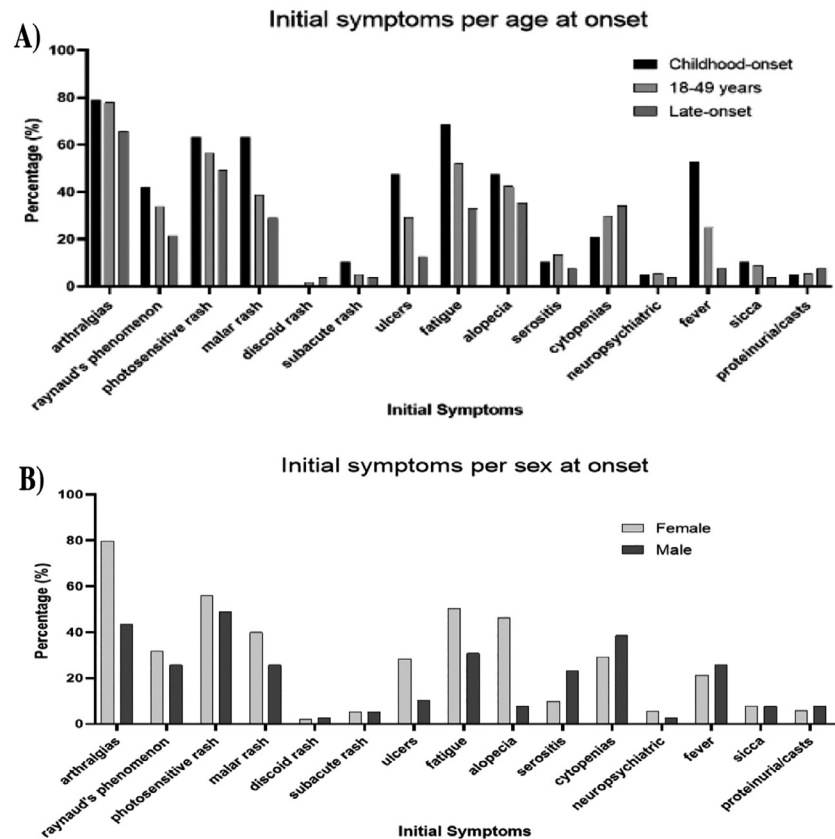


Supplementary Table S1. Clinical features and immunological profile at diagnosis (n=275).

Clinical features	n (%)
Arthritis*	256 (93)
Acute cutaneous lupus*	224 (81.4)
Malar rash*	154 (56)
Photosensitivity†	199 (72.4)
Subacute cutaneous lupus*	32 (11.6)
Chronic cutaneous lupus*	20 (72.7)
Discoid rash*	8 (2.9)
Mucosal ulcers*	77 (28)
Alopecia*	118 (42.9)
Lupus nephritis*	20 (7.3)
Serositis*	40 (14.5)
AIHA*	12 (4.4)
Leukopenia*	59 (21.4)
Thrombocytopenia*	37 (13.4)
NPSLE*	39 (14.2)
Raynaud's phenomenon‡	101 (36.7)
Livedo reticularis‡	26 (9.5)
Sicca‡	28 (10.2)
Lymphadenopathy‡	23 (8.4)
Fever§	74 (27)
Immunological profile	n (%)
ANA§	239 (86.9)
Anti-dsDNA§	69 (25)
Anti-Sm§	15 (5.5)
Anti-SSA‡	58 (21)
Anti-SSB‡	14 (5.1)
Anti-RNP‡	18 (6.5)
aPL§	61 (22.2)
Anti-CL§	49 (17.8)
Anti-b2GPI§	26 (9.5)
LA§	14 (5.1)
Low complement§	86 (31.3)

*according to SLICC-2012 classification criteria for Systemic Lupus Erythematosus (31); †according to ACR-1997 classification criteria for systemic lupus erythematosus (30); ‡defined as in J.P. Maddison *et al.* (3); §according to EULAR/ACR-2019 classification criteria for Systemic Lupus Erythematosus (32).

AIHA: autoimmune haemolytic anaemia; NP-SLE: neuropsychiatric lupus; ANA: antinuclear antibodies; anti-dsDNA: anti-double stranded DNA antibodies; anti-Sm: anti-Smith antibodies; anti-SSA: anti-Sjögren's syndrome-related antigen A antibodies; anti-SSB: anti-Sjögren's syndrome-related antigen B antibodies; anti-RNP: anti-ribonucleoproteins antibodies; aPL: antiphospholipid antibodies; anti-CL: anti-cardiolipin antibodies; anti-b2GPI: anti-beta-2 glycoprotein antibodies; LA: lupus anticoagulant

**Supplementary Fig. S1.** Initial symptoms of SLE patients, n=275.

A: Distribution per age; childhood-onset patients presented more frequently with unexplained fever ($p<0.01$), ulcers ($p<0.01$), fatigue ($p<0.01$) and malar rash ($p<0.01$) compared with late-onset patients. There was no statistical significance difference in neuropsychiatric and renal involvement. Childhood-onset (n=19, black bars); late-onset (n=79, dark grey bars); SLE onset between 18-49 years of age (n=177, light grey bars).

B: Distribution per sex; females were reported more often arthralgias ($p<0.01$), alopecia ($p<0.01$), ulcers ($p<0.05$) and fatigue ($p<0.05$) compared to males. Males presented more frequently with serositis ($p<0.05$). Females (n=236, black bars); males (n=39, grey bars).

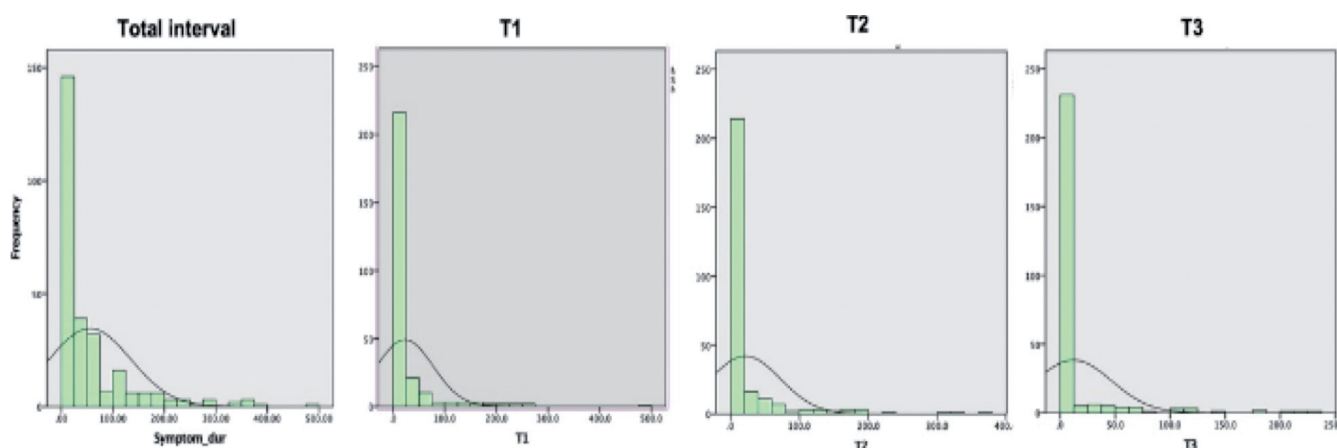
Supplementary Table S2. Distribution of initial symptoms per age at disease onset and sex.

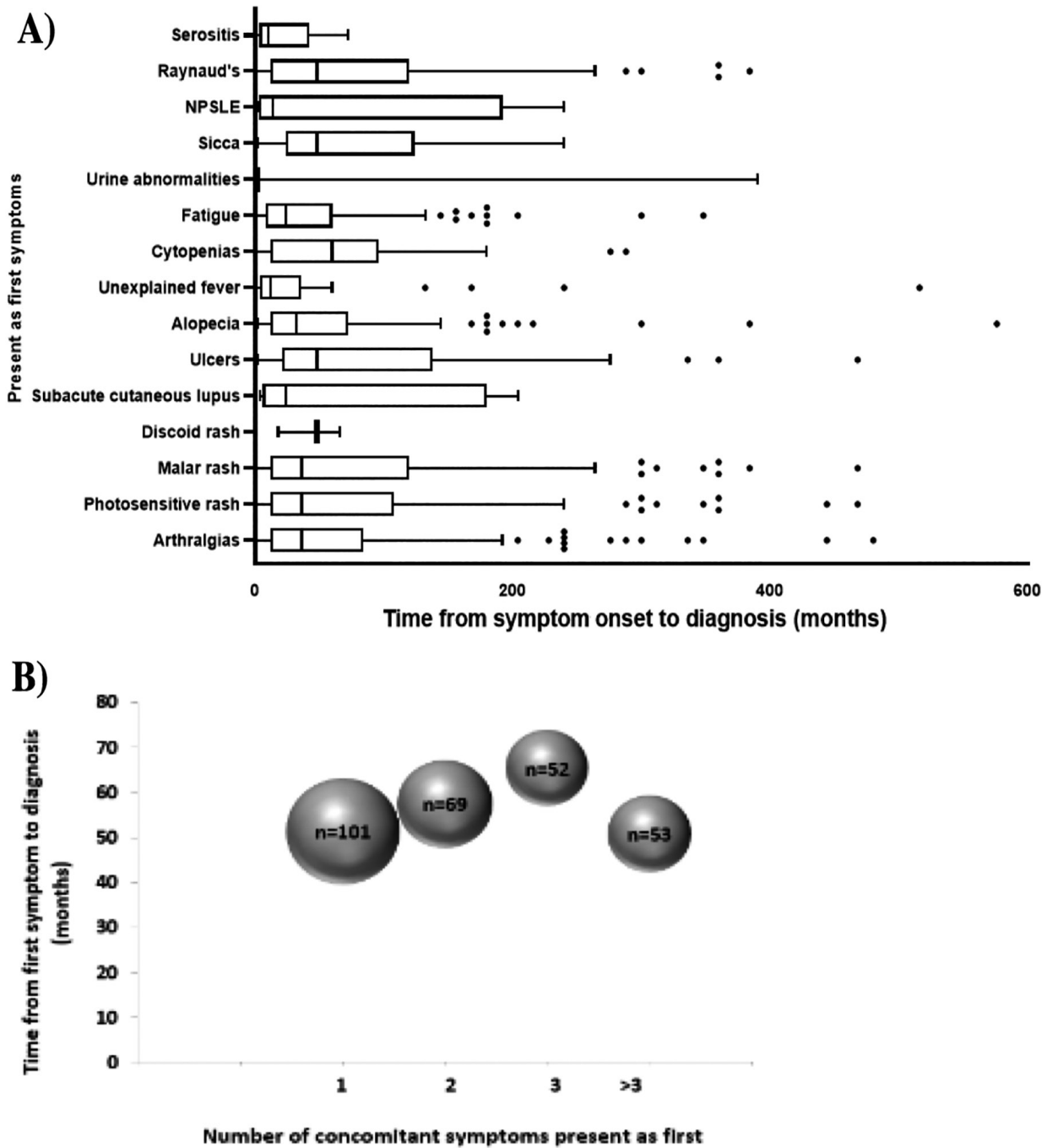
Symptoms	Childhood-onset n (%)	Late-onset n (%)	OR	p-value	95% CI	Females n (%)	Males n (%)	OR	p-value	95% CI
Arthralgias/arthritis*	15 (78.9)	52 (65.8)	1.95	0.2752	(0.59-6.44)	188 (79.7)	17 (43.6)	5.07	<0.0001	(2.50-10.29)
Raynaud's phenomenon†	8 (42.1)	17 (21.5)	2.65	0.0705	(0.92-7.63)	75 (31.8)	10 (25.6)	1.35	0.4434	(0.63-2.92)
Photosensitive rash*	12 (63.2)	39 (49.4)	1.76	0.2835	(0.63-4.93)	132 (55.9)	19 (48.7)	1.34	0.4026	(0.68-2.63)
Malar rash*	12 (63.2)	23 (29.1)	4.17	0.0077	(1.46-11.94)	94 (39.8)	10 (25.6)	1.92	0.0945	(0.89-4.12)
Discoid rash*	0 (0)	3 (3.8)	0.56	0.7056	(0.03-11.31)	5 (2.1)	1 (2.6)	0.82	0.8602	(0.09-7.23)
Subacute rash*	2 (10.5)	3 (3.8)	2.98	0.2511	(0.46-19.24)	12 (5.1)	2 (5.1)	0.99	0.9909	(0.21-4.61)
Ulcers*	9 (47.4)	10 (12.7)	6.21	0.0014	(2.03-19.00)	67 (28.4)	4 (10.3)	3.47	0.0230	(1.19-10.14)
Alopecia*	9 (47.4)	28 (35.4)	1.64	0.3383	(0.60-4.51)	109 (46.2)	3 (7.7)	10.30	0.0001	(3.09-34.38)
Unexplained fever‡	10 (52.6)	6 (7.6)	13.52	<0.0001	(39.66-46.08)	50 (21.2)	10 (25.6)	0.78	0.5334	(0.36-1.71)
Haematological abnormalities*	4 (21.1)	27 (34.2)	0.51	0.2752	(0.16-1.70)	69 (29.2)	15 (38.5)	0.66	0.2488	(0.33-1.34)
Fatigue†	13 (68.4)	26 (32.9)	4.42	0.0068	(1.51-12.94)	119 (50.4)	12 (30.8)	2.29	0.0255	(1.11-4.73)
Urine abnormalities*	1 (5.3)	6 (7.6)	1.50	0.5721	(0.37-6.12)	14 (5.9)	3 (7.7)	0.56	0.2223	(0.22-1.42)
Pleurisy/pericarditis*	2 (10.5)	6 (7.6)	1.43	0.6766	(0.27-7.72)	23 (9.7)	9 (23.1)	0.36	0.0199	(0.15-0.85)
Sicca†	2 (10.5)	3 (3.8)	2.98	0.2511	(0.46-19.24)	18 (7.6)	3 (7.7)	0.10	0.9887	(0.28-3.54)
Neuropsychiatric§	1 (5.3)	3 (3.8)	2.53	0.4396	(0.24-26.76)	13 (5.5)	1 (2.6)	2.22	0.4498	(0.28-17.43)

*According to SLICC-2012 classification criteria for Systemic Lupus Erythematosus (31);

†defined as in J.P. Maddison et al. (3); ‡According to EULAR/ACR-2019 classification criteria for Systemic Lupus Erythematosus (32); §According to ACR-1997 classification criteria for systemic lupus erythematosus (30).

Childhood-onset: symptom onset at ≤17 years of age, n=19; late-onset: symptom onset at ≥50 years of age, n=79; females: n=236; males: n=39; OR: odds ratio; CI: confidence interval

**Supplementary Fig. S2.** Distribution of overall and individual intervals (i.e. T1, T2, T3) in the patient journey from symptom onset to diagnosis.



Supplementary Fig. S3. Mean time (months) from symptom onset to diagnosis.

A: per each symptom reported by patients as first (n=275).

B: per total number of concomitant first symptoms.