--|--|--|
| Number of subjects analysed | 51 | | | |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Day 30: Serotype O1A (n =101, 98, 100, 48, 51) | 1794173.8 (1315930.3 to 2446223.7) | | | |
| Day 30: Serotype O2 (n =101, 98, 100, 48, 51) | 484833.8 (372182.7 to 631581.8) | | | |
| Day 30: Serotype O4 (n =101, 98, 100, 48, 51) | 585948.8 (448200.5 to 766032.1) | | | |
| Day 30: Serotype O6A (n =101, 98, 100, 48, 51) | 1018443.7 (813194.1 to 1275498.2) | | | |
| Day 30: Serotype O8 (n =101, 98, 100, 48, 51) | 1549931.5 (1203616.5 to 1995891.3) | | | |
| Day 30: Serotype O15 (n =101, 98, 100, 48, 51) | 1106266.6 (821060.3 to 1490543.2) | | | |
| Day 30: Serotype O16 (n =101, 98, 100, 48, 51) | 819745.0 (642584.7 to 1045748.2) | | | |
| Day 30: Serotype O18A (n =101, 98, 100, 48, 51) | 1121774.9 (868211.3 to 1449392.5) | | | |
| Day 30: Serotype O25B (n =101, 98, 100, 48, 51) | 285650.4 (211348.9 to 386073.0) | | | |
| Day 30: Serotype O75 (n =101, 98, 100, 48, 51) | 1399568.8 (1063013.9 to 1842678.4) | | | |
| Day 30: Serotype EPA (n =99, 93, 99, 48, 48) | 9999.9 (9999.9 to 77381.5) | | | |
| Day 181: Serotype O1A (n =101, 98, 100, 48, 51) | 1523139.6 (1054776.8 to 2199474.2) | | | |
| Day 181: Serotype O2 (n =101, 98, 100, 48, 51) | 490033.8 (367540.7 to 653351.1) | | | |
| Day 181: Serotype O4 (n =101, 98, 100, 48, 51) | 549904.9 (410508.2 to 736636.7) | | | |
| Day 181: Serotype O6A (n =101, 98, 100, 48, 51) | 958424.9 (745010.8 to 1232973.1) | | | |
| Day 181: Serotype O8 (n =101, 98, 100, 48, 51) | 1637517.2 (1193309.1 to 2247081.3) | | | |
| Day 181: Serotype O15 (n =101, 98, 100, 48, 51) | 948722.9 (703688.5 to 1279081.8) | | | |
| Day 181: Serotype O16 (n =101, 98, 100, 48, 51) | 720322.3 (537574.2 to 965195.6) | | | |
| Day 181: Serotype O18A (n =101, 98, 100, 48, 51) | 1025511.9 (773259.0 to 1360054.9) | | | |

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|--|--------------------------------------|--|--|--|
| Day 181: Serotype O25B (n =101, 98, 100, 48, 51) | 239952.5 (185411.5 to 310537.2) | | | |
| Day 181: Serotype O75 (n =101, 98, 100, 48, 51) | 1159722.4 (858094.1 to 1567375.9) | | | |
| Day 181: Serotype EPA (n =76, 75, 80, 43, 37) | 9999.9 (-9999.9 to 82330.5) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes from Baseline for Serotype-specific Antibodies Measured by Multiplex ECL Based Immunoassay on Days 30 and 181

| | |
|-----------------|--|
| End point title | Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes from Baseline for Serotype-specific Antibodies Measured by Multiplex ECL Based Immunoassay on Days 30 and 181 ^[43] |
|-----------------|--|

End point description:

GMR of fold changes from baseline for serotype specific antibodies measured by multiplex ECL based immunoassay on Days 30 and 181 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA were determined in serum from collected blood samples by ECL based immunoassay. GMR of fold change from baseline was calculated as the ratio of GMTs on Days 30 and 181 and pre-vaccination (on Day 1). PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Days 30 and 181

Notes:

[43] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|--|-----------------------------|--------------------------------|------------------------------|-------------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 101 | 98 | 100 | 48 |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Day 30: Serotype O1A (n =101, 98, 100, 48, 51) | 4.05 (3.466 to 4.740) | 5.17 (4.284 to 6.242) | 5.28 (4.405 to 6.325) | 5.54 (4.082 to 7.524) |
| Day 30: Serotype O2 (n =101, 98, 100, 48, 51) | 9.16 (7.714 to 10.884) | 9.20 (7.551 to 11.215) | 12.00 (10.318 to 13.957) | 11.53 (8.447 to 15.729) |
| Day 30: Serotype O4 (n =101, 98, 100, 48, 51) | 6.19 (4.989 to 7.677) | 4.85 (4.007 to 5.873) | 8.50 (6.996 to 10.327) | 1.08 (1.024 to 1.146) |
| Day 30: Serotype O6A (n =101, 98, 100, 48, 51) | 3.21 (2.745 to 3.750) | 4.08 (3.355 to 4.952) | 4.67 (3.988 to 5.467) | 3.93 (2.991 to 5.156) |
| Day 30: Serotype O8 (n =101, 98, 100, 48, 51) | 3.51 (3.065 to 4.013) | 3.28 (2.810 to 3.836) | 4.01 (3.437 to 4.673) | 1.11 (1.054 to 1.174) |

| | | | | |
|--|-----------------------|------------------------|------------------------|------------------------|
| Day 30: Serotype O15 (n =101, 98, 100, 48, 51) | 5.43 (4.559 to 6.458) | 4.99 (4.152 to 6.003) | 5.78 (4.842 to 6.910) | 1.03 (0.959 to 1.098) |
| Day 30: Serotype O16 (n =101, 98, 100, 48, 51) | 5.05 (4.318 to 5.912) | 3.98 (3.292 to 4.805) | 6.60 (5.577 to 7.802) | 1.08 (1.016 to 1.149) |
| Day 30: Serotype O18A (n =101, 98, 100, 48, 51) | 3.73 (3.158 to 4.395) | 3.35 (2.777 to 4.038) | 4.83 (4.067 to 5.737) | 1.05 (0.986 to 1.116) |
| Day 30: Serotype O25B (n =101, 98, 100, 48, 51) | 5.48 (4.481 to 6.695) | 8.60 (6.697 to 11.044) | 7.00 (5.596 to 8.766) | 8.70 (6.293 to 12.038) |
| Day 30: Serotype O75 (n =101, 98, 100, 48, 51) | 2.20 (1.915 to 2.534) | 2.04 (1.749 to 2.373) | 2.75 (2.344 to 3.238) | 1.06 (0.949 to 1.177) |
| Day 30: Serotype EPA (n =99, 93, 99, 48, 48) | 9.97 (7.72 to 12.89) | 10.98 (8.16 to 14.76) | 10.26 (7.85 to 13.42) | 10.03 (6.52 to 15.45) |
| Day 181: Serotype O1A (n =101, 98, 100, 48, 51) | 3.07 (2.598 to 3.626) | 4.05 (3.272 to 5.019) | 4.23 (3.442 to 5.201) | 4.08 (3.055 to 5.447) |
| Day 181: Serotype O2 (n =101, 98, 100, 48, 51) | 6.14 (5.076 to 7.438) | 6.67 (5.312 to 8.382) | 9.38 (7.788 to 11.309) | 9.04 (6.375 to 12.817) |
| Day 181: Serotype O4 (n =101, 98, 100, 48, 51) | 3.74 (2.949 to 4.734) | 2.97 (2.478 to 3.567) | 4.54 (3.753 to 5.496) | 1.04 (0.968 to 1.125) |
| Day 181: Serotype O6A (n =101, 98, 100, 48, 51) | 2.10 (1.785 to 2.477) | 2.90 (2.382 to 3.532) | 3.15 (2.656 to 3.738) | 2.69 (2.084 to 3.480) |
| Day 181: Serotype O8 (n =101, 98, 100, 48, 51) | 2.47 (2.155 to 2.841) | 2.52 (2.135 to 2.974) | 3.14 (2.673 to 3.698) | 1.11 (0.990 to 1.242) |
| Day 181: Serotype O15 (n =101, 98, 100, 48, 51) | 3.93 (3.213 to 4.812) | 3.84 (3.160 to 4.671) | 4.21 (3.470 to 5.107) | 1.06 (0.931 to 1.203) |
| Day 181: Serotype O16 (n =101, 98, 100, 48, 51) | 3.30 (2.752 to 3.955) | 2.89 (2.361 to 3.530) | 4.75 (3.969 to 5.685) | 1.06 (0.946 to 1.182) |
| Day 181: Serotype O18A (n =101, 98, 100, 48, 51) | 2.59 (2.192 to 3.049) | 2.48 (2.061 to 2.986) | 2.96 (2.481 to 3.544) | 0.98 (0.911 to 1.062) |
| Day 181: Serotype O25B (n =101, 98, 100, 48, 51) | 3.61 (2.920 to 4.468) | 5.35 (4.133 to 6.918) | 3.88 (3.114 to 4.841) | 4.67 (3.387 to 6.429) |
| Day 181: Serotype O75 (n =101, 98, 100, 48, 51) | 1.59 (1.417 to 1.790) | 1.54 (1.339 to 1.776) | 2.07 (1.764 to 2.430) | 0.92 (0.829 to 1.014) |
| Day 181: Serotype EPA (n =76, 75, 80, 43, 37) | 4.74 (3.58 to 6.28) | 5.61 (4.11 to 7.66) | 4.46 (3.46 to 5.75) | 5.37 (3.66 to 7.89) |

| End point values | Cohort 1: Prevmar 13 | | | |
|---|-------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 51 | | | |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Day 30: Serotype O1A (n =101, 98, 100, 48, 51) | 1.31 (1.129 to 1.520) | | | |
| Day 30: Serotype O2 (n =101, 98, 100, 48, 51) | 1.05 (0.979 to 1.116) | | | |
| Day 30: Serotype O4 (n =101, 98, 100, 48, 51) | 1.33 (1.115 to 1.588) | | | |
| Day 30: Serotype O6A (n =101, 98, 100, 48, 51) | 1.01 (0.938 to 1.088) | | | |
| Day 30: Serotype O8 (n =101, 98, 100, 48, 51) | 1.16 (1.040 to 1.288) | | | |
| Day 30: Serotype O15 (n =101, 98, 100, 48, 51) | 1.36 (1.184 to 1.560) | | | |
| Day 30: Serotype O16 (n =101, 98, 100, 48, 51) | 1.14 (1.059 to 1.230) | | | |
| Day 30: Serotype O18A (n =101, 98, 100, 48, 51) | 1.13 (1.004 to 1.275) | | | |

| | | | | |
|--|-----------------------|--|--|--|
| Day 30: Serotype O25B (n =101, 98, 100, 48, 51) | 1.03 (0.933 to 1.141) | | | |
| Day 30: Serotype O75 (n =101, 98, 100, 48, 51) | 1.03 (0.915 to 1.149) | | | |
| Day 30: Serotype EPA (n =99, 93, 99, 48, 48) | 0.97 (0.95 to 0.99) | | | |
| Day 181: Serotype O1A (n =101, 98, 100, 48, 51) | 1.23 (1.045 to 1.445) | | | |
| Day 181: Serotype O2 (n =101, 98, 100, 48, 51) | 1.07 (0.990 to 1.162) | | | |
| Day 181: Serotype O4 (n =101, 98, 100, 48, 51) | 1.21 (1.032 to 1.429) | | | |
| Day 181: Serotype O6A (n =101, 98, 100, 48, 51) | 0.93 (0.853 to 1.006) | | | |
| Day 181: Serotype O8 (n =101, 98, 100, 48, 51) | 1.17 (1.022 to 1.341) | | | |
| Day 181: Serotype O15 (n =101, 98, 100, 48, 51) | 1.24 (1.071 to 1.426) | | | |
| Day 181: Serotype O16 (n =101, 98, 100, 48, 51) | 1.11 (1.024 to 1.195) | | | |
| Day 181: Serotype O18A (n =101, 98, 100, 48, 51) | 1.10 (1.005 to 1.206) | | | |
| Day 181: Serotype O25B (n =101, 98, 100, 48, 51) | 0.99 (0.895 to 1.104) | | | |
| Day 181: Serotype O75 (n =101, 98, 100, 48, 51) | 0.92 (0.851 to 0.984) | | | |
| Day 181: Serotype EPA (n =76, 75, 80, 43, 37) | 0.95 (0.92 to 0.98) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase From Baseline in Serotype-specific Serum Antibody Titers as Measured by Multiplex ECL Based Immunoassay on Days 30 and 181

| | |
|-----------------|---|
| End point title | Cohort 1: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase From Baseline in Serotype-specific Serum Antibody Titers as Measured by Multiplex ECL Based Immunoassay on Days 30 and 181 ^[44] |
|-----------------|---|

End point description:

Percentage of participants with a ≥ 2 -fold and ≥ 4 -fold increase from baseline in serotype (ST)-specific serum antibody titers as measured by multiplex ECL based immunoassay on Days 30 and 181 was reported. The fold (≥ 2 -fold and ≥ 4 -fold) increase from baseline to Days 30 and 181 for the serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA was calculated as the ratio of titer values of serum antibody on Day 30 and Day 181 and pre-vaccination (on Day 1 that is, Day 30/Day 1 and Day 181/Day 1. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Day 1 (pre-vaccination) and Days 30 and 181

Notes:

[44] - 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.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|---|-----------------------------|--------------------------------|------------------------------|-----------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 101 | 98 | 100 | 48 |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Day 30: O1A: ≥ 2 FI (n=101, 98, 100, 48, 51) | 78.8 (69.42 to 86.36) | 82.8 (73.57 to 89.83) | 80.8 (71.66 to 88.03) | 77.1 (62.69 to 87.97) |
| Day 30: O1A: ≥ 4 FI (n =101, 98, 100, 48, 51) | 53.5 (43.23 to 63.62) | 62.4 (51.72 to 72.21) | 63.6 (53.36 to 73.07) | 64.6 (49.46 to 77.84) |
| Day 30: O2: ≥ 2 FI (n =101, 98, 100, 48, 51) | 93.9 (87.27 to 97.74) | 91.4 (83.75 to 96.21) | 98.0 (92.89 to 99.75) | 89.6 (77.34 to 96.53) |
| Day 30: O2: ≥ 4 FI (n =101, 98, 100, 48, 51) | 83.8 (75.09 to 90.47) | 79.6 (69.95 to 87.23) | 91.9 (84.70 to 96.45) | 79.2 (65.01 to 89.53) |
| Day 30: O4: ≥ 2 FI (n =101, 98, 100, 48, 51) | 79.8 (70.54 to 87.20) | 81.7 (72.35 to 88.98) | 88.9 (80.9 to 94.32) | 0.0 (0.00 to 7.40) |
| Day 30: O4: ≥ 4 FI (n =101, 98, 100, 48, 51) | 61.6 (51.30 to 71.22) | 59.1 (48.46 to 69.23) | 75.8 (66.11 to 83.81) | 0.0 (0.00 to 7.40) |
| Day 30: O6A: ≥ 2 FI (n =101, 98, 100, 48, 51) | 63.6 (53.36 to 73.07) | 74.2 (64.08 to 82.71) | 80.8 (71.66 to 88.03) | 72.9 (58.15 to 84.72) |
| Day 30: O6A: ≥ 4 FI (n =101, 98, 100, 48, 51) | 38.4 (28.78 to 48.70) | 48.4 (37.89 to 58.99) | 61.6 (51.30 to 71.22) | 45.8 (31.37 to 60.83) |
| Day 30: O8 : ≥ 2 FI (n =101, 98, 100, 48, 51) | 77.8 (68.31 to 85.52) | 68.8 (58.37 to 78.02) | 73.7 (63.93 to 82.07) | 0.0 (0.00 to 7.40) |
| Day 30:O8: ≥ 4 FI (n =101, 98, 100, 48, 51) | 41.4 (31.60 to 51.76) | 36.6 (26.81 to 47.19) | 55.6 (45.22 to 65.55) | 0.0 (0.00 to 7.40) |
| Day 30: O15: ≥ 2 FI (n =101, 98, 100, 48, 51) | 86.9 (78.59 to 92.82) | 80.6 (71.15 to 88.11) | 83.8 (75.09 to 90.47) | 2.1 (0.05 to 11.07) |
| Day 30: O15: ≥ 4 FI (n =101, 98, 100, 48, 51) | 54.5 (44.23 to 64.59) | 63.4 (52.81 to 73.19) | 64.6 (54.40 to 73.99) | 0.0 (0.00 to 7.40) |
| Day 30: O16: ≥ 2 FI (n =101, 98, 100, 48, 51) | 86.9 (78.59 to 92.82) | 72.0 (61.78 to 80.86) | 86.9 (78.59 to 92.82) | 0.0 (0.00 to 7.40) |
| Day 30: O16: ≥ 4 FI (n =101, 98 100, 48, 51) | 60.6 (50.28 to 70.28) | 49.5 (38.93 to 60.03) | 72.7 (62.85 to 81.20) | 0.0 (0.00 to 7.40) |
| Day 30: O18A: ≥ 2 FI (n =101, 98, 100, 48, 51) | 73.7 (63.93 to 82.07) | 64.5 (53.91 to 74.17) | 80.8 (71.66 to 88.03) | 0.0 (0.00 to 7.40) |
| Day 30: O18A: ≥ 4 FI (n =101, 98, 100, 48, 51) | 47.5 (37.34 to 57.76) | 37.6 (27.79 to 48.28) | 60.6 (50.28 to 70.28) | 0.0 (0.00 to 7.40) |
| Day 30: O25B: ≥ 2 FI (n =101, 98, 99, 48, 51) | 81.8 (72.80 to 88.85) | 84.9 (76.03 to 91.52) | 83.8 (75.09 to 90.47) | 87.5 (74.75 to 95.27) |
| Day 30: O25B: ≥ 4 FI (n =101, 98, 99, 48, 51) | 60.6 (50.28 to 70.28) | 75.3 (65.24 to 83.63) | 67.7 (57.53 to 76.73) | 75.0 (60.40 to 86.36) |
| Day 30: O75: ≥ 2 FI (n =101, 98, 100, 48, 51) | 48.5 (38.32 to 58.75) | 43.0 (32.78 to 53.69) | 59.6 (49.26 to 69.34) | 4.2 (0.51 to 14.25) |
| Day 30: O75: ≥ 4 FI (n =101, 98, 100, 48, 51) | 19.2 (11.9 to 28.34) | 22.6 (14.55 to 32.42) | 28.3 (19.69 to 38.22) | 4.2 (0.51 to 14.25) |
| Day 30: EPA: ≥ 2 FI (n =99, 93, 99, 48, 48) | 86.9 (78.59 to 92.82) | 80.6 (71.15 to 88.11) | 85.9 (77.41 to 92.05) | 77.1 (62.69 to 87.97) |
| Day 30: EPA: ≥ 4 FI (n =99, 93, 99, 48, 48) | 73.7 (63.93 to 82.07) | 74.2 (64.08 to 82.71) | 75.8 (66.11 to 83.81) | 72.9 (58.15 to 84.72) |
| Day 181: O1A: ≥ 2 FI (n=101, 98, 100, 48, 51) | 64.5 (52.66 to 75.12) | 73.3 (61.86 to 82.89) | 72.5 (61.38 to 81.90) | 67.4 (51.46 to 80.92) |
| Day 181: O1A: ≥ 4 FI (n=101,98,100, 48, 51) | 35.5 (24.88 to 47.34) | 49.3 (37.58 to 61.14) | 51.3 (39.81 to 62.59) | 51.2 (35.46 to 66.69) |
| Day 181: O2: ≥ 2 FI (n=101, 98, 100, 48, 51) | 89.5 (80.31 to 95.34) | 86.7 (76.84 to 93.42) | 92.5 (84.39 to 97.20) | 83.7 (69.30 to 93.19) |

| | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Day 181: O2: >= 4 FI (n=101, 98, 100, 48, 51) | 69.7 (58.13 to 79.75) | 70.7 (59.02 to 80.62) | 83.8 (73.82 to 91.05) | 74.4 (58.83 to 86.48) |
| Day 181: O4: >= 2 FI (n=101, 98, 100, 48, 51) | 68.4 (56.75 to 78.61) | 65.3 (53.46 to 75.96) | 81.3 (70.97 to 89.11) | 2.3 (0.06 to 12.29) |
| Day 181: O4: >=4 FI (n=101, 98, 100, 48, 51) | 43.4 (32.08 to 55.29) | 33.3 (22.86 to 45.17) | 55.0 (43.47 to 66.15) | 0.0 (0.00 to 8.22) |
| Day 181: O6A: >=2 FI (n=101, 98, 100, 48, 51) | 46.1 (34.55 to 57.87) | 60.0 (48.04 to 71.15) | 67.5 (56.11 to 77.55) | 55.8 (39.88 to 70.9) |
| Day 181: O6A: >=4 FI (n=101, 98, 100, 48, 51) | 18.4 (10.45 to 28.97) | 33.3 (22.86 to 45.17) | 33.8 (23.55 to 45.19) | 32.6 (19.08 to 48.54) |
| Day 181: O8: >= 2 FI (n=101, 98, 100, 48, 51) | 60.5 (48.65 to 71.56) | 56.0 (44.06 to 67.45) | 65.0 (53.52 to 75.33) | 9.3 (2.59 to 22.14) |
| Day 181: O8: >= 4 FI (n=101, 98, 100, 48, 51) | 17.1 (9.43 to 27.47) | 24.0 (14.89 to 35.25) | 37.5 (26.92 to 49.04) | 0.0 (0.00 to 8.22) |
| Day 181: O15: >= 2 FI (n=101, 98, 100, 48, 51) | 73.7 (62.32 to 83.13) | 76.0 (64.75 to 85.11) | 81.3 (70.97 to 89.11) | 4.7 (0.57 to 15.81) |
| Day 181: O15: >= 4 FI (n=101, 98, 100, 48, 51) | 44.7 (33.31 to 56.59) | 49.3 (37.58 to 61.14) | 45.0 (33.85 to 56.53) | 2.3 (0.06 to 12.29) |
| Day 181: O16: >= 2 FI (n=101, 98, 100, 48, 51) | 72.4 (60.91 to 82.01) | 60.0 (48.04 to 71.15) | 87.5 (78.21 to 93.84) | 4.7 (0.57 to 15.81) |
| Day 181: O16: >= 4 FI (n=101, 98, 100, 48, 51) | 36.8 (26.06 to 48.69) | 36.0 (25.23 to 47.91) | 56.3 (44.70 to 67.32) | 2.3 (0.06 to 12.29) |
| Day 181: O18A: >=2 FI (n=101, 98, 100, 48, 51) | 63.2 (51.3 to 73.9) | 52.0 (40.15 to 63.69) | 60.0 (48.44 to 70.80) | 0.0 (0.00 to 8.22) |
| Day 181: O18A: >= 4 FI (n=101, 98, 100, 48, 51) | 23.7 (14.68 to 34.82) | 25.3 (15.99 to 36.70) | 33.8 (23.55 to 45.19) | 0.0 (0.00 to 8.22) |
| Day 181: O25B: >=2FI (n=101, 98, 100, 48, 51) | 67.1 (55.37 to 77.46) | 74.7 (63.30 to 84.01) | 72.5 (61.38 to 81.90) | 76.7 (61.37 to 88.24) |
| Day 181: O25B: >= 4FI (n=101, 98, 100, 48, 51) | 44.7 (33.31 to 56.59) | 56.0 (44.06 to 67.45) | 42.5 (31.51 to 54.06) | 51.2 (35.46 to 66.69) |
| Day 181: O75: >=2 FI (n=101, 98, 100, 48, 51) | 26.3 (16.87 to 37.68) | 26.7 (17.11 to 38.14) | 45.0 (33.85 to 56.53) | 2.3 (0.06 to 12.29) |
| Day 181: O75: >=4 FI (n=101, 98, 100, 48, 51) | 5.3 (1.45 to 12.93) | 10.7 (4.72 to 19.9) | 13.8 (7.07 to 23.27) | 0.0 (0.00 to 8.22) |
| Day 181: EPA: >=2 FI (n=76, 75, 80, 43, 37) | 72.4 (60.91 to 82.01) | 70.7 (59.02 to 80.62) | 71.3 (60.05 to 80.82) | 76.7 (61.37 to 88.24) |
| Day 181: EPA: >=4 FI (n=76, 75, 80, 43, 37) | 51.3 (39.57 to 62.96) | 57.3 (45.38 to 68.69) | 47.5 (36.21 to 58.98) | 55.8 (39.88 to 70.92) |

| End point values | Cohort 1: Prevmar 13 | | | |
|--|-------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 51 | | | |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Day 30: O1A: >= 2 FI (n=101, 98, 100, 48, 51) | 12.5 (4.73 to 25.25) | | | |
| Day 30: O1A: >= 4 FI (n =101, 98, 100, 48, 51) | 4.2 (0.51 to 14.25) | | | |
| Day 30: O2: >= 2 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 7.40) | | | |
| Day 30: O2: >= 4 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 7.40) | | | |
| Day 30: O4: >= 2 FI (n =101, 98, 100, 48, 51) | 12.5 (4.73 to 25.25) | | | |
| Day 30: O4: >= 4 FI (n =101, 98, 100, 48, 51) | 4.2 (0.51 to 14.25) | | | |

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| Day 30: O6A: >= 2 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 7.40) | | | |
| Day 30: O6A: >= 4 FI (n =101, 98, 100, 48, 51) | 0.0 (0.00 to 7.40) | | | |
| Day 30: O8 : >= 2 FI (n =101, 98, 100, 48, 51) | 2.1 (0.05 to 11.07) | | | |
| Day 30:O8: >= 4 FI (n =101, 98, 100, 48, 51) | 2.1 (0.05 to 11.07) | | | |
| Day 30: O15: >= 2 FI (n =101, 98, 100, 48, 51) | 14.6 (6.07 to 27.76) | | | |
| Day 30: O15: >= 4 FI (n =101, 98, 100, 48, 51) | 6.3 (1.31 to 17.20) | | | |
| Day 30: O16: >= 2 FI (n =101, 98, 100, 48, 51) | 2.1 (0.05 to 11.07) | | | |
| Day 30: O16: >= 4 FI (n =101, 98 100, 48, 51) | 0.0 (0.00 to 7.40) | | | |
| Day 30: O18A: >= 2 FI (n =101, 98, 100, 48, 51) | 4.2 (0.51 to 14.25) | | | |
| Day 30: O18A: >= 4 FI (n =101, 98, 100, 48, 51) | 2.1 (0.05 to 11.07) | | | |
| Day 30: O25B: >= 2 FI (n =101, 98, 99, 48, 51) | 4.2 (0.51 to 14.25) | | | |
| Day 30: O25B: >= 4 FI (n =101, 98, 99, 48, 51) | 2.1 (0.05 to 11.07) | | | |
| Day 30: O75: >= 2 FI (n =101, 98, 100, 48, 51) | 2.1 (0.05 to 11.07) | | | |
| Day 30: O75: >= 4 FI (n =101, 98, 100, 48, 51) | 2.1 (0.05 to 11.07) | | | |
| Day 30: EPA: >= 2 FI (n =99, 93, 99, 48, 48) | 0.0 (0.00 to 7.40) | | | |
| Day 30: EPA: >= 4 FI (n =99, 93, 99, 48, 48) | 0.0 (0.00 to 7.40) | | | |
| Day 181: O1A: >= 2 FI (n=101, 98, 100, 48, 51) | 10.8 (3.03 to 25.42) | | | |
| Day 181: O1A:>= 4 FI (n=101,98,100, 48, 51) | 5.4 (0.66 to 18.19) | | | |
| Day 181: O2: >= 2 FI (n=101, 98, 100, 48, 51) | 0.0 (0.00 to 9.49) | | | |
| Day 181:O2: >= 4 FI (n=101, 98, 100, 48, 51) | 0.0 (0.00 to 9.49) | | | |
| Day 181: O4: >= 2 FI (n=101, 98, 100, 48, 51) | 5.4 (0.66 to 18.19) | | | |
| Day 181: O4: >=4 FI (n=101, 98, 100, 48, 51) | 5.4 (0.66 to 18.19) | | | |
| Day 181: O6A: >=2 FI (n=101, 98, 100, 48, 51) | 0.0 (0.00 to 9.49) | | | |
| Day 181: O6A: >=4 FI (n=101, 98, 100, 48, 51) | 0.0 (0.00 to 9.49) | | | |
| Day 181: O8: >= 2 FI (n=101, 98, 100, 48, 51) | 5.4 (0.66 to 18.19) | | | |
| Day 181: O8: >= 4 FI (n=101, 98, 100, 48, 51) | 2.7 (0.07 to 14.16) | | | |
| Day 181: O15: >= 2 FI (n=101, 98, 100, 48, 51) | 8.1 (1.70 to 21.91) | | | |
| Day 181:O15: >= 4 FI (n=101, 98, 100, 48, 51) | 2.7 (0.07 to 14.16) | | | |
| Day 181: O16: >= 2 FI (n=101, 98, 100, 48, 51) | 0.0 (0.00 to 9.49) | | | |
| Day 181: O16: >= 4 FI (n=101, 98, 100, 48, 51) | 0.0 (0.00 to 9.49) | | | |
| Day 181: O18A: >=2 FI (n=101, 98, 100, 48, 51) | 0.0 (0.00 to 9.49) | | | |

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| Day 181: O18A: >= 4 FI (n=101, 98, 100, 48, 51) | 0.0 (0.00 to 9.49) | | | |
| Day 181: O25B: >=2FI (n=101, 98, 100, 48, 51) | 2.7 (0.07 to 14.16) | | | |
| Day 181: O25B: >= 4FI(n=101, 98, 100, 48, 51) | 0.0 (0.00 to 9.49) | | | |
| Day 181: O75: >=2 FI (n=101, 98, 100, 48, 51) | 0.0 (0.00 to 9.49) | | | |
| Day 181: O75: >=4 FI (n=101, 98, 100, 48, 51) | 0.0 (0.0 to 9.49) | | | |
| Day 181: EPA: >=2 FI (n=76, 75, 80, 43, 37) | 0.0 (0.00 to 9.49) | | | |
| Day 181: EPA: >=4 FI (n=76, 75, 80, 43, 37) | 0.0 (0.00 to 9.49) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype Specific Antibodies as Measured by MOPA on Days 30 and 181

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| End point title | Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype Specific Antibodies as Measured by MOPA on Days 30 and 181 ^[45] |
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End point description:

GMR of fold changes from baseline for serotype specific antibodies measured by MOPA on Days 30 and 181 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B and O75 were determined in serum from collected blood samples by MOPA. GMR of fold change from baseline was calculated as the ratio of GMTs on Days 30 and 181 and pre-vaccination (on Day 1). Data was planned to be analyzed for specified arms only. PPI analysis set was analyzed. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (number of participants analyzed) signifies participants evaluable for this outcome measure and "n" (number analyzed) signifies those participants who were evaluable at specified categories.

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| End point type | Secondary |
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End point timeframe:

Baseline (Day 1, pre-vaccination) and Days 30 and 181

Notes:

[45] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: High Dose ExPEC10V | Cohort 1: Prevnar 13 | | |
|--|------------------------------|-----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 100 | 51 | | |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Day 30: Serotype O1A (n =100, 51) | 1.58 (1.166 to 2.153) | 0.65 (0.338 to 1.238) | | |
| Day 30: Serotype O2 (n =100, 51) | 11.86 (8.298 to 16.940) | 0.67 (0.408 to 1.107) | | |
| Day 30: Serotype O4 (n =100, 51) | 3.62 (2.823 to 4.642) | 1.59 (0.727 to 3.493) | | |

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| Day 30: Serotype O6A (n =100, 51) | 1.72 (1.319 to 2.249) | 0.391 (0.391 to 2.394) | | |
| Day 30: Serotype O15 (n =100, 51) | 6.51 (4.645 to 9.134) | 1.70 (0.565 to 5.140) | | |
| Day 30: Serotype O16 (n =100, 51) | 10.50 (7.958 to 13.848) | 1.11 (0.676 to 1.825) | | |
| Day 30: Serotype O18A (n =100, 51) | 2.35 (1.758 to 3.146) | 1.04 (0.400 to 2.715) | | |
| Day 30: Serotype O25B (n =100, 51) | 2.16 (1.771 to 2.627) | 1.02 (0.972 to 1.074) | | |
| Day 30: Serotype O75 (n =100, 51) | 4.02 (2.993 to 5.405) | 1.38 (0.515 to 3.689) | | |
| Day 181: Serotype O1A (n =100, 51) | 0.93 (0.732 to 1.189) | 0.99 (0.530 to 1.833) | | |
| Day 181: Serotype O2 (n =100, 51) | 4.79 (3.457 to 6.649) | 0.96 (0.432 to 2.120) | | |
| Day 181: Serotype O4 (n =100, 51) | 1.94 (1.575 to 2.381) | 1.13 (0.447 to 2.857) | | |
| Day 181: Serotype O6A (n =100, 51) | 1.00 (0.791 to 1.257) | 0.59 (0.268 to 1.304) | | |
| Day 181: Serotype O15 (n =100, 51) | 2.75 (2.034 to 3.731) | 1.22 (0.616 to 2.415) | | |
| Day 181: Serotype O16 (n =100, 51) | 4.86 (3.612 to 6.550) | 1.66 (1.086 to 2.551) | | |
| Day 181: Serotype O18A (n =100, 51) | 1.18 (0.920 to 1.508) | 1.82 (0.584 to 5.684) | | |
| Day 181: Serotype O25B (n =100, 51) | 1.37 (1.196 to 1.572) | 0.96 (0.858 to 1.070) | | |
| Day 181: Serotype O75 (n =100, 51) | 1.78 (1.402 to 2.269) | 0.89 (0.406 to 1.962) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by MOPA on Days 30 and 181

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| End point title | Cohort 1: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by MOPA on Days 30 and 181 ^[46] |
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End point description:

GMTs of serotype-specific total IgG serum antibodies as measured by MOPA on Days 30 and 181 were reported. GMTs for each antigen serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B and O75 were determined in serum from collected blood samples. PPI analysis set was analyzed. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (number of participants analyzed) signifies participants evaluable for this endpoint and "n" (number analyzed) signifies those participants who were evaluable at specified categories. Here 9.9999 signifies geometric mean and lower limit of 95% CI could not be estimated as the value was below the LLOQ, that is, O1A: 33, O2: 42, O4: 12, O6A: 62, O15: 75, O16: 17, O18A: 44, O25B: 58, O75: 14.

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| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 30 and 181

Notes:

[46] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|--|-----------------------------|--------------------------------|------------------------------|---------------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 101 | 98 | 100 | 48 |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Day 30: Serotype O1A (n =101, 98, 100, 48, 51) | 485.7 (383.6 to 615.0) | 452.6 (343.0 to 597.3) | 517.3 (383.9 to 697.0) | 815.3 (545.7 to 1217.9) |
| Day 30: Serotype O2 (n =101, 98, 100, 48, 51) | 2189.0 (1618.1 to 2961.3) | 2533.1 (1768.1 to 3629.1) | 4431.3 (3143.2 to 6247.3) | 3748.8 (2391.6 to 5876.4) |
| Day 30: Serotype O4 (n =101, 98, 100, 48, 51) | 609.5 (470.2 to 790.2) | 562.1 (431.7 to 731.9) | 667.1 (518.0 to 859.1) | 236.2 (177.7 to 313.9) |
| Day 30: Serotype O6A (n =101, 98, 100, 48, 51) | 740.5 (574.6 to 954.4) | 1123.7 (864.6 to 1460.4) | 994.7 (763.8 to 1295.3) | 1067.7 (718.9 to 1585.6) |
| Day 30: Serotype O15 (n =101, 98, 100, 48, 51) | 2423.3 (1767.9 to 3321.7) | 2403.7 (1744.4 to 3312.2) | 2658.9 (1931.1 to 3660.8) | 477.8 (341.5 to 668.4) |
| Day 30: Serotype O16 (n =101, 98, 100, 48, 51) | 987.0 (727.8 to 1338.5) | 1005.1 (701.4 to 1440.3) | 1465.5 (1085.3 to 1978.8) | 107.5 (74.6 to 155.0) |
| Day 30: Serotype O18A (n =101, 98, 100, 48, 51) | 523.5 (412.6 to 664.2) | 538.3 (402.8 to 719.3) | 592.9 (451.5 to 778.7) | 226.5 (155.7 to 329.5) |
| Day 30: Serotype O25B (n =101, 98, 100, 48, 51) | 118.2 (91.1 to 153.4) | 168.8 (122.2 to 233.1) | 134.0 (103.5 to 173.4) | 140.2 (97.0 to 202.6) |
| Day 30: Serotype O75 (n =101, 98, 100, 48, 51) | 221.2 (176.2 to 277.7) | 148.5 (111.8 to 197.2) | 246.4 (177.5 to 342.1) | 71.9 (50.4 to 102.7) |
| Day 181: Serotype O1A (n =101, 98, 100, 48, 51) | 369.0 (290.7 to 468.3) | 249.1 (194.9 to 318.4) | 291.5 (215.3 to 394.7) | 466.6 (311.9 to 698.0) |
| Day 181: Serotype O2 (n =101, 98, 100, 48, 51) | 1196.5 (869.4 to 1646.7) | 1076.4 (777.7 to 1489.8) | 1887.2 (1313.0 to 2712.4) | 1687.3 (1057.5 to 2692.1) |
| Day 181: Serotype O4 (n =101, 98, 100, 48, 51) | 340.9 (259.8 to 447.3) | 298.9 (231.5 to 385.9) | 330.5 (263.7 to 414.2) | 190.5 (140.6 to 258.2) |
| Day 181: Serotype O6A (n =101, 98, 100, 48, 51) | 616.9 (469.9 to 809.8) | 773.5 (580.5 to 1030.7) | 599.4 (454.6 to 790.3) | 623.3 (383.9 to 1012.0) |
| Day 181: Serotype O15 (n =101, 98, 100, 48, 51) | 1053.1 (724.1 to 1531.6) | 1431.8 (1014.1 to 2021.6) | 1110.1 (832.6 to 1480.0) | 347.7 (240.4 to 503.0) |
| Day 181: Serotype O16 (n =101, 98, 100, 48, 51) | 546.7 (386.5 to 773.2) | 426.9 (298.6 to 610.3) | 656.3 (474.2 to 908.5) | 102.5 (73.3 to 143.3) |
| Day 181: Serotype O18A (n =101, 98, 100, 48, 51) | 309.4 (242.6 to 394.7) | 341.3 (255.5 to 455.9) | 291.6 (221.1 to 384.5) | 176.9 (123.3 to 253.7) |
| Day 181: Serotype O25B (n =101, 98, 100, 48, 51) | 75.4 (60.1 to 94.6) | 84.3 (65.6 to 108.3) | 74.1 (58.4 to 94.0) | 67.8 (9.9999 to 93.0) |
| Day 181: Serotype O75 (n =101, 98, 100, 48, 51) | 121.7 (95.8 to 154.8) | 72.4 (55.6 to 94.1) | 103.1 (79.1 to 134.5) | 40.3 (28.6 to 56.9) |

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| End point values | Cohort 1: Prevnar 13 | | | |
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|--|--------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 51 | | | |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Day 30: Serotype O1A (n =101, 98, 100, 48, 51) | 300.8 (215.4 to 420.1) | | | |
| Day 30: Serotype O2 (n =101, 98, 100, 48, 51) | 270.4 (201.1 to 363.6) | | | |
| Day 30: Serotype O4 (n =101, 98, 100, 48, 51) | 193.3 (152.8 to 244.7) | | | |
| Day 30: Serotype O6A (n =101, 98, 100, 48, 51) | 519.9 (339.3 to 796.5) | | | |
| Day 30: Serotype O15 (n =101, 98, 100, 48, 51) | 527.5 (345.5 to 805.4) | | | |
| Day 30: Serotype O16 (n =101, 98, 100, 48, 51) | 110.4 (78.1 to 156.1) | | | |
| Day 30: Serotype O18A (n =101, 98, 100, 48, 51) | 195.1 (141.5 to 269.1) | | | |
| Day 30: Serotype O25B (n =101, 98, 100, 48, 51) | 63.3 (9.9999 to 96.5) | | | |
| Day 30: Serotype O75 (n =101, 98, 100, 48, 51) | 97.6 (69.8 to 136.5) | | | |
| Day 181: Serotype O1A (n =101, 98, 100, 48, 51) | 254.3 (162.3 to 398.4) | | | |
| Day 181: Serotype O2 (n =101, 98, 100, 48, 51) | 246.7 (173.3 to 351.3) | | | |
| Day 181: Serotype O4 (n =101, 98, 100, 48, 51) | 171.5 (124.8 to 235.6) | | | |
| Day 181: Serotype O6A (n =101, 98, 100, 48, 51) | 506.5 (280.3 to 915.3) | | | |
| Day 181: Serotype O15 (n =101, 98, 100, 48, 51) | 438.2 (282.6 to 679.5) | | | |
| Day 181: Serotype O16 (n =101, 98, 100, 48, 51) | 77.9 (51.6 to 117.6) | | | |
| Day 181: Serotype O18A (n =101, 98, 100, 48, 51) | 203.7 (142.8 to 290.6) | | | |
| Day 181: Serotype O25B (n =101, 98, 100, 48, 51) | 9.9999 (-9.9999 to 69.1) | | | |
| Day 181: Serotype O75 (n =101, 98, 100, 48, 51) | 55.1 (38.0 to 80.1) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by MOPA on Days 30 and 181

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| End point title | Cohort 1: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by MOPA on Days 30 and 181 ^[47] |
|-----------------|---|

End point description:

Percentage of participants with a ≥ 2 -fold and ≥ 4 -fold increase in serotype-specific serum antibody titers measured by MOPA on Days 30 and 181 was reported. The fold (≥ 2 -fold and ≥ 4 -fold) increase from baseline to Days 30 and 181 for the serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B, and O75 was calculated as the ratio of titer values of serum antibody on Days 30 and 181 and pre-

vaccination (on day 1 that is, Day 30/Day 1 and 181/Day 1). Data was planned to be analyzed for specified arms only. PPI analysis set was analyzed. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint and "n" signifies those participants who were evaluable at specified categories.

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| End point type | Secondary |
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End point timeframe:

Day 1 (pre-vaccination) and Days 30 and 181

Notes:

[47] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: High Dose ExPEC10V | Cohort 1: Prevnar 13 | | |
|-------------------------------------|------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 100 | 51 | | |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Day 30:ST O1A: >= 2 FI (n=100,51) | 33.7 (24.31 to 44.11) | 11.1 (0.28 to 48.25) | | |
| Day 30:ST O1A: >= 4 FI (n=100,51) | 24.2 (16.01 to 34.08) | 0.0 (0.00 to 33.63) | | |
| Day 30: ST O2: >= 2 FI (n=100,51) | 80.0 (70.54 to 87.51) | 0.0 (0.00 to 33.63) | | |
| Day 30: ST O2: >= 4 FI (n=100,51) | 73.7 (63.65 to 82.19) | 0.0 (0.00 to 33.63) | | |
| Day 30: ST O4: >= 2 FI (n=100,51) | 63.2 (52.64 to 72.83) | 33.3 (7.49 to 70.07) | | |
| Day 30: ST O4: >= 4 FI (n=100,51) | 43.2 (33.03 to 53.72) | 33.3 (7.49 to 70.07) | | |
| Day 30: ST O6A: >= 2 FI (n=100,51) | 35.8 (26.21 to 46.28) | 22.2 (2.81 to 60.01) | | |
| Day 30: ST O6A: >= 4 FI (n=100,51) | 23.2 (15.12 to 32.94) | 11.1 (0.28 to 48.25) | | |
| Day 30: ST O15: >= 2 FI (n=100,51) | 67.4 (56.98 to 76.64) | 33.3 (7.49 to 70.07) | | |
| Day 30: ST O15: >= 4 FI (n=100,51) | 53.7 (43.15 to 63.98) | 22.2 (2.81 to 60.01) | | |
| Day 30: ST O16: >= 2 FI (n=100,51) | 89.4 (81.30 to 94.78) | 22.2 (2.81 to 60.01) | | |
| Day 30: ST O16: >= 4 FI (n=100,51) | 73.4 (63.29 to 81.99) | 0.0 (0.00 to 33.63) | | |
| Day 30: ST O18A: >= 2 FI (n=100,51) | 50.5 (40.07 to 60.95) | 22.2 (2.81 to 60.01) | | |
| Day 30: ST O18A: >= 4 FI (n=100,51) | 33.7 (24.31 to 44.11) | 11.1 (0.28 to 48.25) | | |
| Day 30: ST O25B: >= 2 FI (n=100,51) | 41.5 (31.41 to 52.12) | 0.0 (0.00 to 33.63) | | |
| Day 30: ST O25B: >= 4 FI (n=100,51) | 22.3 (14.39 to 32.10) | 0.0 (0.00 to 33.63) | | |
| Day 30: ST O75: >= 2 FI (n=100,51) | 65.3 (54.80 to 74.74) | 33.3 (7.49 to 70.07) | | |
| Day 30: ST O75: >= 4 FI (n=100,51) | 44.2 (34.02 to 54.77) | 22.2 (2.81 to 60.01) | | |
| Day 181:ST O1A: >= 2 FI (n=100,51) | 15.4 (8.21 to 25.33) | 16.7 (0.42 to 64.12) | | |
| Day 181:ST O1A: >= 4 FI (n=100,51) | 10.3 (4.53 to 19.21) | 0.0 (0.00 to 45.93) | | |

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| Day 181:ST O2: >= 2 FI (n=100,51) | 67.9 (56.42 to 78.07) | 16.7 (0.42 to 64.12) | | |
| Day 181:ST O2: >= 4 FI (n=100,51) | 51.3 (39.69 to 62.77) | 0.0 (0.00 to 45.93) | | |
| Day 181:ST O4: >= 2 FI (n=100,51) | 51.3 (39.69 to 62.77) | 33.3 (4.33 to 77.72) | | |
| Day 181:ST O4: >= 4 FI (n=100,51) | 23.1 (14.29 to 34.00) | 0.0 (0.00 to 45.93) | | |
| Day 181:ST O6A: >= 2 FI (n=100,51) | 23.1 (14.29 to 34.00) | 0.0 (0.00 to 45.93) | | |
| Day 181:ST O6A: >= 4 FI (n=100,51) | 10.3 (4.53 to 19.21) | 0.0 (0.00 to 45.93) | | |
| Day 181:ST O15: >= 2 FI (n=100,51) | 56.4 (44.70 to 67.61) | 33.3 (4.33 to 77.72) | | |
| Day 181:ST O15: >= 4 FI (n=100,51) | 33.3 (23.06 to 44.92) | 0.0 (0.00 to 45.93) | | |
| Day 181:ST O16: >= 2 FI (n=100,51) | 75.3 (64.18 to 84.44) | 33.3 (4.33 to 77.72) | | |
| Day 181:ST O16: >= 4 FI (n=100,51) | 51.9 (40.26 to 63.48) | 0.0 (0.00 to 45.93) | | |
| Day 181:ST O18A: >= 2 FI (n=100,51) | 30.8 (20.81 to 42.24) | 66.7 (22.28 to 95.67) | | |
| Day 181:ST O18A: >= 4 FI (n=100,51) | 10.3 (4.53 to 19.21) | 33.3 (4.33 to 77.72) | | |
| Day 181:ST O25B: >= 2 FI (n=100,51) | 22.1 (13.42 to 32.98) | 0.0 (0.00 to 45.93) | | |
| Day 181:ST O25B: >= 4 FI (n=100,51) | 5.2 (1.43 to 12.77) | 0.0 (0.00 to 45.93) | | |
| Day 181:ST O75: >= 2 FI (n=100,51) | 47.4 (36.01 to 59.07) | 16.7 (0.42 to 64.12) | | |
| Day 181:ST O75: >= 4 FI (n=100,51) | 23.1 (14.29 to 34.00) | 0.0 (0.00 to 45.93) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Number of Participants With Serious Adverse Events (SAEs) Related to Study Vaccine or Study Procedure From Day 182 up to End of Study (Day 1826)

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|-----------------|--|
| End point title | Cohort 1: Number of Participants With Serious Adverse Events (SAEs) Related to Study Vaccine or Study Procedure From Day 182 up to End of Study (Day 1826) ^[48] |
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End point description:

Number of participants with SAEs related to study vaccine or study procedure was reported. An AE is any untoward medical occurrence in a participant participating in a clinical study that does not necessarily have a causal relationship with the pharmaceutical/biological agent under study. An SAE is an AE resulting in any of the following outcomes or deemed significant for any other reason: death; initial or prolonged inpatient hospitalization; life-threatening experience (immediate risk of dying); persistent or significant disability/incapacity; congenital anomaly/birth defect; suspected transmission of any infectious agent via a medicinal product or medically important. The FAS included all randomized participants with a vaccine administration documented.

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| End point type | Secondary |
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End point timeframe:

From Day 182 up to end of study (Day 1826)

Notes:

[48] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: High Dose ExPEC10V | Cohort 1: ExPEC4V |
|-----------------------------|-----------------------------|--------------------------------|------------------------------|-------------------|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 104 | 102 | 104 | 52 |
| Units: participants | 0 | 0 | 0 | 0 |

| End point values | Cohort 1: Prevna 13 | | | |
|-----------------------------|---------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 54 | | | |
| Units: participants | 0 | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex ECL Based Immunoassay on Days 366, 731, 1096, 1461 and 1826

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|-----------------|--|
| End point title | Cohort 1: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex ECL Based Immunoassay on Days 366, 731, 1096, 1461 and 1826 ^[49] |
|-----------------|--|

End point description:

GMTs of serotype-specific total IgG serum antibodies as measured by ECL based immunoassay were reported. GMTs for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA were determined in serum from collected blood samples. Data was planned to be analyzed for specified arms only. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (Overall number of participants analyzed) signifies participants evaluable for this outcome measure and "n" (number analyzed) signifies those participants who were evaluable at specified categories. 9.9999 signifies lower limit of 95% CI could not be calculated as values were below lower limit of quantification (LLOQ), that is, O1A: 69149, O2: 65287, O4: 67356, O6A: 150748, O8: 72196, O15: 66910, O16: 71586, O18A: 70519, O25B: 61990, O75: 133019, and EPA: 66165.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 366, 731, 1096, 1461 and 1826

Notes:

[49] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: High Dose ExPEC10V | Cohort 1: Prevna 13 | | |
|--|---------------------------------------|---------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 71 | 39 | | |
| Units: titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Day 366: Serotype O1A (n=71,39) | 3934158.7 (3201033.1 to 4835190.3) | 1605160.3 (1139469.6 to 2261174.4) | | |
| Day 731: Serotype O1A (n=62,35) | 3045758.4 (2382153.2 to 3894226.5) | 1143355.0 (756785.2 to 1727386.8) | | |
| Day 1096: Serotype O1A (n=57,32) | 2796702.3 (2156387.6 to 3627151.2) | 1226079.9 (796412.6 to 1887554.1) | | |
| Day 1461: Serotype O1A (n=36,17) | 3061251.0 (2233370.1 to 4196016.6) | 2051609.9 (1151725.0 to 3654607.7) | | |
| Day 1826: Serotype O1A (n=35,17) | 2510326.1 (1749766.6 to 3601472.9) | 1415585.1 (729252.3 to 2747857.2) | | |
| Day 366: Serotype O2 (n=71,39) | 3550164.5 (2808076.4 to 4488363.6) | 558977.9 (422941.4 to 738769.7) | | |
| Day 731: Serotype O2 (n=62,35) | 3625183.6 (2836267.9 to 4633538.3) | 694262.8 (464778.4 to 1037055.1) | | |
| Day 1096: Serotype O2 (n=57,32) | 3629211.5 (2829177.2 to 4655479.5) | 686457.3 (441411.8 to 1067537.5) | | |
| Day 1461: Serotype O2 (n=36,17) | 3659457.8 (2685565.0 to 4986523.1) | 833384.9 (446849.3 to 1554283.2) | | |
| Day 1826: Serotype O2 (n=35,17) | 3252095.8 (2248988.6 to 4702614.7) | 609740.1 (280074.9 to 1327441.3) | | |
| Day 366: Serotype O4 (n=71,39) | 1429668.5 (1165397.8 to 1753866.4) | 555656.1 (427063.9 to 722968.3) | | |
| Day 731: Serotype O4 (n=62,35) | 1363392.1 (1095361.6 to 1697008.7) | 475609.0 (338935.6 to 667394.8) | | |
| Day 1096: Serotype O4 (n=57,32) | 1468864.1 (1183756.4 to 1822639.9) | 548486.3 (379268.3 to 793204.1) | | |
| Day 1461: Serotype O4 (n=36,17) | 1636156.0 (1240514.2 to 2157981.2) | 698085.2 (433044.7 to 1125341.0) | | |
| Day 1826: Serotype O4 (n=35,17) | 1046670.4 (778237.4 to 1407692.4) | 474799.1 (277284.3 to 813007.2) | | |
| Day 366: Serotype O6A (n=71,39) | 2720316.5 (2256764.3 to 3279084.9) | 1140758.7 (870845.9 to 1494329.1) | | |
| Day 731: Serotype O6A (n=62,35) | 1938035.7 (1550939.3 to 2421747.0) | 656929.5 (476890.5 to 904938.0) | | |
| Day 1096: Serotype O6A (n=57,32) | 1908743.4 (1507339.8 to 2417040.6) | 763111.9 (558645.1 to 1042414.4) | | |

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|-----------------------------------|---------------------------------------|---------------------------------------|--|--|
| Day 1461: Serotype O6A (n=36,17) | 1648828.8 (1197245.3 to 2270743.1) | 901423.2 (580706.7 to 1399267.1) | | |
| Day 1826: Serotype O6A (n=35,17) | 1468233.5 (1065011.1 to 2024119.5) | 701895.9 (468747.4 to 1051009.2) | | |
| Day 366: Serotype O8 (n=71,39) | 3623746.8 (3024857.5 to 4341209.8) | 1430653.9 (1072253.4 to 1908849.6) | | |
| Day 731: Serotype O8 (n=62,35) | 4270645.7 (3499266.5 to 5212068.0) | 2059650.9 (1475833.6 to 2874417.4) | | |
| Day 1096: Serotype O8 (n=57,32) | 4008813.4 (3266716.4 to 4919491.9) | 1899779.1 (1312135.7 to 2750600.2) | | |
| Day 1461: Serotype O8 (n=36,17) | 3942469.5 (3029442.8 to 5130668.3) | 2118665.0 (1293637.1 to 3469861.5) | | |
| Day 1826: Serotype O8 (n=35,17) | 3271322.5 (2489462.5 to 4298739.4) | 1985249.0 (1280656.7 to 3077494.0) | | |
| Day 366: Serotype O15 (n=71,39) | 2758990.7 (2227724.4 to 3416952.9) | 1026707.7 (748937.3 to 1407499.4) | | |
| Day 731: Serotype O15 (n=62,35) | 2733971.3 (2215513.4 to 3373754.8) | 1282357.8 (894038.1 to 1839341.6) | | |
| Day 1096: Serotype O15 (n=57,32) | 2605816.2 (2048432.4 to 3314865.4) | 1164007.7 (792330.9 to 1710035.4) | | |
| Day 1461: Serotype O15 (n=36,17) | 2675476.7 (2035772.1 to 3516196.9) | 1318256.0 (878009.0 to 1979249.6) | | |
| Day 1826: Serotype O15 (n=35,17) | 2452726.4 (1794091.2 to 3353155.4) | 1339915.0 (858920.2 to 2090266.8) | | |
| Day 366: Serotype O16 (n=71,39) | 2784393.1 (2248058.4 to 3448684.8) | 766620.1 (570562.4 to 1030047.4) | | |
| Day 731: Serotype O16 (n=62,35) | 2191014.4 (1676843.6 to 2862845.6) | 432088.3 (280872.9 to 664714.5) | | |
| Day 1096: Serotype O16 (n=57,32) | 1953749.9 (1467640.7 to 2600867.1) | 408528.9 (257897.7 to 647139.9) | | |
| Day 1461: Serotype O16 (n=36,17) | 1808141.1 (1314903.6 to 2486398.5) | 588532.7 (315738.3 to 1097018.3) | | |
| Day 1826: Serotype O16 (n=35,17) | 1418665.2 (1021423.3 to 1970398.5) | 441156.2 (228168.2 to 852961.9) | | |
| Day 366: Serotype O18A (n=71,39) | 2180993.4 (1813783.2 to 2622547.1) | 1011099.1 (803648.4 to 1272100.4) | | |
| Day 731: Serotype O18A (n=62,35) | 2120844.7 (1737493.1 to 2588776.9) | 1011635.3 (770544.8 to 1328158.9) | | |
| Day 1096: Serotype O18A (n=57,32) | 2139682.8 (1721939.0 to 2658771.7) | 1069851.1 (812183.5 to 1409264.4) | | |
| Day 1461: Serotype O18A (n=36,17) | 1799444.8 (1411938.5 to 2293302.1) | 1155976.5 (798832.2 to 1672794.0) | | |

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|-----------------------------------|---------------------------------------|---------------------------------------|--|--|
| Day 1826: Serotype O18A (n=35,17) | 1634243.4 (1224433.2 to 2181214.6) | 938306.2 (615022.6 to 1431522.1) | | |
| Day 366: Serotype O25B (n=71,39) | 744315.5 (587104.6 to 943623.5) | 278650.7 (211316.5 to 367440.3) | | |
| Day 731: Serotype O25B (n=62,35) | 469677.8 (345884.4 to 637777.3) | 159425.2 (108167.9 to 234971.5) | | |
| Day 1096: Serotype O25B (n=57,32) | 457385.0 (342281.3 to 611196.1) | 180091.3 (120576.0 to 268982.7) | | |
| Day 1461: Serotype O25B (n=36,17) | 527143.7 (369078.7 to 752903.0) | 292822.0 (178948.4 to 479158.8) | | |
| Day 1826: Serotype O25B (n=35,17) | 376505.3 (247784.9 to 572093.9) | 173640.5 (98267.2 to 306826.7) | | |
| Day 366: Serotype O75 (n=71,39) | 1960676.9 (1639629.8 to 2344586.6) | 1519723.2 (1099805.5 to 2099970.1) | | |
| Day 731: Serotype O75 (n=62,35) | 1991539.0 (1598606.6 to 2481053.0) | 1689340.2 (1218863.3 to 2341419.5) | | |
| Day 1096: Serotype O75 (n=57,32) | 2152383.1 (1720798.5 to 2692211.4) | 1732413.2 (1200043.3 to 2500956.0) | | |
| Day 1461: Serotype O75 (n=36,17) | 1811492.3 (1376465.0 to 2384008.6) | 1821419.2 (1047856.4 to 3166052.1) | | |
| Day 1826: Serotype O75 (n=35,17) | 1912235.2 (1470493.6 to 2486677.5) | 1848589.6 (1050960.1 to 3251582.6) | | |
| Day 366: Serotype EPA (n=71,39) | 395660.6 (278689.7 to 561726.1) | 66438.6 (9.9999 to 93488.9) | | |
| Day 731: Serotype EPA (n=62,35) | 255548.1 (174717.6 to 373773.7) | 74302.9 (9.9999 to 115058.4) | | |
| Day 1096: Serotype EPA (n=57,32) | 284265.5 (191542.8 to 421873.6) | 81384.5 (9.9999 to 128120.5) | | |
| Day 1461: Serotype EPA (n=36,17) | 285201.1 (175060.8 to 464636.9) | 104825.0 (9.9999 to 213630.5) | | |
| Day 1826: Serotype EPA (n=35,17) | 236408.3 (142449.3 to 392342.4) | 95540.4 (9.9999 to 201601.6) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase From Baseline in Serotype Specific Serum Antibody Titers as Measured by Multiplex ECL Based Immunoassay on Days 366, 731, 1096, 1461 and 1826

| | |
|-----------------|--|
| End point title | Cohort 1: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase From Baseline in Serotype Specific Serum Antibody Titers as Measured by Multiplex ECL Based Immunoassay on Days 366, 731, 1096, 1461 and 1826 ^[50] |
|-----------------|--|

End point description:

Percentage of participants with a ≥ 2 -fold and ≥ 4 -fold increase from baseline in serotype specific serum antibody titers as measured by multiplex ECL based immunoassay on Days 366, 731, 1096, 1461, and 1826 was reported. The fold (≥ 2 -fold and ≥ 4 -fold) increase from baseline to Days 366, 731, 1096, 1461, and 1826 for the serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA was calculated as the ratio of titer values of serum antibody on Days 366, 731, 1096, 1461 and 1826 and pre-vaccination (on day 1) that is, Day 366/Day 1, 731/Day 1, 1096/Day 1, 1461/Day 1 and 1826 /Day 1. Data was planned to be analyzed for specified arms only. PPI analysis set was analyzed. Here, "N" (number of participants analyzed) signifies participants evaluable for this outcome measure.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Days 366, 731, 1096, 1461, 1826

Notes:

[50] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: High Dose ExPEC10V | Cohort 1: Pevnar 13 | | |
|--|------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 100 | 51 | | |
| Units: Percentage of Participants | | | | |
| number (confidence interval 95%) | | | | |
| Day 366: Serotype O1A: ≥ 2 Fold Increase | 70.4 (58.41 to 80.67) | 5.3 (0.64 to 17.75) | | |
| Day 731: Serotype O1A: ≥ 2 Fold Increase | 58.1 (44.85 to 70.49) | 8.6 (1.80 to 23.06) | | |
| Day 1096: Serotype O1A: ≥ 2 Fold Increase | 56.1 (42.36 to 69.26) | 9.4 (1.98 to 25.02) | | |
| Day 1461: Serotype O1A: ≥ 2 Fold Increase | 61.1 (43.46 to 76.86) | 17.6 (3.80 to 43.43) | | |
| Day 1826: Serotype O1A: ≥ 2 Fold Increase | 51.4 (33.99 to 68.62) | 5.9 (0.15 to 28.69) | | |
| Day 366: Serotype O1A: ≥ 4 Fold Increase | 45.1 (33.23 to 57.34) | 2.6 (0.07 to 13.81) | | |
| Day 731: Serotype O1A: ≥ 4 Fold Increase | 38.7 (26.60 to 51.93) | 0.0 (0.00 to 10.00) | | |
| Day 1096: Serotype O1A: ≥ 4 Fold Increase | 35.1 (22.91 to 48.87) | 0.0 (0.00 to 10.89) | | |
| Day 1461: Serotype O1A: ≥ 4 Fold Increase | 36.1 (20.82 to 53.78) | 11.8 (1.46 to 36.44) | | |
| Day 1826: Serotype O1A: ≥ 4 Fold Increase | 31.4 (16.85 to 49.29) | 0.0 (0.00 to 19.51) | | |
| Day 366: Serotype O2: ≥ 2 Fold Increase | 91.5 (82.51 to 96.84) | 5.3 (0.64 to 17.75) | | |
| Day 731: Serotype O2: ≥ 2 Fold Increase | 95.2 (86.50 to 98.99) | 20.0 (8.44 to 36.94) | | |
| Day 1096: Serotype O2: ≥ 2 Fold Increase | 98.2 (90.61 to 99.96) | 15.6 (5.28 to 32.79) | | |
| Day 1461: Serotype O2: ≥ 2 Fold Increase | 97.2 (85.47 to 99.93) | 11.8 (1.46 to 36.44) | | |
| Day 1826: Serotype O2: ≥ 2 Fold Increase | 85.7 (69.74 to 95.19) | 17.6 (3.80 to 43.43) | | |
| Day 366: Serotype O2: ≥ 4 Fold Increase | 77.5 (66.00 to 86.54) | 0.0 (0.00 to 9.25) | | |
| Day 731: Serotype O2: ≥ 4 Fold Increase | 75.8 (63.26 to 85.78) | 2.9 (0.07 to 14.92) | | |
| Day 1096: Serotype O2: ≥ 4 Fold Increase | 73.7 (60.34 to 84.46) | 0.0 (0.00 to 10.89) | | |

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| Day 1461: Serotype O2: ≥ 4 Fold Increase | 72.2 (54.81 to 85.80) | 0.0 (0.00 to 19.51) | | |
| Day 1826: Serotype O2: ≥ 4 Fold Increase | 68.6 (50.71 to 83.15) | 0.0 (0.00 to 19.51) | | |
| Day 366: Serotype O4: ≥ 2 Fold Increase | 70.4 (58.41 to 80.67) | 2.6 (0.07 to 13.81) | | |
| Day 731: Serotype O4: ≥ 2 Fold Increase | 71.0 (58.05 to 81.80) | 8.6 (1.80 to 23.06) | | |
| Day 1096: Serotype O4: ≥ 2 Fold Increase | 77.2 (64.16 to 87.26) | 15.6 (5.28 to 32.79) | | |
| Day 1461: Serotype O4: ≥ 2 Fold Increase | 94.4 (81.34 to 99.32) | 23.5 (6.81 to 49.90) | | |
| Day 1826: Serotype O4: ≥ 2 Fold Increase | 65.7 (47.79 to 80.87) | 11.8 (1.46 to 36.44) | | |
| Day 366: Serotype O4: ≥ 4 Fold Increase | 35.2 (24.24 to 47.46) | 2.6 (0.07 to 13.81) | | |
| Day 731: Serotype O4: ≥ 4 Fold Increase | 41.9 (29.51 to 55.15) | 2.9 (0.07 to 14.92) | | |
| Day 1096: Serotype O4: ≥ 4 Fold Increase | 38.6 (26.00 to 52.43) | 3.1 (0.08 to 16.22) | | |
| Day 1461: Serotype O4: ≥ 4 Fold Increase | 50.0 (32.92 to 67.08) | 0.0 (0.00 to 19.51) | | |
| Day 1826: Serotype O4: ≥ 4 Fold Increase | 22.9 (10.42 to 40.14) | 0.0 (0.00 to 19.51) | | |
| Day 366: Serotype O6A: ≥ 2 Fold Increase | 56.3 (44.05 to 68.09) | 0.0 (0.00 to 9.25) | | |
| Day 731: Serotype O6A: ≥ 2 Fold Increase | 30.6 (19.56 to 43.65) | 0.0 (0.00 to 10.00) | | |
| Day 1096: Serotype O6A: ≥ 2 Fold Increase | 28.1 (16.97 to 41.54) | 6.3 (0.77 to 20.81) | | |
| Day 1461: Serotype O6A: ≥ 2 Fold Increase | 19.4 (8.19 to 36.02) | 5.9 (0.15 to 28.69) | | |
| Day 1826: Serotype O6A: ≥ 2 Fold Increase | 20.0 (8.44 to 36.94) | 0.0 (0.00 to 19.51) | | |
| Day 366: Serotype O6A: ≥ 4 Fold Increase | 23.9 (14.61 to 35.54) | 0.0 (0.00 to 9.25) | | |
| Day 731: Serotype O6A: ≥ 4 Fold Increase | 12.9 (5.74 to 23.85) | 0.0 (0.00 to 10.00) | | |
| Day 1096: Serotype O6A: ≥ 4 Fold Increase | 14.0 (6.26 to 25.79) | 0.0 (0.00 to 10.89) | | |
| Day 1461: Serotype O6A: ≥ 4 Fold Increase | 11.1 (3.11 to 26.06) | 0.0 (0.00 to 19.51) | | |
| Day 1826: Serotype O6A: ≥ 4 Fold Increase | 8.6 (1.80 to 23.06) | 0.0 (0.00 to 19.51) | | |
| Day 366: Serotype O8: ≥ 2 Fold Increase | 59.2 (46.84 to 70.68) | 2.6 (0.07 to 13.81) | | |
| Day 731: Serotype O8: ≥ 2 Fold Increase | 66.1 (52.99 to 77.67) | 28.6 (14.64 to 46.30) | | |
| Day 1096: Serotype O8: ≥ 2 Fold Increase | 59.6 (45.82 to 72.44) | 28.1 (13.75 to 46.75) | | |
| Day 1461: Serotype O8: ≥ 2 Fold Increase | 69.4 (51.89 to 83.65) | 29.4 (10.31 to 55.96) | | |
| Day 1826: Serotype O8: ≥ 2 Fold Increase | 51.4 (33.99 to 68.62) | 17.6 (3.80 to 43.43) | | |
| Day 366: Serotype O8: ≥ 4 Fold Increase | 22.5 (13.46 to 34.00) | 0.0 (0.00 to 9.25) | | |
| Day 731: Serotype O8: ≥ 4 Fold Increase | 38.7 (26.60 to 51.93) | 8.6 (1.80 to 23.06) | | |
| Day 1096: Serotype O8: ≥ 4 Fold Increase | 24.6 (14.13 to 37.76) | 3.1 (0.08 to 16.22) | | |
| Day 1461: Serotype O8: ≥ 4 Fold Increase | 30.6 (16.35 to 48.11) | 17.6 (3.80 to 43.43) | | |

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| Day 1826: Serotype O8: ≥ 4 Fold Increase | 25.7 (12.49 to 43.26) | 5.9 (0.15 to 28.69) | | |
| Day 366: Serotype O15: ≥ 2 Fold Increase | 67.6 (55.45 to 78.24) | 5.3 (0.64 to 17.75) | | |
| Day 731: Serotype O15: ≥ 2 Fold Increase | 71.0 (58.05 to 81.80) | 28.6 (14.64 to 46.30) | | |
| Day 1096: Serotype O15: ≥ 2 Fold Increase | 63.2 (49.34 to 75.55) | 21.9 (9.28 to 39.97) | | |
| Day 1461: Serotype O15: ≥ 2 Fold Increase | 58.3 (40.76 to 74.49) | 23.5 (6.81 to 49.90) | | |
| Day 1826: Serotype O15: ≥ 2 Fold Increase | 54.3 (36.65 to 71.17) | 29.4 (10.31 to 55.96) | | |
| Day 366: Serotype O15: ≥ 4 Fold Increase | 32.4 (21.76 to 44.55) | 2.6 (0.07 to 13.81) | | |
| Day 731: Serotype O15: ≥ 4 Fold Increase | 32.3 (20.94 to 45.34) | 8.6 (1.80 to 23.06) | | |
| Day 1096: Serotype O15: ≥ 4 Fold Increase | 28.1 (16.97 to 41.54) | 6.3 (0.77 to 20.81) | | |
| Day 1461: Serotype O15: ≥ 4 Fold Increase | 27.8 (14.20 to 45.19) | 5.9 (0.15 to 28.69) | | |
| Day 1826: Serotype O15: ≥ 4 Fold Increase | 25.7 (12.49 to 43.26) | 11.8 (1.46 to 36.44) | | |
| Day 366: Serotype O16: ≥ 2 Fold Increase | 76.1 (64.46 to 85.39) | 2.6 (0.07 to 13.81) | | |
| Day 731: Serotype O16: ≥ 2 Fold Increase | 66.1 (52.99 to 77.67) | 2.9 (0.07 to 14.92) | | |
| Day 1096: Serotype O16: ≥ 2 Fold Increase | 54.4 (40.66 to 67.64) | 3.1 (0.08 to 16.22) | | |
| Day 1461: Serotype O16: ≥ 2 Fold Increase | 61.1 (43.46 to 76.86) | 11.8 (1.46 to 36.44) | | |
| Day 1826: Serotype O16: ≥ 2 Fold Increase | 54.3 (36.65 to 71.17) | 5.9 (0.15 to 28.69) | | |
| Day 366: Serotype O16: ≥ 4 Fold Increase | 40.8 (29.32 to 53.16) | 2.6 (0.07 to 13.81) | | |
| Day 731: Serotype O16: ≥ 4 Fold Increase | 32.3 (20.94 to 45.34) | 2.9 (0.07 to 14.92) | | |
| Day 1096: Serotype O16: ≥ 4 Fold Increase | 28.1 (16.97 to 41.54) | 0.0 (0.00 to 10.89) | | |
| Day 1461: Serotype O16: ≥ 4 Fold Increase | 25.0 (12.12 to 42.20) | 0.0 (0.00 to 19.51) | | |
| Day 1826: Serotype O16: ≥ 4 Fold Increase | 17.1 (6.56 to 33.65) | 0.0 (0.00 to 19.51) | | |
| Day 366: Serotype O18A: ≥ 2 Fold Increase | 60.6 (48.25 to 71.97) | 2.6 (0.07 to 13.81) | | |
| Day 731: Serotype O18A: ≥ 2 Fold Increase | 54.8 (41.68 to 67.52) | 25.7 (12.49 to 43.26) | | |
| Day 1096: Serotype O18A: ≥ 2 Fold Increase | 50.9 (37.2 to 64.37) | 18.8 (7.21 to 36.44) | | |
| Day 1461: Serotype O18A: ≥ 2 Fold Increase | 36.1 (20.82 to 53.78) | 17.6 (3.80 to 43.43) | | |
| Day 1826: Serotype O18A: ≥ 2 Fold Increase | 28.6 (14.64 to 46.30) | 11.8 (1.46 to 36.44) | | |
| Day 366: Serotype O18A: ≥ 4 Fold Increase | 12.7 (5.96 to 22.70) | 0.0 (0.00 to 9.25) | | |
| Day 731: Serotype O18A: ≥ 4 Fold Increase | 21.0 (11.66 to 33.18) | 0.0 (0.00 to 10.00) | | |
| Day 1096: Serotype O18A: ≥ 4 Fold Increase | 17.5 (8.75 to 29.91) | 0.0 (0.00 to 10.89) | | |
| Day 1461: Serotype O18A: ≥ 4 Fold Increase | 8.3 (1.75 to 22.47) | 0.0 (0.00 to 19.51) | | |
| Day 1826: Serotype O18A: ≥ 4 Fold Increase | 8.6 (1.80 to 23.06) | 0.0 (0.00 to 19.51) | | |

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| Day 366: Serotype 025B: ≥ 2 Fold Increase | 64.8 (52.54 to 75.76) | 5.3 (0.64 to 17.75) | | |
| Day 731: Serotype 025B: ≥ 2 Fold Increase | 50.0 (37.02 to 62.98) | 0.0 (0.00 to 10.00) | | |
| Day 1096: Serotype 025B: ≥ 2 Fold Increase | 52.6 (38.97 to 66.02) | 0.0 (0.00 to 10.89) | | |
| Day 1461: Serotype 025B: ≥ 2 Fold Increase | 52.8 (35.49 to 69.59) | 0.0 (0.00 to 19.51) | | |
| Day 1826: Serotype 025B: ≥ 2 Fold Increase | 28.6 (14.64 to 46.30) | 0.0 (0.00 to 19.51) | | |
| Day 366: Serotype 025B: ≥ 4 Fold Increase | 33.8 (23.00 to 46.01) | 0.0 (0.00 to 9.25) | | |
| Day 731: Serotype 025B: ≥ 4 Fold Increase | 25.8 (15.53 to 38.50) | 0.0 (0.00 to 10.00) | | |
| Day 1096: Serotype 025B: ≥ 4 Fold Increase | 21.1 (11.38 to 33.89) | 0.0 (0.00 to 10.89) | | |
| Day 1461: Serotype 025B: ≥ 4 Fold Increase | 16.7 (6.37 to 32.81) | 0.0 (0.00 to 19.51) | | |
| Day 1826: Serotype 025B: ≥ 4 Fold Increase | 8.6 (1.80 to 23.06) | 0.0 (0.00 to 19.51) | | |
| Day 366: Serotype 075: ≥ 2 Fold Increase | 33.8 (23.00 to 46.01) | 2.6 (0.07 to 13.81) | | |
| Day 731: Serotype 075: ≥ 2 Fold Increase | 32.3 (20.94 to 45.34) | 8.6 (1.80 to 23.06) | | |
| Day 1096: Serotype 075: ≥ 2 Fold Increase | 40.4 (27.56 to 54.18) | 15.6 (5.28 to 32.79) | | |
| Day 1461: Serotype 075: ≥ 2 Fold Increase | 33.3 (18.56 to 50.97) | 5.9 (0.15 to 28.69) | | |
| Day 1826: Serotype 075: ≥ 2 Fold Increase | 31.4 (16.85 to 49.29) | 17.6 (3.80 to 43.43) | | |
| Day 366: Serotype 075: ≥ 4 Fold Increase | 8.5 (3.16 to 17.49) | 2.6 (0.07 to 13.81) | | |
| Day 731: Serotype 075: ≥ 4 Fold Increase | 11.3 (4.66 to 21.89) | 2.9 (0.07 to 14.92) | | |
| Day 1096: Serotype 075: ≥ 4 Fold Increase | 12.3 (5.08 to 23.68) | 3.1 (0.08 to 16.22) | | |
| Day 1461: Serotype 075: ≥ 4 Fold Increase | 16.7 (6.37 to 32.81) | 5.9 (0.15 to 28.69) | | |
| Day 1826: Serotype 075: ≥ 4 Fold Increase | 14.3 (4.81 to 30.26) | 11.8 (1.46 to 36.44) | | |
| Day 366: Serotype EPA: ≥ 2 Fold Increase | 60.6 (48.25 to 71.97) | 0.0 (0.00 to 9.25) | | |
| Day 731: Serotype EPA: ≥ 2 Fold Increase | 45.2 (32.48 to 58.32) | 5.7 (0.70 to 19.16) | | |
| Day 1096: Serotype EPA: ≥ 2 Fold Increase | 42.1 (29.14 to 55.92) | 9.4 (1.98 to 25.02) | | |
| Day 1461: Serotype EPA: ≥ 2 Fold Increase | 47.2 (30.41 to 64.51) | 11.8 (1.46 to 36.44) | | |
| Day 1826: Serotype EPA: ≥ 2 Fold Increase | 40.0 (23.87 to 57.89) | 17.6 (3.80 to 43.43) | | |
| Day 366: Serotype EPA: ≥ 4 Fold Increase | 38.0 (26.76 to 50.33) | 0.0 (0.00 to 9.25) | | |
| Day 731: Serotype EPA: ≥ 4 Fold Increase | 29.0 (18.20 to 41.95) | 5.7 (0.70 to 19.16) | | |
| Day 1096: Serotype EPA: ≥ 4 Fold Increase | 28.1 (16.97 to 41.54) | 6.3 (0.77 to 20.81) | | |
| Day 1461: Serotype EPA: ≥ 4 Fold Increase | 27.8 (14.20 to 45.19) | 5.9 (0.15 to 28.69) | | |
| Day 1826: Serotype EPA: ≥ 4 Fold Increase | 22.9 (10.42 to 40.14) | 11.8 (1.46 to 36.44) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes from Baseline for Serotype-specific Antibodies Measured by Multiplex ECL Based Immunoassay on Days 366, 731, 1096, 1461 and 1826

| | |
|-----------------|---|
| End point title | Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes from Baseline for Serotype-specific Antibodies Measured by Multiplex ECL Based Immunoassay on Days 366, 731, 1096, 1461 and 1826 ^[51] |
|-----------------|---|

End point description:

GMR of fold changes from baseline for serotype specific antibodies as measured by multiplex ECL based immunoassay on Days 366, 731, 1096, 1461 and 1826 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA were determined in serum from collected blood samples by ECL based immunoassay. GMR of fold change from baseline was calculated as the ratio of GMTs on Days 366, 731, 1096, 1461 and 1826 and pre-vaccination (on Day 1). Data was planned to be analyzed for specified arms only. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (number of participants analyzed) signifies participants evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Days 366, 731, 1096, 1461, 1826

Notes:

[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 data was planned for specified baseline arms only.

| End point values | Cohort 1: High Dose ExPEC10V | Cohort 1: Pevnar 13 | | |
|--|------------------------------|-----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 71 | 39 | | |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Day 366: Serotype O1A | 3.57 (2.893 to 4.402) | 1.10 (0.969 to 1.248) | | |
| Day 731: Serotype O1A | 2.74 (2.159 to 3.466) | 0.82 (0.674 to 1.009) | | |
| Day 1096: Serotype O1A | 2.52 (1.932 to 3.293) | 0.82 (0.640 to 1.047) | | |
| Day 1461: Serotype O1A | 2.75 (2.076 to 3.635) | 1.01 (0.678 to 1.498) | | |
| Day 1826: Serotype O1A | 2.23 (1.701 to 2.928) | 0.72 (0.518 to 1.009) | | |
| Day 366: Serotype O2 | 7.71 (6.279 to 9.457) | 1.22 (1.098 to 1.348) | | |
| Day 731: Serotype O2 | 7.62 (5.994 to 9.694) | 1.34 (1.103 to 1.637) | | |

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|-------------------------|-----------------------|-----------------------|--|--|
| Day 1096: Serotype O2 | 7.78 (6.202 to 9.761) | 1.31 (1.101 to 1.558) | | |
| Day 1461: Serotype O2 | 7.13 (5.471 to 9.294) | 1.32 (1.062 to 1.651) | | |
| Day 1826: Serotype O2 | 6.29 (4.594 to 8.616) | 1.05 (0.800 to 1.385) | | |
| Day 366: Serotype O4 | 3.29 (2.762 to 3.907) | 1.20 (1.053 to 1.356) | | |
| Day 731: Serotype O4 | 3.16 (2.630 to 3.808) | 1.06 (0.881 to 1.280) | | |
| Day 1096: Serotype O4 | 3.35 (2.792 to 4.029) | 1.16 (0.942 to 1.439) | | |
| Day 1461: Serotype O4 | 4.02 (3.302 to 4.890) | 1.43 (1.097 to 1.865) | | |
| Day 1826: Serotype O4 | 2.58 (2.057 to 2.657) | 1.06 (0.767 to 1.461) | | |
| Day 366: Serotype O6A | 2.54 (2.178 to 2.958) | 1.09 (0.988 to 1.205) | | |
| Day 731: Serotype O6A | 1.63 (1.323 to 1.999) | 0.67 (0.547 to 0.811) | | |
| Day 1096: Serotype O6A | 1.64 (1.345 to 1.993) | 0.71 (0.559 to 0.896) | | |
| Day 1461: Serotype O6A | 1.37 (1.089 to 1.726) | 0.69 (0.548 to 0.867) | | |
| Day 1826: Serotype O6A | 1.27 (0.999 to 1.615) | 0.51 (0.395 to 0.655) | | |
| Day 366: Serotype O8 | 2.46 (2.110 to 2.868) | 1.01 (0.892 to 1.143) | | |
| Day 731: Serotype O8 | 2.93 (2.396 to 3.595) | 1.52 (1.221 to 1.886) | | |
| Day 1096: Serotype O8 | 2.61 (2.120 to 3.207) | 1.29 (1.028 to 1.625) | | |
| Day 1461: Serotype O8 | 2.99 (2.275 to 3.923) | 1.44 (0.981 to 2.106) | | |
| Day 1826: Serotype O8 | 2.54 (1.930 to 3.330) | 1.42 (1.070 to 1.897) | | |
| Day 366: Serotype O15 | 3.16 (2.615 to 3.810) | 1.24 (1.082 to 1.423) | | |
| Day 731: Serotype O15 | 2.99 (2.477 to 3.609) | 1.52 (1.201 to 1.912) | | |
| Day 1096: Serotype O15 | 2.90 (2.352 to 3.569) | 1.29 (0.984 to 1.681) | | |
| Day 1461: Serotype O15 | 2.76 (2.120 to 3.586) | 1.30 (0.878 to 1.937) | | |
| Day 1826: Serotype O15 | 2.54 (1.908 to 3.374) | 1.37 (0.903 to 2.083) | | |
| Day 366: Serotype O16 | 3.62 (3.025 to 4.342) | 1.08 (0.949 to 1.225) | | |
| Day 731: Serotype O16 | 2.79 (2.180 to 3.575) | 0.68 (0.557 to 0.836) | | |
| Day 1096: Serotype O16 | 2.44 (1.911 to 3.125) | 0.63 (0.511 to 0.788) | | |
| Day 1461: Serotype O16 | 2.46 (1.832 to 3.315) | 0.90 (0.656 to 1.235) | | |
| Day 1826: Serotype O16 | 1.98 (1.454 to 2.694) | 0.73 (0.529 to 0.997) | | |
| Day 366: Serotype O18A | 2.37 (2.021 to 2.778) | 1.11 (1.009 to 1.232) | | |
| Day 731: Serotype O18A | 2.36 (1.939 to 2.876) | 1.16 (0.966 to 1.385) | | |
| Day 1096: Serotype O18A | 2.35 (1.916 to 2.872) | 1.19 (1.010 to 1.406) | | |

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|-------------------------|-----------------------|-----------------------|--|--|
| Day 1461: Serotype O18A | 1.83 (1.495 to 2.249) | 1.03 (0.767 to 1.371) | | |
| Day 1826: Serotype O18A | 1.67 (1.328 to 2.099) | 0.88 (0.632 to 1.227) | | |
| Day 366: Serotype O25B | 3.10 (2.573 to 3.737) | 1.16 (1.033 to 1.293) | | |
| Day 731: Serotype O25B | 2.14 (1.673 to 2.733) | 0.71 (0.598 to 0.831) | | |
| Day 1096: Serotype O25B | 2.06 (1.638 to 2.592) | 0.74 (0.624 to 0.867) | | |
| Day 1461: Serotype O25B | 1.99 (1.507 to 2.640) | 0.99 (0.77 to 1.268) | | |
| Day 1826: Serotype O25B | 1.41 (1.094 to 1.823) | 0.65 (0.507 to 0.827) | | |
| Day 366: Serotype O75 | 1.71 (1.516 to 1.75) | 1.05 (0.931 to 1.182) | | |
| Day 731: Serotype O75 | 1.69 (1.419 to 2.010) | 1.14 (0.949 to 1.368) | | |
| Day 1096: Serotype O75 | 1.84 (1.519 to 2.226) | 1.08 (0.845 to 1.392) | | |
| Day 1461: Serotype O75 | 1.61 (1.253 to 2.075) | 1.04 (0.681 to 1.577) | | |
| Day 1826: Serotype O75 | 1.67 (1.318 to 2.121) | 1.19 (0.818 to 1.731) | | |
| Day 366: Serotype EPA | 3.31 (2.587 to 4.232) | 0.98 (0.946 to 1.019) | | |
| Day 731: Serotype EPA | 2.25 (1.793 to 2.819) | 1.14 (0.838 to 1.546) | | |
| Day 1096: Serotype EPA | 2.33 (1.864 to 2.907) | 1.14 (0.844 to 1.553) | | |
| Day 1461: Serotype EPA | 2.11 (1.568 to 2.844) | 1.17 (0.712 to 1.939) | | |
| Day 1826: Serotype EPA | 1.86 (1.376 to 2.513) | 1.29 (0.848 to 1.957) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Geometric Mean Titer (GMT) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by MOPA on Days 366, 731, 1096, and 1461

| | |
|-----------------|--|
| End point title | Cohort 1: Geometric Mean Titer (GMT) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by MOPA on Days 366, 731, 1096, and 1461 ^[52] |
|-----------------|--|

End point description:

GMTs of serotype-specific total IgG serum antibodies as measured by MOPA were reported. GMTs for each antigen serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B and O75 were determined in serum from collected blood samples. Data was planned to be analyzed for specified arms only. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (number of participants analyzed) signifies participants evaluable for this endpoint. 9.9999 signifies lower limit of 95% CI could not be calculated as values were below lower limit of quantification (LLOQ), that is, O1A: 33, O2: 42, O4: 12, O6A: 62, O15: 75, O16: 17, O18A: 44, O25B: 58, O75: 14.

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|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Days 366, 731, 1096, 1461

Notes:

[52] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: High Dose ExPEC10V | Cohort 1: Prevna 13 | | |
|--|------------------------------|--------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 100 | 51 | | |
| Units: titers | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Day 366: Serotype O1A | 266.6 (194.4 to 365.5) | 187.9 (76.6 to 460.5) | | |
| Day 731: Serotype O1A | 198.0 (146.6 to 267.5) | 379.5 (125.6 to 1146.1) | | |
| Day 1096: Serotype O1A | 229.2 (162.9 to 322.4) | 278.9 (116.4 to 667.8) | | |
| Day 1461: Serotype O1A | 241.0 (160.6 to 361.6) | 362.3 (53.0 to 2478.0) | | |
| Day 366: Serotype O2 | 1700.5 (1171.9 to 2467.7) | 186.1 (74.2 to 466.5) | | |
| Day 731: Serotype O2 | 468.2 (325.6 to 673.4) | 261.3 (132.0 to 517.2) | | |
| Day 1096: Serotype O2 | 866.7 (600.6 to 1250.8) | 236.5 (104.7 to 534.3) | | |
| Day 1461: Serotype O2 | 622.5 (374.9 to 1033.5) | 288.4 (9.9999 to 2239.4) | | |
| Day 366: Serotype O4 | 269.8 (211.3 to 344.3) | 155.8 (98.4 to 246.6) | | |
| Day 731: Serotype O4 | 279.7 (225.2 to 347.3) | 229.2 (92.0 to 571.1) | | |
| Day 1096: Serotype O4 | 284.4 (233.9 to 345.7) | 292.0 (204.4 to 417.2) | | |
| Day 1461: Serotype O4 | 242.0 (180.6 to 324.2) | 216.3 (101.2 to 462.3) | | |
| Day 366: Serotype O6A | 620.2 (471.0 to 816.6) | 287.6 (91.7 to 902.0) | | |
| Day 731: Serotype O6A | 483.7 (357.0 to 655.4) | 368.0 (104.3 to 1298.3) | | |
| Day 1096: Serotype O6A | 548.5 (397.1 to 757.6) | 635.9 (156.7 to 2581.5) | | |
| Day 1461: Serotype O6A | 538.7 (374.0 to 775.8) | 921.4 (200.1 to 4243.2) | | |
| Day 366: Serotype O15 | 1062.4 (770.4 to 1465.1) | 434.2 (160.1 to 1177.6) | | |
| Day 731: Serotype O15 | 846.5 (606.0 to 1182.4) | 815.5 (170.5 to 3900.1) | | |
| Day 1096: Serotype O15 | 484.3 (355.7 to 659.5) | 527.2 (135.9 to 2045.2) | | |
| Day 1461: Serotype O15 | 600.8 (376.3 to 959.3) | 736.1 (106.0 to 5110.6) | | |
| Day 366: Serotype O16 | 440.9 (304.1 to 639.4) | 113.1 (58.3 to 219.6) | | |
| Day 731: Serotype O16 | 375.6 (263.5 to 535.6) | 140.7 (47.6 to 416.0) | | |

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|-------------------------|---------------------------|---------------------------|--|--|
| Day 1096: Serotype O16 | 265.9 (181.4 to 389.7) | 300.1 (83.5 to 1078.5) | | |
| Day 1461: Serotype O16 | 249.6 (153.5 to 405.7) | 186.2 (37.6 to 921.8) | | |
| Day 366: Serotype O18A | 301.7 (233.4 to 390.1) | 182.8 (71.2 to 469.7) | | |
| Day 731: Serotype O18A | 213.0 (167.6 to 270.7) | 131.8 (9.9999 to 412.7) | | |
| Day 1096: Serotype O18A | 192.9 (143.1 to 260.2) | 90.2 (9.9999 to 373.6) | | |
| Day 1461: Serotype O18A | 324.9 (222.0 to 475.4) | 327.2 (9.9999 to 2698.0) | | |
| Day 366: Serotype O25B | 69.2 (9.9999 to 90.2) | 9.9999 (9.9999 to 9.9999) | | |
| Day 731: Serotype O25B | 9.9999 (9.9999 to 70.4) | 9.9999 (9.9999 to 9.9999) | | |
| Day 1096: Serotype O25B | 9.9999 (9.9999 to 9.9999) | 9.9999 (9.9999 to 9.9999) | | |
| Day 1461: Serotype O25B | 9.9999 (9.9999 to 59.9) | 9.9999 (9.9999 to 74.0) | | |
| Day 366: Serotype O75 | 80.9 (62.2 to 105.2) | 101.5 (40.9 to 251.5) | | |
| Day 731: Serotype O75 | 57.7 (42.3 to 78.7) | 101.5 (39.5 to 260.6) | | |
| Day 1096: Serotype O75 | 83.0 (58.7 to 117.2) | 100.9 (33.3 to 305.4) | | |
| Day 1461: Serotype O75 | 46.6 (32.0 to 67.9) | 117.3 (19.7 to 698.4) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype Specific Antibodies as Measured by MOPA on Days 366, 731, 1096, and 1461

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|-----------------|--|
| End point title | Cohort 1: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype Specific Antibodies as Measured by MOPA on Days 366, 731, 1096, and 1461 ^[53] |
|-----------------|--|

End point description:

GMR of fold changes from baseline for serotype specific antibodies as measured by MOPA on Days 366, 731, 1096, 1461 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B and O75 were determined in serum from collected blood samples by MOPA. GMR of fold change from baseline was calculated as the ratio of GMTs on Days 366, 731, 1096, 1461 and pre-vaccination (on Day 1). Data was planned to be analyzed for specified arms only. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (number of participants analyzed) signifies participants evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Days 366, 731, 1096, 1461

Notes:

[53] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: High Dose ExPEC10V | Cohort 1: Prevnar 13 | | |
|--|------------------------------|------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 100 | 51 | | |
| Units: ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Day 366: Serotype O1A | 0.90 (0.738 to 1.110) | 0.62 (0.401 to 0.963) | | |
| Day 731: Serotype O1A | 0.71 (0.591 to 0.865) | 0.91 (0.401 to 2.088) | | |
| Day 1096: Serotype O1A | 0.80 (0.665 to 0.953) | 0.69 (0.325 to 1.459) | | |
| Day 1461: Serotype O1A | 0.98 (0.781 to 1.225) | 0.64 (0.146 to 2.786) | | |
| Day 366: Serotype O2 | 5.05 (3.601 to 7.072) | 0.84 (0.437 to 1.604) | | |
| Day 731: Serotype O2 | 1.53 (1.131 to 2.057) | 0.93 (0.410 to 2.095) | | |
| Day 1096: Serotype O2 | 2.63 (1.932 to 3.574) | 0.76 (0.513 to 1.140) | | |
| Day 1461: Serotype O2 | 2.13 (1.386 to 3.274) | 0.96 (0.398 to 2.313) | | |
| Day 366: Serotype O4 | 1.67 (1.343 to 2.080) | 1.23 (0.367 to 4.130) | | |
| Day 731: Serotype O4 | 1.62 (1.313 to 1.997) | 2.04 (0.672 to 6.185) | | |
| Day 1096: Serotype O4 | 1.62 (1.345 to 1.947) | 2.12 (0.330 to 13.573) | | |
| Day 1461: Serotype O4 | 1.43 (1.087 to 1.880) | 1.42 (0.041 to 49.404) | | |
| Day 366: Serotype O6A | 1.19 (0.954 to 1.475) | 0.59 (0.317 to 1.083) | | |
| Day 731: Serotype O6A | 0.84 (0.689 to 1.018) | 0.91 (0.458 to 1.808) | | |
| Day 1096: Serotype O6A | 0.91 (0.711 to 1.160) | 1.47 (0.337 to 6.398) | | |
| Day 1461: Serotype O6A | 1.00 (0.761 to 1.319) | 2.59 (0.139 to 48.195) | | |
| Day 366: Serotype O15 | 2.86 (2.140 to 3.825) | 0.95 (0.594 to 1.522) | | |
| Day 731: Serotype O15 | 2.06 (1.549 to 2.737) | 1.81 (0.904 to 3.610) | | |
| Day 1096: Serotype O15 | 1.23 (0.887 to 1.707) | 0.97 (0.331 to 2.850) | | |
| Day 1461: Serotype O15 | 1.79 (1.164 to 2.753) | 0.87 (0.320 to 2.343) | | |
| Day 366: Serotype O16 | 3.84 (2.861 to 5.155) | 0.99 (0.495 to 1.962) | | |
| Day 731: Serotype O16 | 3.45 (2.618 to 4.534) | 1.13 (0.631 to 2.031) | | |
| Day 1096: Serotype O16 | 2.39 (1.796 to 3.171) | 1.80 (0.891 to 3.618) | | |

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|-------------------------|-----------------------|-----------------------|--|--|
| Day 1461: Serotype O16 | 2.53 (1.726 to 3.719) | 1.31 (0.419 to 4.085) | | |
| Day 366: Serotype O18A | 1.27 (1.008 to 1.601) | 0.93 (0.464 to 1.861) | | |
| Day 731: Serotype O18A | 0.86 (0.695 to 1.064) | 0.78 (0.516 to 1.181) | | |
| Day 1096: Serotype O18A | 0.78 (0.647 to 0.949) | 0.57 (0.365 to 0.901) | | |
| Day 1461: Serotype O18A | 1.21 (0.979 to 1.491) | 1.03 (0.422 to 2.519) | | |
| Day 366: Serotype O25B | 1.39 (1.188 to 1.630) | 1.08 (0.906 to 1.276) | | |
| Day 731: Serotype O25B | 1.19 (0.999 to 1.428) | 1.08 (0.894 to 1.308) | | |
| Day 1096: Serotype O25B | 0.99 (0.918 to 1.070) | 1.00 (0.996 to 1.010) | | |
| Day 1461: Serotype O25B | 1.05 (0.921 to 1.185) | 1.05 (0.896 to 1.235) | | |
| Day 366: Serotype O75 | 1.43 (1.160 to 1.772) | 1.20 (0.496 to 2.878) | | |
| Day 731: Serotype O75 | 1.12 (0.886 to 1.408) | 1.17 (0.457 to 2.982) | | |
| Day 1096: Serotype O75 | 1.57 (1.159 to 2.117) | 0.92 (0.338 to 2.479) | | |
| Day 1461: Serotype O75 | 1.13 (0.875 to 1.462) | 1.11 (0.189 to 6.553) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 1: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by MOPA on Days 366, 731, 1096, and 1461

| | |
|-----------------|---|
| End point title | Cohort 1: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by MOPA on Days 366, 731, 1096, and 1461 ^[54] |
|-----------------|---|

End point description:

Percentage of participants with a ≥ 2 -fold and ≥ 4 -fold increase from baseline in serotype specific serum antibody titers as measured by MOPA on Days 366, 731, 1096, 1461 was reported. The fold (≥ 2 -fold and ≥ 4 -fold) increase from baseline to Days 366, 731, 1096, and 1461 for the serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B, and O75 was calculated as the ratio of titer values of serum antibody on Days 366, 731, 1096, 1461 and pre-vaccination (on day 1) that is, Day 366/Day 1, 731/Day 1, 1096/Day 1, 1461/Day 1. Data was planned to be analyzed for specified arms only. PPI analysis set was analyzed. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (number of participants analyzed) signifies participants evaluable for this endpoint and "n" (number analyzed) signifies those participants who were evaluable at specified categories.

| | |
|----------------|-----------|
| End point type | Secondary |
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End point timeframe:

Baseline (Day 1, pre-vaccination) and Days 366, 731, 1096, and 1461

Notes:

[54] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 1: High Dose ExPEC10V | Cohort 1: Prevna 13 | | |
|---|------------------------------|-----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 71 | 39 | | |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Day 366: O1A: >=2fold increase (n=71, 39) | 8.7 (3.26 to 17.97) | 0.0 (0.00 to 36.94) | | |
| Day 731: O1A: >=2 Fold Increase (n=62, 35) | 6.8 (1.88 to 16.46) | 14.3 (0.36 to 57.87) | | |
| Day 1096: O1A: >=2Fold Increase(n=57, 32) | 10.9 (4.11 to 22.25) | 0.0 (0.00 to 45.93) | | |
| Day 1461: O1A: >=2 Fold Increase(n=36, 17) | 17.1 (6.56 to 33.65) | 0.0 (0.00 to 60.24) | | |
| Day 366: O1A: >=4 Fold Increase(n=71, 39) | 7.2 (2.39 to 16.11) | 0.0 (0.00 to 36.94) | | |
| Day 731: O1A: >=4 Fold Increase (n=71, 39) | 1.7 (0.04 to 9.09) | 0.0 (0.00 to 40.96) | | |
| Day 1096: O1A: >=4 Fold Increase (n=71,39) | 0.0 (0.00 to 6.49) | 0.0 (0.00 to 45.93) | | |
| Day 1461: O1A: >=4 Fold Increase(n=71,39) | 0.0 (0.00 to 10.00) | 0.0 (0.00 to 60.24) | | |
| Day 366: O2: >=2 Fold Increase(n=71,39) | 69.6 (57.31 to 80.08) | 12.5 (0.32 to 52.65) | | |
| Day 731: O2: >=2Fold Increase (n=71,39) | 31.0 (19.54 to 44.54) | 28.6 (3.67 to 70.96) | | |
| Day 1096: O2: >=2 Fold Increase(n=71,39) | 52.7 (38.80 to 66.35) | 0.0 (0.00 to 45.93) | | |
| Day 1461: O2: >= 2 Fold Increase (n=71,39) | 51.4 (33.99 to 68.62) | 0.0 (0.00 to 60.24) | | |
| Day 366: O2: >= 4 Fold Increase (n=71,39) | 52.2 (39.80 to 64.35) | 0.0 (0.00 to 36.94) | | |
| Day 731: O2: >= 4 Fold Increase (n=71,39) | 15.5 (7.35 to 27.42) | 0.0 (0.00 to 40.96) | | |
| Day 1096: O2: >= 4 Fold Increase (n=71,39) | 32.7 (20.68 to 46.71) | 0.0 (0.00 to 45.93) | | |
| Day 1461: O2: >= 4 Fold Increase (n=71,39) | 31.4 (16.85 to 49.29) | 0.0 (0.00 to 60.24) | | |
| Day 366: O4: >= 2 Fold Increase (n=71,39) | 40.6 (28.91 to 53.08) | 37.5 (8.52 to 75.51) | | |
| Day 731: O4: >= 2 Fold Increase (n=71,39) | 35.6 (23.55 to 49.13) | 71.4 (29.04 to 96.33) | | |
| Day 1096: O4: >= 2 Fold Increase (n=71,39) | 38.2 (25.41 to 52.27) | 66.7 (22.28 to 95.67) | | |
| Day 1461: O4: >= 2 Fold Increase (n=71,39) | 28.6 (14.64 to 46.30) | 50.0 (6.76 to 93.24) | | |
| Day 366: O4: >= 4 Fold Increase (n=71,39) | 21.7 (12.71 to 33.31) | 12.5 (0.32 to 52.65) | | |
| Day 731: O4: >= 4 Fold Increase (n=71,39) | 15.3 (7.22 to 26.99) | 28.6 (3.67 to 70.96) | | |
| Day 1096: O4: = 4 Fold Increase (n=71,39) | 10.9 (4.11 to 22.25) | 33.3 (4.33 to 77.72) | | |
| Day 1461: O4: >= 4 Fold Increase (n=71,39) | 8.6 (1.80 to 23.06) | 50.0 (6.76 to 93.24) | | |
| Day 366: O6A: >= 2 Fold Increase (n=71,39) | 24.6 (15.05 to 36.49) | 0.0 (0.00 to 36.94) | | |
| Day 731: O6A: >= 2 Fold Increase (n=71,39) | 8.5 (2.81 to 18.68) | 14.3 (0.36 to 57.87) | | |
| Day 1096: O6A: >= 2 Fold Increase (n=71,39) | 14.5 (6.50 to 26.66) | 16.7 (0.42 to 64.12) | | |

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| Day 1461: O6A: >= 2 Fold Increase (n=71,39) | 14.3 (4.81 to 30.26) | 25.0 (0.63 to 80.59) | | |
| Day 366: O6A: >= 4 Fold Increase (n=71,39) | 11.6 (5.14 to 21.57) | 0.0 (0.00 to 36.94) | | |
| Day 731: O6A: >= 4 Fold Increase (n=71,39) | 5.1 (1.06 to 14.15) | 0.0 (0.00 to 40.96) | | |
| Day 1096: O6A: >= 4 Fold Increase (n=71,39) | 7.3 (2.02 to 17.59) | 16.7 (0.42 to 64.12) | | |
| Day 1461: O6A: >= 4 Fold Increase (n=71,39) | 8.6 (1.80 to 23.06) | 25.0 (0.63 to 80.59) | | |
| Day 366: O15: >= 2 Fold Increase (n=71,39) | 55.1 (42.62 to 67.08) | 0.0 (0.00 to 36.94) | | |
| Day 731: O15: >= 4 Fold Increase (n=71,39) | 23.7 (13.62 to 36.59) | 28.6 (3.67 to 70.96) | | |
| Day 1096: O15: >= 4 Fold Increase (n=71,39) | 20.0 (10.43 to 32.97) | 0.0 (0.00 to 45.93) | | |
| Day 1461: O15: >= 4 Fold Increase (n=71,39) | 25.7 (12.49 to 43.26) | 0.0 (0.00 to 99999) | | |
| Day 366: O16: >= 2 Fold Increase (n=71,39) | 64.7 (52.17 to 75.92) | 37.5 (8.52 to 75.51) | | |
| Day 731: O16: >= 2 Fold Increase (n=71,39) | 69.0 (55.46 to 80.46) | 14.3 (0.36 to 57.87) | | |
| Day 1096: O16: >= 2 Fold Increase (n=71,39) | 55.6 (41.40 to 69.08) | 50.0 (11.81 to 88.19) | | |
| Day 1461: O16: >= 2 Fold Increase (n=71,39) | 54.3 (36.65 to 71.17) | 25.0 (0.63 to 80.59) | | |
| Day 366: O16: >= 4 Fold Increase (n=71,39) | 47.1 (34.83 to 59.55) | 0.0 (0.00 to 36.94) | | |
| Day 731: O16: >= 4 Fold Increase (n=71,39) | 44.8 (31.74 to 58.46) | 0.0 (0.00 to 40.96) | | |
| Day 1096: O16: >= 4 Fold Increase (n=71,39) | 31.5 (19.52 to 45.55) | 0.0 (0.00 to 45.93) | | |
| Day 1461: O16: >= 4 Fold Increase (n=71,39) | 34.3 (19.13 to 52.21) | 0.0 (0.00 to 60.24) | | |
| Day 366: O18A: >= 2 Fold Increase (n=71,39) | 26.1 (16.25 to 38.06) | 12.5 (0.32 to 52.65) | | |
| Day 731: O18A: >= 2 Fold Increase (n=71,39) | 13.6 (6.04 to 24.98) | 0.0 (0.00 to 40.96) | | |
| Day 1096: O18A: >= 2 Fold Increase (n=71,39) | 5.5 (1.14 to 15.12) | 0.0 (0.00 to 45.93) | | |
| Day 1461: O18A: >= 2 Fold Increase (n=71,39) | 20.0 (8.44 to 36.94) | 0.0 (0.00 to 60.24) | | |
| Day 366: : >= 4 Fold Increase (n=71,39) | 13.0 (6.14 to 23.32) | 0.0 (0.00 to 36.94) | | |
| Day 731: O18A: >= 4 Fold Increase (n=71,39) | 5.1 (1.06 to 14.15) | 0.0 (0.00 to 40.96) | | |
| Day 1096: O18A: >= 4 Fold Increase (n=71,39) | 0.0 (0.00 to 6.49) | 0.0 (0.00 to 45.93) | | |
| Day 1461: O18A: >= 4 Fold Increase (n=71,39) | 5.7 (0.70 to 19.16) | 0.0 (0.00 to 19.16) | | |
| Day 366: O25B: >= 2 Fold Increase (n=71,39) | 16.2 (8.36 to 27.10) | 0.0 (0.00 to 36.94) | | |
| Day 731: O25B: >= 2 Fold Increase (n=71,39) | 12.1 (4.99 to 23.30) | 0.0 (0.00 to 40.96) | | |
| Day 1096: O25B: >= 2 Fold Increase (n=71,39) | 1.9 (0.05 to 9.89) | 0.0 (0.00 to 45.9) | | |
| Day 1461: O25B: >= 2 Fold Increase (n=71,39) | 5.9 (0.72 to 19.68) | 0.0 (0.00 to 60.24) | | |
| Day 366: O25B: >= 4 Fold Increase (n=71,39) | 8.8 (3.31 to 18.22) | 0.0 (0.00 to 36.94) | | |
| Day 731: O25B: >= 4 Fold Increase (n=71,39) | 3.4 (0.42 to 11.91) | 0.0 (0.00 to 40.96) | | |

| | | | | |
|--|-----------------------|----------------------|--|--|
| Day 1096: O25B: ≥ 4 Fold Increase (n=71,39) | 0.0 (0.00 to 6.60) | 0.0 (0.00 to 45.93) | | |
| Day 1461: O25B: ≥ 4 Fold Increase (n=71,39) | 0.0 (0.00 to 10.28) | 0.0 (0.00 to 60.24) | | |
| Day 366: O75: ≥ 2 Fold Increase (n=71,39) | 29.0 (18.69 to 41.16) | 25.0 (3.19 to 65.09) | | |
| Day 731: O75: ≥ 2 Fold Increase (n=71,39) | 22.4 (12.51 to 35.27) | 14.3 (0.36 to 57.87) | | |
| Day 1096: O75: ≥ 2 Fold Increase (n=71,39) | 38.9 (25.92 to 53.12) | 16.7 (0.42 to 64.12) | | |
| Day 1461: O75: ≥ 2 Fold Increase (n=71,39) | 14.3 (4.81 to 30.26) | 25.0 (0.63 to 80.59) | | |
| Day 366: O75: ≥ 4 Fold Increase (n=71,39) | 11.6 (5.14 to 21.57) | 12.5 (0.32 to 52.65) | | |
| Day 731: O75: ≥ 4 Fold Increase (n=71,39) | 12.1 (4.99 to 23.30) | 0.0 (0.00 to 40.96) | | |
| Day 1096: O75: ≥ 4 Fold Increase (n=71,39) | 20.4 (10.63 to 33.53) | 16.7 (0.42 to 64.12) | | |
| Day 1461: O75: ≥ 4 Fold Increase (n=71,39) | 8.6 (1.80 to 23.06) | 25.0 (0.63 to 80.59) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Correlation Between the Multiplex ECL-Based Immunoassay and the MOPA Functional Titers by Serotype on Day 30

| | |
|-----------------|--|
| End point title | Cohort 2: Correlation Between the Multiplex ECL-Based Immunoassay and the MOPA Functional Titers by Serotype on Day 30 ^[55] |
|-----------------|--|

End point description:

Correlation between the multiplex ECL-based immunoassay and the MOPA functional titers by serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B, and O75 on Day 30 was analyzed. Data was planned to be analyzed for specified arms only. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (number of participants analyzed) signifies participants evaluable for this outcome measure and "n" (number analyzed) signifies those participants who were evaluable at specified categories.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Day 30

Notes:

[55] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|----------------------------------|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 69 | | |
| Units: correlation coefficient | | | | |
| number (confidence interval 95%) | | | | |

| | | | | |
|---------------------------|---------------------|----------------------|--|--|
| Serotype O1A (n=258, 69) | 0.35 (0.24 to 0.46) | 0.20 (-0.04 to 0.42) | | |
| Serotype O2 (n=258, 69) | 0.59 (0.50 to 0.66) | 0.47 (0.26 to 0.64) | | |
| Serotype O4 (n=258, 69) | 0.61 (0.53 to 0.68) | 0.20 (-0.03 to 0.42) | | |
| Serotype O6A (n=258, 69) | 0.55 (0.45 to 0.63) | 0.30 (0.07 to 0.50) | | |
| Serotype O15 (n=258, 69) | 0.54 (0.45 to 0.63) | 0.41 (0.20 to 0.59) | | |
| Serotype O16 (n=258, 69) | 0.70 (0.63 to 0.76) | 0.41 (0.19 to 0.59) | | |
| Serotype O18A (n=258, 69) | 0.60 (0.51 to 0.67) | 0.19 (-0.05 to 0.41) | | |
| Serotype O25B (n=258, 69) | 0.66 (0.58 to 0.72) | 0.40 (0.19 to 0.58) | | |
| Serotype O75 (n=257, 68) | 0.56 (0.47 to 0.64) | 0.28 (0.04 to 0.49) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex ECL Based Immunoassay on Days 15 and 181

| | |
|-----------------|---|
| End point title | Cohort 2: Geometric Mean Titers (GMTs) of Serotype-specific Total Immunoglobulin G (IgG) Serum Antibodies as Measured by Multiplex ECL Based Immunoassay on Days 15 and 181 ^[56] |
|-----------------|---|

End point description:

GMTs of serotype-specific total IgG serum antibodies as measured by ECL based immunoassay were reported. GMTs for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 and EPA were determined in serum from collected blood samples. Data was planned to be analyzed for specified arms only. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (number of participants analyzed) signifies participants evaluable for this outcome measure and "n" (number analyzed) signifies those participants who were evaluable at specified categories. 9999.9 signifies lower limit of 95% CI could not be calculated as values were below lower limit of quantification (LLOQ), that is, O1A: 69149, O2: 65287, O4: 67356, O6A: 150748, O8: 72196, O15: 66910, O16: 71586, O18A: 70519, O25B: 61990, O75: 133019, and EPA: 66165.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

At Days 15 and 181

Notes:

[56] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|----------------------------------|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 256 | 131 | | |
| Units: titers | | | | |
| number (confidence interval 95%) | | | | |

| | | | | |
|-------------------------------------|---------------------------------------|---------------------------------------|--|--|
| Serotype O1A (n=253, 131): Day 15 | 6440111.0 (5964513.8 to 6953631.4) | 1683620.1 (1434083.1 to 1976577.8) | | |
| Serotype O2 (n=253, 131): Day 15 | 5984689.5 (5506341.8 to 6504592.4) | 758680.9 (637710.3 to 902599.0) | | |
| Serotype O4 (n=253, 131): Day 15 | 3674695.0 (3268908.7 to 4130853.6) | 752878.3 (648044.1 to 874671.5) | | |
| Serotype O6A (n=253, 131): Day 15 | 5549559.4 (5061238.2 to 6084995.1) | 1864516.2 (1602306.3 to 2169635.5) | | |
| Serotype O8 (n=253, 131): Day 15 | 6259628.9 (5787049.2 to 6770800.1) | 2402212.7 (2080311.6 to 2773923.8) | | |
| Serotype O15 (n=253, 131): Day 15 | 5820591.1 (5382542.2 to 6294289.8) | 1196527.5 (1020092.0 to 1403479.3) | | |
| Serotype O16 (n=253, 131): Day 15 | 5328787.2 (4876101.2 to 5823499.4) | 1094722.5 (967329.6 to 1238892.4) | | |
| Serotype O18A (n=253, 131): Day 15 | 4224096.2 (3810089.9 to 4683088.6) | 1343124.1 (1178653.4 to 1530545.3) | | |
| Serotype O25B (n=253, 131): Day 15 | 2205580.7 (1907527.9 to 2550204.4) | 369020.0 (309515.7 to 439964.0) | | |
| Serotype O75 (n=253, 131): Day 15 | 3879088.3 (3534225.0 to 4257602.7) | 1525428.5 (1313220.7 to 1771927.8) | | |
| Serotype EPA: (n=253, 131): Day 15 | 764611.5 (606266.0 to 964314.1) | 76119.8 (9999.9 to 92444.3) | | |
| Serotype O1A (n=255, 122): Day 181 | 5181579.3 (4717321.1 to 5691527.8) | 1363698.1 (1134292.4 to 1639500.3) | | |
| Serotype O2 (n=256, 123): Day 181 | 5104290.1 (4630408.3 to 5626669.7) | 772833.5 (647611.4 to 922268.6) | | |
| Serotype O4 (n=255, 123): Day 181 | 2464185.1 (2180166.2 to 2785204.2) | 748466.8 (626770.4 to 893792.2) | | |
| Serotype O6A (n=255, 123): Day 181 | 4237338.6 (3839748.2 to 4676097.9) | 1377697.3 (1156472.5 to 1641240.8) | | |
| Serotype O8 (n=256, 123): Day 181 | 5341568.9 (4901755.3 to 5820845.0) | 2347175.9 (2014621.2 to 2734625.6) | | |
| Serotype O15 (n=255, 123): Day 181 | 4651707.1 (4246266.4 to 5095859.9) | 1212443.2 (1022590.8 to 1437543.2) | | |
| Serotype O16 (n=253, 131): Day 181 | 4002647.6 (3633889.3 to 4408826.6) | 974253.6 (851675.7 to 1114473.6) | | |
| Serotype O18A (n=255, 123): Day 181 | 3510981.8 (3167417.1 to 3891812.4) | 1440992.4 (1251837.9 to 1658728.5) | | |
| Serotype O25B (n=255, 123): Day 181 | 1448059.1 (1242167.0 to 1688078.3) | 338325.5 (276179.7 to 414455.2) | | |
| Serotype O75 (n=256, 123): Day 181 | 3483252.0 (3157048.6 to 3843160.4) | 1605445.2 (1367665.3 to 1884565.2) | | |

| | | | | |
|-------------------------------------|---------------------------------------|-----------------------------------|--|--|
| Serotype EPA: (n=256, 123): Day 181 | 415564.1 (335178.0 to 515229.3) | 71976.3 (9999.9 to 86879.0) | | |
|-------------------------------------|---------------------------------------|-----------------------------------|--|--|

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes from Baseline for Serotype-specific Antibodies Measured by Multiplex ECL Based Immunoassay on Days 15 and 181

| | |
|-----------------|--|
| End point title | Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes from Baseline for Serotype-specific Antibodies Measured by Multiplex ECL Based Immunoassay on Days 15 and 181 ^[57] |
|-----------------|--|

End point description:

GMR of fold changes from baseline for serotype specific antibodies as measured by multiplex ECL based immunoassay on Days 15 and 181 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, and O75 were determined in serum from collected blood samples by ECL based immunoassay. GMR of fold change from baseline was calculated as the ratio of GMTs on Days 15 and 181 and pre-vaccination (on Day 1). PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (number of participants analyzed) signifies participants evaluable for this outcome measure and "n" (number analyzed) signifies those participants who were evaluable at specified categories.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Baseline (Day 1, pre-vaccination), Days 15 and 181

Notes:

[57] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|--|------------------------------------|-----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 131 | | |
| Units: ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A (n=253, 131): Day 15 | 4.40 (3.932 to 4.928) | 0.99 (0.967 to 1.023) | | |
| Serotype O2 (n=253, 131): Day 15 | 7.96 (7.052 to 8.987) | 0.99 (0.933 to 1.057) | | |
| Serotype O4 (n=253, 131): Day 15 | 5.45 (4.825 to 6.146) | 1.02 (0.988 to 1.063) | | |
| Serotype O6A (n=253, 131): Day 15 | 3.89 (3.518 to 4.298) | 1.03 (0.989 to 1.070) | | |
| Serotype O8 (n=253, 131): Day 15 | 2.89 (2.619 to 3.194) | 1.03 (0.992 to 1.072) | | |
| Serotype O15 (n=253, 131): Day 15 | 4.93 (4.420 to 5.505) | 1.02 (0.976 to 1.070) | | |
| Serotype O16 (n=253, 131): Day 15 | 5.14 (4.615 to 5.715) | 1.03 (0.984 to 1.078) | | |

| | | | | |
|-------------------------------------|-----------------------|-----------------------|--|--|
| Serotype O18A (n=253, 131): Day 15 | 3.63 (3.266 to 4.031) | 1.06 (1.023 to 1.093) | | |
| Serotype O25B (n=253, 131): Day 15 | 5.80 (4.990 to 6.748) | 1.01 (0.963 to 1.068) | | |
| Serotype O75 (n=253, 131): Day 15 | 2.42 (2.217 to 2.644) | 1.02 (0.977 to 1.071) | | |
| Serotype O1A (n=258, 123): Day 181 | 3.54 (3.186 to 3.937) | 0.85 (0.778 to 0.930) | | |
| Serotype O2 (n=258, 123): Day 181 | 6.79 (6.020 to 7.649) | 1.10 (0.964 to 1.252) | | |
| Serotype O4 (n=258, 123): Day 181 | 3.68 (3.284 to 4.116) | 1.02 (0.948 to 1.105) | | |
| Serotype O6A (n=258, 123): Day 181 | 2.88 (2.569 to 3.222) | 0.78 (0.678 to 0.894) | | |
| Serotype O8 (n=258, 123): Day 181 | 2.45 (2.239 to 2.681) | 1.06 (1.000 to 1.130) | | |
| Serotype O15 (n=258, 123): Day 181 | 4.08 (3.692 to 4.514) | 1.08 (1.016 to 1.150) | | |
| Serotype O16 (n=258, 131): Day 15 | 3.98 (3.605 to 4.385) | 0.92 (0.859 to 0.982) | | |
| Serotype O18A (n=258, 123): Day 181 | 2.91 (2.657 to 3.179) | 1.16 (1.088 to 1.234) | | |
| Serotype O25B (n=258, 123): Day 181 | 3.73 (3.237 to 4.300) | 0.95 (0.814 to 1.102) | | |
| Serotype O75 (n=258, 123): Day 181 | 2.14 (1.983 to 2.307) | 1.11 (1.029 to 1.196) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Percentage of Participants With a \geq 2-Fold Increase in Serotype-specific Serum Antibody Titers Measured by Multiplex ECL Based Immunoassay on Days 15 and 181

| | |
|-----------------|--|
| End point title | Cohort 2: Percentage of Participants With a \geq 2-Fold Increase in Serotype-specific Serum Antibody Titers Measured by Multiplex ECL Based Immunoassay on Days 15 and 181 ^[58] |
|-----------------|--|

End point description:

Percentage of participants with a \geq 2-fold increase from baseline in serotype specific serum antibody titers as measured by multiplex ECL based immunoassay on Days 15 and 181 were reported. The fold (\geq 2-fold increase from baseline to Days 15 and 181) for the serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, and O75 was calculated as the ratio of titer values of serum antibody on Days 15 and 181 and pre-vaccination (on Day 1 that is Day 15/Day 1 and Day 181/Day 1). PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (number of participants analyzed) signifies participants evaluable for this outcome measure and "n" (number analyzed) signifies those participants who were evaluable at specified categories.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Baseline (Day 1, pre-vaccination), Days 15 and 181

Notes:

[58] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|-------------------------------------|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 131 | | |
| Units: Percentage of Participants | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A (n=253, 131): Day 15 | 76.3 (70.55 to 81.39) | 0 (0 to 2.78) | | |
| Serotype O2 (n=253, 131): Day 15 | 88.9 (84.40 to 92.52) | 0.8 (0.02 to 4.18) | | |
| Serotype O4 (n=253, 131): Day 15 | 81.8 (76.50 to 86.37) | 1.5 (0.19 to 5.41) | | |
| Serotype O6A (n=253, 131): Day 15 | 73.9 (68.04 to 79.21) | 0.8 (0.02 to 4.18) | | |
| Serotype O8 (n=253, 131): Day 15 | 62.1 (55.77 to 68.06) | 1.5 (0.19 to 5.41) | | |
| Serotype O15 (n=253, 131): Day 15 | 82.2 (76.93 to 86.72) | 0.8 (0.02 to 4.18) | | |
| Serotype O16 (n=253, 131): Day 15 | 86.2 (81.29 to 90.17) | 0.8 (0.02 to 4.18) | | |
| Serotype O18A (n=253, 131): Day 15 | 69.2 (63.08 to 74.80) | 0.8 (0.02 to 4.18) | | |
| Serotype O25B (n=253, 131): Day 15 | 77.1 (71.40 to 82.11) | 0.8 (0.02 to 4.18) | | |
| Serotype O75 (n=253, 131): Day 15 | 52.6 (46.22 to 58.86) | 1.5 (0.19 to 5.41) | | |
| Serotype O1A (n=258, 123): Day 181 | 71.4 (65.40 to 76.84) | 2.5 (0.51 to 7.02) | | |
| Serotype O2 (n=258, 123): Day 181 | 86.7 (81.94 to 90.62) | 12.2 (6.99 to 19.32) | | |
| Serotype O4 (n=258, 123): Day 181 | 69.0 (62.95 to 74.64) | 3.3 (0.89 to 8.12) | | |
| Serotype O6A (n=258, 123): Day 181 | 64.3 (58.10 to 70.19) | 6.5 (2.85 to 12.41) | | |
| Serotype O8 (n=258, 123): Day 181 | 55.9 (49.54 to 62.04) | 3.3 (0.89 to 8.12) | | |
| Serotype O15 (n=258, 123): Day 181 | 79.6 (74.13 to 84.38) | 1.6 (0.20 to 5.75) | | |
| Serotype O16 (n=258, 131): Day 15 | 78.8 (73.29 to 83.67) | 0 (0 to 2.95) | | |
| Serotype O18A (n=258, 123): Day 181 | 62.4 (56.09 to 68.32) | 2.4 (0.51 to 6.96) | | |
| Serotype O25B (n=258, 123): Day 181 | 65.5 (59.30 to 71.31) | 10.6 (5.75 to 17.40) | | |
| Serotype O75 (n=258, 123): Day 181 | 50.8 (44.48 to 57.06) | 4.9 (1.81 to 10.32) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Percentage of Participants With a ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by Multiplex ECL Based Immunoassay on Days 15 and 181

| | |
|-----------------|--|
| End point title | Cohort 2: Percentage of Participants With a ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by |
|-----------------|--|

End point description:

Percentage of participants with a ≥ 4 -fold increase from baseline in serotype specific serum antibody titers as measured by multiplex ECL based immunoassay on Days 15 and 181 were reported. The fold (≥ 4 -fold increase from baseline to Days 15 and 181) for the serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, and O75 was calculated as the ratio of titer values of serum antibody on Days 15 and 181 and pre-vaccination (on Day 1 that is Day 15/Day 1 and Day 181/Day 1). PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding participants with major protocol deviations expected to impact the immunogenicity outcomes. Here, "N" (number of participants analyzed) signifies participants evaluable for this outcome measure and "n" (number analyzed) signifies those participants who were evaluable at specified categories.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

| |
|--|
| Baseline (Day 1, pre-vaccination), Days 15 and 181 |
|--|

Notes:

[59] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|------------------------------------|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 131 | | |
| Units: Percentage of Participants | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A (n=253, 131): Day 15 | 54.5 (48.19 to 60.79) | 0 (0 to 2.78) | | |
| Serotype O2 (n=253, 131): Day 15 | 77.9 (72.24 to 82.83) | 0.8 (0.02 to 4.18) | | |
| Serotype O4 (n=253, 131): Day 15 | 60.9 (54.56 to 66.92) | 0.8 (0.02 to 4.18) | | |
| Serotype O6A (n=253, 131): Day 15 | 49.8 (43.48 to 56.13) | 0 (0 to 2.78) | | |
| Serotype O8 (n=253, 131): Day 15 | 36.4 (30.43 to 42.62) | 1.5 (0.19 to 5.41) | | |
| Serotype O15 (n=253, 131): Day 15 | 58.9 (52.56 to 65.02) | 0.8 (0.02 to 4.18) | | |
| Serotype O16 (n=253, 131): Day 15 | 62.5 (56.17 to 68.44) | 0.8 (0.02 to 4.18) | | |
| Serotype O18A (n=253, 131): Day 15 | 47.4 (41.14 to 53.78) | 0 (0 to 2.78) | | |
| Serotype O25B (n=253, 131): Day 15 | 58.1 (51.76 to 64.25) | 0.8 (0.02 to 4.18) | | |
| Serotype O75 (n=253, 131): Day 15 | 24.5 (19.34 to 30.28) | 1.5 (0.19 to 5.41) | | |
| Serotype O1A (n=258, 123): Day 181 | 48.2 (41.96 to 54.55) | 0 (0 to 2.98) | | |
| Serotype O2 (n=258, 123): Day 181 | 69.9 (63.90 to 75.47) | 7.3 (3.40 to 13.44) | | |
| Serotype O4 (n=258, 123): Day 181 | 43.5 (37.35 to 49.86) | 2.4 (0.51 to 6.96) | | |
| Serotype O6A (n=258, 123): Day 181 | 39.2 (33.18 to 45.50) | 0.8 (0.02 to 4.45) | | |
| Serotype O8 (n=258, 123): Day 181 | 27.3 (21.98 to 33.24) | 0.8 (0.02 to 4.45) | | |
| Serotype O15 (n=258, 123): Day 181 | 52.5 (46.23 to 58.81) | 0.8 (0.02 to 4.45) | | |
| Serotype O16 (n=258, 131): Day 181 | 49.8 (43.50 to 56.11) | 0 (0 to 2.95) | | |

| | | | | |
|-------------------------------------|-----------------------|---------------------|--|--|
| Serotype O18A (n=258, 123): Day 181 | 34.9 (29.06 to 41.10) | 0 (0 to 2.95) | | |
| Serotype O25B (n=258, 123): Day 181 | 44.3 (38.12 to 50.64) | 6.5 (2.85 to 12.41) | | |
| Serotype O75 (n=258, 123): Day 181 | 16.0 (11.74 to 21.09) | 3.3 (0.89 to 8.12) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Geometric Mean Titers (GMTs) of Serotype-specific Antibodies Against Specified Antigens Measured by MOPA on Day 181

| | |
|-----------------|---|
| End point title | Cohort 2: Geometric Mean Titers (GMTs) of Serotype-specific Antibodies Against Specified Antigens Measured by MOPA on Day 181 ^[60] |
|-----------------|---|

End point description:

GMTs of serotype-specific total IgG serum antibodies as measured by MOPA were reported. Serotypes: O1A, O2, O4, O6A, O15, O16, O18A, O25B, and O75 were determined in serum from collected blood samples. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding those samples with major protocol deviations expected to impact the immunogenicity outcomes. Participants in this analysis set had to have at least a baseline antibody titer measurement. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint. 9.9999 signifies geometric mean and lower limit of 95% CI could not be calculated as values were below LLOQ, that is, O1A: 33, O2: 42, O4: 12, O6A: 62, O15: 75, O16: 17, O18A: 44, O25B: 58, O75: 14.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

At Day 181

Notes:

[60] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|--|------------------------------------|------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 123 | | |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A | 411.3 (355.6 to 475.7) | 334.1 (270.8 to 412.3) | | |
| Serotype O2 | 1684.8 (1413.3 to 2008.5) | 352.1 (284.7 to 435.5) | | |
| Serotype O4 | 591.2 (512.8 to 681.6) | 204.3 (173.2 to 241.0) | | |
| Serotype O6A | 747.6 (643.4 to 868.6) | 379.7 (291.9 to 494.0) | | |
| Serotype O15 | 1756.2 (1502.7 to 2052.5) | 469.6 (372.5 to 592.2) | | |

| | | | | |
|---------------|-------------------------|--------------------------|--|--|
| Serotype O16 | 890.9 (758.7 to 1046.1) | 144.5 (115.9 to 180.1) | | |
| Serotype O18A | 423.9 (370.3 to 485.2) | 199.7 (158.7 to 251.2) | | |
| Serotype O25B | 103.1 (88.9 to 119.6) | 9.9999 (-9.9999 to 59.1) | | |
| Serotype O75 | 160.4 (138.8 to 185.3) | 66.6 (52.9 to 83.8) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by MOPA on Day 181

| | |
|-----------------|---|
| End point title | Cohort 2: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by MOPA on Day 181 ^[61] |
|-----------------|---|

End point description:

Percentage of participants with a ≥ 2 -fold and ≥ 4 -fold increase from baseline in serotype specific serum antibody titers as measured by MOPA on Day 181 was reported. The fold (≥ 2 -fold and ≥ 4 -fold) increase from baseline to Day 181 for the serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B and O75 was calculated as the ratio of titer values of serum antibody on Day 181 and pre-vaccination (on Day 1) that is, Day 181/Day 1. The PPI analysis set was analyzed. Participants in this analysis set had to have at least a baseline antibody titer measurement. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Day 181

Notes:

[61] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|--------------------------------------|------------------------------|-----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 123 | | |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A: ≥ 2 Fold Increase | 22.1 (17.18 to 27.66) | 12.5 (5.88 to 22.41) | | |
| Serotype O1A: ≥ 4 Fold Increase | 8.5 (5.42 to 12.63) | 1.4 (0.04 to 7.50) | | |
| Serotype O2: ≥ 2 Fold Increase | 64.7 (58.56 to 70.55) | 12.5 (5.88 to 22.41) | | |
| Serotype O2: ≥ 4 Fold Increase | 42.6 (36.52 to 48.92) | 2.8 (0.34 to 9.68) | | |
| Serotype O4: ≥ 2 Fold Increase | 61.6 (55.39 to 67.59) | 19.4 (11.06 to 30.47) | | |
| Serotype O4: ≥ 4 Fold Increase | 36.4 (30.55 to 42.63) | 2.8 (0.34 to 9.68) | | |

| | | | | |
|---------------------------------------|-----------------------|-----------------------|--|--|
| Serotype O6A: ≥ 2 Fold Increase | 31.4 (25.78 to 37.44) | 9.7 (4.00 to 19.01) | | |
| Serotype O6A: ≥ 4 Fold Increase | 12.0 (8.31 to 16.62) | 1.4 (0.04 to 7.50) | | |
| Serotype O15: ≥ 2 Fold Increase | 71.7 (65.79 to 77.12) | 23.6 (14.40 to 35.09) | | |
| Serotype O15: ≥ 4 Fold Increase | 51.2 (44.89 to 57.41) | 5.6 (1.53 to 13.62) | | |
| Serotype O16: ≥ 2 Fold Increase | 79.8 (74.42 to 84.57) | 25.4 (13.08 to 33.14) | | |
| Serotype O16: ≥ 4 Fold Increase | 49.6 (43.27 to 55.95) | 0.0 (0.00 to 4.93) | | |
| Serotype O18A: ≥ 2 Fold Increase | 53.5 (47.20 to 59.70) | 16.7 (8.92 to 27.30) | | |
| Serotype O18A: ≥ 4 Fold Increase | 22.9 (17.89 to 28.48) | 2.8 (0.34 to 9.68) | | |
| Serotype O25B: ≥ 2 Fold Increase | 26.0 (20.73 to 31.77) | 4.2 (0.87 to 11.70) | | |
| Serotype O25B: ≥ 4 Fold Increase | 11.6 (7.98 to 16.18) | 1.4 (0.04 to 7.50) | | |
| Serotype O75: ≥ 2 Fold Increase | 55.5 (49.15 to 61.66) | 29.6 (19.33 to 41.59) | | |
| Serotype O75: ≥ 4 Fold Increase | 32.8 (27.09 to 38.93) | 5.6 (1.56 to 13.80) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes from Baseline for Serotype-specific Antibodies Measured by MOPA on Day 181

| | |
|-----------------|---|
| End point title | Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes from Baseline for Serotype-specific Antibodies Measured by MOPA on Day 181 ^[62] |
|-----------------|---|

End point description:

GMR of fold changes from baseline for serotype specific antibodies as measured by MOPA on Day 181 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B and O75 were determined in serum from collected blood samples by MOPA. GMR of fold change from baseline was calculated as the ratio of GMTs on Day 181 and pre-vaccination (on Day 1). The PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding those samples with major protocol deviations expected to impact the immunogenicity outcomes. Participants in this analysis set had to have at least a baseline antibody titer measurement. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Baseline (Day 1, pre-vaccination), Day 181

Notes:

[62] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|---|------------------------------------|--------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 258 | 123 | | |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A | 1.07 (0.948 to 1.201) | 0.80 (0.671 to 0.954) | | |
| Serotype O2 | 3.94 (3.285 to 4.727) | 0.80 (0.658 to 0.983) | | |
| Serotype O4 | 3.16 (2.716 to 3.686) | 1.15 (0.988 to 1.349) | | |
| Serotype O6A | 1.41 (1.244 to 1.599) | 0.80 (0.680 to 0.938) | | |
| Serotype O15 | 4.19 (3.568 to 4.919) | 1.13 (0.885 to 1.431) | | |
| Serotype O16 | 6.63 (5.601 to 7.844) | 1.21 (0.994 to 1.483) | | |
| Serotype O18A | 2.30 (2.008 to 2.641) | 1.03 (0.875 to 1.223) | | |
| Serotype O25B | 1.42 (1.277 to 1.571) | 0.94 (0.857 to 1.038) | | |
| Serotype O75 | 2.56 (2.246 to 2.920) | 1.18 (0.965 to 1.442) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Number of Participants With Serious Adverse Events (SAEs) Related to Study Vaccine or Study Procedure From Day 182 up to End of Study (Day 1826)

| | |
|-----------------|--|
| End point title | Cohort 2: Number of Participants With Serious Adverse Events (SAEs) Related to Study Vaccine or Study Procedure From Day 182 up to End of Study (Day 1826) ^[63] |
|-----------------|--|

End point description:

An AE is any untoward medical occurrence in a participant participating in a clinical study that does not necessarily have a causal relationship with the pharmaceutical/biological agent under study. An SAE is an AE resulting in any of the following outcomes or deemed significant for any other reason: death; initial or prolonged inpatient hospitalization; life- threatening experience (immediate risk of dying); persistent or significant disability/incapacity; congenital anomaly/birth defect; suspected transmission of any infectious agent via a medicinal product or medically important. The FAS included all randomized participants with a vaccine administration documented.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

From Day 182 up to end of study (Day 1826)

Notes:

[63] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|-----------------------------|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 278 | 138 | | |
| Units: Participants | 0 | 0 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Geometric Mean Titers (GMTs) of Serotype-specific Antibodies Against Specified Antigens Measured by Multiplex ECL Based Immunoassay on Day 366

| | |
|-----------------|--|
| End point title | Cohort 2: Geometric Mean Titers (GMTs) of Serotype-specific Antibodies Against Specified Antigens Measured by Multiplex ECL Based Immunoassay on Day 366 ^[64] |
|-----------------|--|

End point description:

GMTs of serotype-specific antibodies as measured by ECL based immunoassay were reported. GMTs for the serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 were determined. The PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding those samples with major protocol deviations expected to impact the immunogenicity outcomes. Participants in this analysis set had to have at least a baseline antibody titer measurement. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

At Day 366

Notes:

[64] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|--|---------------------------------------|---------------------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 255 | 129 | | |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A | 4022674.3 (3621999.8 to 4467672.3) | 1425709.7 (1193504.1 to 1703092.6) | | |
| Serotype O2 | 4539197.6 (4061044.2 to 5073649.6) | 945957.9 (770610.6 to 1161204.5) | | |
| Serotype O4 | 1877926.0 (1662018.9 to 2121880.9) | 781470.1 (645829.6 to 945598.4) | | |
| Serotype O6A | 3366305.0 (3030852.9 to 3738884.7) | 1746191.5 (1476781.0 to 2064750.9) | | |
| Serotype O8 | 4468182.7 (4073515.2 to 4901088.0) | 2612423.8 (2233155.6 to 3056105.0) | | |

| | | | | |
|---------------|---------------------------------------|---------------------------------------|--|--|
| Serotype O15 | 3690523.9 (3327526.1 to 4093120.9) | 1379883.1 (1146231.7 to 1661162.7) | | |
| Serotype O16 | 2732322.4 (2460092.5 to 3034676.8) | 909470.4 (771204.3 to 1072525.6) | | |
| Serotype O18A | 2902883.8 (2610124.6 to 3228479.7) | 1538291.3 (1327257.2 to 1782880.0) | | |
| Serotype 25B | 1010150.2 (874663.8 to 1166623.5) | 344740.3 (281210.9 to 422621.9) | | |
| Serotype O75 | 2675947.8 (2416208.1 to 2963609.2) | 1512970.1 (1293159.3 to 1770144.2) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by Multiplex ECL Based Immunoassay on Day 366

| | |
|-----------------|--|
| End point title | Cohort 2: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by Multiplex ECL Based Immunoassay on Day 366 ^[65] |
|-----------------|--|

End point description:

Percentage of participants with a ≥ 2 -fold and ≥ 4 -fold increase from baseline in serotype specific serum antibody titers as measured by multiplex ECL based immunoassay on Day 366 was reported. The fold (≥ 2 -fold and ≥ 4 -fold) increase from baseline to Day 366 for the serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 was calculated as the ratio of titer values of serum antibodies on Day 366 and pre-vaccination (on day 1) that is, Day 366/ Day 1. The PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding those samples with major protocol deviations expected to impact the immunogenicity outcomes. Participants in this analysis set had to have at least a baseline antibody titer measurement. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Day 366

Notes:

[65] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|--------------------------------------|------------------------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 255 | 129 | | |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A: ≥ 2 Fold Increase | 62.4 (56.09 to 68.32) | 7.0 (3.24 to 12.83) | | |
| Serotype O1A: ≥ 4 Fold Increase | 34.9 (29.06 to 41.10) | 0.0 (0.00 to 2.82) | | |

| | | | | |
|---------------------------------------|-----------------------|-----------------------|--|--|
| Serotype O2: ≥ 2 Fold Increase | 81.6 (76.26 to 86.13) | 18.6 (12.30 to 26.41) | | |
| Serotype O2: ≥ 4 Fold Increase | 66.3 (60.11 to 72.05) | 3.9 (1.27 to 8.81) | | |
| Serotype O4: ≥ 2 Fold Increase | 60.0 (53.70 to 66.06) | 11.6 (6.66 to 18.45) | | |
| Serotype O4: ≥ 4 Fold Increase | 32.5 (26.84 to 38.67) | 3.1 (0.85 to 7.75) | | |
| Serotype O6A: ≥ 2 Fold Increase | 54.7 (48.38 to 60.96) | 2.3 (0.48 to 6.65) | | |
| Serotype O6A: ≥ 4 Fold Increase | 22.0 (17.11 to 27.65) | 0.8 (0.02 to 4.24) | | |
| Serotype O8: ≥ 2 Fold Increase | 51.0 (44.67 to 57.27) | 10.1 (5.48 to 16.62) | | |
| Serotype O8: ≥ 4 Fold Increase | 18.4 (13.87 to 23.74) | 3.1 (0.85 to 7.75) | | |
| Serotype O15: ≥ 2 Fold Increase | 67.8 (61.73 to 73.53) | 13.2 (7.87 to 20.26) | | |
| Serotype O15: ≥ 4 Fold Increase | 36.9 (30.93 to 43.11) | 7.0 (3.24 to 12.83) | | |
| Serotype O16: ≥ 2 Fold Increase | 63.9 (57.70 to 69.82) | 2.3 (0.48 to 6.65) | | |
| Serotype O16: ≥ 4 Fold Increase | 27.5 (22.07 to 33.37) | 0.8 (0.02 to 4.24) | | |
| Serotype O18A: ≥ 2 Fold Increase | 55.3 (48.96 to 61.50) | 11.6 (6.66 to 18.45) | | |
| Serotype O18A: ≥ 4 Fold Increase | 24.3 (19.18 to 30.06) | 0.0 (0.00 to 2.82) | | |
| Serotype O25B: ≥ 2 Fold Increase | 56.9 (50.54 to 63.03) | 6.2 (2.72 to 11.85) | | |
| Serotype O25B: ≥ 4 Fold Increase | 30.6 (24.99 to 36.64) | 2.3 (0.48 to 6.65) | | |
| Serotype O75: ≥ 2 Fold Increase | 33.7 (27.95 to 39.89) | 8.6 (4.37 to 14.86) | | |
| Serotype O75: ≥ 4 Fold Increase | 8.2 (5.17 to 12.31) | 0.8 (0.02 to 4.28) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes from Baseline for Serotype-specific Antibodies Measured by Multiplex ECL Based Immunoassay on Day 366

| | |
|-----------------|--|
| End point title | Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes from Baseline for Serotype-specific Antibodies Measured by Multiplex ECL Based Immunoassay on Day 366 ^[66] |
|-----------------|--|

End point description:

GMR of fold changes from baseline for serotype specific antibodies as measured by multiplex ECL based immunoassay on Day 366 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O8, O15, O16, O18A, O25B, O75 were determined in serum from collected blood samples by ECL based immunoassay. GMR of fold change from baseline was calculated as the ratio of GMTs on Day 366 and pre-vaccination (on Day 1). The PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding those samples with major protocol deviations expected to impact the immunogenicity outcomes. Participants in this analysis set had to have at least a baseline antibody titer measurement. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Baseline (Day 1, pre-vaccination), Day 366

Notes:

[66] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|---|------------------------------------|--------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 255 | 129 | | |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A | 2.77 (2.497 to 3.070) | 0.83 (0.758 to 0.909) | | |
| Serotype O2 | 6.05 (5.330 to 6.878) | 1.21 (1.087 to 1.342) | | |
| Serotype O4 | 2.82 (2.536 to 3.144) | 1.04 (0.951 to 1.139) | | |
| Serotype O6A | 2.31 (2.102 to 2.534) | 0.95 (0.875 to 1.028) | | |
| Serotype O8 | 2.09 (1.915 to 2.277) | 1.10 (1.009 to 1.202) | | |
| Serotype O15 | 3.15 (2.862 to 3.468) | 1.18 (1.064 to 1.312) | | |
| Serotype O16 | 2.63 (2.388 to 2.906) | 0.83 (0.753 to 0.920) | | |
| Serotype O18A | 2.44 (2.248 to 2.658) | 1.19 (1.106 to 1.286) | | |
| Serotype O25B | 2.66 (2.365 to 2.983) | 0.91 (0.830 to 1.003) | | |
| Serotype O75 | 1.68 (1.563 to 1.809) | 1.00 (0.917 to 1.088) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Geometric Mean Titers (GMTs) of Serotype-specific Antibodies Against Specified Antigens Measured by MOPA on Day 366

| | |
|-----------------|---|
| End point title | Cohort 2: Geometric Mean Titers (GMTs) of Serotype-specific Antibodies Against Specified Antigens Measured by MOPA on Day 366 ^[67] |
|-----------------|---|

End point description:

GMTs of serotype-specific antibodies against specified antigens measured by MOPA on Day 366 were reported. GMTs for each antigen serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B, and O75 were determined in serum from collected blood samples. PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding those samples with major protocol deviations expected to impact the immunogenicity outcomes. Participants in this analysis set had to have at least a baseline antibody titer measurement. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint. 99999 signifies that geometric mean and 95% CI could not be calculated as values were below LLOQ, that is, O1A: 33, O2: 42, O4: 12, O6A: 62, O15: 75, O16: 17, O18A: 44, O25B: 58, O75: 14.

| | |
|--|-----------|
| End point type | Secondary |
| End point timeframe: | |
| At Day 366 | |
| Notes: | |
| [67] - 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 data was planned for specified baseline arms only. | |

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|--|------------------------------------|-------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 255 | 129 | | |
| Units: Titer | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A | 376.0 (325.3 to 434.5) | 368.5 (302.4 to 449.1) | | |
| Serotype O2 | 1167.9 (994.6 to 1371.5) | 322.9 (322.9 to 484.5) | | |
| Serotype O4 | 398.1 (347.2 to 456.5) | 191.7 (163.3 to 225.0) | | |
| Serotype O6A | 592.2 (509.2 to 688.9) | 395.4 (302.6 to 516.7) | | |
| Serotype O15 | 1125.8 (958.3 to 1322.7) | 478.8 (377.2 to 607.7) | | |
| Serotype O16 | 557.6 (470.4 to 660.9) | 134.5 (107.8 to 167.8) | | |
| Serotype O18A | 335.1 (291.5 to 385.1) | 211.6 (171.5 to 261.1) | | |
| Serotype 25B | 78.0 (67.6 to 90.0) | 99999 (-99999 to 99999) | | |
| Serotype O75 | 126.5 (109.7 to 145.9) | 78.6 (62.6 to 98.7) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype-specific Antibodies Measured by MOPA on Day 366

| | |
|------------------------|--|
| End point title | Cohort 2: Geometric Mean Ratio (GMR) of Fold Changes From Baseline for Serotype-specific Antibodies Measured by MOPA on Day 366 ^[68] |
| End point description: | GMR of fold changes from baseline for serotype specific antibodies as measured by MOPA on Day 366 were reported. GMR for each antigen serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B and O75 were determined in serum from collected blood samples by MOPA. GMR of fold change from baseline was calculated as the ratio of GMTs on Day 366 and pre-vaccination (on Day 1). The PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding those samples with major protocol deviations expected to impact the immunogenicity outcomes. Participants in this analysis set had to have at least a baseline antibody titer measurement. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint. |
| End point type | Secondary |

End point timeframe:

Baseline (Day 1, pre-vaccination), Day 366

Notes:

[68] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|---|------------------------------------|--------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 255 | 129 | | |
| Units: Ratio | | | | |
| geometric mean (confidence interval 95%) | | | | |
| Serotype O1A | 0.99 (0.880 to 1.104) | 0.84 (0.704 to 1.013) | | |
| Serotype O2 | 2.70 (2.292 to 3.178) | 0.78 (0.653 to 0.931) | | |
| Serotype O4 | 2.14 (1.857 to 2.474) | 1.04 (0.889 to 1.222) | | |
| Serotype O6A | 1.11 (0.987 to 1.259) | 0.84 (0.693 to 1.009) | | |
| Serotype O15 | 2.66 (2.251 to 3.137) | 0.98 (0.736 to 1.314) | | |
| Serotype O16 | 4.06 (3.448 to 4.782) | 0.98 (0.813 to 1.174) | | |
| Serotype O18A | 1.84 (1.612 to 2.097) | 0.97 (0.831 to 1.135) | | |
| Serotype 25B | 1.19 (1.088 to 1.294) | 0.93 (0.822 to 1.060) | | |
| Serotype O75 | 2.09 (1.837 to 2.369) | 1.40 (1.137 to 1.717) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Cohort 2: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by MOPA on Day 366

| | |
|-----------------|---|
| End point title | Cohort 2: Percentage of Participants With a ≥ 2 -Fold and ≥ 4 -Fold Increase in Serotype-specific Serum Antibody Titers Measured by MOPA on Day 366 ^[69] |
|-----------------|---|

End point description:

Percentage of participants with a ≥ 2 -fold and ≥ 4 -fold increase from baseline in serotype specific serum antibody titers as measured by MOPA on Day 366 was reported. The ≥ 2 -fold and ≥ 4 -fold increase from baseline to Day 366 for the serotypes O1A, O2, O4, O6A, O15, O16, O18A, O25B and O75 was calculated as the ratio of titer values of serum antibody on Day 366 and pre-vaccination (on day 1) that is, Day 366/Day 1. The PPI analysis set included all randomized and vaccinated participants, for whom immunogenicity data were available excluding those samples with major protocol deviations expected to impact the immunogenicity outcomes. For serotype O8 functional IgG serum antibodies were not evaluated as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Participants in this analysis set had to have at least a baseline antibody titer measurement. Here, "N" (Number of participants analyzed) signifies participants evaluable for this endpoint.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Baseline (Day 1, pre-vaccination) and Day 366

Notes:

[69] - 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 data was planned for specified baseline arms only.

| End point values | Cohort 2: ExPEC10V High Dose | Cohort 2: Placebo | | |
|---------------------------------------|------------------------------------|-----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 255 | 129 | | |
| Units: Percentage of participants | | | | |
| number (confidence interval 95%) | | | | |
| Serotype O1A: ≥ 2 Fold Increase | 22.6 (17.60 to 28.29) | 12.3 (5.80 to 22.12) | | |
| Serotype O1A: ≥ 4 Fold Increase | 5.6 (3.07 to 9.15) | 2.7 (0.33 to 9.55) | | |
| Serotype O2: ≥ 2 Fold Increase | 54.0 (47.60 to 60.24) | 11.0 (4.85 to 20.46) | | |
| Serotype O2: ≥ 4 Fold Increase | 32.1 (26.42 to 38.29) | 1.4 (0.03 to 7.40) | | |
| Serotype O4: ≥ 2 Fold Increase | 48.0 (41.70 to 54.37) | 11.0 (4.85 to 20.46) | | |
| Serotype O4: ≥ 4 Fold Increase | 23.0 (17.97 to 28.71) | 2.7 (0.33 to 9.55) | | |
| Serotype O6A: ≥ 2 Fold Increase | 25.1 (19.86 to 30.94) | 12.3 (5.80 to 22.12) | | |
| Serotype O6A: ≥ 4 Fold Increase | 9.2 (5.90 to 13.43) | 6.8 (2.26 to 15.26) | | |
| Serotype O15: ≥ 2 Fold Increase | 57.9 (51.58 to 64.10) | 21.9 (13.08 to 33.14) | | |
| Serotype O15: ≥ 4 Fold Increase | 37.3 (31.31 to 43.59) | 6.8 (2.26 to 15.26) | | |
| Serotype O16: ≥ 2 Fold Increase | 67.5 (61.30 to 73.21) | 21.9 (13.08 to 33.14) | | |
| Serotype O16: ≥ 4 Fold Increase | 49.6 (43.27 to 55.95) | 0.0 (0.00 to 4.93) | | |
| Serotype O18A: ≥ 2 Fold Increase | 38.5 (32.45 to 44.80) | 9.9 (4.06 to 19.26) | | |
| Serotype O18A: ≥ 4 Fold Increase | 17.1 (12.63 to 22.29) | 2.8 (0.34 to 9.81) | | |
| Serotype O25B: ≥ 2 Fold Increase | 15.9 (11.59 to 20.98) | 8.2 (3.08 to 17.04) | | |
| Serotype O25B: ≥ 4 Fold Increase | 5.6 (3.07 to 9.15) | 2.7 (0.33 to 9.55) | | |
| Serotype O75: ≥ 2 Fold Increase | 51.6 (45.22 to 57.94) | 40.0 (28.47 to 52.41) | | |
| Serotype O75: ≥ 4 Fold Increase | 24.8 (19.57 to 30.63) | 5.7 (1.58 to 13.99) | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From Day 1 (post vaccination) up to Day 1826

Adverse event reporting additional description:

FAS included all randomized participants with a vaccine administration documented.

| | |
|-----------------|----------------|
| Assessment type | Non-systematic |
|-----------------|----------------|

Dictionary used

| | |
|-----------------|--------|
| Dictionary name | MedDRA |
|-----------------|--------|

| | |
|--------------------|------|
| Dictionary version | 27.1 |
|--------------------|------|

Reporting groups

| | |
|-----------------------|-----------------------------|
| Reporting group title | Cohort 1: Low Dose ExPEC10V |
|-----------------------|-----------------------------|

Reporting group description:

Participants aged greater than or equal to (\geq) 60 to less than or equal to (\leq) 85 years in stable health with or without a history of urinary tract infection (UTI) received a single 0.5 milliliter (mL) intramuscular (IM) injection of ExPEC10V low dose (88 micrograms polysaccharide per milliliter [mcg PS/mL]) on Day 1.

| | |
|-----------------------|--------------------------------|
| Reporting group title | Cohort 1: Medium Dose ExPEC10V |
|-----------------------|--------------------------------|

Reporting group description:

Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC10V medium dose (120 mcg PS/mL) on Day 1.

| | |
|-----------------------|-------------------|
| Reporting group title | Cohort 1: ExPEC4V |
|-----------------------|-------------------|

Reporting group description:

Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC4V 40 mcg PS/mL on Day 1.

| | |
|-----------------------|----------------------|
| Reporting group title | Cohort 1: Prevnar 13 |
|-----------------------|----------------------|

Reporting group description:

Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of Prevnar 13 on Day 1.

| | |
|-----------------------|------------------------------|
| Reporting group title | Cohort 1: High Dose ExPEC10V |
|-----------------------|------------------------------|

Reporting group description:

Participants aged ≥ 60 to ≤ 85 years in stable health with or without a history of UTI received a single 0.5 mL IM injection of ExPEC10V high dose (176 mcg PS/mL) on Day 1.

| | |
|-----------------------|--------------------|
| Reporting group title | Cohort 2: ExPEC10V |
|-----------------------|--------------------|

Reporting group description:

Participants aged ≥ 60 years in stable health with a history of UTI received a single 0.5 mL IM injection of ExPEC10V high dose (176 mcg PS/mL) on Day 1.

| | |
|-----------------------|-------------------|
| Reporting group title | Cohort 2: Placebo |
|-----------------------|-------------------|

Reporting group description:

Participants aged ≥ 60 years in stable health with a history of UTI received a single 0.5 mL IM injection of placebo (matched to ExPEC10V high dose) on Day 1.

| Serious adverse events | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: ExPEC4V |
|---|-----------------------------|--------------------------------|-------------------|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 2 / 104 (1.92%) | 2 / 102 (1.96%) | 0 / 52 (0.00%) |
| number of deaths (all causes) | 0 | 0 | 0 |
| number of deaths resulting from adverse events | 0 | 0 | 0 |

| | | | |
|--|-----------------|-----------------|----------------|
| Injury, poisoning and procedural complications | | | |
| Lumbar Vertebral Fracture | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 | | | |
| Migraine | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |
| General disorders and administration site conditions | | | |
| Non-Cardiac Chest Pain | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |
| Gastrointestinal disorders | | | |
| Abdominal Hernia | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |
| Respiratory, thoracic and mediastinal disorders | | | |
| Pulmonary Embolism | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |
| Renal and urinary disorders | | | |
| Chronic Kidney Disease | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |
| Calculus Urinary | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |

| | | | |
|---|-----------------|-----------------|----------------|
| Nephrolithiasis | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 1 / 102 (0.98%) | 0 / 52 (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 |
| Musculoskeletal and connective tissue disorders | | | |
| Osteoarthritis | | | |
| subjects affected / exposed | 1 / 104 (0.96%) | 0 / 102 (0.00%) | 0 / 52 (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 |
| Intervertebral Disc Protrusion | | | |
| subjects affected / exposed | 1 / 104 (0.96%) | 1 / 102 (0.98%) | 0 / 52 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Infections and infestations | | | |
| Enterococcal Sepsis | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |
| Enterocolitis Infectious | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |
| Pyelonephritis | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |
| Pyelonephritis Acute | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |
| Sepsis | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |

| | | | |
|---|-----------------|-----------------|----------------|
| Urinary Tract Infection | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (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 |

| Serious adverse events | Cohort 1: Prevnar 13 | Cohort 1: High Dose ExPEC10V | Cohort 2: ExPEC10V |
|--|----------------------|------------------------------|--------------------|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 1 / 54 (1.85%) | 0 / 104 (0.00%) | 9 / 278 (3.24%) |
| number of deaths (all causes) | 0 | 0 | 0 |
| number of deaths resulting from adverse events | 0 | 0 | 0 |
| Injury, poisoning and procedural complications | | | |
| Lumbar Vertebral Fracture | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 0 / 278 (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 | | | |
| Migraine | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 0 / 278 (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 |
| General disorders and administration site conditions | | | |
| Non-Cardiac Chest Pain | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 2 / 278 (0.72%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Gastrointestinal disorders | | | |
| Abdominal Hernia | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 1 / 278 (0.36%) |
| 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 | | | |
| Pulmonary Embolism | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 0 / 278 (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 |

| | | | |
|---|----------------|-----------------|-----------------|
| Renal and urinary disorders | | | |
| Chronic Kidney Disease | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 0 / 278 (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 |
| Calculus Urinary | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 1 / 278 (0.36%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Nephrolithiasis | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 1 / 278 (0.36%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Musculoskeletal and connective tissue disorders | | | |
| Osteoarthritis | | | |
| subjects affected / exposed | 1 / 54 (1.85%) | 0 / 104 (0.00%) | 1 / 278 (0.36%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Intervertebral Disc Protrusion | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 0 / 278 (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 | | | |
| Enterococcal Sepsis | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 0 / 278 (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 |
| Enterocolitis Infectious | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 1 / 278 (0.36%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Pyelonephritis | | | |

| | | | |
|---|----------------|-----------------|-----------------|
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 1 / 278 (0.36%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Pyelonephritis Acute | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 0 / 278 (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 |
| Sepsis | | | |
| subjects affected / exposed | 0 / 54 (0.00%) | 0 / 104 (0.00%) | 1 / 278 (0.36%) |
| 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 / 54 (0.00%) | 0 / 104 (0.00%) | 0 / 278 (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 |

| | | | |
|---|-------------------|--|--|
| Serious adverse events | Cohort 2: Placebo | | |
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 6 / 138 (4.35%) | | |
| number of deaths (all causes) | 0 | | |
| number of deaths resulting from adverse events | 0 | | |
| Injury, poisoning and procedural complications | | | |
| Lumbar Vertebral Fracture | | | |
| subjects affected / exposed | 1 / 138 (0.72%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Nervous system disorders | | | |
| Migraine | | | |
| subjects affected / exposed | 1 / 138 (0.72%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| General disorders and administration site conditions | | | |
| Non-Cardiac Chest Pain | | | |

| | | | |
|---|-----------------|--|--|
| subjects affected / exposed | 0 / 138 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Gastrointestinal disorders | | | |
| Abdominal Hernia | | | |
| subjects affected / exposed | 0 / 138 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Respiratory, thoracic and mediastinal disorders | | | |
| Pulmonary Embolism | | | |
| subjects affected / exposed | 1 / 138 (0.72%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Renal and urinary disorders | | | |
| Chronic Kidney Disease | | | |
| subjects affected / exposed | 1 / 138 (0.72%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Calculus Urinary | | | |
| subjects affected / exposed | 0 / 138 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Nephrolithiasis | | | |
| subjects affected / exposed | 0 / 138 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Musculoskeletal and connective tissue disorders | | | |
| Osteoarthritis | | | |
| subjects affected / exposed | 0 / 138 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Intervertebral Disc Protrusion | | | |

| | | | |
|---|-----------------|--|--|
| subjects affected / exposed | 1 / 138 (0.72%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Infections and infestations | | | |
| Enterococcal Sepsis | | | |
| subjects affected / exposed | 1 / 138 (0.72%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Enterocolitis Infectious | | | |
| subjects affected / exposed | 0 / 138 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Pyelonephritis | | | |
| subjects affected / exposed | 0 / 138 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Pyelonephritis Acute | | | |
| subjects affected / exposed | 1 / 138 (0.72%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Sepsis | | | |
| subjects affected / exposed | 0 / 138 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Urinary Tract Infection | | | |
| subjects affected / exposed | 1 / 138 (0.72%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |

Frequency threshold for reporting non-serious adverse events: 3 %

| Non-serious adverse events | Cohort 1: Low Dose ExPEC10V | Cohort 1: Medium Dose ExPEC10V | Cohort 1: ExPEC4V |
|--|--------------------------------|-----------------------------------|-------------------|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 60 / 104 (57.69%) | 61 / 102 (59.80%) | 24 / 52 (46.15%) |
| Investigations | | | |
| Blood Pressure Increased | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (0.00%) |
| occurrences (all) | 0 | 0 | 0 |
| Nervous system disorders | | | |
| Headache (Solicited) | | | |
| subjects affected / exposed | 19 / 104 (18.27%) | 25 / 102 (24.51%) | 11 / 52 (21.15%) |
| occurrences (all) | 26 | 41 | 15 |
| General disorders and administration site conditions | | | |
| Erythema (Solicited) | | | |
| subjects affected / exposed | 11 / 104 (10.58%) | 19 / 102 (18.63%) | 1 / 52 (1.92%) |
| occurrences (all) | 11 | 19 | 1 |
| Fatigue (Solicited) | | | |
| subjects affected / exposed | 21 / 104 (20.19%) | 29 / 102 (28.43%) | 8 / 52 (15.38%) |
| occurrences (all) | 30 | 52 | 8 |
| Injection Site Pruritus | | | |
| subjects affected / exposed | 1 / 104 (0.96%) | 5 / 102 (4.90%) | 2 / 52 (3.85%) |
| occurrences (all) | 1 | 5 | 2 |
| Fever (Solicited) | | | |
| subjects affected / exposed | 2 / 104 (1.92%) | 0 / 102 (0.00%) | 1 / 52 (1.92%) |
| occurrences (all) | 2 | 0 | 1 |
| Pain/Tenderness (Solicited) | | | |
| subjects affected / exposed | 46 / 104 (44.23%) | 52 / 102 (50.98%) | 15 / 52 (28.85%) |
| occurrences (all) | 61 | 74 | 20 |
| Swelling (Solicited) | | | |
| subjects affected / exposed | 9 / 104 (8.65%) | 15 / 102 (14.71%) | 2 / 52 (3.85%) |
| occurrences (all) | 10 | 15 | 2 |
| Ear and labyrinth disorders | | | |
| Tinnitus | | | |
| subjects affected / exposed | 0 / 104 (0.00%) | 0 / 102 (0.00%) | 0 / 52 (0.00%) |
| occurrences (all) | 0 | 0 | 0 |
| Gastrointestinal disorders | | | |

| | | | |
|--|-------------------------|-------------------------|------------------------|
| Diarrhoea subjects affected / exposed occurrences (all) | 1 / 104 (0.96%) 1 | 0 / 102 (0.00%) 0 | 1 / 52 (1.92%) 1 |
| Nausea (Solicited) subjects affected / exposed occurrences (all) | 5 / 104 (4.81%) 5 | 9 / 102 (8.82%) 11 | 1 / 52 (1.92%) 1 |
| Musculoskeletal and connective tissue disorders Myalgia subjects affected / exposed occurrences (all) | 1 / 104 (0.96%) 1 | 3 / 102 (2.94%) 3 | 0 / 52 (0.00%) 0 |
| Myalgia (Solicited) subjects affected / exposed occurrences (all) | 26 / 104 (25.00%) 34 | 36 / 102 (35.29%) 46 | 10 / 52 (19.23%) 15 |
| Infections and infestations Upper Respiratory Tract Infection subjects affected / exposed occurrences (all) | 3 / 104 (2.88%) 3 | 4 / 102 (3.92%) 4 | 3 / 52 (5.77%) 3 |
| Urinary Tract Infection subjects affected / exposed occurrences (all) | 0 / 104 (0.00%) 0 | 0 / 102 (0.00%) 0 | 0 / 52 (0.00%) 0 |

| Non-serious adverse events | Cohort 1: Prevnar 13 | Cohort 1: High Dose ExPEC10V | Cohort 2: ExPEC10V |
|---|------------------------|------------------------------|-------------------------|
| Total subjects affected by non-serious adverse events subjects affected / exposed | 41 / 54 (75.93%) | 71 / 104 (68.27%) | 180 / 278 (64.75%) |
| Investigations Blood Pressure Increased subjects affected / exposed occurrences (all) | 2 / 54 (3.70%) 2 | 0 / 104 (0.00%) 0 | 1 / 278 (0.36%) 1 |
| Nervous system disorders Headache (Solicited) subjects affected / exposed occurrences (all) | 10 / 54 (18.52%) 16 | 25 / 104 (24.04%) 32 | 74 / 278 (26.62%) 74 |
| General disorders and administration site conditions Erythema (Solicited) subjects affected / exposed occurrences (all) Fatigue (Solicited) | 5 / 54 (9.26%) 5 | 19 / 104 (18.27%) 19 | 60 / 278 (21.58%) 60 |

| | | | |
|--|------------------------|-------------------------|---------------------------|
| subjects affected / exposed occurrences (all) | 13 / 54 (24.07%) 19 | 24 / 104 (23.08%) 34 | 98 / 278 (35.25%) 98 |
| Injection Site Pruritus subjects affected / exposed occurrences (all) | 1 / 54 (1.85%) 1 | 3 / 104 (2.88%) 3 | 7 / 278 (2.52%) 7 |
| Fever (Solicited) subjects affected / exposed occurrences (all) | 0 / 54 (0.00%) 0 | 3 / 104 (2.88%) 4 | 15 / 278 (5.40%) 15 |
| Pain/Tenderness (Solicited) subjects affected / exposed occurrences (all) | 39 / 54 (72.22%) 41 | 60 / 104 (57.69%) 83 | 132 / 278 (47.48%) 132 |
| Swelling (Solicited) subjects affected / exposed occurrences (all) | 2 / 54 (3.70%) 2 | 14 / 104 (13.46%) 14 | 44 / 278 (15.83%) 44 |
| Ear and labyrinth disorders Tinnitus subjects affected / exposed occurrences (all) | 2 / 54 (3.70%) 2 | 0 / 104 (0.00%) 0 | 0 / 278 (0.00%) 0 |
| Gastrointestinal disorders Diarrhoea subjects affected / exposed occurrences (all) | 0 / 54 (0.00%) 0 | 4 / 104 (3.85%) 4 | 3 / 278 (1.08%) 3 |
| Nausea (Solicited) subjects affected / exposed occurrences (all) | 2 / 54 (3.70%) 2 | 11 / 104 (10.58%) 12 | 40 / 278 (14.39%) 40 |
| Musculoskeletal and connective tissue disorders Myalgia subjects affected / exposed occurrences (all) | 0 / 54 (0.00%) 0 | 2 / 104 (1.92%) 2 | 7 / 278 (2.52%) 8 |
| Myalgia (Solicited) subjects affected / exposed occurrences (all) | 21 / 54 (38.89%) 26 | 37 / 104 (35.58%) 49 | 84 / 278 (30.22%) 84 |
| Infections and infestations Upper Respiratory Tract Infection subjects affected / exposed occurrences (all) | 3 / 54 (5.56%) 3 | 1 / 104 (0.96%) 1 | 1 / 278 (0.36%) 1 |

| | | | |
|---|---------------------|----------------------|----------------------|
| Urinary Tract Infection subjects affected / exposed occurrences (all) | 0 / 54 (0.00%) 0 | 1 / 104 (0.96%) 1 | 7 / 278 (2.52%) 8 |
|---|---------------------|----------------------|----------------------|

| | | | |
|--|-------------------------|--|--|
| Non-serious adverse events | Cohort 2: Placebo | | |
| Total subjects affected by non-serious adverse events subjects affected / exposed | 64 / 138 (46.38%) | | |
| Investigations Blood Pressure Increased subjects affected / exposed occurrences (all) | 0 / 138 (0.00%) 0 | | |
| Nervous system disorders Headache (Solicited) subjects affected / exposed occurrences (all) | 34 / 138 (24.64%) 34 | | |
| General disorders and administration site conditions Erythema (Solicited) subjects affected / exposed occurrences (all) | 1 / 138 (0.72%) 1 | | |
| Fatigue (Solicited) subjects affected / exposed occurrences (all) | 31 / 138 (22.46%) 31 | | |
| Injection Site Pruritus subjects affected / exposed occurrences (all) | 0 / 138 (0.00%) 0 | | |
| Fever (Solicited) subjects affected / exposed occurrences (all) | 3 / 138 (2.17%) 3 | | |
| Pain/Tenderness (Solicited) subjects affected / exposed occurrences (all) | 20 / 138 (14.49%) 20 | | |
| Swelling (Solicited) subjects affected / exposed occurrences (all) | 2 / 138 (1.45%) 2 | | |
| Ear and labyrinth disorders Tinnitus | | | |

| | | | |
|--|----------------------|--|--|
| subjects affected / exposed occurrences (all) | 0 / 138 (0.00%) 0 | | |
| Gastrointestinal disorders | | | |
| Diarrhoea | | | |
| subjects affected / exposed | 3 / 138 (2.17%) | | |
| occurrences (all) | 3 | | |
| Nausea (Solicited) | | | |
| subjects affected / exposed | 8 / 138 (5.80%) | | |
| occurrences (all) | 8 | | |
| Musculoskeletal and connective tissue disorders | | | |
| Myalgia | | | |
| subjects affected / exposed | 6 / 138 (4.35%) | | |
| occurrences (all) | 6 | | |
| Myalgia (Solicited) | | | |
| subjects affected / exposed | 23 / 138 (16.67%) | | |
| occurrences (all) | 23 | | |
| Infections and infestations | | | |
| Upper Respiratory Tract Infection | | | |
| subjects affected / exposed | 0 / 138 (0.00%) | | |
| occurrences (all) | 0 | | |
| Urinary Tract Infection | | | |
| subjects affected / exposed | 10 / 138 (7.25%) | | |
| occurrences (all) | 10 | | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date | Amendment |
|------------------|---|
| 21 January 2019 | The reason for this amendment was to update the Phase 1 study design based on Food and Drug Administration (FDA) recommendations and clarify that the additional blood draw from additional 30 participants was taken from one site in Phase 2a. |
| 05 April 2019 | The reason for this amendment was to correct the fever grading (on the impact of fever grading in the electronic case report form [eCRF]), correct recording of the fever grades). |
| 09 October 2019 | The reason for this amendment was to expand the dataset supporting the short- and long-term safety and immunogenicity of the selected dose of ExPEC10V in an additional cohort (Cohort 2). Cohort 2 include 600 male and female participants ≥ 60 years of age in stable health with a history of urinary tract infection (UTI) in the past 5 years and were included in the study to support the plan for late stage development of ExPEC10V. |
| 17 March 2020 | The reason for this amendment was to revise the inclusion criterion for the body mass index range, and to clarify details on data collection for solicited adverse events (AEs) that were not resolved within 14 days after vaccination, severity grading scales, and the time window for participant collection of stool samples. |
| 24 November 2020 | The reason for this amendment was to update the number of participants to be included due to early enrollment termination and to clarify that the use of oral E. coli vaccines was allowed and must be recorded as concomitant medication. |
| 18 March 2021 | The reason for this amendment was to restrict MOPA testing in Cohort 2 to timepoints Day 1, Day 30, Day 181, Year 1, and Year 3 (Day 15 and Year 2 were evaluated). It was decided to leave out Day 15 MOPA testing as previous experience with ExPEC4V (63871860BAC2001) showed that Day 15 and Day 30 MOPA results are very similar. MOPA testing at Year 2 was considered not needed as the Applicant believes that, based on experience with ExPEC4V, Year 1 and Year 3 testing were sufficient to model the long-term immunogenicity profile. |
| 19 October 2021 | The reason for this amendment was to shorten the long-term follow-up period in Cohort 2 from 3 years to 1 year, as a 3-year long-term follow-up period will be part of another Phase 3 ExPEC study that includes the same population, that is, participants with a history of UTI. The long-term follow-up period in Cohort 1 will be extended from 3 years to 5 years, to obtain more long-term data on the safety and immunogenicity of the selected dose of the ExPEC10V vaccine in the general population. In addition, the assessment of vaccine-induced functional antibodies against the ExPEC10V O8 serotype was removed from the MOPA analysis in Cohort 1 and 2, except for baseline and Day 15 in Cohort 1, as the assay was not able to detect vaccine-induced functional antibodies against the O8 serotype. Clarifications about the Cohort 1 and 2 LTFU procedures were added, and minor changes were implemented to align text in this protocol with recent template updates. |

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported