Table 1. Main demographic data, clinical and laboratory features in the studied group.

	SLE no aPL, n (%)	SLE APS, n (%)	SLE aPL, n (%)	*P*
Female sex	2075 (90.9%)	455 (88.3%)	757 (90.1%)	0.178
Age, mean±SD (yr)	47.0±15.1	48.5±14.4	45.3±14.3	<0.001
Disease duration, mean±SD (mo)	141.5±100.7	156.8±109.8	136.4±94.0	0.001
Tobacco use: •Current •Former	335 (16.3) 494 (24.1)	91 (18.6) 119 (24.3)	125 (16.6) 189 (25.2)	0.743
High blood pressure	647 (28.6)	211 (40.1)	203 (24.4)	<0.001
Dyslipidemia	664 (30.3)	216 (41.9)	221 (27.3)	<0.001
Diabetes: •Without organ damage •With organ damage	97 (4.3) 17 (0.8)	29 (5.6) 8 (1.5)	25 (3) 3 (0.4)	0.022
Cutaneous manifestations	1700 (74.4)	358 (67.4)	611 (72.7)	0.005
Joint symptoms	636 (27.8)	164 (30.9)	204 (24.3)	0.022
Respiratory manifestations	241 (10.5)	125 (23.5)	70 (8.3)	<0.001
Cardiac manifestations	379 (16.6)	159 (29.9)	125 (14.9)	<0.001
Renal manifestations	862 (37.7)	249 (46.9)	298 (35.4)	<0.001
Neuropsychiatric manifestations	655 (28.7)	235 (44.3)	238 (28.3)	<0.001
Ophthalmological manifestations	315 (13.8)	111 (20.9)	103 (12.2)	<0.001
Positive anti DNA antibodies	1049 (46.9)	258 (50)	367 (45.1)	<0.001
Hypocomplementemia	1716 (76.7)	424 (82.8)	645 (77.9)	0.011

Conclusion: SLE-APS patients show a more severe clinical profile with higher frequency of major organ involvement and more damage accrual than SLE-aPL and SLE no APL.

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OP0250 INFLUENTIAL FACTORS IN PROMOTING TREAT-TO-TARGET FOR SYSTEMIC LUPUS ERYTHEMATOSUS VIA EMPOWERING PATIENTS: A COHORT STUDY FROM CHINA BY SMART SYSTEM OF DISEASE MANAGEMENT (SSDM)

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Background: T2T is routine in RA, but no comparable standard has been defined for SLE. In 2015, the definition of Lupus Low Disease Activity State (LLDAS) was generated by Asia-Pacific Lupus Collaboration, and the preliminary validation demonstrated its attainment to be associated with improved outcomes in SLE. A SLEDAI-2K score lower than 4 is the main criteria for LLDAS. SSDM is an interactive mobile disease management application, including application systems for both the doctors and patients. The patients can perform self-assessment, including SLEDAI and medical records entry through the mobile application. The data is synchronized to the SSDM of authorized rheumatologists and stored in cloud database.

Objectives: To evaluate the patterns of T2T and related influential factors among SLE patients after applying SSDM in real world.

Methods: Patients were trained to master SSDM by rheumatologists in clinics. The first assessment for SLEDAI was performed as the baseline. Patients were required to perform repeated assessments after leaving the clinics.

Results: From July 2015 to Jan 2019, 1,090 SLE patients from 88 hospitals were followed up for more than 12 months through SSDM, and the results were summarized in Table 1. The ratio of T2T achievers was 52.84% (576/1,090) at the baseline and improved significantly to 68.35% (745/1,090) after a 12-month follow-up, p<0.01. Among T2T achievers at the baseline, 77.08% (444/576) maintained T2T, and 22.92% (132/576) relapsed. Of patients who didn' t achieve T2Tat baseline, 58.56% (301/514) of the them achieve T2T after 12-month follow-up.

The impact of the times of self-assessment for SLEDAI on T2T has been analyzed. The more frequent of the self-assessments being conducted by patients, the higher improvement of T2T rate will be. We performed linear regression analysis of variables in statistics and parameter estimation by least square method. The improvement of T2T rate(y) was positively correlated with times of self-assessment for SLEDAI(x) independently. The regression equation as "y = 0.0324x + 0.0226 R2 = 0.7717", p<0.01. (Figure 1)

Conclusion: After proactive disease management via SSDM, the rate of T2T in SLE patients increased significantly. Patients with SLEDAI-2K≤4 score at baseline had a significantly higher retention rate. The patients who performed more self-assessments through SSDM had lower probability of relapse and higher rate of T2T maintaining and achievement. SSDM is a valuable tool for long term SLE follow-up through empowering patients.

Table1:

Baseline\Last follow-up	Number	%	SLEDAI≤4	%	SLEDAI≥5	%
SLEDAI≤4	576	52.84%	444	77.08%	132	22.92%
SLEDAI≥5	514	47.16%	301	58.56%	213	41.44%
Total	1090	100%	745	68.35%	345	31.65%

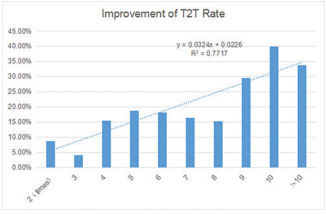

Figure 1

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OP0251 SLE PATIENTS FROM NORTH AMERICA ARE OLDER WITH LESS SEROLOGIC ACTIVITY THAN OTHER POPULATIONS IN INTERNATIONAL CLINICAL TRIALS

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Background: Regional differences have been identified as potential confounders of SLE clinical trial results. Recently, no difference between treatment and placebo was observed in the US lupus patients when a significant treatment effect was observed in Europe[1].

Objectives: To compare SLE serologic features/markers of active disease between different geographic regions in recent multinational clinical trials.

Methods: Laboratory data of 1005 subjects from four global randomized SLE clinical trials at baseline were examined. Mean/median C3 and C4 complement levels, prevalence of low C3 or C4 (**Low C3**/**C4**), positive anti-double stranded DNA (**DNA**), anti-Extractable Nuclear Antibodies (**ENA**), and high-titer Antinuclear Antibody (**ANA≥1:640**) in North America (**NA**) patients were compared to Asia (**AS**), Latin America (**LA**), Africa (**AF**), Western Europe (**WE**), and Eastern Europe (**EE**)

Results: NA patients were significantly older than patients in LA, AF, or AS but not WE or EE. Not surprisingly, they also had higher complement levels and the lowest rates of low C3/C4, DNA, ENA, and ANA ≥1:640. Our data confirm that age is an important factor in the prevalence of low complement and autoantibodies. However, there remained a marked difference in serologic activity between NA and EE, despite being close in age.