

Additional file 2. HI antibody responses in the per protocol immunogenicity cohort

		AS03_C	AS03_C- MPL25	AS03_C- MPL50	AS03_B	AS03_B- MPL25	AS03_B- MPL50	AS03_A	AS03_A-MPL25	Non- adjuvanted	Non-adjuvanted 18–40y
		N=191	N=194	N=192	N=192	N=192		N=189	N=189	N=187	N=197
A/Solomon Islands											
GMT, value (95% CI)	D0	10.6 (9.3, 12.2)	10.6 (9.3, 12.1)	10.2 (8.9, 11.7)	10.8 (9.4, 12.4)	12.0 (10.3, 14.0)	10.3 (9.0, 11.9)	10.1 (8.8, 11.5)	9.9 (8.6, 11.3)	10.7 (9.2, 12.4)	21.3 (17.1, 26.5)
	D21	82.3 (69.7, 97.1)	91.7 (76.9, 109.3)	78.5 (65.9, 93.5)	102.2 (87.0, 119.9)	113.2 (96.0, 133.6)	111.8 (93.3, 134.0)	98.2 (84.3, 114.3)	114.4 (97.1, 134.8)	59.6 (49.6, 71.7)	271.6 (224.6, 328.4)
SCR, % (95% CI)	D21	69.6 (62.6, 76.1)	67.0 (59.9, 73.6)	67.2 (60.1, 73.8)	72.3 (65.3, 78.5)	74.0 (67.1, 80.0)	77.2 (70.6, 83.0)	81.5 (75.2, 86.7)	78.2 (71.7, 83.8)	52.9 (45.5, 60.3)	68.5 (61.5, 74.9)
SPR, % (95% CI)	D0	14.1 (9.5, 19.9)	17.0 (12.0, 23.1)	11.5 (7.3, 16.8)	16.2 (11.3, 22.2)	22.9 (17.2, 29.5)	13.8 (9.2, 19.5)	13.2 (8.7, 18.9)	11.9 (7.7, 17.3)	16.6 (11.6, 22.7)	35.0 (28.4, 42.1)
	D21	83.8 (77.8, 88.7)	81.4 (75.2, 86.7)	79.7 (73.3, 85.1)	87.5 (82.0, 91.8)	88.0 (82.6, 92.3)	86.2 (80.5, 90.8)	90.5 (85.4, 94.3)	89.1 (83.8, 93.1)	70.2 (63.1, 76.6)	92.4 (87.8, 95.7)
SCF, % (95% CI)	D21	7.7 (6.5, 9.2)	8.6 (7.2, 10.4)	7.7 (6.5, 9.2)	9.4 (7.8, 11.3)	9.4 (8.0, 11.1)	10.8 (9.0, 13.0)	9.8 (8.3, 11.5)	11.6 (9.7, 13.9)	5.6 (4.7, 6.8)	12.8 (10.0, 16.3)
A/Wisconsin											
GMT, value (95% CI)	D0	59.9 (49.5, 72.4)	65.7 (53.7, 80.4)	54.6 (44.5, 67.0)	51.2 (41.9, 62.4)	61.1 (50.6, 73.8)	57.8 (47.1, 70.9)	44.4 (36.5, 54.0)	55.8 (46.2, 67.4)	61.0 (49.8, 74.7)	47.8 (39.2, 58.4)
	D21	276.2 (238.8, 319.6)	309.2 (264.9, 361.0)	263.3 (225.3, 307.7)	350.2 (298.0, 411.4)	331.1 (289.6, 378.6)	347.5 (296.4, 407.3)	351.3 (304.8, 404.8)	438.1 (379.7, 505.4)	186.7 (158.0, 220.7)	380.2 (331.6, 435.9)
SCR, % (95% CI)	D21	56.5 (49.2, 63.7)	53.6 (46.3, 60.8)	57.3 (50.0, 64.4)	64.9 (57.7, 71.7)	64.6 (57.4, 71.3)	69.3 (62.2, 75.8)	74.6 (67.8, 80.6)	73.6 (66.8, 79.6)	36.9 (30.0, 44.2)	66.0 (58.9, 72.6)
SPR, % (95% CI)	D0	69.6 (62.6, 76.1)	71.6 (64.8, 77.9)	67.7 (60.6, 74.3)	64.9 (57.7, 71.7)	68.2 (61.1, 74.7)	70.9 (63.9, 77.3)	59.8 (52.4, 66.8)	72.0 (65.1, 78.2)	70.6 (63.5, 77.0)	61.9 (54.8, 68.7)

		AS03_C	AS03_C- MPL25	AS03_C- MPL50	AS03_B	AS03_B- MPL25	AS03_B- MPL50	AS03_A	AS03_A-MPL25	Non- adjuvanted	Non-adjuvanted 18–40y
	D21	98.4 (95.5, 99.7)	97.9 (94.8, 99.4)	97.4 (94.0, 99.1)	98.4 (95.5, 99.7)	100 (98.1, 100)	97.9 (94.7, 99.4)	99.5 (97.1, 100)	99.0 (96.3, 99.9)	95.2 (91.1, 97.8)	100 (98.1, 100)
SCF, % (95% CI)	D21	4.6 (3.9, 5.4)	4.7 (4.0, 5.5)	4.8 (4.1, 5.7)	6.8 (5.6, 8.1)	5.4 (4.6, 6.3)	6.0 (5.1, 7.1)	7.9 (6.6, 9.5)	7.8 (6.5, 9.5)	3.1 (2.6, 3.6)	7.9 (6.4, 9.8)
B/Malaysia											
GMT, value (95% CI)	D0	58.6 (49.8, 68.9)	62.6 (53.3, 73.4)	58.2 (49.0, 69.1)	53.7 (45.7, 63.2)	77.8 (66.0, 91.7)	62.6 (53.0, 74.0)	57.0 (48.2, 67.5)	62.9 (53.9, 73.4)	66.5 (56.5, 78.3)	23.4 (19.1, 28.7)
	D21	147.1 (129.1, 167.6)	152.4 (134.4, 172.7)	155.7 (134.8, 179.8)	163.1 (142.5, 186.6)	181.4 (158.9, 207.1)	174.6 (152.0, 200.7)	172.1 (149.9, 197.6)	202.0 (179.7, 227.1)	153.0 (135.2, 173.1)	281.9 (241.7, 328.7)
SCR, % (95% CI)	D21	24.6 (18.7, 31.3)	22.7 (17.0, 29.2)	26.0 (20.0, 32.9)	38.2 (31.3, 45.5)	23.4 (17.6, 30.1)	29.1 (22.7, 36.1)	34.4 (27.6, 41.6)	40.9 (33.9, 48.2)	25.1 (19.1, 32.0)	74.6 (67.9, 80.5)
SPR, % (95% CI)	D0	72.3 (65.3, 78.5)	76.3 (69.7, 82.1)	72.4 (65.5, 78.6)	73.3 (66.4, 79.4)	81.3 (75.0, 86.5)	76.7 (70, 82.5)	73.0 (66.1, 79.2)	77.2 (70.6, 82.9)	77.0 (70.3, 82.8)	39.1 (32.2, 46.3)
	D21	95.8 (91.9, 98.2)	96.4 (92.7, 98.5)	94.8 (90.6, 97.5)	95.3 (91.3, 97.8)	96.9 (93.3, 98.8)	97.4 (93.9, 99.1)	97.4 (93.9, 99.1)	99.5 (97.1, 100)	97.3 (93.9, 99.1)	99.0 (96.4, 99.9)
SCF, % (95% CI)	D21	2.5 (2.2, 2.8)	2.4 (2.2, 2.8)	2.7 (2.3, 3.1)	3.0 (2.6, 3.5)	2.3 (2.1, 2.6)	2.8 (2.4, 3.2)	3.0 (2.6, 3.5)	3.2 (2.8, 3.7)	2.3 (2.0, 2.6)	12.0 (9.7, 15.0)

HI, hemagglutination-inhibition; CI, confidence interval; GMT, geometric mean titer; HI SCR, seroconversion rate (proportion with pre-vaccination titer <1:10 and a post-vaccination titer ≥1:40, or a pre-vaccination titer ≥1:10 and at least a four-fold increase in post-vaccination titer); SPR, seroprotection rate (as proportion of subjects with HI antibody titers ≥ 1:40); SCF, seroconversion factor (geometric mean of the within subject ratios of reciprocal HI antibody titers for post-vaccination versus pre-vaccination). All participants received inactivated trivalent influenza vaccine, non-adjuvanted (non-adjuvanted ≥65 years and control 18–40 years) or formulated with an adjuvant. AS03 is a squalene and α-tocopherol oil-in-water emulsion-based Adjuvant System, with tocopherol content 11.86 mg (A), 5.93 mg (B), or 2.97 mg (C); MPL is 3-O-desacyl-4'-monophosphoryl lipid A: 25 µg (MPL-25) or 50 µg (MPL-50).