

1080. Antibody Persistence 5 Years After Vaccination at 2 to 10 Years of Age With Quadrivalent MenACWY-CRM Conjugate Vaccine, And Responses To a Booster Vaccination

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Background. MenACWY-CRM vaccine was immunogenic in 2–10 year-old children in 1- and 2-dose schedules. As only limited data is available on antibody persistence we assessed bactericidal antibodies 5 years after primary vaccination and response to a booster dose, compared with age-matched vaccine-naïve controls (clinicaltrials.gov NCT01823536).

Methods. We enrolled two groups of 7–10 year-olds after 1 (n = 101) or 2 (n = 73) doses of MenACWY-CRM as 2–5 year-olds, and a group of 11–15 year-olds after 1 dose (n = 66) as 6–10 year-olds, with age-matched naïve-controls (n = 120 and 101). We measured serum bactericidal activity with human complement (hSBA) at baseline and 30 days after a booster or first MenACWY-CRM vaccination. Local and systemic reactions and any adverse events were recorded.

Results. Five years postvaccination levels of antibodies were still higher than controls in the three vaccinated groups, who displayed anamnestic responses to a booster dose, with 99–100% having hSBA titers ≥ 8 against all four serogroups.

Reactogenicity was similar across groups, 50–67% and 27–36% of children had mild to moderate solicited local and systemic reactions. No vaccine-related SAEs were reported.

Conclusion. 5 years after 1- and 2-dose MenACWY-CRM vaccination in 2–10 year-olds, half or more of the children still had persistent antibodies against serogroups C, W and Y with robust responses to a booster dose.

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Group	Percentages with hSBA ≥ 8 (95%CI)					
	7–10 years (2 doses)		11–15 years (1 dose)		Naïve Controls	
Time	Pre	Post	Pre	Post	Pre	Post
n/N	13/99	99/99	0/119	88/118	15/65	5/101
A	13 [7, 21]	100 [96, 100]	0 [0, 3]	75 [66, 82]	23 [14, 35]	5 [2, 11]
n/N	32/99	98/98	26/119	96/118	37/65	21/100
C	32 [23, 42]	100 [96, 100]	22 [15, 30]	81 [73, 88]	57 [44, 69]	21 [13, 30]
n/N	73/99	99/99	62/119	110/118	52/65	55/101
W	74 [64, 82]	100 [96, 100]	52 [43, 61]	93 [87, 97]	80 [68, 89]	54 [44, 64]
n/N	48/99	98/98	28/119	101/119	35/65	37/101
Y	48 [38, 59]	100 [95, 100]	24 [16, 32]	85 [77, 91]	54 [41, 66]	37 [27, 47]