Supplemental material

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SUPPLEMENTARY MATERIAL

Supplementary Table S1: Participant characteristics

	PERIPHERAL BLOOD ANALYSIS		MINOR SALIVARY GLAND ANALYSIS
	pSS patients (n=21)	Healthy controls (n=28)	pSS patients (n=16)
Demographic			
Sex (female), n (%)	20 (95.2)	23 (82.1)	13 (81.2)
Age (years), median (IQR)	56 (42.5-68)	55 (28.3-55)*	54 (39.8-58.8)
Disease characteristics			
Time from pSS diagnosis (years), median (IQR)	8.5 (3.3-13.3)		0 (0-6)
Positive anti-SSA antibodies, n (%)	15 (71.4)		9 (56.2)
Positive anti-SSB antibodies, n (%)	3 (14.3)		5 (31.2)
ClinESSDAI, median (IQR)	0 (0-8)		3 (2-8)
ClinESSDAI > 0, n (%)	9 (42.9)		12/15 (80)
ClinESSDAI > 4, n (%)	7 (33.3)		7/15 (46.7)
Minor salivary gland histology			
Focus score, median (IQR)	-		1.15 (1-2.75)
Laboratory parameters			
Positive rheumatoid factor, n (%)	9/17 (52.9)		7/11 (63.6)
Lymphopenia, n (%)	3 (14.3)		4 (25)
Hypergammaglobulinemia, n (%)	7/20 (35.0)		9 (56.2)
Cryoglobulinemia, n (%)	3/18 (16.7)		0/10 (0)
Hypocomplementemia, n (%)	3/17 (17.8)		2/9 (22.2)
Treatment			
Corticosteroids, n (%)	2 (9.5)		4 (25)
Hydroxychloroquine, n (%)	7 (33.3)		2 (15,4)
Methotrexate, n (%)	1 (4.8)		1 (7.7)

IQR: interquartile range, pSS: primary Sjögren's syndrome

* Ages of 12 healthy controls who donated PB samples were 50 to 60 years old, but age was not precisely known, and age was considered 55 years old.

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Supplementary Table S2: Antibodies used for flow cytometry staining

	Antibody	Labeling	Manufacturer	Clone
Lineage	CD1a	FITC	BD Pharmingen	HI149
	CD3	FITC	Miltenyi	BW264/56
	CD4	FITC	Miltenyi	VIT4
	CD14	FITC	BD Pharmingen	M5E2
	CD16	FITC	Miltenyi	REA423
	CD19	FITC	BD Pharmingen	HIB19
	CD34	FITC	Miltenyi	AC136
	CD303	FITC	Biolegend	201A
	FcεRI	FITC	eBioscience	AER-37
	CD127	PE	BD Pharmingen	HIL-7R-M21
	CD45	PE-Cy7	BD Pharmingen	H130
	c-kit	APC	Miltenyi	REA787
	CRTH2	APC-Vio770	Miltenyi	REA598

FITC: fluorescein isothiocyanate; PE: phycoerythrin; Cy: cyanine; APC: allophycocyanine

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Supplementary Table S3: Antibodies used for immunofluorescence staining

		Primary antibodies			Secondary antibodies		
	Antibody	Isotype	Clone	Manufacturer	Clone	Manufacturer	Labeling
	CD127	Rabbit IgG	6H0T7	Clinisciences	polyclonal	Thermo Fisher	A488
Lineage	CD3	Rat IgG	KT3	Clinisciences	polyclonal	Jackson	Cy3
	CD19	Rat Ig2a, κ	6OMP31	Thermo Fisher			
	CD14	Sheep IgG	polyclonal	Biotechne	polyclonal	Jackson	Cy3
	CRTH2	Mouse IgG1, κ	G-12	SantaCruz Biotechnology	polyclonal	Thermo Fisher	A647
	T-bet	Mouse IgG1, κ	eBio4B10	Thermo Fisher			

Cy: cyanine

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Supplementary Figures

Supplementary Figure 1: Peripheral blood analysis: frequency of total innate lymphoid cells (ILCs) and ILC1, 2 and 3 subsets and association with clinical and biological manifestations in primary Sjögren's syndrome (pSS).

(A) Correlation between total ILC, ILC1, 2 and 3 subsets frequency and disease activity measured by ClinESSDAI in pSS patients (N=21). **(B)** Correlation between total ILC, ILC1, 2 and 3 subsets frequency and time from pSS diagnosis (N=21). **(C)** Total ILC, ILC1, 2 and 3 subsets frequency in pSS patients with or without glandular manifestations defined as active ESSDAI glandular domain (N=21). **(D)** Total ILC, ILC1, 2 and 3 subets frequency in pSS patients with or without positive anti-SSA antibodies (N=21). **(E)** Total ILC, ILC1, 2 and 3 subets frequency in pSS patients with or without positive anti-SSB antibodies (N=21).

Data are median +/-IQR. *: $p < 0.05$; **: $p < 0.01$; yr: years.

Supplementary Figure 2:

Supplementary Figure 2: Minor salivary gland (MSG) analysis: quantity of ILC3 subset and association with clinical and biological manifestations in primary Sjögren's syndrome (pSS).

(A) Correlation between the quantity of ILC3 subset in inflammatory infiltrates of pSS patient MSGs and the focus score (N=13). **(B)** Correlation between the quantity of ILC3 subset in inflammatory infiltrates of pSS patient MSGs and disease activity measured by ClinESSDAI (N=12). **(C)** Quantity of ILC3 subset in inflammatory infiltrates of pSS patient MSGs with altered or normal salivary flow (p>0.99) (N=8). **(D)** Quantity of ILC3 subset in inflammatory infiltrates of pSS patient MSGs with positive or negative anti-SSA antibodies (p=0.52) (N=13). **(E)** Quantity of ILC3 subset in inflammatory infiltrates of pSS patient MSGs with positive or negative anti-SSB antibodies (p=0.50) (N=13). **(F)** Quantity of ILC3 subset in inflammatory infiltrates of pSS patient MSGs with positive or negative rheumatoid factor (p=0.76) (N=10). **(G)** Quantity of ILC3 subset in inflammatory infiltrates of pSS patient MSGs with or without hypogammaglobulinemia (p=0.52) (N=13).

Data are median +/-IQR. ILC: innate lymphoid cells.