

Supplementary Table S3. Relative to baseline percentage change in B cell subset counts and serum levels of serological markers from baseline through week 52 in patients who developed versus did not develop flares from week 24 through week 52 in the pooled BLISS study population.

	Any flare			Severe flare		
	Yes	No	P value	Yes	No	P value
Entire patient cohort (all treatment arms)						
B cell subsets						
CD19 ⁺ CD20 ⁺	-36.6 (-65.2-1.4)	-42.9 (-66.7--2.9)	0.228	-35.4 (-53.2--25.6)	-40.0 (-66.5--1.1)	0.084
CD19 ⁺ CD20 ⁺ CD27 ⁺	20.0 (-28.6-100.0)	13.8 (-27.8-87.8)	0.336	23.0 (-29.0-97.4)	15.4 (-28.6-94.3)	0.910
CD19 ⁺ CD20 ⁺ CD69 ⁺	-42.9 (-78.8-34.3)	-37.2 (-79.5-55.9)	0.521	-59.8 (-81.8-31.8)	-40.0 (-79.3-43.8)	0.439
CD19 ⁺ CD20 ⁺ CD27 ⁻	-54.1 (-77.7--12.1)	-59.7 (-77.7--17.7)	0.208	-48.5 (-73.1-1.2)	-56.3 (-77.9-14.3)	0.103
CD19 ⁺ CD20 ⁺ CD138 ⁺	-45.8 (-81.8-35.2)	-54.1 (-81.8-23.6)	0.233	-47.8 (-85.5-32.7)	-49.7 (-81.7-31.3)	0.897
CD19 ⁺ CD20 ⁺ CD138 ⁺	-41.7 (-76.1-42.2)	-49.3 (-82.0-37.5)	0.060	-21.5 (-75.3-83.1)	-46.1 (-78.6-38.1)	0.083
CD19 ⁺ CD20 ⁺ CD27 ^{brt}	-33.3 (-75.0-27.5)	-47.7 (-80.0-0.0)	0.042	-21.7 (-72.0-67.7)	-40.0 (-77.6-12.1)	0.110
CD19 ⁺ CD27 ^{brt} CD38 ^{brt}	-34.4 (-69.8-42.9)	-36.2 (-72.7-34.3)	0.252	-21.4 (-72.6-65.8)	-35.2 (-71.5-39.0)	0.592
Serological markers						
C3	3.7 (-8.3-19.5)	4.5 (-6.6-17.3)	0.080	3.9 (-7.1-21.0)	4.3 (-7.7-18.4)	0.923
C4	14.3 (-4.9-40.0)	15.8 (0.0-42.9)	0.153	16.7 (-4.5-51.0)	14.3 (-3.4-41.2)	0.882
anti-dsDNA (all patients)	-12.5 (-50.4-0.0)	-30.9 (-62.2-0.0)	<0.001	0.0 (-47.5-9.4)	-24.7 (-56.4-0.0)	0.013
anti-dsDNA (patients positive at baseline)	-37.9 (-62.6-0.1)	-46.0 (-67.0--17.8)	0.001	-20.6 (-61.8-33.4)	-42.8 (-65.1-10.9)	0.040
Belimumab						
B cell subsets						
CD19 ⁺ CD20 ⁺	-51.0 (-72.5-19.9)	-53.7 (-71.4-14.5)	0.864	-47.7 (-66.1--21.9)	-53.4 (-72.2--17.8)	0.378
CD19 ⁺ CD20 ⁺ CD27 ⁺	35.7 (-14.3-123.1)	28.6 (-14.3-109.3)	0.399	38.2 (-27.2-116.4)	33.3 (-14.2-115.8)	0.649
CD19 ⁺ CD20 ⁺ CD69 ⁺	-46.8 (-81.8-31.5)	-40.9 (-81.2-50.9)	0.538	-69.4 (-89.7--26.2)	-42.5 (-81.0-40.9)	0.053
CD19 ⁺ CD20 ⁺ CD27 ⁻	-69.9 (-83.1--48.1)	-69.2 (-82.1-47.9)	0.686	-67.9 (-79.2--48.2)	-69.5 (-82.6--48.0)	0.630
CD19 ⁺ CD20 ⁺ CD138 ⁺	-56.9 (-85.7-7.4)	-56.1 (-81.3-13.2)	0.607	-75.6 (-90.8-37.5)	-55.5 (-83.0-13.2)	0.046
CD19 ⁺ CD20 ⁺ CD138 ⁺	-46.2 (-79.0-27.5)	-52.9 (-83.2-17.6)	0.291	-33.2 (-77.7-77.7)	-49.9 (-80.5-20.2)	0.271
CD19 ⁺ CD20 ⁺ CD27 ^{brt}	-45.0 (-82.7-13.8)	-53.0 (-87.1-0.0)	0.075	-26.3 (-72.8-44.0)	-50.0 (-83.7-0.0)	0.231
CD19 ⁺ CD27 ^{brt} CD38 ^{brt}	-44.5 (-76.3-26.6)	-48.1 (-75.8-13.8)	0.501	-40.4 (-74.3-16.9)	-46.2 (-76.0-22.3)	0.998
Serological markers						
C3	-6.9 (-6.4-22.8)	6.1 (-3.7-22.4)	0.443	10.2 (-6.6-29.4)	6.5 (-4.7-22.6)	0.939
C4	18.8 (0.0-46.2)	22.2 (4.5-50.0)	0.142	31.3 (8.0-58.1)	20.0 (0.0-47.6)	0.145
anti-dsDNA (all patients)	-26.0 (-56.5-0.0)	-37.5 (-65.1-0.0)	<0.001	-6.4 (-56.0-0.0)	-31.3 (-61.9-0.0)	0.149
anti-dsDNA (patients positive at baseline)	-46.2 (-66.2--16.4)	-48.3 (-68.5--21.3)	0.123	-51.3 (-75.6-46.7)	-47.5 (-67.2--20.8)	0.684
Placebo						
B cell subsets						
CD19 ⁺ CD20 ⁺	-7.3 (-39.0-32.5)	-14.3 (-42.4-29.8)	0.133	8.5 (-42.3-84.4)	-10.5 (-39.7-30.8)	0.237
CD19 ⁺ CD20 ⁺ CD27 ⁺	-7.7 (-38.4-55.6)	-18.6 (-50.0-33.3)	0.105	-6.4 (-45.5-79.7)	13.8 (-44.7-50.0)	0.353
CD19 ⁺ CD20 ⁺ CD69 ⁺	-34.5 (-71.2-41.9)	-18.8 (-74.6-80.3)	0.612	13.9 (-61.7-114.9)	-34.1 (-73.0-53.7)	0.292
CD19 ⁺ CD20 ⁺ CD27 ⁻	-5.9 (-37.6-35.1)	-16.2 (-42.1-27.2)	0.086	14.9 (-41.6-82.7)	-11.0 (-40.2-30.8)	0.135
CD19 ⁺ CD20 ⁺ CD138 ⁺	-7.8 (-73.6-116.0)	-39.8 (-84.1-48.3)	0.017	15.5 (-41.9-74.2)	-30.1 (-78.6-76.4)	0.131
CD19 ⁺ CD20 ⁺ CD138 ⁺	-30.2 (-65.0-82.9)	-36.8 (-77.0-75.0)	0.176	7.5 (-74.1-132.3)	-34.5 (-70.3-75.0)	0.282
CD19 ⁺ CD20 ⁺ CD27 ^{brt}	-15.6 (-57.1-91.0)	-20.0 (-54.0-40.8)	0.607	0.3 (-68.5-232.2)	-18.2 (-54.6-51.3)	0.414
CD19 ⁺ CD27 ^{brt} CD38 ^{brt}	-11.1 (-54.4-100.6)	-14.9 (-57.5-59.8)	0.638	12.1 (-53.5-120.5)	-13.9 (-55.7-80.9)	0.583
Serological markers						
C3	-0.7 (-12.5-13.3)	-2.2 (-11.7-9.0)	0.276	-1.4 (-9.5-19.7)	-1.3 (-12.0-11.1)	0.634
C4	0.0 (-15.8-23.1)	0.0 (-12.5-20.0)	0.763	0.0 (-25.4-21.1)	0.0 (-14.3-21.4)	0.411
anti-dsDNA (all patients)	0.0 (-36.6-11.9)	-14.8 (-47.5-0.0)	0.005	0.0 (-23.2-19.6)	-1.0 (-42.8-5.3)	0.206
anti-dsDNA (patients positive at baseline)	-17.3 (-48.1-23.4)	-35.6 (-53.7--1.6)	0.006	-3.8 (-37.8-31.8)	-24.7 (-51.6-10.2)	0.135

Data are presented as medians (interquartile range) of the relative to baseline percentage changes. P values are derived from non-parametrical Mann-Whitney U tests. Statistically significant P values are in bold.

C3: complement component 3; C4: complement component 4