Abstract PS3:51 Table 1 Prevalence and combinations of main comorbidities of SLE patients

Cancer										5%
Diabetes									8%	1%
Lung Diseases								9%	1%	1%
Heart Disease							12%	2%	2%	1%
Osteoporosis						18%	4%	3%	2%	1%
Allergies					19%	4%	4%	2%	1%	1%
Hypertension				25%	5%	6%	5%	5%	5%	2%
Hyperlipedemia			32%	15%	6%	8%	5%	3%	4%	1%
MentalDisease		36%	13%	9%	8%	7%	4%	5%	3%	2%
Thyroid Disorders	45%	19%	16%	12%	11%	10%	8%	3%	4%	3%
	Thyroid Disorders	Mental Disease	Hyperlipe-demia	Hyperte-nsion	Allergies	Osteopo-rosis	Heart Disease	Lung Diseases	Diabetes	Cancer

Purpose To examine the prevalence of comorbidities in SLE patients at the community as well as their impact on disease outcomes.[1]

Methods We utilised data from the Cretan Lupus Registry.[2] Comorbidities were defined based on self-reported condition(s) and/or use of relevant treatments, and were accessed through face interviews upon enrollment (period 2012–2015). Data on organ damage (SLICC/ACR Damage Index [SDI]), disease severity (modified BILAG index) and hospitalizations were abstracted from the medical charts.

Results We included 399 SLE patients with mean age at diagnosis 43 years and disease duration 7 years. The total number of comorbidities was (mean ±SD) 3.4±2.4 and 42% of patients had multi-morbidity (>3 comorbidities). The mean Charlson Comorbidity Index was 0.9±1.1. The prevalence of major comorbidities in SLE patients and their co-occurrence matrix are shown in Figure 1 and Table 1, respectively. Most frequent physical comorbidity was thyroid disease (45%), which frequently (19%) concurred with a mental disorder. Although 36% of patients reported mental disorders, only 14% were regularly seen by a mental health professional. Female SLE patients had increased frequency of thyroid (51% versus 16%, p<0.001), allergic diseases (21% versus 3%, p=0.006), and osteoporosis (19% versus 6%, p=0.05) compared to male patients, whereas respiratory comorbidities (21% versus 9%, p<0.001) and alcohol abuse (3% versus 0%, p<0.01) were more prevalent among male patients. Analysis according to the place of residence revealed increased prevalence of respiratory comorbidities among patients who reside in rural (12.3%) versus urban (7.2%) or semi-urban (7.7%) regions (p=0.014). SLE patients with multi-morbidity had more hospitalizations due to active disease (2.2±5.8 versus 1.1 ±2.3, p<0.001) and increased organ damage accrual (SDI>0) (40.8% versus 28.5%, p=0.044) compared to those with ≤3 comorbidities. In multivariable analysis, age-adjusted Charlson Comorbidity Index was associated with disease severity (Odds Ratio 1.43, p<0.003)

Conclusions Our results from a community-based registry highlight a considerable burden of physical and mental multi-morbidity in SLE patients, which may be linked to adverse disease outcomes.

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PS3:52 INCIDENCE AND CLINICAL FEATURES OF NEUROPSYCHIATRIC LUPUS IN KOREA: A PROSPECTIVE SINGLE-CENTRE STUDY

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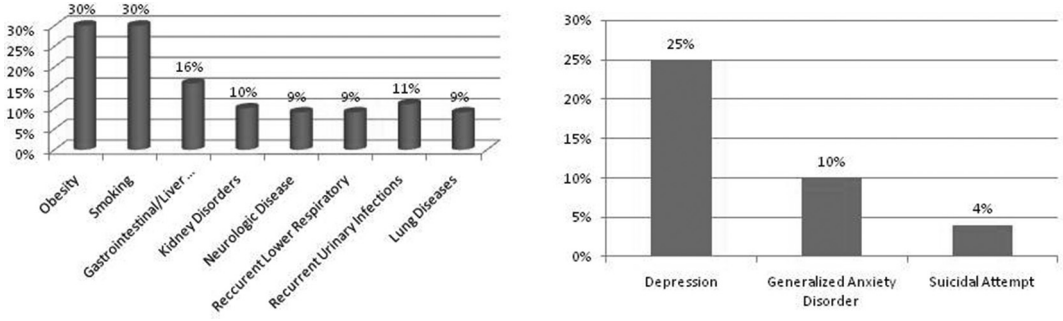
Objective To identify the incidence, risk factors and prognosis for neuropsychiatric lupus (NPSLE) in Korea.

Methods 1121 patients with SLE from Hanyang BAE lupus cohort were enrolled and followed from 1998 to 2015. NPSLE was defined using the ACR case definitions and Ainiala Criteria. Demographics and clinical information including ACR Classification criteria for SLE, autoantibodies, SLE Disease Activity Index, the SLICC/ACR damage index (DI) were collected at baseline and then annually. Symptoms of NPSLE were collected from patient interview and medical



Abstract PS3:51 Figure 1 Prevalence of physical (1A) and mental comorbidities (1B) of SLE patients (n=399) at the community level (cretan lupus registry)

Abstract PS3:52 Table 1 Prevalence of ACR/Ainiala NPSLE manifestations

	Number of patients (%)	Number of patients*1,000 /Number of patients* follow up years (patients per 1,000 PY)
Central nervous system	405/183 (36.13/16.32)	40.15/18.14
Aseptic meningitis	16 (1.43)	1.59
Cerebrovascular disease	47 (4.19)	4.66
Demyelinating syndrome	2 (0.18)	0.2
Headache+	258/- (23.02/-)	25.58/-
Chorea	7 (0.62)	0.69
Myelopathy	3 (0.27)	0.3
Seizure disorders	71 (6.33)	7.04
Acute confusional state	19 (1.69)	1.88
Anxiety disorder+	36/- (3.21/-)	3.57/-
Cognitive dysfunction/Severe++	12/4 (1.07/0.36)	1.19 / 0.40
Mood disorder/Severe++	89/50 (7.94/4.46)	8.82 / 4.96
Psychosis	26 (2.32)	2.58
Peripheral nervous system	59/51 (5.26/4.55)	5.85/5.06
Guillain-Barre syndrome	1 (0.09)	0.1
Autonomic disorder	1 (0.09)	0.1
Mononeuropathy, single/multiplex	22 (1.96)	2.18
Myasthenia gravis	0	1.39
Neuropathy, cranial	14 (1.25)	0
Plexopathy	0	2.78
Polyneuropathy/NCV confirmed++	28/16 (2.50/1.43)	2.78/1.59
Total	429/216 (38.27/19.27)	42.53/21.41

+ Outpointed manifestations are excluded in Ainiala NPSLE criteria.
++ Only severe events are included in Ainiala NPSLE criteria.
*NCV, nerve conduction velocity

Abstract PS3:52 Table 2 Risk factors for the occurrence of NPSLE manifestations (n=908)

	NPSLE (n=216)	Non-NPSLE (n=692)	p	Adjusted OR (95%CI)	p
Demographics					
Age of disease onset	24.68±11.09	25.99±10.53	0.12	1.02 (0.97-1.07)	0.5
Age of diagnosis	26.10±11.14	27.72±10.75	0.06		
Younger age of diagnosis				1.04 (0.963-1.09)	0.19
Female gender	201 (93.06)	634 (91.62)	0.59	1.60 (0.84-3.07)	0.15
SLEDAI without NP manifestations at enrollment	4.32±4.31	3.90±3.40	0.19	1.04 (1.00-1.09)	0.05
SDI without NP manifestations at enrollment	0.42±0.83	0.32±0.76	0.09	1.16 (0.96-1.41)	0.13
Comorbidity					
Hypertension	20/214 (9.35)	58/684 (8.48)	0.8	1.05 (0.59-1.89)	0.87
Diabetes mellitus	5/214 (2.34)	8/684 (1.17)	0.2	2.26 (0.68-7.55)	0.19
Education (years)	12.31±3.25	13.21±3.08	<.01*	0.92(0.87-0.96)	<.01*
=< High school	121/207 (58.45)	317/674 (47.03)	0.01*		
> High school	86/207 (41.55)	357/674 (52.97)			
ACR Classification criteria for SLE					
Malar Rash	91 (42.13)	278 (40.17)	0.67		
Discoid Rash	9 (4.17)	52 (7.51)	0.12		
Photosensitivity	58 (26.85)	223 (32.23)	0.16		
Oral ulcers	76 (35.19)	222 (32.08)	0.44		
Non-erosive arthritis	119 (55.09)	429 (61.99)	0.08		
Serositis	62 (28.70)	160 (23.12)	0.12		
Renal disorder	85 (39.35)	273 (39.45)	1.00		
Hematologic	179 (82.87)	552 (79.77)	0.36		
Immunologic disorder, cumulative	181 (83.80)	607 (87.72)	0.17		
Anti-dsDNA antibody	151 (69.91)	544 (78.61)	0.01	0.52 (0.37-0.76)	<.01*
Antiphospholipid antibody	83 (38.43)	200 (28.90)	0.01	1.38 (0.99-1.94)	0.06
Anti-RNP antibody	75 (36.59)	206 (30.93)	0.15		
Anti-Smith antibody	35 (16.20)	96 (13.87)	0.46		

Values are the number (percentage) or mean ± standard deviation.
NPSLE neuropsychiatric systemic lupus erythematosus; SLEDAI, systemic lupus erythematosus disease activity index; SDI, systemic lupus international collaborating clinics/American college of rheumatology damage index for systemic lupus erythematosus; ACR, American college of rheumatology; dsDNA, double-stranded deoxyribose nucleic acid; RNP, ribonucleoprotein

records. Mortality data were derived by linking with data from the Korean National Statistics Office (KNSO). Multivariable logistic regression and cox regression test were performed to assess the risk factor of NPSLE and predictors of mortality.
Results Of 1121 SLE patients, 429 (38.2%) patients had NPSLE events according to ACR definitions and 216 (19.3%) by Ainiala criteria. In multivariable logistic regression analysis, year of education [Odds ratio (OR) 0.92, 95% confidence interval (CI) 0.87 to 0.96, p<0.01] and elevated anti-dsDNA antibodies (OR 0.52, CI: 0.37 to 0.76, p<0.01) decreased the risk of NPSLE. In multivariable cox regression analysis, SLEDAI without NP manifestations at enrollment increased the risk of mortality (OR 1.18, CI: 1.08 to 1.25, p<0.01) in NPSLE patients.
Conclusion The 38.2% and 19.3% of SLE patients had NPSLE according to ACR and Ainiala definition of NPSLE. Year of education and elevated anti-dsDNA antibodies decreased the risk of occurrence of NPSLE. SLEDAI without NP manifestations at enrollment increased the risk of mortality in NPSLE patients.

PS3:54 CHARACTERISTIC FEATURES OF HAEMATOLOGICAL INVOLVEMENT AND ITS EFFECT ON DAMAGE ACCRUAL IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOUSUS: PRELIMINARY RESULTS FROM A MULTICENTER EUROPEAN COHORT

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Background and aim We studied haematological manifestations (HM) and their impact on the progression of damage in systemic lupus erythematosus (SLE) using a multicenter European cohort of patients.
Methods We examined the observational data of a SLE patients with serial clinical and laboratory measurements of every 6 months for 2 years gathered from 4 different countries. Each collaborative centre was asked for a contribution of fifty or more consecutive SLE patients. We compared clinical features, antibody profiles, SLEDAI-2K and SDI in patients with and without HM using Chi-Square and Student's t-tests for categorical and continuous variables, respectively. Multivariate Cox Proportional hazards regression was used the investigate the quartiles of leukocytes, lymphocytes and platelets at every time point (at 0,6,12,18,24 months) in relation to the damage characterised by the SDI scores. Probability of change in damage index (from SDI=0 to SDI equal or greater than 1) was calculated using mixed models logistic regression. Adjustments ma Results are presented as odds ratios (ORs) with their 95% CIs; results were defined significant as a p 0.05.
Results So far, 751 measurements of 159 patients were examined. Mean age was 44.9 (13.5) vs 44.0 (12.9) for patients with and without HM, respectively (p=NS). Mean disease duration at the time of cohort created was 11.1 (6.2) vs 10.8 (4.9) in patients with or without HM. Demographic features, clinical characteristics of patients with HM at SLE diagnosis or during the follow up are demonstrated in table 1. Sex, ethnicity and baseline autoantibodies showed no influence on damage. SLEDAI-2K was associated with an increased OR of 2.1 [95% CI: 1.29 to 3.42] for damage.
Conclusion Preliminary results imply that disease activity predicts future damage accrual in patients with haematological manifestations.

Abstract PS3:54 Table 1

Characteristics	Median (range) unless stated otherwise
Gender: female, n (%)	101 (88)
Ethnicity, n(%)	
Caucasian	109(94)
African	6(6)
SDI first recorded, n(%)	
0	90(78)
1	18(16)
≥2	7(6)
HM first detected	
Disease onset	78(68)
Disease course	37(32)
Leukopenia ≤3000	27(23)
Lymphopenia ≤1000	71(62)
Thrombocytopenia	39(34)
AHA	20(17)
Associated clinical features	
Musculoskeletal	75(65)
Cutaneous	57(50)
Renal	33(29)
Neurological	12(10)
Associated Abs	
Anti-dsDNA	60(53)
Anti-Ro	31(27)
Anti-Sm	18(16)

PS3:55 PREDICTIVE POTENTIAL OF THE DISEASE ACTIVITY INDEX AND C-REACTIVE PROTEIN FOR INFECTION IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

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Aim of the work The aim of the present work was to determine the prevalence of infections in a cohort of Egyptian Systemic lupus erythematosus (SLE) patients and to describe their