to be a major cause of morbidity and mortality among children and adults with SLE. Up to 60% of adult and 80% of pediatric SLE patients (pts) will eventually develop overt renal disease [1]. To date the excess burden of comorbidities, risk of inpatient hospitalization, and in-hospital death associated with SLE and LN remains incompletely understood.

Objectives: To identify differences in comorbidities, hospitalizations, and in-hospital mortality of SLE and LN cohorts compared to: 1) each other; 2) reference populations of pts without an autoimmune condition (non-AI) matched on gender and age. Reference populations were allowed to have claims for non-autoimmune conditions.

Methods: We conducted a retrospective cohort study using the Truven Healthcare MarketScan® Commercial Claims and Encounters and Medicare Supplemental and Coordination of Benefits database, which together comprise 65 million insured US lives between 1999 and 2014. Cohort identification is based on validated algorithms [2, 3] for identification of pts with either LN or SLE without renal involvement using claims data. Pts were matched on age and gender at index date. All eligible participants had 365 days of enrollment prior to and after the index date. End of study for post-index follow-up was captured as whichever of the following occurred first: 1) end of enrollment; 2) end of database; 3) date of death. Results are presented separately for pediatric and adult pts.

Results: 54,813 SLE pts without renal involvement and 8,839 LN pts were identified and matched to reference non AI populations. Compared to the non-renal SLE cohort, pts in the LN cohort were older (49.9±16.6 vs. 48.6±14.3 years) with a higher proportion of males (15.4% vs. 11.2%). Pts with LN had the highest scores on the Charlson Comorbidity Index modified to exclude renal involvement (Table 1). Additionally, adults with LN had higher rates of hospitalizations and longer hospitalizations compared with adults with non-renal SLE, who already had higher rates of hospitalizations and longer hospitalizations than matched controls (Table 2). This pattern of findings was consistent for children. Rates of in-hospital mortality were highest among those with LN but also increased among those with SLE compared with matched controls (Figure 1).

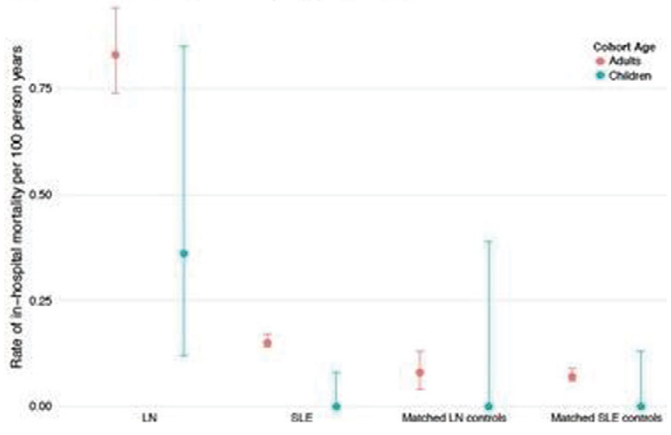
Table 1. Comorbidities on the Charlson Comorbidity Index.

	LN N=8466		non-renal SLE N=53597		non-AI matched controls (LN) N=8466		non-AI matched controls (non-renal SLE) N=53597	
	Mean (Std)	Median (IQR)	Mean (Std)	Median (IQR)	Mean (Std)	Median (IQR)	Mean (Std)	Median (IQR)
Enrollment Duration (days)	1709.5 (887.11)	1442 (1076)	1715.1 (926.53)	1422 (1101)	1195.5 (650.23)	979 (437)	1224.9 (692.48)	988 (464)
Charlson Comorbidity Index								
Baseline	1.5 (1.54)	1 (2)	0.8 (1.24)	0 (1)	0.3 (0.87)	0 (0)	0.3 (0.80)	0 (0)
Follow-Up	5.0 (2.68)	4 (3)	2.6 (2.16)	2 (2)	0.6 (1.34)	0 (1)	0.5 (1.21)	0 (1)
Charlson Comorbidity Index Excluding Renal Diseases								
Baseline	1.3 (1.46)	1 (2)	0.8 (1.19)	0 (1)	0.3 (0.83)	0 (0)	0.3 (0.77)	0 (0)
Follow-Up	3.8 (2.64)	3 (3)	2.5 (2.03)	2 (2)	0.6 (1.27)	0 (0)	0.5 (1.16)	0 (1)

Table 2. Hospitalizations and mortality by age and patient population.

		Children (<18)				Adults (>18)			
		LN N=573	non-renal SLE N=1216	non-AI matched controls (LN) N=573	non-AI matched controls (non-renal SLE) N=1216	LN N=8466	non-renal SLE N=53597	non-AI matched controls (LN) N=8466	non-AI matched controls (non renal SLE) N=53597
Overall risk of hospitalization	Number of patients hospitalized; n(%)	268 (71.85%)	335 (27.55%)	14 (3.75%)	53 (4.36%)	5645 (66.68%)	19172 (35.77%)	1030 (12.17%)	6326 (11.80%)
	Sum of Person-Years for Hospitalization	483.69	3493.28	918.96	2867.38	14761.14	142359.65	17569.43	115370.4
	Incidence Rate (Per 100 Person-Years) for Hospitalization (95% CI)	55.41 (48.97, 62.45)	9.59 (8.69, 10.67)	1.52 (0.83, 2.56)	1.85 (1.39, 2.42)	38.24 (37.25, 39.25)	13.47 (13.28, 13.66)	5.86 (5.51, 6.23)	5.48 (5.35, 5.62)
Total days in hospital	Mean (SD)	19.9 (28.20)	11.1 (18.36)	5.2 (7.24)	5.4 (6.42)	23.0 (35.97)	10.1 (16.15)	5.3 (7.54)	5.0 (6.42)
	Median (IQR)	10 (18)	5 (9)	3 (4)	3 (3)	11 (21)	5 (8)	3 (3)	3 (3)
	Min - Max	1 - 214	1 - 142	1 - 29	1 - 53	1 - 880	1 - 626	1 - 104	1 - 153
Overall risk of mortality	Number of patients with in-hospital mortality; n (%)	5 (1.34%)	0	0	0	260 (3.07%)	304 (0.57%)	15 (0.18%)	88 (0.16%)
	Sum of Person-Years for in-hospital mortality	1380.44	4409.72	942.64	2950.59	31192.18	198473.39	19192.98	126335.39
	Incidence Rate (Per 100 Person-Years) for in- hospital Mortality (95% CI)	0.36 (0.12, 0.85)	0 (, 0.08)	0 (, 0.39)	0 (, 0.13)	0.83 (0.74, 0.94)	0.15 (0.14, 0.17)	0.08 (0.04, 0.13)	0.07 (0.06, 0.09)

Figure 1: Rates of in−hospital mortality by group and age



Conclusions: An SLE diagnosis was associated with a higher burden of comorbidities and higher rates of hospitalizations and in-hospital mortality than non-AI matched controls. Pts with LN had the highest burden of comorbidities and rates of hospitalizations and in-hospital mortality. SLE and LN impose a high burden of morbidity and mortality and the medical need for safe and effective treatments of LN and SLE remains unmet. Clinicians should consider these factors in their assessment and treatment of pts with SLE and LN. The retrospective, claims-based results do not permit pt-level assessment of the relative contributions of disease, treatment, and potential confounders to these findings.

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FRI0286 SEROLOGICAL EVOLUTION IN PATIENTS WITH THROMBOTIC ANTIPHOSPHOLIPID SYNDROME

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Background: Antiphospholipid syndrome (APS) is an autoinmune disease characterized by the presence of antiphospholipid antibodies (aPL) and at least one clinical event (thrombosis and /or pregnancy morbidities). The titers of aPL can fluctuate and eventually become negative. This negativization, particularly if persistent, may be associated with a lower frequency of clinical events.

Objectives: To describe the clinical and serological course of patients with thrombotic APS as well as the factors related with the aPL negativization

Methods: We performed a retrospective study including patients attended at the Rheumatology clinic from a tertiary hospital in Northern Spain. We included 94 patients with thrombotic APS according to Sidney criteria of 2006. They were classified according to the serological evolution as persistently negative aPL, transiently positive, and persistently positive aPL according to previously established criteria.

Results: After a mean follow-up of 145±56 months, 48.9% of patients presented a persistently negative serology, whereas in 12.8% it was transiently positive, and persistently positive in 38.3%. When analyzing potential factors related to the negativization (table 1), we found that patients with positive lupus anticoagulant tended to have a persistently negative serology during follow-up, but it did not reach statistical significance (OR 2.7; 95% CI 0.8–9.4; p=0.145). We found no association between traditional cardiovascular risk factors or previous treatments and the serological evolution.

Variable	Total	Persistently negative (n=46)	Persistently positive and transiently positive (n=48)	P
Age	45±16	44±14	47±17	0.33
Male sex, n (%)	19 (21)	8 (18)	11 (24)	0.61
SLE, n (%)	25 (27)	12 (26)	13 (27)	1
Load of antibodies, n (%)		0.94		
1	29 (31)	15 (33)	14 (29)	
2	40 (43)	19 (41)	21 (44)	
3	25 (27)	12 (26)	13 (27)	
Anticardiolipin antibodies, n (%)	76 (81)	36 (78)	40 (83)	0.60
Antiβ2-GlycoproteinI antibodies, n (%)	59 (63)	27 (59)	32 (67)	0.52
Lupus anticoagulant, n (%)	35 (66)	18 (78)	17 (57)	0.14
Family history of thrombosis, n (%)	17 (31)	10 (40)	7 (24)	0.25
Tobacco use, n (%)	41 (44)	21 (46)	20 (42)	0.83
Hypertension, n (%)	45 (48)	21 (46)	24 (50)	0.69
Dyslipidemia, n (%)	43 (46)	21 (46)	22 (46)	1
Diabetes, n (%)	4 (4)	2 (4)	2 (4)	1
Antimalarials, n (%)	34 (36)	16 (35)	18 (37)	0.83
Heparin, n (%)	34 (36)	16 (35)	18 (37)	0.83
Oral anticoagulants, n (%)	68 (72)	33 (72)	35 (73)	1
Antiplatelets, n (%)	71 (76)	33 (73)	38 (79)	0.63
Corticosteroids, n (%)	5 (5)	2 (4)	3 (6)	1
Immunosuppressants, n (%)	4 (4)	1 (2)	3 (6)	0.36

Conclusions: After a mean follow-up of 12 years, 49% of thrombotic APS patients presented a persistently negative serology. We found no significant association between immunological, traditional cardiovascular risk factors or previous treatments and the persistently negative serology.

Disclosure of Interest: None declared

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FRI0287 INCIDENCE OF LUPUS NEPHRITIS AND 18-MONTH FOLLOW UP IN COLOMBIAN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Lupus nephritis (LN) is one of the major indicators of poor prognosis in patients with systemic lupus erythematosus (SLE). Multiple studies with Latin-