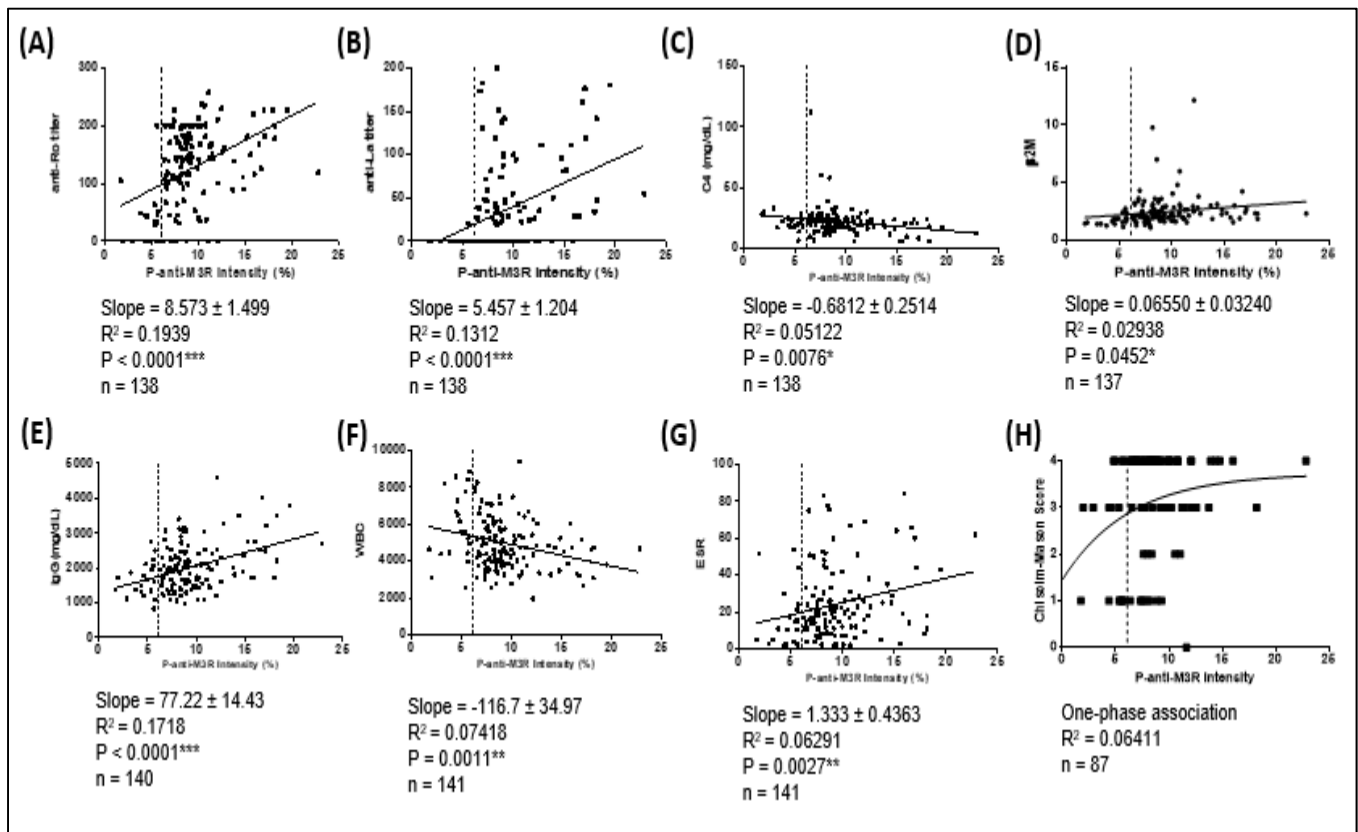


Supplementary Table S1. Comparison between S-anti-M3R positive and negative SS patients.

	Salivary anti-M3R (-) n=13	Salivary anti-M3R (+) n=23	P value
Ocular symptoms *	11 (84.6%)	17 (73.9%)	0.682
Ocular signs *	11 (84.6%)	20/22 (90.9%)	0.618
Schirmer test \leq 5 mm	6/10 (60.0%)	10/21 (47.6%)	0.704
OSS \geq 5	2/8 (25.0%)	5/15 (33.3%)	1.000
Oral symptoms *	9 (69.2%)	20 (87.0%)	0.225
Salivary gland involvement *	11 (84.6%)	23 (100%)	0.124
Unstimulated WSFR \leq 0.1 mL/min	7 (53.8%)	20 (87.0%)	0.046
Abnormal salivary scintigraphy	8 (61.5%)	17 (73.9%)	0.439
Anti-Ro/SSA (+)	10 (76.9%)	23 (100%)	0.040
Anti-La/SSB (+)	6 (46.2%)	14 (60.9%)	0.393
Focus score \geq 1	8/12 (66.7%)	16/21 (76.2%)	0.690
Focus score \geq 2	4/12 (33.3%)	3/21 (14.3%)	0.377
Chisholm–Mason grade = 4	5/12 (41.7%)	8/21 (38.1%)	0.840
ESSDAI \geq 5	2 (15.4%)	4 (17.4%)	1.000
Extraglandular manifestations	5 (38.5%)	10 (43.5%)	0.769
Raynaud's phenomenon	2 (15.4%)	4 (17.4%)	1.000
Leukopenia	5 (38.5%)	9 (39.1%)	0.968
Hypocomplementemia C3 or C4	3/12 (25.0%)	0/21 (0.0%)	0.040
Total IgG \geq 1700 mg/dL	8 (61.5%)	13/22 (59.1%)	0.886

P values were calculated by chi-square or Fischer's exact test as applicable.

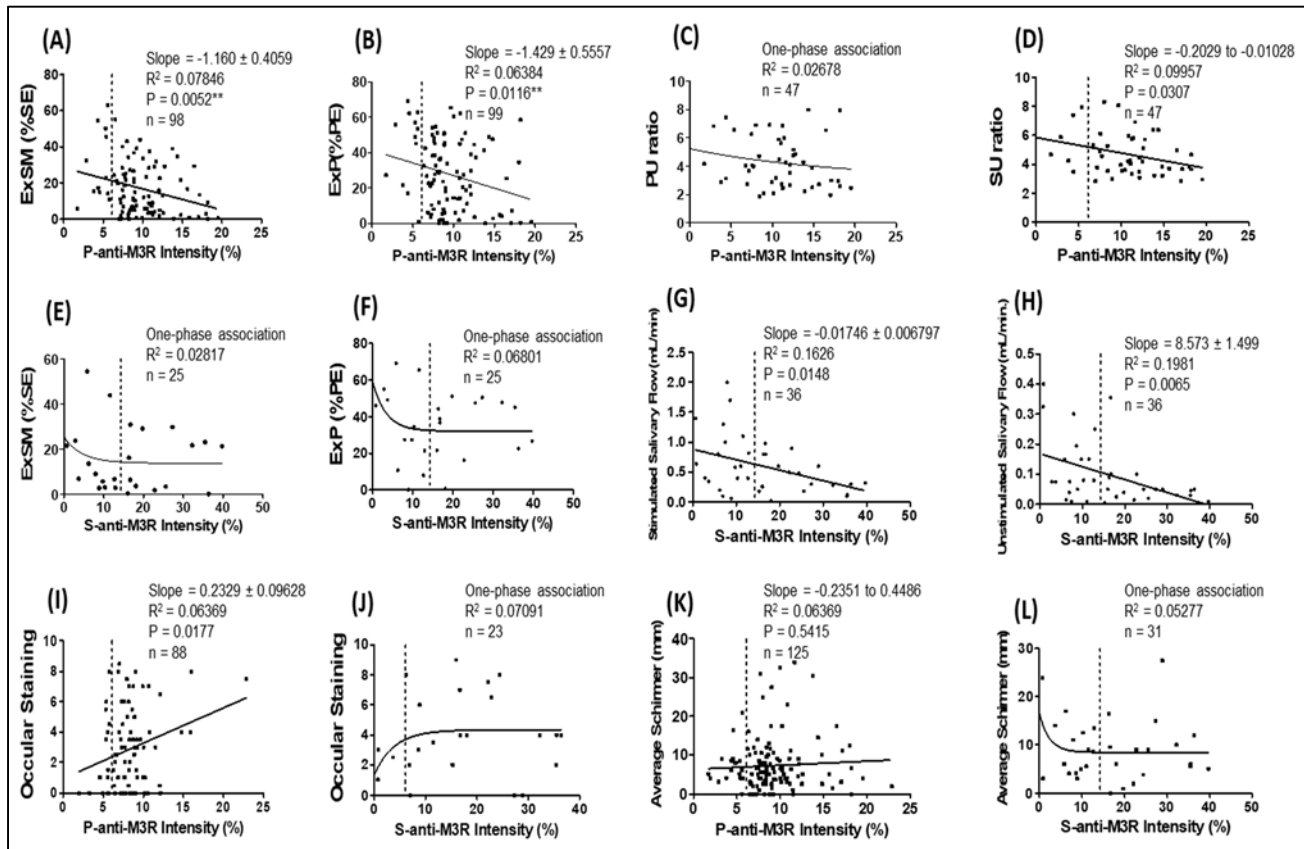
*, defined according to the 2002 AECG classification criteria.



Supplementary Figure S1. Correlation between P-anti-M3R and inflammatory/serological markers

(A, B) P-anti-M3R is proportionally and positively correlated to anti-Ro/SSA and anti-La/SSB in plasma. (C) C4 complement protein levels are negatively proportional to P-anti-M3R in SS patient plasma. (D) B2M level shows an increasing trend, but shows no statistical significance. (E) Total IgG level in the plasma is positively correlated with the level of P-anti-M3R. (F) An inverse correlation was shown between WBC and P-anti-M3R. (G) A positive correlation is shown between ESR and P-anti-M3R. (H) One-phase association between lymphocytic infiltration graded by the Chiselm-Mason grading system and P-anti-M3R. Vertical dashed lines indicate the cut-off value with plasma of HC mean+2 standard deviations.

Clinical values of anti-M3R autoantibodies



Supplementary Figure S2. Correlation between anti-M3R with scintigraphic parameters and lacrimal/salivary secretory dysfunction.

(A, B) P-anti-M3R intensity was found to be inversely proportional to percentage of submandibular and parotid glands excretion, ExSM and ExP, respectively, detected by the salivary scintigraphy. (C, D) Stimulated and unstimulated WSFR has no linear relation with P-anti-M3R level in SS patient plasma (E,F) S-anti-M3R intensity shows one-phase association with ExSM or ExP. (G,H) Stimulated and unstimulated WSFR are positively and linearly correlated S-anti-M3R in SS. (I) Ocular staining score is positively proportional to the intensity of P-anti-M3R. (J) Average Schirmer's test values show a positive one-phase association with P-anti-M3R. (K) Ocular stating shows one-phase association with S-anti-M3R without a statistical significance. (L) S-anti-M3R has shown a one-phase association with average Schirmer's test in SS patients. Vertical dashed lines indicate the cut-off values of HC mean+2 standard deviations.