

## Supplemental data

Table S1: Experimental studies identified through literature search to determine the cross-reactive antigenic variants to Bexsero® (4CMenB) vaccine included for combined analysis.

Study	Year	Assay	Country of isolate collection	No. of meningococcal isolates studied	Reference
Abad <i>et al.</i>	2016	MATS	Spain	300	1
Bettinger <i>et al.</i>	2013	MATS	Canada	157	2
Budroni <i>et al.</i>	2016	MATS	UK	40	3
Mowlabococcus <i>et al.</i>	2016	MATS	Australia	278	4
Mulhall <i>et al.</i>	2018	MATS	Republic of Ireland	105	5
Parikh <i>et al.</i>	2017	MATS	UK	251	6
Rajam <i>et al.</i>	2017	MATS	US	442	7
Vogel <i>et al.</i>	2013	MATS	European	1052	8
Wasko <i>et al.</i>	2016	MATS	Poland	196	9
Abad <i>et al.</i>	2015	MATS	Spain	10	10
Green <i>et al.</i>	2018	MATS	UK	69	11
Kesanopoulos <i>et al.</i>	2018	MATS	Greece	71	12
Stella <i>et al.</i>	2019	MATS	UK	34	13

Table S2: Experimental studies identified through literature search to determine the cross-reactive antigenic variants to Trumenba® (rLP2086) vaccine included for combined analysis.

<b>Study</b>	<b>Year</b>	<b>Assay</b>	<b>Demographic of study participants</b>	<b>No. of study participants</b>	<b>Reference</b>
McNeil <i>et al.</i>	2018	MEASURE	Adults	Not relevant	14
Harris <i>et al.</i>	2017	SBA	Adolescents and adults	Not specified	15
Lujan <i>et al.</i>	2017	SBA	Healthcare workers	17	16
Taha <i>et al.</i>	2017	SBA	11-18 year olds	15	17
Ostergaard <i>et al.</i>	2017	SBA	Adolescent, young adults	3596, 3304	18
Marshall <i>et al.</i>	2016	SBA	11-18 year olds	539	19
Muse <i>et al.</i>	2016	SBA	10-13 year old children	2648	20
Senders <i>et al.</i>	2016	SBA	11-17 year old children	2499	21
Vesikari <i>et al.</i>	2016	SBA	11-18 year old children	749	22
Reiner <i>et al.</i>	2016	SBA	Healthcare workers	7	23
Marshall <i>et al.</i>	2013	SBA	Adults	60	24
Vesikari <i>et al.</i>	2016	SBA	11-18 year olds	1714	25
Nissen <i>et al.</i>	2016	SBA	8-14 year old children	127	26
Richmond <i>et al.</i>	2012	SBA	18-25 year old adults	130	27
Richmond <i>et al.</i>	2012	SBA	Adolescents	538	28
Marshall <i>et al.</i>	2012	SBA	Healthy toddlers	99	29

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