

Supplementary Table S2. Relative to baseline percentage change in B cell subset counts and serum levels of serological markers from baseline through week 24 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 ⁺	-18.6 (-48.7–21.3)	-21.4 (-51.9–23.5)	0.575	-14.3 (-53.8–29.5)	-21.0 (-50.0–20.6)	0.323
CD19 ⁺ CD20 ⁺ CD27 ⁺	53.8 (-3.8–141.7)	56.5 (-10.8–151.3)	0.863	52.2 (-4.3–141.7)	54.5 (-9.1–150.0)	0.691
CD19 ⁺ CD20 ⁺ CD69 ⁺	-32.6 (-72.9–75.7)	-28.6 (-72.5–86.9)	0.532	-21.8 (-70.0–107.3)	-31.4 (-73.1–75.0)	0.431
CD19 ⁺ CD20 ⁺ CD27 ⁻	-36.8 (-65.0–2.5)	-42.1 (-66.3–1.1)	0.400	-37.5 (-66.7–12.9)	-38.9 (-65.2–0.0)	0.313
CD19 ⁺ CD20 ⁺ CD138 ⁺	-40.0 (-74.9–52.8)	-40.4 (-80.0–73.0)	0.727	-21.5 (-68.5–108.7)	-41.1 (-78.1–60.9)	0.024
CD19 ⁺ CD20 ⁺ CD138 ⁺	-37.0 (-73.8–41.4)	-39.9 (-78.6–39.3)	0.331	-23.5 (-67.2–51.0)	-39.4 (-77.0–38.6)	0.028
CD19 ⁺ CD20 ⁺ CD27 ^{brt}	-37.6 (-73.3–24.0)	-33.9 (-71.5–0.0)	0.603	-28.7 (-67.8–74.8)	-37.7 (-73.7–10.7)	0.088
CD19 ⁺ CD27 ^{brt} CD38 ^{brt}	-24.1 (-66.2–59.2)	-30.1 (-65.8–23.6)	0.071	-19.0 (-62.5–113.6)	-27.8 (-66.2–39.2)	0.045
Serological markers						
C3	2.3 (-7.8–15.9)	2.5 (-8.2–16.5)	0.946	1.0 (-10.0–17.4)	2.6 (-7.9–16.0)	0.891
C4	10.5 (-7.1–33.6)	11.8 (-3.8–33.3)	0.310	12.5 (-8.3–37.5)	11.1 (-5.9–33.3)	0.991
anti-dsDNA (all patients)	-1.9 (-39.1–0.0)	-21.7 (-47.9–0.0)	<0.001	0.0 (-36.5–9.7)	-13.3 (-44.0–0.0)	0.020
anti-dsDNA (patients positive at baseline)	-24.0 (-48.6–7.4)	-33.0 (-54.6–6.5)	<0.001	-11.2 (-49.5–17.1)	-29.8 (-51.6–2.4)	0.003
Belimumab						
B cell subsets						
CD19 ⁺ CD20 ⁺	-31.8 (-59.1–9.6)	-30.6 (-57.3–22.5)	0.288	-36.3 (-61.9–13.1)	-31.2 (-57.6–14.6)	0.421
CD19 ⁺ CD20 ⁺ CD27 ⁺	93.8 (26.3–184.2)	86.6 (16.7–200.0)	0.597	83.3 (26.0–163.9)	90.0 (20.0–197.1)	0.454
CD19 ⁺ CD20 ⁺ CD69 ⁺	-36.6 (-73.7–67.5)	-27.4 (-71.6–90.3)	0.269	-39.1 (-74.9–104.1)	-32.9 (-73.2–75.1)	0.815
CD19 ⁺ CD20 ⁺ CD27 ⁻	-55.1 (-73.4–28.6)	-53.8 (-70.6–18.8)	0.172	-58.3 (-74.1–35.9)	-54.1 (-72.2–23.0)	0.225
CD19 ⁺ CD20 ⁺ CD138 ⁺	-47.6 (-78.1–34.9)	-42.9 (-82.0–59.8)	0.519	-41.2 (-70.7–68.1)	-46.9 (-80.4–44.4)	0.217
CD19 ⁺ CD20 ⁺ CD138 ⁺	-46.6 (-78.9–33.3)	-43.0 (-78.5–35.8)	0.381	-48.3 (-75.6–27.2)	-43.5 (-79.0–34.5)	0.967
CD19 ⁺ CD20 ⁺ CD27 ^{brt}	-50.0 (-77.7–8.6)	-48.4 (-75.2–0.0)	0.899	-43.6 (-76.1–43.2)	-50.0 (-77.0–0.0)	0.468
CD19 ⁺ CD27 ^{brt} CD38 ^{brt}	-38.3 (-70.7–43.8)	-38.3 (-68.2–3.9)	0.389	-37.5 (-73.1–105.6)	-46.2 (-76.0–22.3)	0.878
Serological markers						
C3	4.0 (-6.0–16.8)	4.6 (-7.3–18.5)	0.913	2.2 (-6.8–17.6)	4.4 (-6.5–17.7)	0.987
C4	14.3 (0.0–40.0)	15.2 (0.0–40.0)	0.670	16.3 (0.0–55.4)	14.3 (0.0–40.0)	0.248
anti-dsDNA (all patients)	-10.8 (-45.0–0.0)	-26.4 (-52.0–0.0)	<0.001	-10.5 (-43.7–8.2)	-20.5 (-48.3–0.0)	0.071
anti-dsDNA (patients positive at baseline)	-31.5 (-52.5–-3.3)	-39.0 (-56.9–14.7)	0.008	-19.6 (-57.9–13.4)	-35.9 (-54.3–10.4)	0.022
Placebo						
B cell subsets						
CD19 ⁺ CD20 ⁺	0.7 (-27.3–33.9)	-5.2 (-39.3–24.6)	0.082	11.7 (-23.6–50.6)	-2.8 (-31.0–30.7)	0.062
CD19 ⁺ CD20 ⁺ CD27 ⁺	0.0 (-33.3–54.4)	-11.6 (-38.6–47.5)	0.038	14.3 (-26.1–84.3)	-7.7 (-36.4–50.0)	0.023
CD19 ⁺ CD20 ⁺ CD69 ⁺	-25.0 (-69.2–81.8)	-30.3 (-75.7–71.2)	0.681	3.2 (-64.3–112.8)	-30.4 (-72.3–74.2)	0.159
CD19 ⁺ CD20 ⁺ CD27 ⁻	0.0 (-26.4–38.6)	-5.7 (-38.3–27.6)	0.104	4.8 (-19.3–57.3)	-3.9 (-31.7–31.6)	0.101
CD19 ⁺ CD20 ⁺ CD138 ⁺	-15.8 (-66.3–93.8)	-31.7 (-76.6–81.5)	0.270	-6.7 (-54.9–140.1)	-24.0 (-74.0–81.5)	0.106
CD19 ⁺ CD20 ⁺ CD138 ⁺	-16.1 (-60.1–63.6)	-35.1 (-78.7–59.0)	0.012	6.7 (-39.5–143.7)	-27.2 (-70.7–52.3)	0.002
CD19 ⁺ CD20 ⁺ CD27 ^{brt}	-14.8 (-55.2–60.0)	-7.4 (-52.0–38.4)	0.772	-0.7 (-52.6–85.8)	-14.3 (-53.9–46.3)	0.184
CD19 ⁺ CD27 ^{brt} CD38 ^{brt}	4.3 (-48.4–85.2)	-8.5 (-52.5–96.2)	0.366	41.2 (-37.2–154.6)	-6.1 (-50.8–81.2)	0.038
Serological markers						
C3	-1.2 (-12.2–14.3)	-1.1 (-10.1–9.0)	0.497	-1.9 (-14.2–17.4)	-1.1 (-10.7–10.7)	0.845
C4	0.0 (-14.3–23.5)	3.3 (-12.0–18.8)	0.802	0.0 (-20.0–25.0)	0.0 (12.5–20.0)	0.723
anti-dsDNA (all patients)	0.0 (-25.1–12.5)	-3.4 (-33.3–5.6)	0.087	0.0 (-24.3–22.5)	0.0 (-30.2–10.3)	0.525
anti-dsDNA (patients positive at baseline)	-7.9 (-35.4–21.8)	-21.2 (-42.4–11.4)	0.106	-4.9 (-36.5–24.6)	-16.7 (-37.2–16.9)	0.316

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