

Supplementary Table S1. Risk factors of disease flare in cox regression models. Identification of risk factors of lupus flares after adjusting important confounders by cox regression analysis.

	VZV (vs background)			UTI (vs background)		
	P	HR	95% CI	P	HR	95% CI
VZV or UTI Infection	0.001	3.70	1.671~8.184	0.569	0.625	0.124~3.151
Gender	0.629	0.602	0.077~4.724	0.931	0.913	0.115~7.222
Age	0.843	1.003	0.973~1.035	0.654	0.990	0.908~1.101
Organ involvement	0.591	0.884	0.563~1.387	0.858	0.947	0.519~1.727
SLEDAI	0.219	1.148	0.921~1.430	0.834	1.025	0.811~1.296
HCQ exposure	0.399	0.619	0.203~1.888	0.406	0.515	0.108~2.465
Prior Prednisone	0.965	0.998	0.925~1.078	0.211	1.058	0.969~1.154
Prior IS	0.970	0.981	0.364~2.646	0.161	0.356	0.084~1.509
Subsequent Prednisone	0.577	1.024	0.942~1.114	0.547	1.025	0.945~1.113
Subsequent IS	0.814	1.125	0.421~3.007	0.529	1.575	0.383~6.487

Supplement table S2. Propensity score weighting analysis. Characteristics of patients from three groups at the time of the VZV/UTI infections or visits after propensity score weighting analysis.

	Background (n=141)	VZV (n=47)	p (vs background)	Background (n=141)	UTI (n=28)	p (vs background)
Age	37.29±34.25	37.20±28.74	0.988	37.16±30.40	33.32±30.19	0.542
Gender (F %)	93.1%	95.2%	0.630	93.9%	100%	0.111
Disease duration (y)	4.82±5.21	4.36±4.33	0.579	5.11±6.24	3.95±4.03	0.347
Organ Involvement	2.29±1.28	2.46±3.01	0.629	2.28±1.19	2.26±3.06	0.962
SLEDAI	3.81±2.93	4.31±5.33	0.420	3.75±2.83	4.37±7.08	0.440
HCQ exposure (%)	91.8%	100%	0.497	90.8%	87.5%	0.807
previous daily prednisone	12.99±11.53	12.40±4.74	0.888	12.27±9.41	12.52±17.50	0.577
Previous IS (%)	60.1%	54.6%	0.360	56.9%	66.3%	0.541
Subsequent daily prednisone	11.43±14.01	11.36±7.65	0.976	10.65±10.34	11.73±16.33	0.650
Subsequent IS (%)	59.9%	67.3%	0.589	59.9%	66.9%	0.629