

Table S1: Mean levels of BAFF gene expression and BAFF protein by patient characteristics

Patient Characteristic	Mean (SD) BAFF gene expression	P-value	Mean (SD) BAFF Protein (pg/ml)	P-value
Age Group <30 (n=28) 30-44 (n=98) 40-59 (n=122) 60+ (n=44)	0.38 (0.14) 0.38 (0.22) 0.30 (0.16) 0.30 (0.16)	0.0032	1239 (547) 1429 (1014) 1346 (904) 1444 (668)	0.70
Sex Female (n=266) Male (n=26)	0.34 (0.19) 0.24 (0.11)	<0.0001	1391 (901) 1252 (677)	0.45
Ethnicity Caucasian (n=172) African-American (n=100) Asians (n=9) Other (n=11)	0.31 (0.17) 0.35 (0.19) 0.48 (0.11) 0.50 (0.13)	0.0006	1388 (867) 1253 (831) 2251 (1361) 1665 (752)	0.0069

P-values based on one-way ANOVA. For BAFF qPCR, p-value is based on the log-transformed value so the analysis is based on a variable that is approximately normal.

Table S2: Associations with disease activity by ethnicity.

Variable	Race	BAFF QPCR Level			P-value	Adjusted P-value age, and sex
		1 st Tertial	2 nd Tertial	3 rd Tertial		
PGA > 1	Caucasian	8/66 (12%)	8/55 (15%)	7/42 (17%)	0.80	0.88
	African-American	4/25 (16%)	6/34 (18%)	10/33 (30%)	0.33	0.61
SLEDAI ≥2	Caucasian	24/66 (36%)	28/55 (51%)	28/42 (66%)	0.0085	0.013
	African-American	12/25 (48%)	25/34 (74%)	28/33 (85%)	0.0085	0.024

Table S3. BAFF Gene Expression and Clinical History: Percentage of Patients in each of the BAFF Gene Expression categories (Low, Medium, High) that exhibit a history of the Clinical Characteristic.

	1 st Tertial (%, n=91)	2 nd Tertial (%,n=92)	3 rd Tertial (%,n=92)	P-value	P-value Adjusted for Age, Ethnicity, and Sex
ACR Criteria					
Malar rash	49	59	47	0.24	0.25
Discoid rash	15	17	22	0.52	0.29
Photosensitivity	59	51	53	0.51	0.47
Oral ulcers	56	57	49	0.51	0.53
Arthritis	76	77	71	0.56	0.55
Serositis	52	49	43	0.53	0.67
Neurologic	11	16	3	0.013	0.010
Hematologic	57	82	76	0.0006	0.0003
Immunologic	81	86	89	0.32	0.69
ANA	96	98	99	0.35	0.37
Proteinuria	38	47	54	0.098	0.79
Nephrotic syndrome	10	17	22	0.091	0.16
Hematuria	23	34	36	0.13	0.50
Renal insufficiency	25	23	21	0.76	0.58
Renal failure	7	7	4	0.61	0.60
Abnormal renal biopsy	25	29	46	0.0083	0.26
Leukopenia	32	50	58	0.0016	0.0013
Hemolytic Anemia	8	12	10	0.63	0.76
Anti-dsDNA	49	63	73	0.0048	0.037
Anti-Sm	13	13	30	0.0041	0.066
Anti-Ro	16	32	47	<0.0001	0.0007
Anti-La	10	11	23	0.019	0.051
Anti-RNP	14	20	41	<0.0001	0.0064
Direct Coombs	12	16	24	0.093	0.17
Low C3	41	55	71	0.0002	0.022
Low C4	32	49	61	0.0004	0.011

Table S4. BAFF Protein and Clinical History: Percentage of Patients in each of the BAFF Categories (Low, Medium, High) that Exhibit a History of the Clinical or Laboratory Manifestation.

	Low (<950) (%, n=96)	Medium (950-1400) (%, n=98)	High (>1400) (%, n=98)	P-value	P-value Adjusted for Age Ethnicity, and Sex
ACR Criteria					
Malar rash	44	49	61	0.044	0.063
Discoid rash	18	14	23	0.25	0.069
Photosensitivity	47	53	63	0.068	0.013
Oral ulcers	56	54	52	0.84	0.55
Arthritis	83	67	73	0.036	0.025
Serositis	47	49	51	0.85	0.71
Neurologic	10	9	11	0.89	0.83
Hematologic	70	69	73	0.79	0.81
Immunologic	79	87	91	0.064	0.059
ANA	97	97	99	0.55	0.52
Renal Lupus					
Proteinuria	41	46	53	0.22	0.12
Nephrotic syndrome	14	20	16	0.44	0.50
Hematuria	25	30	38	0.15	0.13
Renal insufficiency	16	28	26	0.11	0.13
Renal failure	5	5	6	0.94	0.85
Abnormal renal biopsy	27	33	41	0.13	0.078
Immunologic Findings					
Leukopenia	43	48	49	0.64	0.62
Hemolytic Anemia	9	9	10	0.96	0.87
Anti-dsDNA	48	62	76	0.0004	0.0002
Anti-Sm	17	16	22	0.48	0.36
Anti-Ro	28	32	33	0.77	0.85
Anti-La	11	15	14	0.71	0.72
Anti-RNP	22	23	30	0.39	0.28
Direct Coombs	18	12	22	0.18	0.17
Low C3	48	53	67	0.018	0.042
Low C4	41	42	58	0.023	0.025