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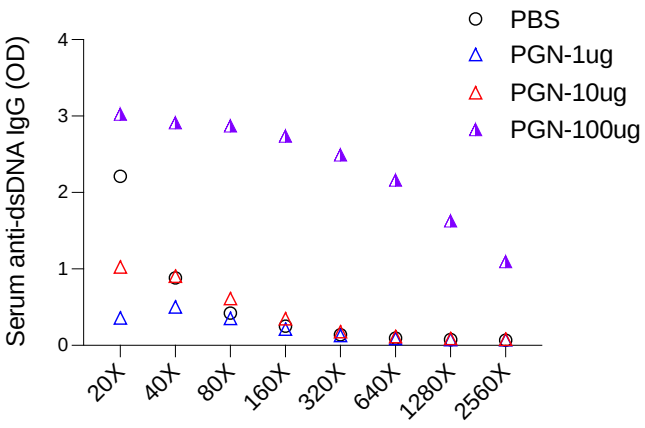

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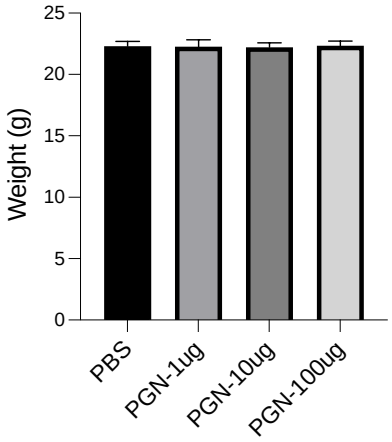
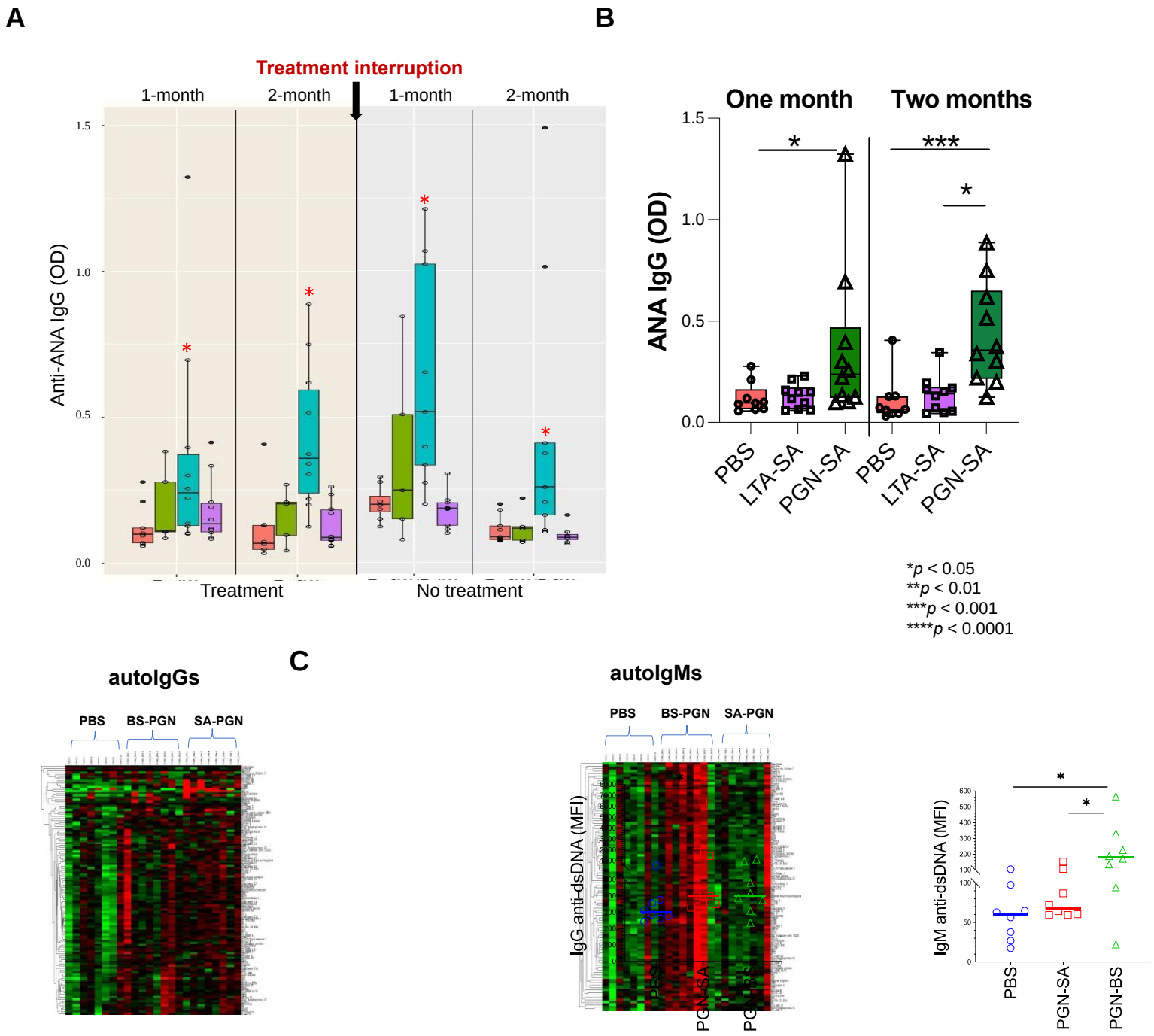


Supplementary Figure 1. Dose titration for production of anti-dsDNA IgG and TLR2 activation of PGNs.



Supplementary Figure 2. *S. aureus* PGN but not *B. subtilis* PGN induced production of stable IgG ANA autoantibodies in C57/B6 mice.

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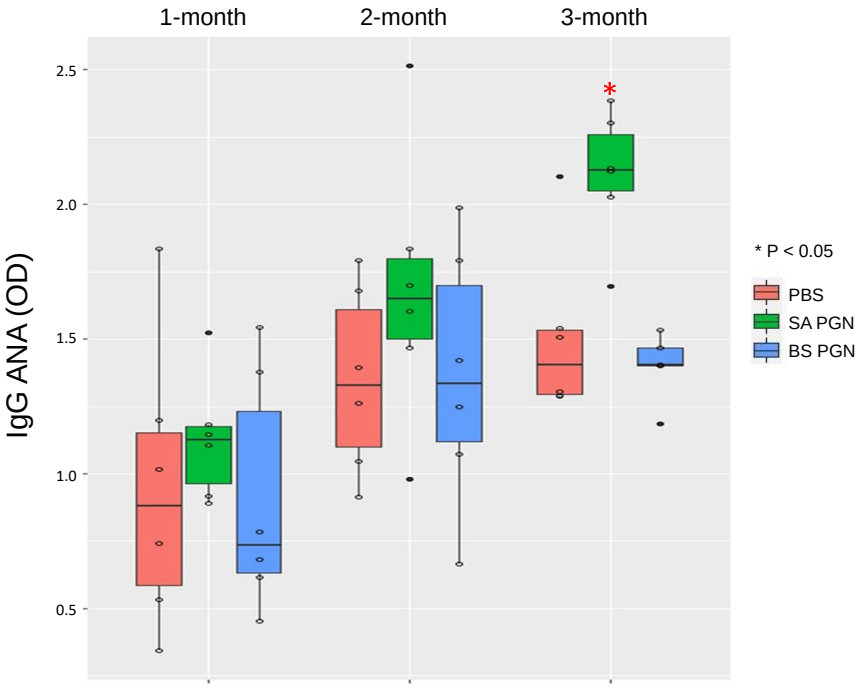

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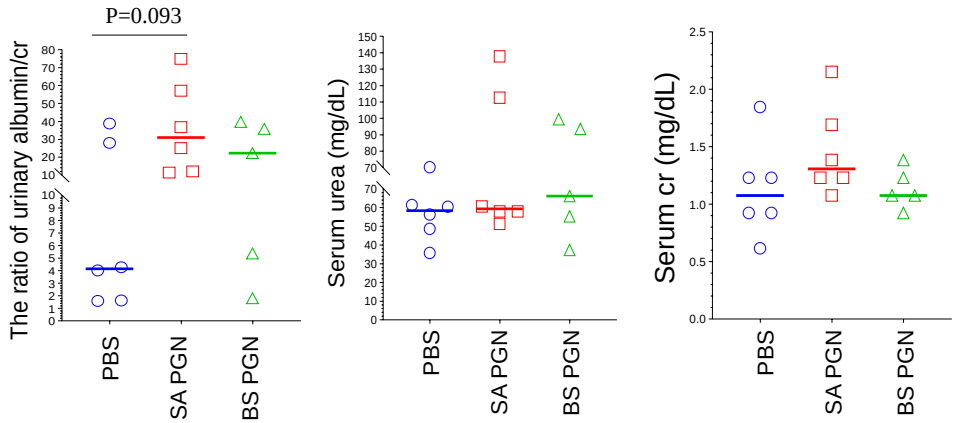
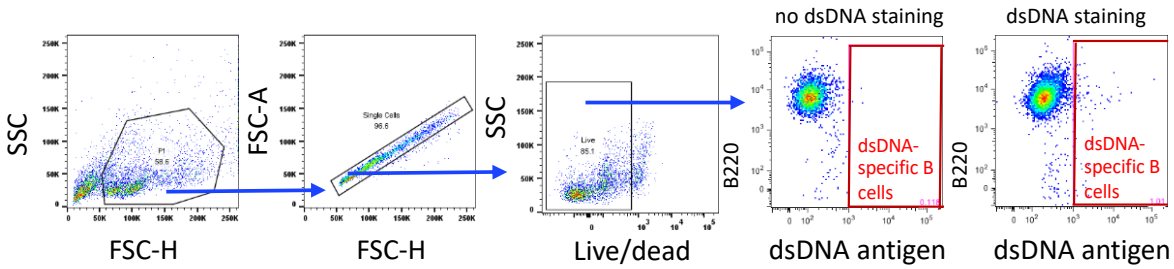


Supplementary Figure 3. *S. aureus* PGN but not *B. subtilis* PGN induced production of IgG ANA in MRL/lpr mice.



Supplementary Figure 4.

Supplementary Table 1. Antibodies used in this study

Antibody to	Type	Company	Cat.No.	Assays
Mouse CD3, PerCP-Cy5.5-conjugated	Rat mAb	BD Biosciences	560527(17A2)	FCM
Mouse CD4, BV510-conjugated	Rat mAb	BD Biosciences	563106(RM4-5)	FCM
Mouse CD8a, APC-vio770 -conjugated	Rat mAb	BD Biosciences	557654(53-6.7)	FCM
Mouse CD19, BV421 -conjugated	Rat mAb	BD Biosciences	562701(1D3)	FCM
Mouse F4/80, APC-conjugated	Rat mAb	BioLegend	123116(BM8)	FCM
Mouse IgG, FITC-conjugated	Goat pAb	BioLegend	405305(Poly4053)	FCM
Mouse B220, BV421-conjugated	Rat mAb	BioLegend	103239(RA3-6B2)	FCM
Mouse IgG2b, PE-conjugated	Rat mAb	BioLegend	406708(RMG2b-1)	FCM

Abbreviations: mAb, monoclonal antibody; pAb, polyclonal antibody; FCM, flow cytometry.

	Mean ± SD
Controls (n = 25)	
-Demographic features	
Male/female, n	0/25
African-American race	13
Mean age ± SD (years)	35.7 ± 12.8
SLE patients (n = 32)	**Mean ± SD**
-Demographic features	
Male/female, n	0/32
African-American race	20
Mean age ± SD (years)	37.1 ± 9.1
-Clinical manifestations	
SLEDAI	2.94 ± 2.78
-Laboratory manifestations	
anti-dsDNA(IU/ml)	26.0±30.9
C3 complement (mg/dl)	110.6±29.3
C4 complement (mg/dl)	25.5±10.9
Serum albumin(g/dl)	3.6±0.4
BUN (mg/dl)	16.0±10.2
Serum creatinine (mg/dl)	1.8±2.1
Urine protein(mg/dl)	70.8±131.1
Urine creatinine (mg/dl)	127.8±71.6
Urine protein / creatinine ratio (mg/mg)	477.8±910.3

Supplementary Table 2. Demographic, clinical, and laboratory characteristics.

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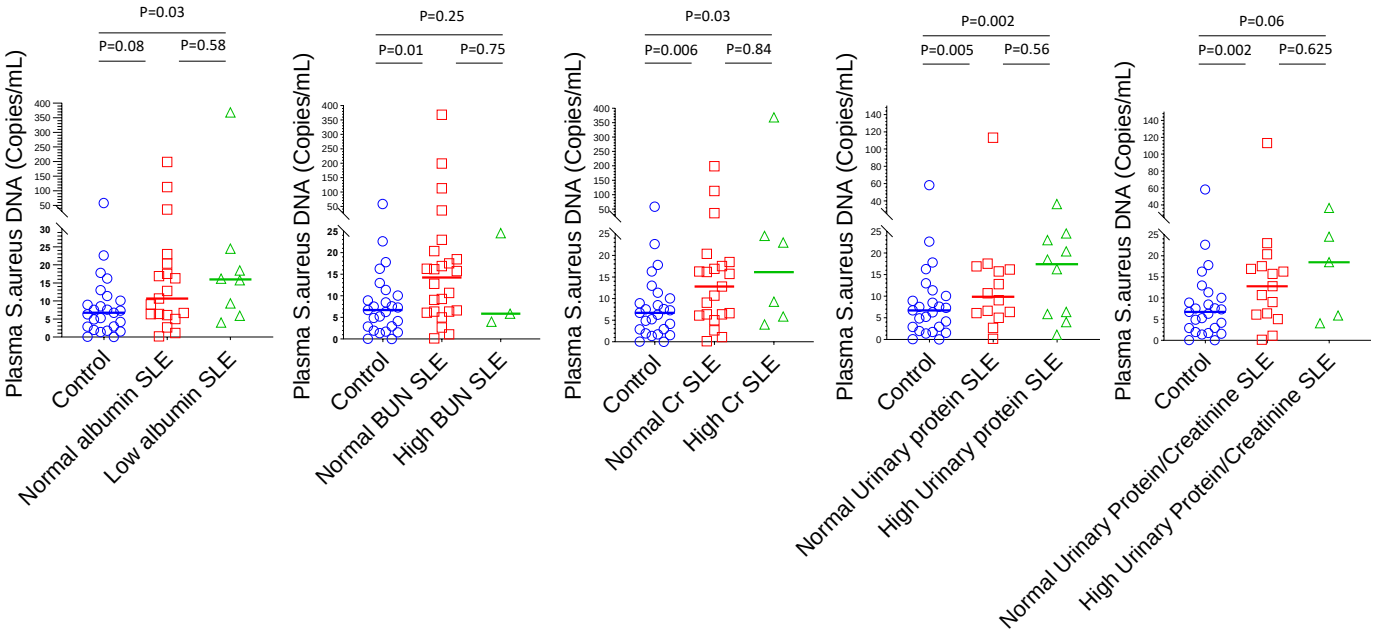

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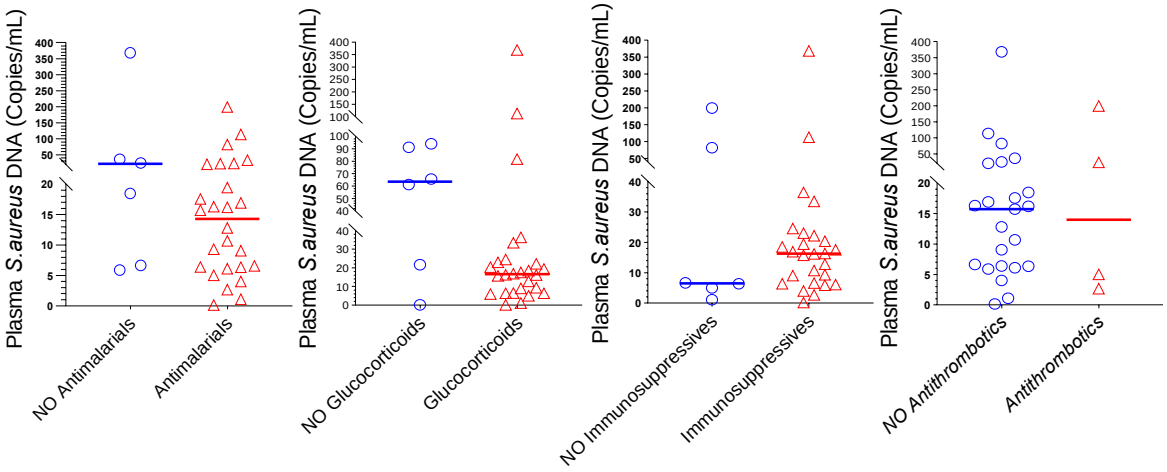
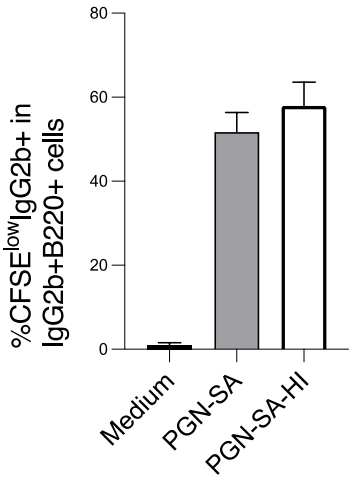


Supplementary Figure 5. Translocation of *S. aureus* DNA based on markers of kidney damage and treatment regimens.



Supplementary Figure 6. Comparison of IgG2b CSR induction in response to *S. aureus* PGN and heat inactivated *S. aureus* PGN.