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Supplemental Material to:

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A phase 2 randomised controlled trial of a multicomponent meningococcal serogroup B vaccine (I): Effects of prophylactic paracetamol on immunogenicity and reactogenicity of routine infant vaccines and 4CMenB

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Supplementary tables – Prymula et al.

Table 1. Geometric mean ELISA concentrations for pneumococcal vaccine antigens (95% CI)					
		Study groups			Difference between 4CMenB + Para and 4CMenB (95% CI)
Serotype	Timing	**4CMenB**	**4CMenB + Para**	**Men C**	
04	Post-3rd dose	**1.62** (1.37−1.91) N = 140	**1.44** (1.22−1.7) N = 135	**1.78** (1.49−2.12) N = 132	0.89 (0.7−1.12)
	Pre-booster	**0.63** (0.54−0.74) N = 124	**0.67** (0.57−0.79) N = 120	**0.81** (0.7−0.94) N = 135	1.06 (0.85−1.33)
	Post-booster	**11** (9.37−13) N = 120	**10** (8.42−12) N = 121	**13** (11−15) N = 124	0.9 (0.7−1.16)
6B	Post-3rd dose	**1.1** (0.86−1.39) N = 140	**0.88** (0.69−1.11) N = 135	**1.21** (1.49−2.12) N = 132	0.8 (0.57−1.12)
	Pre-booster	**0.84** (0.69−1.02) N = 124	**0.75** (0.62−0.91) N = 120	**0.88** (0.72−1.07) N = 135	1.06 (0.85−1.33)
	Post-booster	**20** (16−25) N = 120	**17** (13−21) N = 121	**21** (17−27) N = 124	0.9 (0.7−1.16)
9V	Post-3rd dose	**3.21** (2.81−3.65) N = 140	**2.95** (2.58−3.37) N = 135	**3.13** (2.66−3.68) N = 132	0.92 (0.76−1.11)
	Pre-booster	**0.9** (0.78−1.04) N = 124	**0.95** (0.82−1.09) N = 120	**1.03** (0.9−1.18) N = 135	1.05 (0.85−1.28)
	Post-booster	**12** (10−14) N = 120	**11** (9.46−13) N = 121	**13** (11−16) N = 124	0.93 (0.74−1.16)
14	Post-3rd dose	**3.84** (3.22−4.58) N = 140	**3.04** (2.54−3.63) N = 135	**3.98** (3.31−4.77) N = 132	0.79 (0.62−1.02)
	Pre-booster	**2.26** (1.85−2.77) N = 124	**1.78** (1.45−2.19) N = 120	**2.45** (2.03−2.96) N = 135	0.79 (0.59−1.05)
	Post-booster	**15** (12−18) N = 120	**13** (10−15) N = 121	**18** (15−21) N = 124	0.85 (0.65−1.11)
18c	Post-3rd dose	**4.13** (3.49−4.9) N = 140	**3.34** (2.81−3.98) N = 135	**4.14** (3.51−4.89) N = 132	0.81 (0.63−1.03)
	Pre-booster	**0.84** (0.73−0.97) N = 124	**0.84** (0.73−0.98) N = 120	**0.88** (0.78−1) N = 135	1 (0.82−1.24)
	Post-booster	**12** (9.99−15) N = 120	**10** (8.46−12) N = 121	**14** (12−17) N = 124	0.85 (0.65−1.1)

19F	Post-3rd dose	**4.84** (4.26−5.51) N = 140	**4.37** (3.84−4.98) N = 135	**4.62** (3.91−5.45) N = 132	0.9 (0.75−1.08)
	Pre-booster	**0.68** (0.58−0.8) N = 124	**0.74** (0.62−0.87) N = 120	**0.88** (0.73−1.06) N = 135	1.08 (0.85−1.37)
	Post-booster	**12** (10−15) N = 120	**9.4** (7.73−11) N = 121	**12** (10−14) N = 124	0.76 (0.58−1.01)
23F	Post-3rd dose	**2.49** (2.03−3.04) N = 140	**2.03** (1.66−2.5) N = 135	**2.39** (1.94−2.94) N = 132	0.82 (0.61−1.09)
	Pre-booster	**0.67** (0.54−0.82) N = 124	**0.73** (0.59−0.91) N = 120	**0.74** (0.62−0.88) N = 135	1.1 (0.81−1.49)
	Post-booster	**17** (14−22) N = 120	**15** (12−19) N = 121	**21** (17−27) N = 124	0.85 (0.61−1.18)

Table 2. Percentages of subjects achieving recognised cut-offs for routine vaccine components

Antigen (cut-off)		**Study groups**			Difference between 4CMenB+Para and 4CMenB (95% CI)
	Timing	**4CMenB**	**4CMenB + Para**	**Men C**	
Diphtheria (% ≥ 0.1 IU/mL)	Post-3rd dose	**100** (97−100) N = 140	**100** (97−100) N = 135	**100** (97−100) N = 132	0% (-2.7−2.6)
	Pre-booster	**99** (95−100) N = 119	**97** (91−99) N = 115	**98** (95−100) N = 131	-3% (-7.8−1.4)
	Post-booster	**100** (97−100) N = 118	**100** (97−100) N = 120	**100** (97−100) N = 119	0% (-3.1−3.1)
Tetanus (% ≥ 0.1 IU/mL)	Post-3rd dose	**100** (97−100) N = 140	**100** (97−100) N = 135	**100** (97−100) N = 132	0% (-2.7−2.6)
	Pre-booster	**97** (93−99) N = 119	**96** (90−99) N = 115	**97** (92−99) N = 131	-2% (-7.5−3.3)
	Post-booster	**100** (97−100) N = 118	**100** (97−100) N = 120	**100** (97−100) N = 119	0% (-3.1−3.1)
PRP (% ≥ 0.15 µg/mL)	Post-3rd dose	**98** (94−100) N = 140	**99** (96−100) N = 135	**100** (97−100) N = 132	1% (-2.1−5.4)
	Pre-booster	**100** (97−100) N = 119	**100** (97−100) N = 115	**100** (97−100) N = 131	0% (-3.2−3.1)
	Post-booster	**100** (97−100) N = 118	**100** (97−100) N = 120	**100** (97−100) N = 119	0% (-4.5−4.3)
Anti-HBs (% ≥ 10 mIU/mL)	Post-3rd dose	**97** (89−100) N = 65	**97** (89−100) N = 66	**98** (91−100) N = 60	0% (-7.7−7.8)
	Pre-booster	**92** (85−97) N = 102	**91** (84−96) N = 101	**89** (81−94) N = 107	-1% (-9.2−7)
	Post-booster	**100** (96−100) N = 98	**99** (94−100) N = 95	**99** (94−100) N = 94	-1% (-5.7−2.7)
Poliovirus (% ≥ 8) Post-3rd dose	Poliovirus 1	**99** (96−100) N = 123	**97** (92−99) N = 120	**98** (94−100) N = 119	-3% (-7.5−1.4)
	Poliovirus 2	**96** (91−99) N = 123	**96** (91−99) N = 120	**97** (93−99) N = 117	0% (-5.8−5.5)
	Poliovirus 3	**100** (97−100) N = 123	**100** (97−100) N = 120	**99** (95−100) N = 117	-0% (-3.1−3.0)

Table 3. Percentages of subjects seroconverting to acellular pertussis antigens				
	Study groups			Difference between 4CMenB+Para and 4CMenB (95% CI)
	4CMenB	**4CMenB + Para**	**Men C**	
Pertussis Toxoid				
Post-3rd dose	**98** (94−100) N = 124	**97** (9−299) N = 119	**100** (97−100) N = 115	-2% (-7−3)
Post-booster	**99** (95−100) N = 100	**96** (90−99) N = 96	**100** (97−100) N = 104	-3% (-9−2)
Filamentous hemagglutinin				
Post-3rd dose	**97** (92−99) N = 125	**97** (93−99) N = 119	**98** (94−100) N = 115	1% (-4−6)
Post-booster	**98** (93−100) N = 100	**96** (90−99) N = 96	**96** (90−99) N = 104	-2% (-8−3)
Pertactin				
Post-3rd dose	**97** (92−99) N = 125	**91** (84−95) N = 119	**97** (93−99) N = 115	-6% (-13−0)
Post-booster	**97** (91−99) N = 100	**98** (93−100) N = 96	**98** (93−100) N = 104	1% (-5−7)

Table 4. Percentages of subjects achieving 0.35 µg/mL for pneumococcal vaccine antigens after three primary doses, and 1.0 µg/mL after a booster dose

		Study groups			Difference between 4CMenB + Para and 4CMenB (95% CI)
Serotype	Timing	**4CMenB**	**4CMenB + Para**	**Men C**	
04	Post-3rd dose (% ≥ 0.35 µg/mL)	**95** (90−98) N = 140	**91** (85−95) N = 135	**93** (87−97) N = 132	-4% (-10.5−2.2)
	Pre-booster (% ≥ 0.35 µg/mL)	**79** (71−86) N = 124	**77** (68−84) N = 120	**87** (80−92) N = 135	-2.0% (-12.8−8.0)
	Post-booster (% ≥ 1.0 µg/mL)	**98** (94−100) N = 120	**97** (92−99) N = 121	**98** (94−100) N = 124	-2.0% (-6.7−2.9)
6B	Post-3rd dose (% ≥ 0.35 µg/mL)	**76** (68−83) N = 140	**73** (65−81) N = 135	**81** (73−87) N = 132	-2.0% (-12.7−7.9)
	Pre-booster (% ≥ 0.35 µg/mL)	**85** (78−91) N = 124	**81** (73−87) N = 120	**85** (78−91) N = 135	-5.0% (-14.2−4.8)
	Post-booster (% ≥ 1.0 µg/mL)	**98** (93−99) N = 120	**96** (91−99) N = 121	**97** (92−99) N = 124	-2.0% (-7.1−3.4)
9V	Post-3rd dose (% ≥ 0.35 µg/mL)	**100** (97−100) N = 140	**99** (96−100) N = 135	**98** (94−100) N = 132	-1.0% (-4.0−1.9)
	Pre-booster (% ≥ 0.35 µg/mL)	**91** (85−95) N = 124	**88** (80−93) N = 120	**97** (93−99) N = 135	-4.0% (-11.8−4.2)
	Post-booster (% ≥ 1.0 µg/mL)	**98** (94−100) N = 120	**98** (94−100) N = 121	**98** (94−100) N = 124	0% (-4.3−4.4)
14	Post-3rd dose (% ≥ 0.35 µg/mL)	**98** (94−100) N = 140	**93** (88−97) N = 135	**98** (94−100) N = 132	-5% (-10.3−0.3)
	Pre-booster (% ≥ 0.35 µg/mL)	**94** (89−98) N = 124	**93** (86−97) N = 120	**97** (93−99) N = 135	-2.0% (-8.7−4.7)
	Post-booster (% ≥ 1.0 µg/mL)	**97** (92−99) N = 120	**97** (92−99) N = 121	**98** (94−100) N = 124	0% (-5.2−5.3)
18c	Post-3rd dose (% ≥ 0.35 µg/mL)	**99** (96−100) N = 140	**98** (94−100) N = 135	**100** (97−100) N = 132	-2% (-5.6−1.9)
	Pre-booster (% ≥ 0.35 µg/mL)	**89** (82−94) N = 124	**88** (80−93) N = 120	**93** (87−96) N = 135	-1.0% (-9.6−7.1)
	Post-booster (% ≥ 1.0 µg/mL)	**98** (93−99) N = 120	**98** (93−99) N = 121	**98** (94−100) N = 124	0% (-4.8−4.9)

19F	Post-3rd dose (% ≥ 0.35 µg/mL)	**99** (96−100) N = 140	**99** (95−100) N = 135	**98** (94−100) N = 132	-1.0% (-4.6−2.5)
	Pre-booster (% ≥ 0.35 µg/mL)	**84** (76−90) N = 124	**81** (73−87) N = 120	**88** (81−93) N = 135	-3.0% (-12.7−6.6)
	Post-booster (% ≥ 1.0 µg/mL)	**98** (94−100) N = 120	**93** (86−97) N = 121	**97** (92−99) N = 124	-6.0% (-12.0−0.6)
23F	Post-3rd dose (% ≥ 0.35 µg/mL)	**95** (90−98) N = 140	**93** (87−96) N = 135	**92** (87−96) N = 132	-2.0% (-8.7−3.5)
	Pre-booster (% ≥ 0.35 µg/mL)	**73** (65−81) N = 124	**73** (64−80) N = 120	**82** (75−88) N = 135	-1.0% (-12−10.2)
	Post-booster (% ≥ 1.0 µg/mL)	**96** (91−99) N = 120	**95** (90−98) N = 121	**97** (92−99) N = 124	-1.0% (-6.7−5.0)