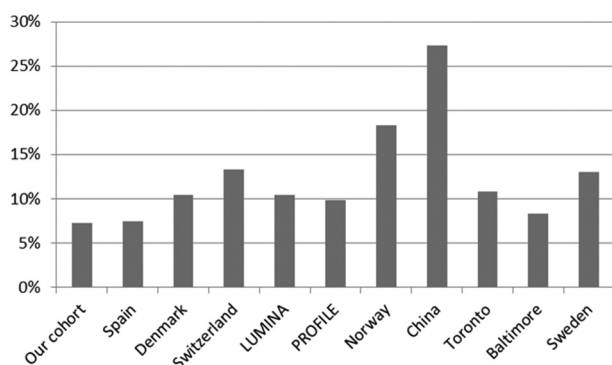traditional risk factors (smoke, hypertension, dyslipidemia) and treatment with aspirin and hydroxychloroquine.

Conclusion Our results confirmed that Italian lupus patients suffer a high incidence of CV disease compared with general population. However, this incidence was lower than that detected in North European and American lupus cohorts

Abstract PS3:48 Figure 1

PS3:49 | **EVALUATION OF CAPILLAROSCOPIC PATTERN IN SLE PATIENTS WITH AND WITHOUT RAYNAUD SYMPTOM**

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Background Capillaroscopy is a noninvasive method for evaluating nailfold abnormalities and differentiating between primary and secondary Raynaud syndrome (RP). It is widely investigated in systemic sclerosis (SSc) but not in systemic lupus erythematosus (SLE). SSc pattern is described with decreased capillary density, haemorrhage, neoangiogenesis and avascularity.

Objective Evaluate capillaroscopic pattern and clinical features in SLE patients; examine the influence of RP on capillaroscopic pattern and capillary density.

Methods 318 systemic autoimmune patients and 25 healthy controls were collected, 73 fulfilled SLE classification criteria. All patients underwent detailed nailfold capillaroscopic investigation. Density, intercapillary distance was recorded as well as the progression and diagnostic parameters described by Cutulo in semiquantitative manner. Presence of RP was investigated by a detailed questionnaire. Patients with and without RP were compared. 89 patients fulfilled SSc classification criteria, the median capillary density was 6.66 (5.2; 7.94) in this group, the median microangiopathia evaluation score (MES) was 1.97 (1.19; 3.13) in SSc subgroup.

Results 23 patients had pure 'idiopathic' SLE, 36 fulfilled SLE plus another classification criteria, 11 SLE plus two other, 2 SLE plus three other and 1 SLE plus four other. Median capillary density was 8.23 (7.4; 8.94), the median MES was 1.00 (0.56; 1.47); the median giant capillary number was 0.00 (0.00; 0.75) in the entire SLE group. 6.9% of all SLE patients had SSc early pattern, 1.4% SSc active pattern, 20.6% had SSc late pattern and 71.2% had no SSc pattern. Among patients having SSc pattern all except two had RP. Comparison of capillaroscopy of SLE patients with and without RP showed that patients in the former group had

significantly lower capillary density (7.97 [7.19; 8.72] vs. 8.92 (8.19; 9.34), p<0.05). Dilatation point and giant capillary point was significantly higher in the RP-SLE subgroup (0.36 [0.13; 0.69] vs 0.13 [0.06; 0.28] p<0.05, 0.06 [0.00;0.28 vs. 0.00 [0.00; 0.00] p<0.001).

Conclusion SSc capillary pattern is present in SLE as well, most of these particular patients had Raynaud's phenomenon. Patients having both SLE and RP have lower capillary density and worse capillary structure. SLE patients capillary density is higher than the density found in SSc controls.

PS3:50 | **INCIDENCE, DISEASE SEVERITY AND OUTCOME OF LUPUS NEPHRITIS. RESULTS FROM AN INCEPTION COHORT OF HISPANIC SLE PATIENTS**

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Background Lupus nephritis among Hispanic SLE patients have been identified with poor outcomes when it is compared to other populations; so, we aimed to identify lupus nephritis characteristics and its outcomes in an inception cohort of Hispanic SLE patients.

Patients and methods two-hundred twenty-three patients with SLE of recent-onset were studied. At baseline, standardised medical history and laboratory tests were done; followup visits occurred quarterly, and information about renal disorder, disease activity, damage accrual and comorbidities was updated annually. Main outcome was the development of renal disorder since SLE diagnosis, incidence of LN and ESRD over time, and mortality associated with renal disease.

Results At entry into the cohort, age of SLE patients [mean (SD)] was 27.3 (9,1) years and 90% were female. One-hundred thirty-one (59%) patients developed lupus nephritis during 9.95 years of follow-up; incidence-rate 59/1000 py, most events (78%) were developed within the first year of diagnosis. Patients with lupus nephritis had lower baseline BMI, less frequency of arthritis, and higher hypertension. There were no differences on age at lupus diagnosis, gender and baseline comorbidities between lupus patients with and without renal involvement. Among patients with renal biopsy, 80% had ISN/RPS Class IV and V alone or in combination. Twenty-eight (21%) developed ESRD, five of them (18%) have been received renal transplantation. Severe renal disease was strongly associated with poor outcomes in this cohort.

Conclusion LN in Hispanic SLE patients represents an early and severe manifestation with higher incidence. It imposes poorer prognosis during first years of disease duration.

PS3:51 | **MULTIMORBIDITY BURDEN IN SLE: PRELIMINARY DATA FROM THE COMMUNITY-BASED LUPUS REGISTRY OF CRETE**

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

	Thyroid Disorders	Mental Disease	Hyperlipedemia	Hypertension	Allergies	Osteoporosis	Heart Disease	Lung Diseases	Diabetes	Cancer
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%

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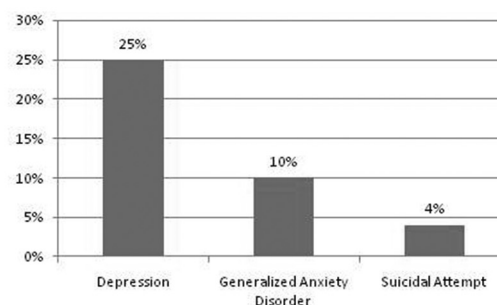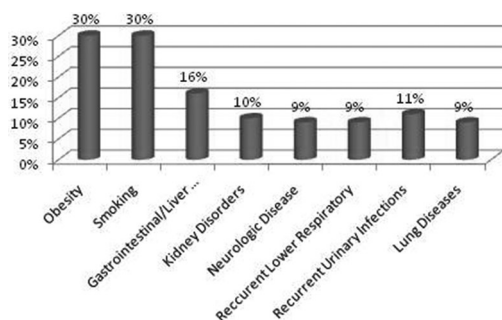
Abstract PS3:51 Figure 1 Prevalence of physical (1A) and mental comorbidities (1B) of SLE patients (n=399) at the community level (cretan lupus registry)

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