

Supplementary Table S1. Patients with autoimmune diseases (n=22) described according to median proportions of IDO1+ and PD-L2+ cells.

Variable	Interfollicular IDO1+ cells ≥5%, n (%) n=15	Interfollicular IDO1+ cells <5%, n (%) n=6	P value *	Follicular IDO1+ cells ≥1% n=3	Follicular IDO1+ cells <1% n=15	P value* *	Interfollicular PD-L2+ cells ≥5%, n (%) n=13	Interfollicular PD-L2+ cells <5%, n (%) n=8	P value** *	Follicular PD-L2+ cells ≥5% n=11	Follicular PD-L2+ cells <5% n=7	P value*** *
RA			0.36			0.25			0.67			0.33
Yes	6 (40)	4 (67)		0 (0)	7 (47)		5 (38)	4 (50)		3 (27)	4 (57)	
No	9 (60)	2 (33)		3 (100)	8 (53)		8 (62)	4 (50)		8 (73)	3 (43)	
RA and/or SLE			0.66			0.21			0.66			0.99
Yes	8 (53)	4 (67)		0 (0)	9 (60)		6 (46)	5 (63)		5 (45)	4 (57)	
No	7 (47)	2 (33)		3 (100)	6 (40)		7 (54)	3 (38)		6 (55)	3 (43)	
RA and/or Sjögren's syndrome			0.64			0.22			0.99			0.14
Yes	7 (47)	4 (67)		0 (0)	8 (53)		6 (46)	4 (50)		3 (27)	5 (71)	
No	8 (53)	2 (33)		3 (100)	7 (47)		7 (54)	4 (50)		8 (73)	2 (29)	
RA, SLE and/or Sjögren's syndrome			0.99			0.07			0.99			0.37
Yes	9 (60)	4 (67)		0 (0)	10 (67)		7 (54)	5 (63)		5 (45)	5 (71)	
No	6 (40)	2 (33)		3 (100)	5 (33)		6 (46)	3 (38)		6 (55)	2 (29)	

IDO1=Indoleamine 2,3 dioxygenase; PD-L2=Programmed death ligand 2; RA=Rheumatoid arthritis; SLE=Systemic lupus erythematosus

*Comparing interfollicular IDO1+ cells ≥5% with interfollicular IDO1+ cells <5%

** Comparing follicular IDO1+ cells ≥1% with follicular IDO1+ cells <1%

***Comparing interfollicular PD-L2+ cells ≥5% with interfollicular PD-L2+ cells <5%

**** Comparing follicular PD-L2+ cells ≥5% with follicular PD-L2+ cells <5%

Supplementary Table S2. Correlation of interfollicular and follicular cells in patients with autoimmune diseases. Spearman rho correlation coefficient and P-value.

	Follicular IDO1+ cells	Interfollicular PD-L2+ cells	Follicular PD-L2+ cells	Interfollicular PD-1+ cells	Follicular PD-1+ cells	Interfollicular PD-L1+ cells	Follicular PD-L1+ cells	Interfollicular EBV+ cells	Follicular EBV+ cells
Interfollicular	0.35	0.30	-0.23	-0.25	0.02	0.69	0.05	0.56	-0.04
IDO1+ cells	0.16	0.20	0.37	0.28	0.92	<0.001	0.83	0.008	0.86
Follicular		0.04	0.07	0.04	0.18	0.52	0.22	0.54	0.61
IDO1+ cells		0.89	0.78	0.89	0.47	0.03	0.37	0.02	0.007
Interfollicular			-0.30	-0.09	-0.17	0.18	-0.14	0.03	-0.20
PD-L2+ cells			0.22	0.70	0.48	0.44	0.57	0.91	0.41
Follicular PD-				0.44	0.41	0.09	0.53	0.05	0.14
L2+ cells				0.07	0.09	0.71	0.02	0.84	0.57

IDO1=Indoleamine 2,3 dioxygenase; PD-L2=Programmed death ligand 2; PD-1=Programmed death receptor 1; EBV=Epstein-Barr Virus

Supplementary Table S3. Correlation of interfollicular and follicular cells in patients without autoimmune diseases. Spearman rho correlation coefficient and P-value.

	Follicular IDO1+ cells	Interfollicular PD-L2+ cells	Follicular PD-L2+ cells	Interfollicular PD-1+ cells	Follicular PD-1+ cells	Interfollicular PD-L1+ cells	Follicular PD-L1+ cells	Interfollicular EBV+ cells	Follicular EBV+ cells
Interfollicular	0.41	-0.11	0.09	-0.13	-0.21	0.20	0.19	0.24	0.07
IDO1+ cells	0.002	0.42	0.55	0.34	0.14	0.14	0.19	0.07	0.62
Follicular		-0.11	0.19	-0.13	0.08	0.21	0.23	0.26	0.10
IDO1+ cells		0.42	0.17	0.36	0.60	0.13	0.10	0.07	0.47
Interfollicular			0.36	0.15	-0.03	0.05	0.03	-0.15	0.06
PD-L2+ cells			0.01	0.28	0.82	0.70	0.86	0.25	0.67
Follicular PD-				0.14	0.05	0.09	0.36	0.21	0.24
L2+ cells				0.31	0.75	0.52	0.01	0.14	0.08

IDO1=Indoleamine 2,3 dioxygenase; PD-L2=Programmed death ligand 2; PD-1=Programmed death receptor 1; EBV=Epstein-Barr Virus