

## Supplementary information

### The antibody response following a booster with either a 10- or 13-valent pneumococcal conjugate vaccine in toddlers primed with a 13-valent pneumococcal conjugate vaccine in early infancy

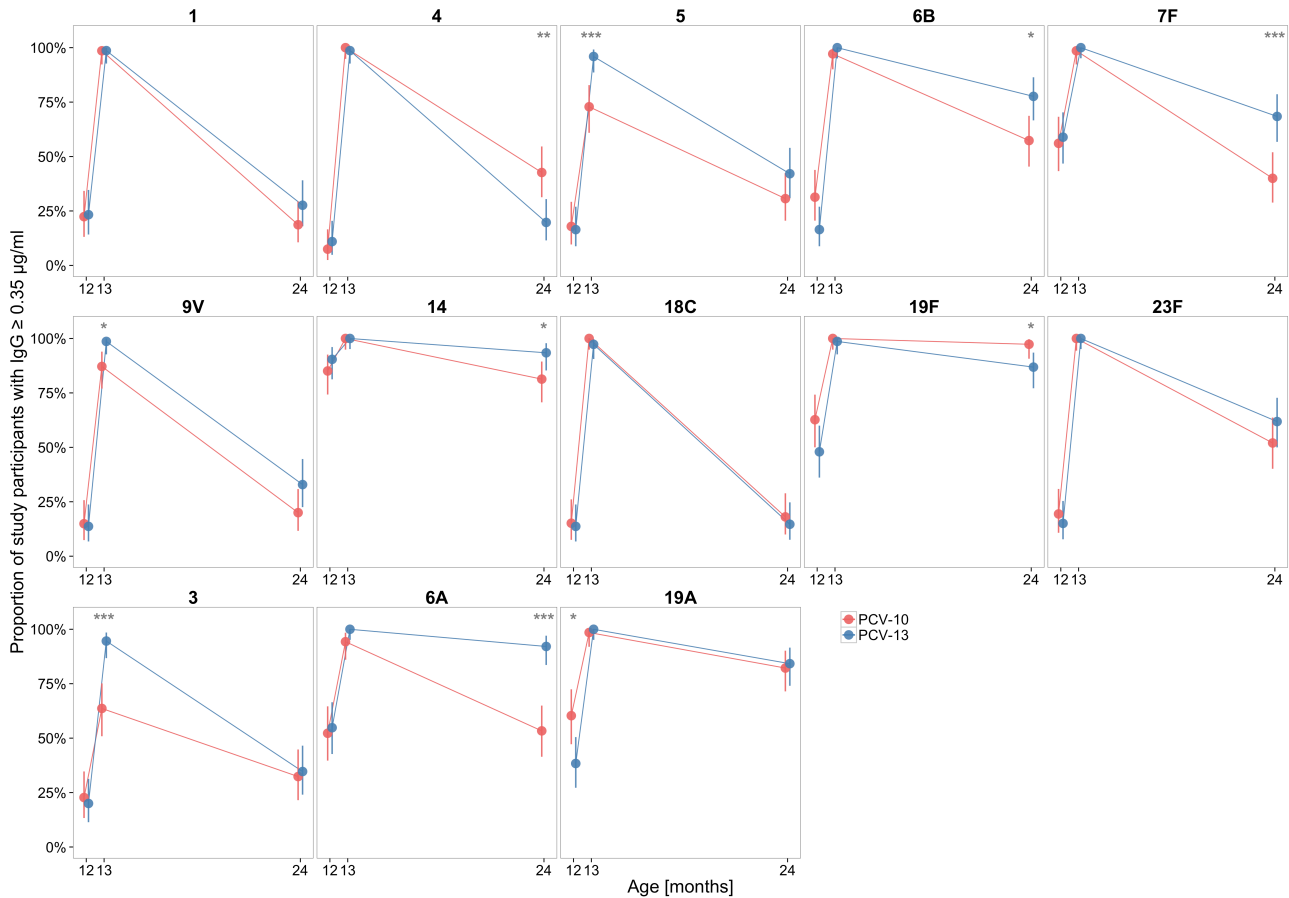
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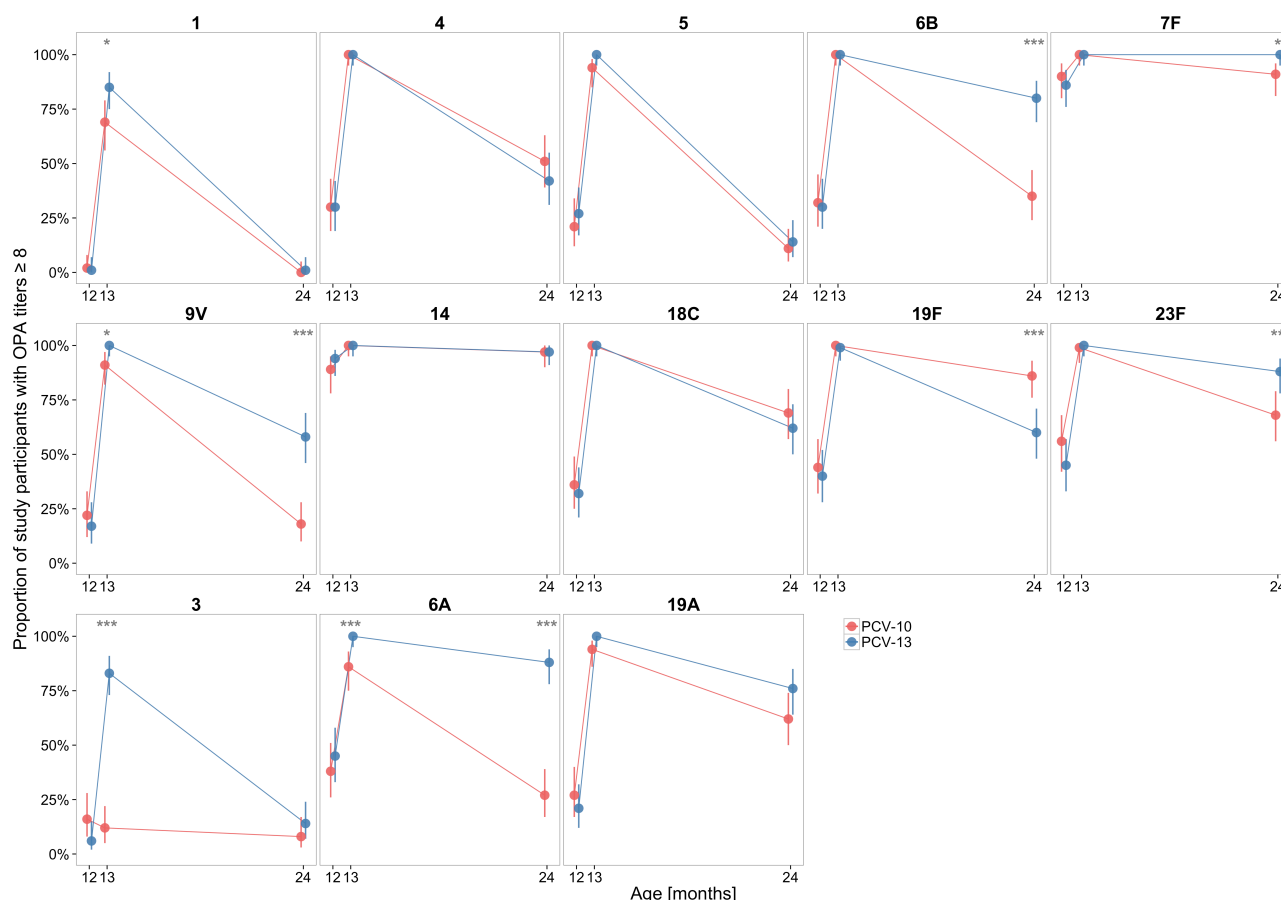
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**Figure S1** Proportion of participants with IgG antibody concentrations  $\geq 0.35$   $\mu\text{g/ml}$  by serotype and vaccine group at all 3 study time points. Groups were compared using the Chi-square or Fisher's exact test and stars indicate the associated p-value (\*\*\*  $< 0.001$ ; \*\*  $< 0.01$ ; \*  $< 0.05$ ).



**Figure S2** Proportion of participants with OPA titers  $\geq 8$  by serotype and vaccine group at all 3 study time points. Groups were compared using the Chi-square or Fisher's exact test and stars indicate the associated p-value (\*\*\*)  $< .001$ ; \*\*  $< .01$ ; \*  $< .05$ ).

**Table S1**

Absolute exclusion criteria	Temporary exclusion criteria
<ul style="list-style-type: none"> <li>- previous receipt of pneumococcal vaccine other than PCV-13</li> <li>- receipt of any of the routine 12-months immunizations (PCV-13, combined <i>Haemophilus influenzae</i> type b and serogroup C meningococcal glyco-conjugate vaccine (Hib-MenC) or measles, mumps and rubella vaccine (MMR))</li> <li>- previous anaphylactic reactions to any vaccine or vaccine-related component</li> <li>- bleeding diathesis</li> <li>- known or suspected immune deficiency or suppression</li> <li>- history of culture-proven sepsis with <i>S. pneumoniae</i></li> <li>- any serious or chronic ill health</li> <li>- receipt of blood products</li> </ul>	<ul style="list-style-type: none"> <li>- systemic illness or fever <math>&gt; 38.0^{\circ}\text{C}</math> at the time of the visit</li> <li>- any live immunization within 28 days prior to enrolment</li> <li>- any other (non-live) vaccine within the 7 days prior to enrolment</li> <li>- receipt of more than 2 weeks of immunosuppressants or immune modifying drugs (e.g. prednisolone <math>&gt; 0.5</math> mg/kg/day) within 30 days of enrolment</li> </ul>

**Note:**

In the following tables, statistically significant results ( $p < 0.05$ ) are displayed in bold and significant differences between groups are highlighted in colour with 'red' indicating superior results in the PCV-10 group and 'blue' indicating superior results in the PCV-13 group.

**Table S2** Proportions of participants with IgG antibody concentrations  $\geq 0.35$   $\mu\text{g/ml}$  by serotype and vaccine group at age of 13 months (intent-to-treat cohort).

Serotype	PCV-10 (n = 70)			PCV-13 (n = 74)			Fishers's exact test p-value
	N	Proportion IgG $\geq 0.35$ $\mu\text{g/ml}$	95% CI	N	Proportion IgG $\geq 0.35$ $\mu\text{g/ml}$	95% CI	
1	70	0.986	0.923, 1.000	74	0.986	0.927, 1.000	1.0
4	70	1.000	0.949, 1.000	74	0.987	0.927, 1.000	1.0
5	70	<b>0.729</b>	<b>0.609, 0.828</b>	74	<b>0.960</b>	<b>0.886, 0.992</b>	<b>&lt;0.001</b>
6B	70	0.971	0.901, 0.997	73	1.000	0.951, 1.000	0.238
7F	70	0.986	0.923, 1.000	74	1.000	0.951, 1.000	0.486
9V	70	<b>0.871</b>	<b>0.770, 0.940</b>	74	<b>0.987</b>	<b>0.927, 1.000</b>	<b>0.008</b>
14	70	1.000	0.949, 1.000	74	1.000	0.951, 1.000	0.497
18C	70	1.000	0.949, 1.000	74	0.973	0.906, 0.997	
19F	70	1.000	0.949, 1.000	74	0.987	0.927, 1.000	
23F	64	1.000	0.944, 1.000	74	1.000	0.951, 1.000	1.0
3†	66	<b>0.636</b>	<b>0.509, 0.751</b>	74	<b>0.946</b>	<b>0.867, 0.985</b>	<b>&lt;0.001</b>
6A†	70	<b>0.943</b>	<b>0.860, 0.984</b>	74	<b>1.000</b>	<b>0.951, 1.000</b>	<b>0.053</b>
19A†	67	0.985	0.920, 1.000	74	1.000	0.951, 1.000	0.475

† Serotypes contained in PCV-13 only

**Table S3** Serotype-specific IgG geometric mean concentration and ratio at age of 12 months by vaccine group (intent-to-treat cohort).

Serotype	PCV-10 (n = 67)			PCV-13 (n = 73)			PCV-10 / PCV-13		
	N	Geometric Mean	95% CI	N	Geometric Mean	95% CI	Geometric Mean Ratio	95% CI	P-Value
1	67	0.197	0.160, 0.241	73	0.207	0.174, 0.248	0.948	0.725, 1.239	0.694
4	67	0.123	0.104, 0.146	73	0.125	0.106, 0.146	0.988	0.785, 1.243	0.918
5	67	0.155	0.127, 0.189	73	0.139	0.115, 0.166	1.117	0.854, 1.460	0.418
6B	67	0.206	0.169, 0.251	73	0.162	0.135, 0.195	1.268	0.969, 1.659	0.083
7F	66	0.386	0.324, 0.460	73	0.403	0.333, 0.488	0.958	0.741, 1.237	0.739
9V	67	0.135	0.111, 0.163	73	0.136	0.112, 0.165	0.991	0.758, 1.296	0.950
14	67	1.044	0.826, 1.319	73	1.086	0.862, 1.367	0.961	0.694, 1.331	0.811
18C	66	0.160	0.127, 0.201	73	0.142	0.116, 0.174	1.124	0.832, 1.520	0.443
19F	67	<b>0.562</b>	<b>0.411, 0.771</b>	73	<b>0.351</b>	<b>0.280, 0.440</b>	<b>1.602</b>	<b>1.091, 2.352</b>	<b>0.017</b>
23F	67	0.172	0.136, 0.218	73	0.156	0.129, 0.189	1.101	0.815, 1.488	0.529
3†	66	0.212	0.173, 0.261	70	0.183	0.154, 0.216	1.163	0.894, 1.513	0.258
6A†	67	0.400	0.319, 0.502	73	0.351	0.280, 0.439	1.142	0.832, 1.566	0.409
19A†	63	<b>0.478</b>	<b>0.325, 0.703</b>	73	<b>0.295</b>	<b>0.234, 0.373</b>	<b>1.620</b>	<b>1.036, 2.534</b>	<b>0.035</b>

† Serotypes contained in PCV-13 only

**Table S4** Serotype-specific IgG geometric mean concentration and ratio at age of 13 months by vaccine group (intent-to-treat cohort).

Serotype	PCV-10 (n = 70)			PCV-13 (n = 74)			PCV-10 / PCV-13		
	N	Geometric Mean	95% CI	N	Geometric Mean	95% CI	Geometric Mean Ratio	95% CI	P-Value
1	70	<b>1.569</b>	<b>1.297, 1.898</b>	74	<b>2.574</b>	<b>2.118, 3.127</b>	<b>0.610</b>	<b>0.465, 0.799</b>	<b>&lt;0.001</b>
4	70	<b>3.328</b>	<b>2.740, 4.042</b>	74	<b>2.125</b>	<b>1.755, 2.572</b>	<b>1.566</b>	<b>1.195, 2.052</b>	<b>0.001</b>
5	70	<b>0.491</b>	<b>0.412, 0.586</b>	74	<b>1.180</b>	<b>0.999, 1.394</b>	<b>0.416</b>	<b>0.328, 0.529</b>	<b>&lt;0.001</b>
6B	70	<b>2.927</b>	<b>2.347, 3.650</b>	73	<b>5.765</b>	<b>4.656, 7.137</b>	<b>0.508</b>	<b>0.374, 0.688</b>	<b>&lt;0.001</b>
7F	70	<b>1.715</b>	<b>1.488, 1.976</b>	74	<b>3.395</b>	<b>2.883, 3.998</b>	<b>0.505</b>	<b>0.408, 0.626</b>	<b>&lt;0.001</b>
9V	70	<b>0.705</b>	<b>0.585, 0.851</b>	74	<b>1.800</b>	<b>1.534, 2.113</b>	<b>0.392</b>	<b>0.307, 0.500</b>	<b>&lt;0.001</b>
14	70	<b>5.392</b>	<b>4.531, 6.415</b>	74	<b>9.556</b>	<b>7.749, 11.79</b>	<b>0.564</b>	<b>0.431, 0.739</b>	<b>&lt;0.001</b>
18C	70	<b>2.941</b>	<b>2.487, 3.477</b>	74	<b>1.798</b>	<b>1.474, 2.192</b>	<b>1.636</b>	<b>1.264, 2.116</b>	<b>&lt;0.001</b>
19F	70	<b>16.76</b>	<b>13.55, 20.73</b>	74	<b>7.804</b>	<b>6.201, 9.822</b>	<b>2.148</b>	<b>1.574, 2.930</b>	<b>&lt;0.001</b>
23F	64	<b>3.474</b>	<b>2.806, 4.302</b>	74	<b>4.576</b>	<b>3.842, 5.451</b>	<b>0.759</b>	<b>0.577, 0.998</b>	<b>0.049</b>
3†	66	<b>0.456</b>	<b>0.373, 0.558</b>	74	<b>1.124</b>	<b>0.971, 1.300</b>	<b>0.406</b>	<b>0.317, 0.519</b>	<b>&lt;0.001</b>
6A†	70	<b>1.137</b>	<b>0.905, 1.428</b>	74	<b>10.16</b>	<b>8.267, 12.48</b>	<b>0.112</b>	<b>0.083, 0.152</b>	<b>&lt;0.001</b>
19A†	67	<b>3.327</b>	<b>2.453, 4.514</b>	74	<b>6.090</b>	<b>4.868, 7.618</b>	<b>0.546</b>	<b>0.375, 0.795</b>	<b>0.002</b>

† Serotypes contained in PCV-13 only

**Table S5** Serotype-specific IgG geometric mean concentration and ratio at age of 24 months by vaccine group (intent-to-treat cohort).

Serotype	PCV-10 (n = 75)			PCV-13 (n = 76)			PCV-10 / PCV-13		
	N	Geometric Mean	95% CI	N	Geometric Mean	95% CI	Geometric Mean Ratio	95% CI	P-Value
1	75	0.177	0.147, 0.212	76	0.220	0.188, 0.258	0.802	0.631, 1.018	0.070
<b>4</b>	<b>75</b>	<b>0.298</b>	<b>0.246, 0.361</b>	<b>76</b>	<b>0.181</b>	<b>0.153, 0.214</b>	<b>1.647</b>	<b>1.280, 2.120</b>	<b>0.000</b>
5	75	0.260	0.217, 0.312	76	0.293	0.241, 0.355	0.890	0.684, 1.157	0.381
<b>6B</b>	<b>75</b>	<b>0.400</b>	<b>0.324, 0.493</b>	<b>76</b>	<b>0.630</b>	<b>0.522, 0.761</b>	<b>0.634</b>	<b>0.480, 0.839</b>	<b>0.002</b>
<b>7F</b>	<b>75</b>	<b>0.335</b>	<b>0.282, 0.397</b>	<b>76</b>	<b>0.498</b>	<b>0.431, 0.574</b>	<b>0.672</b>	<b>0.538, 0.839</b>	<b>0.001</b>
<b>9V</b>	<b>75</b>	<b>0.159</b>	<b>0.130, 0.194</b>	<b>76</b>	<b>0.231</b>	<b>0.191, 0.279</b>	<b>0.690</b>	<b>0.525, 0.907</b>	<b>0.008</b>
14	75	0.827	0.665, 1.029	76	1.007	0.840, 1.208	0.821	0.620, 1.089	0.170
18C	72	0.193	0.162, 0.231	75	0.156	0.130, 0.188	1.238	0.960, 1.597	0.099
<b>19F</b>	<b>75</b>	<b>2.186</b>	<b>1.711, 2.791</b>	<b>76</b>	<b>0.856</b>	<b>0.715, 1.024</b>	<b>2.554</b>	<b>1.890, 3.451</b>	<b>&lt;0.001</b>
23F	75	0.408	0.316, 0.525	76	0.510	0.398, 0.654	0.799	0.562, 1.136	0.210
3†	68	0.258	0.197, 0.338	75	0.281	0.229, 0.346	0.917	0.654, 1.286	0.613
<b>6A†</b>	<b>75</b>	<b>0.387</b>	<b>0.301, 0.497</b>	<b>76</b>	<b>0.885</b>	<b>0.742, 1.056</b>	<b>0.437</b>	<b>0.323, 0.593</b>	<b>&lt;0.001</b>
19A†	73	1.044	0.758, 1.437	76	0.909	0.698, 1.184	1.147	0.760, 1.732	0.510

† Serotypes contained in PCV-13 only

**Table S6** Serotype-specific IgG geometric mean fold change from 12 to 13 months by vaccine group (ITT cohort).

Serotype	PCV-10						PCV-13					
	N missing at months			Geometric Mean Fold	95% CI		N missing at months			Geometric Mean Fold	95% CI	
	N	12	13	Rise*			N	12	13	Rise*		
<b>1</b>	<b>57</b>	<b>10</b>	<b>13</b>	<b>8.046</b>	<b>5.959,10.86</b>		<b>61</b>	<b>12</b>	<b>13</b>	<b>12.35</b>	<b>9.241,16.50</b>	
<b>4</b>	<b>57</b>	<b>10</b>	<b>13</b>	<b>27.32</b>	<b>20.65,36.14</b>		<b>61</b>	<b>12</b>	<b>13</b>	<b>16.65</b>	<b>12.70,21.82</b>	
<b>5</b>	<b>57</b>	<b>10</b>	<b>13</b>	<b>3.234</b>	<b>2.415,4.331</b>		<b>61</b>	<b>12</b>	<b>13</b>	<b>8.457</b>	<b>6.447,11.09</b>	
<b>6B</b>	<b>57</b>	<b>10</b>	<b>13</b>	<b>14.58</b>	<b>10.66,19.95</b>		<b>60</b>	<b>13</b>	<b>14</b>	<b>33.30</b>	<b>24.72,44.85</b>	
<b>7F</b>	<b>56</b>	<b>11</b>	<b>14</b>	<b>4.510</b>	<b>3.553,5.725</b>		<b>61</b>	<b>12</b>	<b>13</b>	<b>9.191</b>	<b>6.972,12.12</b>	
<b>9V</b>	<b>57</b>	<b>10</b>	<b>13</b>	<b>5.548</b>	<b>4.310,7.141</b>		<b>61</b>	<b>12</b>	<b>13</b>	<b>13.25</b>	<b>10.06,17.44</b>	
<b>14</b>	<b>57</b>	<b>10</b>	<b>13</b>	<b>5.311</b>	<b>3.851,7.324</b>		<b>61</b>	<b>12</b>	<b>13</b>	<b>8.876</b>	<b>6.371,12.37</b>	
<b>18C</b>	<b>56</b>	<b>11</b>	<b>14</b>	<b>19.29</b>	<b>14.24,26.12</b>		<b>61</b>	<b>12</b>	<b>13</b>	<b>12.81</b>	<b>9.345,17.55</b>	
<b>19F</b>	<b>57</b>	<b>10</b>	<b>13</b>	<b>27.16</b>	<b>17.57,41.97</b>		<b>61</b>	<b>12</b>	<b>13</b>	<b>23.85</b>	<b>17.15,33.17</b>	
<b>23F</b>	<b>51</b>	<b>16</b>	<b>19</b>	<b>17.50</b>	<b>11.97,25.58</b>		<b>61</b>	<b>12</b>	<b>13</b>	<b>27.87</b>	<b>20.85,37.24</b>	
3†	54	13	16	2.202	1.625,2.982		59	14	15	6.302	4.905,8.096	
6A†	57	10	13	2.635	1.910,3.634		61	12	13	25.55	18.33,35.59	
19A†	53	14	17	6.001	3.403,10.58		61	12	13	19.12	13.55,26.98	

\* Geometric mean change from 12 months to 13 months;

† Serotypes contained in PCV-13 only

**Table S6** continued

Serotype	Unadjusted Treatment Effect**			Adjusted Treatment Effect***		
	PCV-10/ PCV-13	95% CI	P-Value	PCV-10/ PCV-13	95% CI	P-Value
<b>1</b>	<b>0.652</b>	<b>0.465,0.912</b>	<b>0.013</b>	<b>0.565</b>	<b>0.431,0.740</b>	<b>&lt;0.001</b>
<b>4</b>	<b>1.641</b>	<b>1.117,2.410</b>	<b>0.012</b>	<b>1.560</b>	<b>1.129,2.153</b>	<b>0.007</b>
<b>5</b>	<b>0.382</b>	<b>0.294,0.497</b>	<b>&lt;0.001</b>	<b>0.378</b>	<b>0.306,0.468</b>	<b>&lt;0.001</b>
<b>6B</b>	<b>0.438</b>	<b>0.311,0.616</b>	<b>&lt;0.001</b>	<b>0.452</b>	<b>0.336,0.608</b>	<b>&lt;0.001</b>
<b>7F</b>	<b>0.491</b>	<b>0.356,0.677</b>	<b>&lt;0.001</b>	<b>0.464</b>	<b>0.369,0.583</b>	<b>&lt;0.001</b>
<b>9V</b>	<b>0.419</b>	<b>0.308,0.570</b>	<b>&lt;0.001</b>	<b>0.371</b>	<b>0.294,0.468</b>	<b>&lt;0.001</b>
<b>14</b>	<b>0.598</b>	<b>0.410,0.874</b>	<b>0.008</b>	<b>0.560</b>	<b>0.424,0.739</b>	<b>&lt;0.001</b>
<b>18C</b>	<b>1.506</b>	<b>1.008,2.250</b>	<b>0.046</b>	<b>1.473</b>	<b>1.103,1.969</b>	<b>0.009</b>
<b>19F</b>	<b>1.139</b>	<b>0.690,1.880</b>	<b>0.609</b>	<b>1.720</b>	<b>1.243,2.381</b>	<b>0.001</b>
<b>23F</b>	<b>0.628</b>	<b>0.419,0.941</b>	<b>0.024</b>	<b>0.674</b>	<b>0.496,0.916</b>	<b>0.012</b>
3†	0.349	0.270,0.452	<0.001	0.359	0.288,0.448	<0.001
6A†	0.103	0.071,0.151	<0.001	0.101	0.076,0.134	<0.001
19A†	0.314	0.205,0.480	<0.001	0.390	0.277,0.549	<0.001

\*\* Unadjusted estimate of the ratio of geometric mean fold rises from 12 to 13 months (PCV-10/PCV-13)

\*\*\* Ratio of geometric mean fold rises from 12 to 13 months (PCV-10/PCV-13), adjusted for 12 month values, age, sex and ethnicity

† Serotypes contained in PCV-13 only

**Table S7** Proportions of participants with OPA titers  $\geq 8$  at age of 13 months by serotype and vaccine group (intent-to-treat cohort).

Serotype	PCV-10 (n = 69)			PCV-13 (n = 74)			Fisher's exact test p-value
	N	Proportion OPA $\geq 8$	95% CI	N	Proportion OPA $\geq 8$	95% CI	
<b>1</b>	<b>67</b>	<b>0.687</b>	<b>0.562, 0.794</b>	<b>73</b>	<b>0.849</b>	<b>0.746, 0.922</b>	<b>0.027</b>
4	68	1.000	0.947, 1.000	73	1.000	0.951, 1.000	-
<b>5</b>	<b>66</b>	<b>0.939</b>	<b>0.852, 0.983</b>	<b>74</b>	<b>1.000</b>	<b>0.951, 1.000</b>	<b>0.047</b>
6B	69	1.000	0.948, 1.000	74	1.000	0.951, 1.000	-
7F	69	1.000	0.948, 1.000	74	1.000	0.951, 1.000	-
<b>9V</b>	<b>68</b>	<b>0.912</b>	<b>0.818, 0.967</b>	<b>74</b>	<b>1.000</b>	<b>0.951, 1.000</b>	<b>0.011</b>
14	69	1.000	0.948, 1.000	74	1.000	0.951, 1.000	-
18C	69	1.000	0.948, 1.000	74	1.000	0.951, 1.000	-
19F	69	1.000	0.948, 1.000	74	0.987	0.927, 1.000	1.000
23F	69	0.986	0.922, 1.000	74	1.000	0.951, 1.000	0.483
<b>3†</b>	<b>69</b>	<b>0.116</b>	<b>0.051, 0.216</b>	<b>72</b>	<b>0.833</b>	<b>0.727, 0.911</b>	<b>&lt;0.001</b>
<b>6A†</b>	<b>64</b>	<b>0.859</b>	<b>0.750, 0.934</b>	<b>74</b>	<b>1.000</b>	<b>0.951, 1.000</b>	<b>&lt;0.001</b>
<b>19A†</b>	<b>68</b>	<b>0.941</b>	<b>0.856, 0.984</b>	<b>74</b>	<b>1.000</b>	<b>0.951, 1.000</b>	<b>0.050</b>

† Serotypes contained in PCV-13 only

**Table S8** Geometric mean OPA titers and ratios at age of 12 months by vaccine group (intent-to-treat cohort).

Serotype	PCV-10 (n = 67)			PCV-13 (n = 73)			PCV-10 / PCV-13		
	N	Geometric Mean	95% CI	N	Geometric Mean	95% CI	Geometric Mean Ratio	95% CI	P-Value
1	66	4.042	3.958, 4.128	73	4.157	3.849, 4.490	0.972	0.898, 1.053	0.484
4	61	8.840	6.075, 12.86	71	7.913	5.913, 10.59	1.117	0.698, 1.789	0.642
5	61	5.790	4.642, 7.221	71	5.777	4.947, 6.745	1.002	0.767, 1.310	0.987
6B	62	8.813	6.328, 12.27	69	8.353	6.082, 11.47	1.055	0.670, 1.662	0.816
7F	62	365.9	233.7, 572.9	72	315.5	195.4, 509.3	1.160	0.606, 2.222	0.652
9V	65	9.085	5.828, 14.16	69	8.101	5.449, 12.04	1.121	0.622, 2.023	0.701
14	63	234.6	154.1, 357.0	70	252.2	183.6, 346.5	0.930	0.552, 1.568	0.784
18C	66	12.65	8.020, 19.95	66	8.989	6.216, 13.00	1.407	0.787, 2.516	0.247
19F	66	17.28	10.75, 27.76	68	12.27	8.040, 18.73	1.408	0.750, 2.643	0.284
23F	63	34.56	19.59, 60.96	69	21.20	12.70, 35.38	1.630	0.764, 3.477	0.204
<b>3†</b>	<b>62</b>	<b>5.137</b>	<b>4.282, 6.163</b>	<b>67</b>	<b>4.203</b>	<b>4.002, 4.414</b>	<b>1.222</b>	<b>1.013, 1.475</b>	<b>0.037</b>
6A†	63	19.50	11.12, 34.17	66	26.48	15.41, 45.50	0.736	0.340, 1.594	0.434
19A†	63	10.95	6.452, 18.57	73	6.843	5.037, 9.296	1.600	0.872, 2.934	0.128

† Serotypes contained in PCV-13 only

**Table S9** Geometric mean OPA titers and ratios at 13 months by vaccine group (intent-to-treat cohort).

Serotype	PCV-10 (n = 69)			PCV-13 (n = 74)			PCV-10 / PCV-13		
	N	Geometric Mean	95% CI	N	Geometric Mean	95% CI	Geometric Mean Ratio	95% CI	P-Value
<b>1</b>	<b>67</b>	<b>27.31</b>	<b>17.86, 41.77</b>	<b>73</b>	<b>66.93</b>	<b>43.90, 102.03</b>	<b>0.408</b>	<b>0.225, 0.739</b>	<b>0.003</b>
4	68	1306	1071, 1593	73	1497	1213, 1848	0.872	0.655, 1.162	0.349
<b>5</b>	<b>66</b>	<b>81.80</b>	<b>57.23, 116.9</b>	<b>74</b>	<b>311.8</b>	<b>243.5, 399.3</b>	<b>0.262</b>	<b>0.170, 0.404</b>	<b>&lt;0.001</b>
<b>6B</b>	<b>69</b>	<b>636.1</b>	<b>505.4, 800.7</b>	<b>74</b>	<b>2148</b>	<b>1717, 2686</b>	<b>0.296</b>	<b>0.215, 0.407</b>	<b>&lt;0.001</b>
<b>7F</b>	<b>69</b>	<b>1106</b>	<b>878.1, 1393</b>	<b>74</b>	<b>5254</b>	<b>3904, 7070</b>	<b>0.211</b>	<b>0.145, 0.306</b>	<b>&lt;0.001</b>
<b>9V</b>	<b>68</b>	<b>285.6</b>	<b>196.7, 414.6</b>	<b>74</b>	<b>2373</b>	<b>1794, 3139</b>	<b>0.120</b>	<b>0.076, 0.191</b>	<b>&lt;0.001</b>
<b>14</b>	<b>69</b>	<b>1118</b>	<b>872.4, 1432</b>	<b>74</b>	<b>3137</b>	<b>2418, 4069</b>	<b>0.356</b>	<b>0.250, 0.509</b>	<b>&lt;0.001</b>
18C	69	2501	1989, 3145	74	2539	1921, 3356	0.985	0.689, 1.409	0.934
<b>19F</b>	<b>69</b>	<b>3056</b>	<b>2395, 3898</b>	<b>74</b>	<b>1994</b>	<b>1442, 2757</b>	<b>1.532</b>	<b>1.025, 2.291</b>	<b>0.038</b>
<b>23F</b>	<b>69</b>	<b>609.3</b>	<b>458.6, 809.5</b>	<b>74</b>	<b>3694</b>	<b>2794, 4883</b>	<b>0.165</b>	<b>0.111, 0.245</b>	<b>&lt;0.001</b>
<b>3†</b>	<b>69</b>	<b>4.691</b>	<b>4.081, 5.393</b>	<b>72</b>	<b>34.61</b>	<b>25.48, 47.03</b>	<b>0.136</b>	<b>0.097, 0.189</b>	<b>&lt;0.001</b>
<b>6A†</b>	<b>64</b>	<b>264.2</b>	<b>165.4, 421.9</b>	<b>74</b>	<b>7010</b>	<b>5363, 9164</b>	<b>0.038</b>	<b>0.022, 0.064</b>	<b>&lt;0.001</b>
<b>19A†</b>	<b>68</b>	<b>328.0</b>	<b>208.4, 516.3</b>	<b>74</b>	<b>1389</b>	<b>999.1, 1932</b>	<b>0.236</b>	<b>0.135, 0.412</b>	<b>&lt;0.001</b>

† Serotypes contained in PCV-13 only

**Table S10** Geometric mean OPA titers and ratios at age of 24 months by vaccine group (intent-to-treat cohort).

Serotype	PCV-10 (n = 75)			PCV-13 (n = 76)			PCV-10 / PCV-13		
	N	Geometric Mean	95% CI	N	Geometric Mean	95% CI	Geometric Mean Ratio	95% CI	P-Value
1	75	4.000	4.000, 4.000	76	4.088	3.914, 4.270	0.978	0.937, 1.022	0.321
4	72	31.67	19.13, 52.45	73	28.48	16.39, 49.51	1.112	0.529, 2.335	0.778
5	73	4.985	4.272, 5.817	71	5.928	4.634, 7.584	0.841	0.630, 1.122	0.237
<b>6B</b>	<b>74</b>	<b>18.90</b>	<b>11.46, 31.18</b>	<b>74</b>	<b>201.3</b>	<b>123.3, 328.6</b>	<b>0.094</b>	<b>0.047, 0.188</b>	<b>&lt;0.001</b>
<b>7F</b>	<b>74</b>	<b>421.0</b>	<b>282.3, 627.8</b>	<b>76</b>	<b>1368</b>	<b>1082, 1731</b>	<b>0.308</b>	<b>0.194, 0.488</b>	<b>&lt;0.001</b>
<b>9V</b>	<b>74</b>	<b>9.821</b>	<b>6.223, 15.50</b>	<b>74</b>	<b>96.78</b>	<b>50.61, 185.1</b>	<b>0.101</b>	<b>0.046, 0.223</b>	<b>&lt;0.001</b>
14	73	556.7	427.1, 725.7	75	606.4	448.2, 820.5	0.918	0.616, 1.368	0.672
18C	72	150.8	82.74, 274.8	71	112.9	59.58, 213.8	1.336	0.560, 3.186	0.511
<b>19F</b>	<b>73</b>	<b>237.6</b>	<b>148.8, 379.4</b>	<b>75</b>	<b>60.01</b>	<b>34.83, 103.4</b>	<b>3.959</b>	<b>1.943, 8.067</b>	<b>&lt;0.001</b>
<b>23F</b>	<b>69</b>	<b>142.6</b>	<b>76.34, 266.5</b>	<b>75</b>	<b>624.0</b>	<b>380.1, 1025</b>	<b>0.229</b>	<b>0.104, 0.504</b>	<b>&lt;0.001</b>
3†	73	5.016	4.005, 6.281	76	4.971	4.227, 5.847	1.009	0.766, 1.329	0.949
<b>6A†</b>	<b>70</b>	<b>14.76</b>	<b>8.711, 24.99</b>	<b>73</b>	<b>469.6</b>	<b>287.2, 767.9</b>	<b>0.031</b>	<b>0.015, 0.064</b>	<b>&lt;0.001</b>
<b>19A†</b>	<b>69</b>	<b>41.25</b>	<b>24.01, 70.87</b>	<b>71</b>	<b>109.6</b>	<b>64.78, 185.4</b>	<b>0.376</b>	<b>0.178, 0.795</b>	<b>0.011</b>

† Serotypes contained in PCV-13 only

**Table S11** Serotype-specific OPA geometric mean fold change from 12 to 13 months by vaccine group (intent-to-treat cohort).

Serotype	PCV-10						PCV-13					
	N	N missing at months		Geometric Mean Fold	95% CI	P-Value	N	N missing at months		Geometric Mean Fold	95% CI	P-Value
<b>1</b>	<b>55</b>	<b>12</b>	<b>14</b>	<b>3.417</b>	<b>2.626,4.447</b>	<b>&lt;0.001</b>	<b>60</b>	<b>13</b>	<b>14</b>	<b>4.245</b>	<b>3.279,5.494</b>	<b>&lt;0.001</b>
<b>4</b>	<b>50</b>	<b>17</b>	<b>19</b>	<b>150.4</b>	<b>93.59,241.7</b>	<b>&lt;0.001</b>	<b>58</b>	<b>15</b>	<b>16</b>	<b>181.5</b>	<b>124.6,264.3</b>	<b>&lt;0.001</b>
<b>5</b>	<b>49</b>	<b>18</b>	<b>20</b>	<b>11.83</b>	<b>7.163,19.54</b>	<b>&lt;0.001</b>	<b>59</b>	<b>14</b>	<b>15</b>	<b>56.54</b>	<b>41.27,77.46</b>	<b>&lt;0.001</b>
<b>6B</b>	<b>52</b>	<b>15</b>	<b>17</b>	<b>65.44</b>	<b>41.87,102.3</b>	<b>&lt;0.001</b>	<b>58</b>	<b>15</b>	<b>16</b>	<b>237.6</b>	<b>153.1,368.6</b>	<b>&lt;0.001</b>
<b>7F</b>	<b>52</b>	<b>15</b>	<b>17</b>	<b>3.505</b>	<b>1.941,6.327</b>	<b>&lt;0.001</b>	<b>60</b>	<b>13</b>	<b>14</b>	<b>20.02</b>	<b>10.74,37.32</b>	<b>&lt;0.001</b>
<b>9V</b>	<b>55</b>	<b>12</b>	<b>14</b>	<b>32.85</b>	<b>17.61,61.28</b>	<b>&lt;0.001</b>	<b>59</b>	<b>14</b>	<b>15</b>	<b>253.0</b>	<b>144.5,442.8</b>	<b>&lt;0.001</b>
<b>14</b>	<b>53</b>	<b>14</b>	<b>16</b>	<b>5.277</b>	<b>2.985,9.330</b>	<b>&lt;0.001</b>	<b>59</b>	<b>14</b>	<b>15</b>	<b>12.93</b>	<b>8.102,20.64</b>	<b>&lt;0.001</b>
<b>18C</b>	<b>56</b>	<b>11</b>	<b>13</b>	<b>238.5</b>	<b>141.2,402.6</b>	<b>&lt;0.001</b>	<b>57</b>	<b>16</b>	<b>17</b>	<b>284.4</b>	<b>173.9,465.1</b>	<b>&lt;0.001</b>
<b>19F</b>	<b>55</b>	<b>12</b>	<b>14</b>	<b>180.8</b>	<b>99.53,328.6</b>	<b>&lt;0.001</b>	<b>58</b>	<b>15</b>	<b>16</b>	<b>158.8</b>	<b>91.13,276.7</b>	<b>&lt;0.001</b>
<b>23F</b>	<b>53</b>	<b>14</b>	<b>16</b>	<b>15.15</b>	<b>7.400,31.03</b>	<b>&lt;0.001</b>	<b>59</b>	<b>14</b>	<b>15</b>	<b>166.7</b>	<b>86.02,323.2</b>	<b>&lt;0.001</b>
3†	52	15	17	0.874	0.662,1.153	0.336	57	16	17	9.085	6.373,12.95	<0.001
<b>6A†</b>	<b>48</b>	<b>19</b>	<b>21</b>	<b>11.24</b>	<b>4.793,26.38</b>	<b>&lt;0.001</b>	<b>56</b>	<b>17</b>	<b>18</b>	<b>186.9</b>	<b>95.28,366.5</b>	<b>&lt;0.001</b>
<b>19A†</b>	<b>53</b>	<b>14</b>	<b>16</b>	<b>27.54</b>	<b>12.38,61.30</b>	<b>&lt;0.001</b>	<b>61</b>	<b>12</b>	<b>13</b>	<b>183.1</b>	<b>110.8,302.5</b>	<b>&lt;0.001</b>

\* Geometric mean change from 12 months to 13 months

† Serotypes contained in PCV-13 only

**Table S11** continued

Serotype	Unadjusted Treatment Effect**			Adjusted Treatment Effect***		
	PCV-10/ PCV-13	95% CI	P-Value	PCV-10/ PCV-13	95% CI	P-Value
1	0.805	0.558,1.162	0.244	0.740	0.519,1.053	0.094
4	0.829	0.462,1.487	0.525	0.933	0.653,1.332	0.699
<b>5</b>	<b>0.209</b>	<b>0.127,0.344</b>	<b>&lt;0.001</b>	<b>0.187</b>	<b>0.120,0.290</b>	<b>&lt;0.001</b>
<b>6B</b>	<b>0.275</b>	<b>0.156,0.487</b>	<b>&lt;0.001</b>	<b>0.268</b>	<b>0.189,0.379</b>	<b>&lt;0.001</b>
<b>7F</b>	<b>0.175</b>	<b>0.085,0.359</b>	<b>&lt;0.001</b>	<b>0.194</b>	<b>0.131,0.287</b>	<b>&lt;0.001</b>
<b>9V</b>	<b>0.130</b>	<b>0.061,0.274</b>	<b>&lt;0.001</b>	<b>0.122</b>	<b>0.075,0.198</b>	<b>&lt;0.001</b>
<b>14</b>	<b>0.408</b>	<b>0.230,0.724</b>	<b>0.002</b>	<b>0.403</b>	<b>0.273,0.596</b>	<b>&lt;0.001</b>
18C	0.838	0.451,1.560	0.575	0.998	0.657,1.517	0.992
19F	1.139	0.513,2.527	0.747	1.513	0.989,2.316	0.056
<b>23F</b>	<b>0.091</b>	<b>0.041,0.203</b>	<b>&lt;0.001</b>	<b>0.133</b>	<b>0.085,0.209</b>	<b>&lt;0.001</b>
3†	0.096	0.066,0.140	<0.001	0.101	0.069,0.149	<0.001
<b>6A†</b>	<b>0.060</b>	<b>0.025,0.144</b>	<b>&lt;0.001</b>	<b>0.033</b>	<b>0.019,0.057</b>	<b>&lt;0.001</b>
<b>19A†</b>	<b>0.150</b>	<b>0.071,0.320</b>	<b>&lt;0.001</b>	<b>0.182</b>	<b>0.101,0.329</b>	<b>&lt;0.001</b>

\*\* Unadjusted estimate of the ratio of geometric mean fold rises from 12 to 13 months (PCV-10/PCV-13)

\*\*\* Ratio of geometric mean fold rises from 12 to 13 months (PCV-10/PCV-13), adjusted for 12 month values, age, sex and ethnicity

† Serotypes contained in PCV-13 only

**Table S12** Serotype-specific IgG geometric mean fold change from 12 to 24 months by vaccine group (intent-to-treat cohort).

Serotype	PCV-10						PCV-13					
	N		N missing at months	Geometric Mean Fold Rise*	95% CI	P-Value	N		N missing at months	Geometric Mean Fold Rise*	95% CI	P-Value
	12	24					12	24				
1	58	9	17	0.888	0.654,1.205	0.441	64	9	12	1.156	0.898,1.487	0.257
<b>4</b>	<b>58</b>	<b>9</b>	<b>17</b>	<b>2.440</b>	<b>1.828,3.257</b>	<b>&lt;0.001</b>	<b>64</b>	<b>9</b>	<b>12</b>	<b>1.488</b>	<b>1.164,1.901</b>	<b>0.002</b>
<b>5</b>	<b>58</b>	<b>9</b>	<b>17</b>	<b>1.646</b>	<b>1.217,2.224</b>	<b>0.001</b>	<b>64</b>	<b>9</b>	<b>12</b>	<b>2.017</b>	<b>1.509,2.696</b>	<b>&lt;0.001</b>
<b>6B</b>	<b>58</b>	<b>9</b>	<b>17</b>	<b>1.765</b>	<b>1.291,2.413</b>	<b>&lt;0.001</b>	<b>64</b>	<b>9</b>	<b>12</b>	<b>3.930</b>	<b>2.934,5.264</b>	<b>&lt;0.001</b>
7F	57	10	18	0.812	0.629,1.047	0.108	<b>64</b>	<b>9</b>	<b>12</b>	<b>1.307</b>	<b>1.006,1.697</b>	<b>0.045</b>
9V	58	9	17	1.114	0.824,1.508	0.479	<b>64</b>	<b>9</b>	<b>12</b>	<b>1.814</b>	<b>1.357,2.424</b>	<b>&lt;0.001</b>
14	58	9	17	0.790	0.557,1.120	0.184	64	9	12	0.960	0.694,1.327	0.803
<b>18C</b>	<b>56</b>	<b>11</b>	<b>19</b>	<b>1.367</b>	<b>1.019,1.835</b>	<b>0.037</b>	63	10	13	1.166	0.864,1.574	0.313
<b>19F</b>	<b>58</b>	<b>9</b>	<b>17</b>	<b>4.054</b>	<b>2.612,6.291</b>	<b>&lt;0.001</b>	<b>64</b>	<b>9</b>	<b>12</b>	<b>2.497</b>	<b>1.824,3.419</b>	<b>&lt;0.001</b>
<b>23F</b>	<b>58</b>	<b>9</b>	<b>17</b>	<b>2.492</b>	<b>1.693,3.666</b>	<b>&lt;0.001</b>	<b>64</b>	<b>9</b>	<b>12</b>	<b>3.324</b>	<b>2.366,4.669</b>	<b>&lt;0.001</b>
3†	51	16	24	1.124	0.772,1.635	0.539	<b>60</b>	<b>13</b>	<b>16</b>	<b>1.505</b>	<b>1.149,1.972</b>	<b>0.003</b>
6A†	58	9	17	0.811	0.560,1.175	0.265	<b>64</b>	<b>9</b>	<b>12</b>	<b>2.470</b>	<b>1.795,3.399</b>	<b>&lt;0.001</b>
19A†	<b>54</b>	<b>13</b>	<b>21</b>	<b>2.526</b>	<b>1.437,4.441</b>	<b>0.002</b>	<b>64</b>	<b>9</b>	<b>12</b>	<b>3.004</b>	<b>2.118,4.261</b>	<b>&lt;0.001</b>

\* Geometric mean change from 12 months to 24 months

† Serotypes contained in PCV-13 only

**Table S12** continued

Serotype	Unadjusted Treatment Effect**			Adjusted Treatment Effect***		
	PCV-10/ PCV-13	95% CI	P-Value	PCV-10/ PCV-13	95% CI	P-Value
<b>1</b>	<b>0.768</b>	<b>0.592,0.996</b>	<b>0.047</b>	<b>0.771</b>	<b>0.620,0.957</b>	<b>0.019</b>
<b>4</b>	<b>1.640</b>	<b>1.180,2.280</b>	<b>0.004</b>	<b>1.653</b>	<b>1.239,2.206</b>	<b>0.001</b>
5	0.816	0.625,1.065	0.133	0.827	0.649,1.054	0.124
<b>6B</b>	<b>0.449</b>	<b>0.328,0.615</b>	<b>&lt;0.001</b>	<b>0.513</b>	<b>0.387,0.681</b>	<b>&lt;0.001</b>
<b>7F</b>	<b>0.621</b>	<b>0.492,0.784</b>	<b>&lt;0.001</b>	<b>0.631</b>	<b>0.520,0.765</b>	<b>&lt;0.001</b>
<b>9V</b>	<b>0.614</b>	<b>0.443,0.853</b>	<b>0.004</b>	<b>0.639</b>	<b>0.480,0.850</b>	<b>0.002</b>
14	0.823	0.591,1.146	0.245	0.847	0.638,1.125	0.249
18C	1.173	0.845,1.628	0.338	1.199	0.918,1.565	0.180
<b>19F</b>	<b>1.624</b>	<b>1.047,2.517</b>	<b>0.031</b>	<b>2.316</b>	<b>1.675,3.203</b>	<b>&lt;0.001</b>
23F	0.750	0.521,1.079	0.119	0.738	0.521,1.047	0.088
3†	0.746	0.543,1.025	0.071	0.821	0.601,1.121	0.211
<b>6A†</b>	<b>0.328</b>	<b>0.230,0.469</b>	<b>&lt;0.001</b>	<b>0.365</b>	<b>0.270,0.495</b>	<b>&lt;0.001</b>
19A†	0.841	0.512,1.381	0.490	1.039	0.683,1.582	0.856

\*\* Unadjusted estimate of the ratio of geometric mean fold rises from 12 to 24 months (PCV-10/PCV-13)

\*\*\* Ratio of geometric mean fold rises from 12 to 24 months (PCV-10/PCV-13), adjusted for 12 month values, age, sex and ethnicity

† Serotypes contained in PCV-13 only



**Table S13** Serotype-specific OPA geometric mean fold change from 12 to 24 months by vaccine group (intent-to-treat cohort).

Serotype	PCV-10						PCV-13					
	N	N missing at months		Geometric Mean Fold	95% CI	P-Value	N	N missing at months		Geometric Mean Fold	95% CI	P-Value
1	58	9	17	0.988	0.965,1.012	0.322	64	9	12	0.982	0.887,1.087	0.723
<b>4</b>	<b>53</b>	<b>14</b>	<b>22</b>	<b>3.652</b>	<b>1.785,7.474</b>	<b>0.001</b>	<b>59</b>	<b>14</b>	<b>17</b>	<b>3.786</b>	<b>1.949,7.356</b>	<b>&lt;0.001</b>
5	52	15	23	0.788	0.587,1.056	0.109	58	15	18	1.082	0.767,1.528	0.649
6B	53	14	22	1.648	0.844,3.217	0.142	<b>59</b>	<b>14</b>	<b>17</b>	<b>24.50</b>	<b>12.56,47.80</b>	<b>&lt;0.001</b>
7F	54	13	21	0.940	0.523,1.689	0.835	<b>63</b>	<b>10</b>	<b>13</b>	<b>4.569</b>	<b>2.519,8.289</b>	<b>&lt;0.001</b>
9V	56	11	19	1.053	0.520,2.133	0.885	<b>59</b>	<b>14</b>	<b>17</b>	<b>15.07</b>	<b>6.610,34.36</b>	<b>&lt;0.001</b>
<b>14</b>	<b>54</b>	<b>13</b>	<b>21</b>	<b>1.985</b>	<b>1.153,3.419</b>	<b>0.014</b>	<b>60</b>	<b>13</b>	<b>16</b>	<b>2.533</b>	<b>1.572,4.080</b>	<b>&lt;0.001</b>
<b>18C</b>	<b>55</b>	<b>12</b>	<b>20</b>	<b>12.78</b>	<b>5.576,29.30</b>	<b>0.000</b>	<b>53</b>	<b>20</b>	<b>23</b>	<b>14.05</b>	<b>6.125,32.25</b>	<b>&lt;0.001</b>
<b>19F</b>	<b>55</b>	<b>12</b>	<b>20</b>	<b>15.89</b>	<b>7.793,32.40</b>	<b>0.000</b>	<b>59</b>	<b>14</b>	<b>17</b>	<b>6.775</b>	<b>3.179,14.44</b>	<b>&lt;0.001</b>
<b>23F</b>	<b>51</b>	<b>16</b>	<b>24</b>	<b>4.506</b>	<b>1.760,11.53</b>	<b>0.002</b>	<b>59</b>	<b>14</b>	<b>17</b>	<b>28.86</b>	<b>13.06,63.78</b>	<b>&lt;0.001</b>
3†	52	15	23	0.920	0.679,1.248	0.590	59	14	17	1.127	0.983,1.291	0.085
<b>6A†</b>	<b>49</b>	<b>18</b>	<b>26</b>	<b>0.404</b>	<b>0.168,0.972</b>	<b>0.043</b>	<b>56</b>	<b>17</b>	<b>20</b>	<b>18.43</b>	<b>8.270,41.08</b>	<b>&lt;0.001</b>
<b>19A†</b>	<b>49</b>	<b>18</b>	<b>26</b>	<b>3.656</b>	<b>1.470,9.092</b>	<b>0.006</b>	<b>59</b>	<b>14</b>	<b>17</b>	<b>12.41</b>	<b>6.303,24.45</b>	<b>&lt;0.001</b>

\* Geometric mean change from 12 months to 24 months

† Serotypes contained in PCV-13 only

**Table S13** continued

Serotype	Unadjusted Treatment Effect**			Adjusted Treatment Effect***		
	PCV-10/ PCV-13	95% CI	P-Value	PCV-10/ PCV-13	95% CI	P-Value
1	1.006	0.902,1.123	0.911	0.974	0.921,1.030	0.345
4	0.965	0.387,2.406	0.938	1.082	0.456,2.570	0.857
5	0.728	0.490,1.079	0.113	0.702	0.499,0.988	0.043
<b>6B</b>	<b>0.067</b>	<b>0.028,0.159</b>	<b>&lt;0.001</b>	<b>0.066</b>	<b>0.030,0.146</b>	<b>&lt;0.001</b>
<b>7F</b>	<b>0.206</b>	<b>0.107,0.398</b>	<b>&lt;0.001</b>	<b>0.275</b>	<b>0.175,0.432</b>	<b>&lt;0.001</b>
<b>9V</b>	<b>0.070</b>	<b>0.025,0.192</b>	<b>&lt;0.001</b>	<b>0.078</b>	<b>0.031,0.197</b>	<b>&lt;0.001</b>
14	0.784	0.431,1.427	0.422	0.871	0.552,1.376	0.551
18C	0.909	0.343,2.410	0.847	0.989	0.380,2.574	0.981
<b>19F</b>	<b>2.346</b>	<b>0.890,6.183</b>	<b>0.084</b>	<b>3.198</b>	<b>1.439,7.106</b>	<b>0.005</b>
<b>23F</b>	<b>0.156</b>	<b>0.057,0.426</b>	<b>&lt;0.001</b>	<b>0.189</b>	<b>0.081,0.440</b>	<b>&lt;0.001</b>
3†	0.817	0.599,1.113	0.198	0.976	0.754,1.263	0.853
<b>6A†</b>	<b>0.022</b>	<b>0.008,0.063</b>	<b>&lt;0.001</b>	<b>0.020</b>	<b>0.009,0.044</b>	<b>&lt;0.001</b>
<b>19A†</b>	<b>0.294</b>	<b>0.117,0.739</b>	<b>0.010</b>	<b>0.349</b>	<b>0.152,0.801</b>	<b>0.013</b>

\*\* Unadjusted estimate of the ratio of geometric mean fold rises from 12 to 24 months (PCV-10/PCV-13)

\*\*\* Ratio of geometric mean fold rises from 12 to 24 months (PCV-10/PCV-13), adjusted for 12 month values, age, sex and ethnicity

† Serotypes contained in PCV-13 only



**Table S14** Reactogenicity of the booster vaccine by vaccine group

Reaction	Group	N	Proportion	95% Exact Confidence Limits		P-value*
				Lower	Upper	
<b>Redness</b>	PCV-13	40	0.460	0.352	0.570	0.289
	PCV-10	47	0.540	0.430	0.648	.
<b>Swelling</b>	PCV-13	21	0.241	0.156	0.345	0.858
	PCV-10	20	0.230	0.146	0.333	.
<b>Hardness</b>	PCV-13	27	0.310	0.216	0.419	0.741
	PCV-10	25	0.287	0.195	0.394	.
<b>Pain</b>	PCV-13	25	0.287	0.195	0.394	0.741
	PCV-10	27	0.310	0.216	0.419	.
<b>Irritability</b>	PCV-13	47	0.540	0.430	0.648	1.000
	PCV-10	47	0.540	0.430	0.648	.
<b>Drowsiness</b>	PCV-13	26	0.300	0.205	0.407	0.868
	PCV-10	25	0.287	0.195	0.394	.
<b>Loss of Appetite</b>	PCV-13	26	0.299	0.205	0.407	0.868
	PCV-10	25	0.287	0.195	0.394	.
<b>Fever</b>	PCV-13	5	0.059	0.019	0.131	0.771
	PCV-10	6	0.069	0.026	0.144	.

\*Chi-Square test

**Table S15** Summary of the severity of side effects of the booster vaccine by vaccine group.

	<b>PCV-13</b>		<b>PCV-10</b>		<b>All</b>	
	N	%	N	%	N	%
<b>Redness</b>						
Absent	47	52.22	40	45.98	87	49.15
Mild (<2.5cm)	38	42.22	46	52.87	84	47.46
Mod (>=2.5cm to <5cm)	2	2.22	1	1.15	3	1.69
Severe (>=5cm)	0	0	0	0	0	0
Missing	3	3.33	0	0	3	1.69
<b>Swelling</b>						
Absent	66	73.33	67	77.01	133	75.14
Mild (<2.5cm)	18	20.00	20	22.99	38	21.47
Mod (>=2.5cm to <5cm)	2	2.22	0	0	2	1.13
Severe (>=5cm)	1	1.11	0	0	1	0.56
Missing	3	3.33	0	0	3	1.69
<b>Hardness</b>						
Absent	60	66.67	62	71.26	122	68.93
Mild (<2.5cm)	24	26.67	24	27.59	48	27.12
Mod (>=2.5cm to <5cm)	2	2.22	1	1.15	3	1.69
Severe (>=5cm)	1	1.11	0	0	1	0.56
Missing	3	3.33	0	0	3	1.69
<b>Pain</b>						
Absent	62	68.89	60	68.97	122	68.93
Mild	11	12.22	18	20.69	29	16.38
Mod	12	13.33	6	6.90	18	10.17
Severe	2	2.22	3	3.45	5	2.82
Missing	3	3.33	0	0	3	1.69
<b>Irritability</b>						
Absent	40	44.44	40	45.98	80	45.20
Mild	28	31.11	28	32.18	56	31.64
Mod	16	17.78	14	16.09	30	16.95
Severe	3	3.33	5	5.75	8	4.52
Missing	3	3.33	0	0	3	1.69
<b>Drowsiness</b>						
Absent	61	67.78	62	71.26	123	69.49
Mild	20	22.22	19	21.84	39	22.03
Mod	4	4.44	6	6.90	10	5.65
Severe	2	2.22	0	0	2	1.13
Missing	3	3.33	0	0	3	1.69
<b>Loss of Appetite</b>						
Absent	61	67.78	62	71.26	123	69.49
Mild	20	22.22	19	21.84	39	22.03
Mod	6	6.67	5	5.75	11	6.21
Severe	0	0	1	1.15	1	0.56
Missing	3	3.33	0	0	3	1.69
<b>Fever (°C)</b>						
< 38.0	80	88.89	81	93.10	161	90.96
38.0-38.4	2	2.22	2	2.30	4	2.26
38.5-38.9	1	1.11	2	2.30	3	1.69
39.0-39.4	1	1.11	2	2.30	3	1.69
39.5-39.9	1	1.11	0	0	1	0.56
40.0-40.4	0	0	0	0	0	0
40.5-40.9	0	0	0	0	0	0
>41	0	0	0	0	0	0
Missing	5	5.56	0	0	5	2.82

**Table S16** Summary of duration of side effects of the booster vaccine by vaccine group.

	PCV-13		PCV-10		All	
	N	%	N	%	N	%
<b>Redness</b>						
0 days	46	51.11	40	45.98	86	48.59
1 day	9	10.00	14	16.09	23	12.99
2 days	11	12.22	14	16.09	25	14.12
3 days	10	11.11	10	11.49	20	11.30
4 days	7	7.78	9	10.34	16	9.04
Missing	7	7.78	0	0	7	3.95
<b>Swelling</b>						
0 days	65	72.22	67	77.01	132	74.58
1 day	5	5.56	10	11.49	15	8.47
2 days	10	11.11	6	6.90	16	9.04
3 days	4	4.44	1	1.15	5	2.82
4 days	1	1.11	3	3.45	4	2.26
Missing	5	5.56	0	0	5	2.82
<b>Hardness</b>						
0 days	59	65.56	62	71.26	121	68.36
1 day	7	7.78	5	5.75	12	6.78
2 days	10	11.11	6	6.90	16	9.04
3 days	4	4.44	8	9.20	12	6.78
4 days	4	4.44	6	6.90	10	5.65
Missing	6	6.67	0	0	6	3.39
<b>Pain</b>						
0 days	62	68.89	60	68.97	122	68.93
1 day	14	15.56	14	16.09	28	15.82
2 days	5	5.56	9	10.34	14	7.91
3 days	2	2.22	2	2.30	4	2.26
4 days	2	2.22	2	2.30	4	2.26
Missing	5	5.56	0	0	5	2.82
<b>Irritability</b>						
0 days	39	43.33	39	44.83	78	44.07
1 day	20	22.22	27	31.03	47	26.55
2 days	13	14.44	9	10.34	22	12.43
3 days	9	10.00	6	6.90	15	8.47
4 days	4	4.44	6	6.90	10	5.65
Missing	5	5.56	0	0	5	2.82
<b>Drowsiness</b>						
0 days	60	66.67	62	71.26	122	68.93
1 day	14	15.56	17	19.54	31	17.51
2 days	8	8.89	6	6.90	14	7.91
3 days	2	2.22	1	1.15	3	1.69
4 days	1	1.11	1	1.15	2	1.13
Missing	5	5.56	0	0	5	2.82
<b>Loss of Appetite</b>						
0 days	58	64.44	62	71.26	120	67.80
1 day	16	17.78	15	17.24	31	17.51
2 days	6	6.67	5	5.75	11	6.21
3 days	3	3.33	3	3.45	6	3.39
4 days	2	2.22	2	2.30	4	2.26
Missing	5	5.56	0	0	5	2.82
<b>Fever</b>						
0 days	71	78.89	76	87.36	147	83.05
1 day	3	3.33	3	3.45	6	3.39
2 days	1	1.11	2	2.30	3	1.69
3 days	1	1.11	0	0	1	0.56
4 days	0	0	1	1.15	1	0.56
Missing	14	15.56	5	5.75	19	10.73