**Table 1: Comparison of MenC rSBA responses before and 6 and 28 days after a MenCC boost**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Analysis** | **Single infant dose** **MenC-CRM Group** | **Two infant dose MenC-CRM Group** | **Control Group** | **Single infant dose** **MenC-TT group** |
|  | **N** | **n** | **% (95% CI)** | **N** | **n** | **% (95% CI)** | **N** | **n** | **% (95% CI)** | **N** | **n** | **% (95% CI)** |
| **Subjects with MenC rSBA ≥1:8****n; % (95% CI)** | **Pre** | 45 | 14  | 31.1% (18.2-46.6) | 42 | 14  | 33.3% (19.6-49.5) | 46 | 0 | 0 | 48 | 16 | 33.3% (20.4-48.4) |
| **6 days later** | 45 | 45 | 100% (92.0 -100) | 42 | 42 | 100% (92.0 - 100) | 46 | 38  | 82.6% (68.6-92.2) | 48 | 48 | 100% (92.0-100) |
| **28 days later** | 42 | 42 | 100% (91.40-100) | 36 | 34  | 94.4% (81.3-99.3) | 41 | 34  | 82.9% (67.9-92.8) | 41 | 41  | 100% (91.4-100) |
| **Subjects with MenC rSBA ≥1:128****n; % (95% CI)** | **Pre** | 45 | 6 | 13.3% (5.1- 26.8) | 42 | 4 | 9.5 (2.7 - 22.6) | 46 | 0 | 0 | 48 | 7 | 14.6 (6.1 - 27.8) |
| **6 days post boost** | 45 | 44  | 97.8% (88.2 - 99.9) | 42 | 40 | 95.2% (83.8-99.4) | 46 | 37 | 80.4% (66.1-90.6) | 48 | 48  | 100% (92.0 - 100) |
| **28 days post boost** | 42 | 39 | 92.9% (80.5-98.5) | 36 | 30 | 83.3% (67.2-93.6) | 41 | 26  | 63.4% (46.9-77.9) | 41 | 40 | 97.6% (87.1-99.9) |
|  |  |  |  |  |  |
| **GMTs (95% CI)** | **Pre** | 5.70 (3.47-9.38) | 6.35 (3.72-10.84) | 2 | 6.35 (3.74-10.78) |
| **6 days post boost** | 1039.90 (714.43-1513.63) | 1093.88 (682.44-1753.37) | 248.40 (117.30-526.03) | 3702.2 (2838.04-4829.94) |
| **28 days post boost** | 724.07 (454.55-1153.43) | 276.50 (159.28-479.97) | 97.66 (50.22-189.94) | 2305.29 (1406.86-3777.47) |
| **GMR pre to 6 days post boost (95%CI) adjusted for pre-boost values** | **vs Control group**  | 3.82 (1.88-7.77); **p<0.0001** | 3.99 (1.93-8.23); **p<0.0001** |  | 13.49 (6.68 – 27.25); **p<0.0001** |
| **vs Single dose MenC-CRM** |  |  | 3.53 (1.79-6.97); **p<0.0001** |
| **vs Two dose MenC-CRM** | 0.96 (0.47-1.94); p=0.9  | 3.38 (1.69-6.77); **p=0.001** |
| **GMR 6 days to 28 days post boost (95% CI) adjusted for 6 day post boost values** | **vs Control group**  | 4.04 (1.96, 8.31) **p=<0.0001** | 1.51 (0.72, 3.19); p=0.274 |  | 7.99 (3.63, 17.60); **p=<0.0001** |
| **vs Single dose MenC-CRM** |  |  | 1.98 (0.97, 4.02); p=0.06 |
| **vs Two dose MenC-CRM** | 2.67 (1.31, 5.44) **p=0.007** | 5.28 (2.54, 10.96); **p<0.0001** |

N=number of participants with available blood samples; n=number of participants with SBA titres above the defined cut-off; CI: confidence intervals; GMTs: geometric mean titres; GMR: geometric mean ratio

**Table 2: Comparison of memory B-cell responses before and 6 and 28 days after a MenCC boost**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Analysis** | **Single infant dose** **MenC-CRM Group** | **Two infant dose** **MenC-CRM Group** | **Control Group** | **Single infant dose** **MenC-TT Group** |
| **B cells/million PBMC** | **Pre** | 4.66 (2.50-8.68), N=20 | 1.86 (0.76-4.53), N=13 | 0.94 (0.56-1.57), N=24 | 2.80 (1.56-5.01), N=19 |
| **6 days later** | 9.12 (5.23-15.89), N=21 | 5.88 (2.99-11.56), N=18 | 0.77 (0.44-1.37), N=18 | 9.60 (4.14-22.24), N=15 |
| **28 days later** | 4.22 (1.97-9.03), N=16 | 8.42 (3.92-18.07), N=13 | 6.53 (3.20-13.34), N=18 | 12.81 (6.89-23.81), N=14 |
| **B-cell GMR pre to 6 days post boost (95%CI) adjusted for pre-boost values** | **vs Control group**  | 6.23 (2.04-18.96), p=**0.002** | 3.99 (1.23-12.92), **p=0.022** |  | 8.12 (2.33-28.35), **p=0.0015** |
| **vs Single dose MenC-CRM** |  |  |  | 1.3 (0.43, 3.96), p=0.631 |
| **vs Two dose MenC-CRM** | 1.56 (0.46-5.32), p=0.470 |  |  | 2.03 (0.52-7.88), p=0.296 |
| **B-cell GMR 6 to 28 days post boost (95%CI) adjusted for 6 day post boost values** | **vs Control group**  |  |  |  | 0.48 (0.10-2.25); p=0.34 |
| **vs Single dose MenC-CRM** |  |  | 4.85 (1.29-18.29); **p=0.02** | 2.31 (0.67-7.96); p=0.18 |
| **vs Two dose MenC-CRM** | 0.95 (0.29-3.15); p=0.93 |  | 4.63 (0.10-21.48); **p=0.05** | 2.20 (0.59-8.14); p=0.23 |

PBMC: peripheral blood mononuclear cells; N=number of participants with available blood samples; GMR: geometric mean ratio

**Supplementary Table 1: Comparison of MenC rSBA responses before and 6 days after a MenCC boost in participants with pre-boost MenC rSBA titres <4 and ≥4**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Analysis** | **Single infant dose** **MenC-CRM Group** **n=45** | **Two infant dose** **MenC-CRM Group****n=42** | **Control Group****n=46** | **Single infant dose** **MenC-TT Group** **n=48** |
| **Pre-boost MenC rSBA <1:4** | n=29; 64.4% | n=25; 59.5% | n=46; 100% | n=31; 64.6% |
| **GMTs (95% CI)** | **Pre** | 2  | 2  | 2  | 2  |
| **Post** | 1074.14 (646.44-1784.82) | 968.76 (528.23-1776.71) | 248.40 (117.30-526.03) | 3202.90 (2255.34-4548.56) |
| **GMR (95% CI)** | **vs Control group** | 4.32 (1.85-10.11); **p=0.001** | 3.90 (1.6-9.50); **p=0.003** |  | 12.89 (5.6-29.65); **p<0.0001** |
| **vs Single dose MenC-CRM** |  |  |  | 2.98 (1.18-7.52); **p=0.021** |
| **vs Two dose MenC-CRM** | 1.11 (0.42-2.95); p=0.84 |  |  | 3.31 (1.26-8.66); p=0.015 |
| **B-cells/million PBMC** | **Pre** | 2.78 (0.95-8.04), N=10 | 1.16 (0.53-2.51), N=9 | 0.94 (0.56-1.57), N=24 | 2.05 (0.85-4.92), N=10 |
| **Post** | 6.11 (2.78-13.43),N=12 | 3.19 (0.93-11.03), N=9 | 0.77 (0.44-1.37), N=18 | 9.37 (2.35-37.37), N=8 |
| **Adj B-cell GMR (95% CI)** | **vs Control group** | 2.28 (0.94-5.53); p=0.07 | 1.57 (0.60-4.15); p=0.35 |  | 1.80 (0.76-4.30); p=0.18 |
| **vs Single dose MenC-CRM** |  |  |  | 0.79 (0.30-2.12); p=0.64 |
| **vs Two dose MenC-CRM** | 1.45 (0.48-4.32); p=0.50 |  |  | 1.14 (0.39-3.39); p=0.80 |
| **Pre boost MenC rSBA ≥1:4** | n=16; 35.6% | n=17; 40.5% | n=0 | n=17; 35.4% |
| **GMTs (95% CI)** | **Pre** | 38.05 (17.71-81.77) | 34.72 (16.53-72.92) |  | 52.2 (24.85-109.63) |
| **Post** | 980.59 (530.6-1812.23) | 1307.81 (720.75-2373.07) | 4821.6 (2657.21-8748.93) |
| **Adj GMR (95% CI)** | **vs Single dose MenC-CRM** |  |  |  | 4.72 (2.00-11.14); **p=0.001** |
| **vs Two dose MenC-CRM** | 0.74 (0.32-1.74); p=0.48 | 3.50 (1.50-8.17); **p=0.005** |
| **B-cells**/**million PBMC** | **Pre** | 7.86 (4.00-15.46), N=10 | 5.39 (0.24-119.62), N=4 |  | 3.95 (1.62-9.66), N=9 |
| **Post** | 15.56 (7.09-34.13), N=9 | 10.82 (6.30-18.58), N=9 | 9.87 (2.52-38.60), N=7 |
| **Adj B-cell GMR (95% CI)** | vs Single dose MenC-CRM |  |  |  | 0.40 (0.08-1.91); p=0.24 |
| vs Two dose MenC-CRM | 1.28 (0.18-9.03); p=0.80 | 0.51 (0.07-3.71); p=0.49 |

N=number of participants with available blood samples; Adj GMR: geometric mean ratio adjusted for pre-boost MenC rSBA; adj B-cell GMR: geometric mean ration adjusted for the number of pre-boost MenC specific B-cells