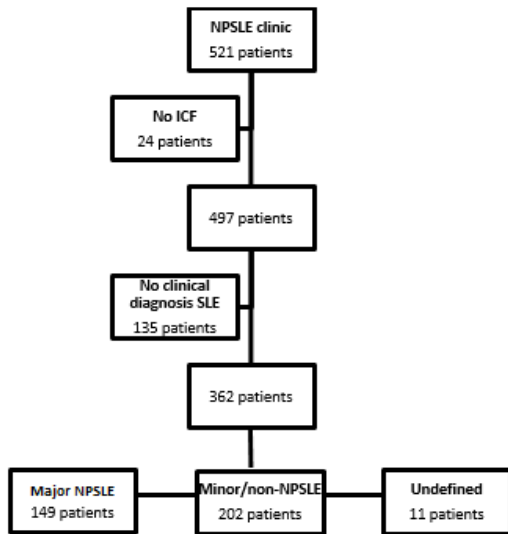
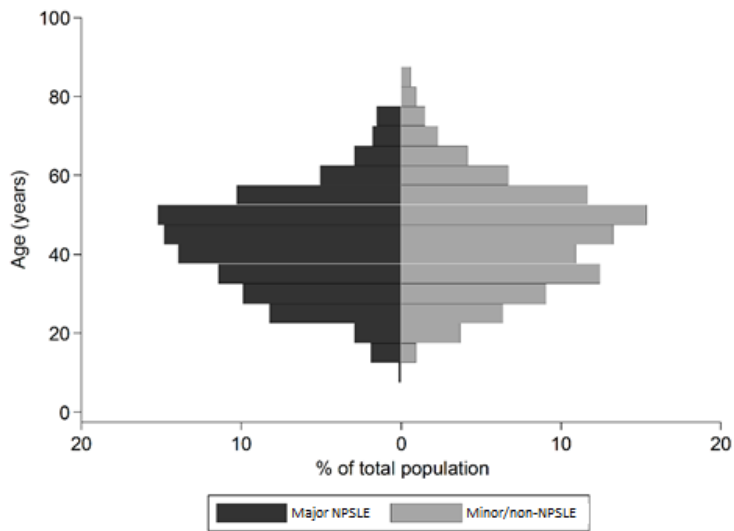


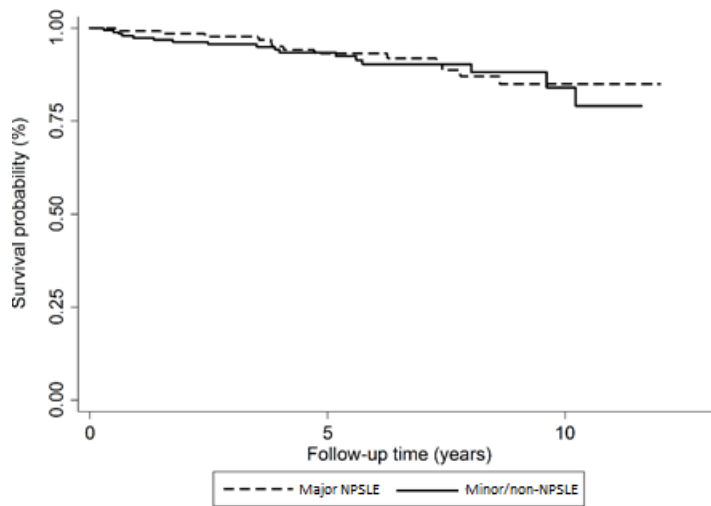
## Supplementary material



**Supplementary Figure 1** Flow chart of patients visiting NPSLE clinic between May 2007 - December 2018.



**Supplementary Figure 2** Distribution of patient years in age groups (% of total patient years) in patients with neuropsychiatric symptoms attributed to SLE requiring treatment (major NPSLE) and to mild and other causes (minor/non-NPSLE).



**Supplementary Figure 3** Kaplan-Meier Survival estimate for patients with neuropsychiatric symptoms attributed to SLE requiring treatment (major NPSLE) and to mild and other causes (minor/non-NPSLE).

**Supplementary Table 1** Sensitivity analysis of all-cause mortality in patients with neuropsychiatric symptoms attributed to SLE requiring treatment (major NPSLE) and to mild and other causes (minor/non-NPSLE).

	<i>Major NPSLE</i>	<i>Minor/non-NPSLE</i>
All-cause mortality <sup>a</sup>		
General analysis	5.0 (2.6 – 8.5)	3.7 (2.2 – 6.0)
1. <i>Undefined</i> patients added to subgroup <sup>b</sup>	5.5 (3.2 – 8.6)	4.0 (2.4 – 6.3)
2. Only patients with >4 1997 ACR classification criteria <sup>c</sup>	5.5 (2.9 – 9.4)	3.5 (1.9 – 6.0)
3. Patients with NPSLE prior to baseline visit excluded from major NPSLE group	5.5 (2.7 – 9.6)	3.7 (2.2 – 5.8)

<sup>a</sup> Standardized mortality ratio (SMR), ratio of the observed and expected number of deaths and 95% confidence intervals; <sup>b</sup> Patients with *Undefined NPSLE* added to the major NPSLE and minor/non-NPSLE group respectively;

<sup>c</sup> Patients with <4 ACR classification criteria excluded from the analyses.

**Supplementary Table 2** Age-specific standardized mortality ratios (SMRs), all-cause of SLE patients with neuropsychiatric symptoms attributed to SLE requiring treatment (major NPSLE) and to mild and other causes (minor/non-NPSLE).

<i>Age (years) at death / end follow-up</i>	<b>Major NPSLE</b>			<b>Minor/non-NPSLE</b>		
	<i>Number of patients</i>	<i>Number of deaths</i>	<i>SMR</i>	<i>Number of patients</i>	<i>Number of deaths</i>	<i>SMR</i>
20-24	1	0	-	5	1	100 (2.5 – 557.2)
25-34	20	1	20 (1.0 – 98.6)	24	1	26 (0.6 – 139.3)
35-44	27	4	23.5 (6.4 – 60.2)	48	1	5.9 (0.1 – 32.8)
45-54	28	4	6.9 (1.9 – 17.7)	55	3	4.4 (0.9 – 12.9)
55-64	25	2	2.8 (0.3 – 10.0)	43	4	3.7 (1.0 – 9.4)
65-74	8	1	1.5 (0.0 – 8.3)	15	4	5.1 (1.4 – 13.1)
75-84	3	1	2.4 (0.1 – 13.6)	6	2	1.9 (0.2 – 6.9)
85-94	0	0	-	2	1	1.4 (0.0 – 7.5)