defined as <34 weeks. Obesity (BMI > 30), age, smoking, and pregestational hypertension and diabetes were defined using NPR and MBR. NPR ICD-coded visit and/or heparin dispensing during pregnancy from the Prescribed Drug Register (2006–2012) was a proxy for antiphospholipid syndrome (APS). The association between early preeclampsia and SLE was estimated by multivariable-adjusted modified Poisson models for first, subsequent, and all births. Robust standard errors and preeclampsia history were accounted for in non-first-births analyses. We investigated effect modification by pregestational hypertension, examined residual confounding by APS and misclassification of lupus nephritis as preeclampsia.

Results There were 742 births to women with SLE (343 first births) and 10484 births to women from the general population (4443 first births). Among the 32 pregnancies with early preeclampsia and SLE, 75% were first births and 34% were positive for the defined APS proxy. SLE was associated with a significantly increased risk of early preeclampsia for all, first, and subsequent births compared to non-SLE [RR = 7.3, (95% CI: = 4.5, 11.9), all births]. Although adjustment for APS proxy attenuated the association SLE remained statistically significantly associated with early preeclampsia (RR = 3.7, 95% CI: = 1.7, 7.9). Findings were similar among women with no pregestational hypertension, as well as in the absence of recent nephrology care. Risk ratios for early preeclampsia were smaller, but significant, for subsequent births compared to first and all births [RR = 2.8 (95% CI: = 1.2, 6.4) subsequent].

Conclusions Women with SLE are at increased risk of preeclampsia before 34 weeks gestation, and importantly, this increased risk may be independent of pregestational hypertension, APS, obesity, or smoking. Traditional risk factors alone may not explain the increased risk of early preeclampsia among women with SLE for first, subsequent, or any birth. Women with SLE during pregnancy should continue to be monitored carefully for early preeclampsia and future research is needed to identify what non-traditional preeclampsia factors might be causing this serious outcome.

CE-28 ANTIMALARIALS PROTECTS AGAINST THROMBOSIS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS (SLE): LONGITUDINAL DATA FROM A LARGE LATIN AMERICAN COHORT

[1]**Guillermo J Pons-Estel***, [2]Graciela S Alarcón, [3]Daniel Wojdyla, [4]Manuel F Ugarte-Gil, [5]Laurence S Magder, [6]Ana I Marcos, [7]Cristina Drenkard, [8]Alejandro J Alvarellos, [9]Eloisa Bonfa, [10]Lilian Lavras Costallat, [11]Loreto Massardo, [12]Antonio A Iglesias-Gamarra, [13]Marlene Guibert-Toledano, [14]Mary Carmen Amigo, [15]Mario H Cardiel, [16]Guillermo F Huerta-Yañez, [17]María H Esteva-Spinetti, [18]Bernardo A Pons-Estel. *[1]Department of Autoimmune Diseases, Hospital Clinic, Barcelona, Spain; [2]Department of Medicine, Division of Clinical Immunology and Rheumatology, School of Medicine, The University of Alabama at Birmingham, Birmingham, AL, USA; [3]GLADEL consultant, Rosario, Argentina; [4]Rheumatology, Hospital Guillermo Almenara Irigoyen. EsSalud, Lima, Perú; [5]University of Maryland Dental School, USA; [6]Hospital Interzonal General de Agudos "General San Martín", La Plata, Argentina; [7]Division of Rheumatology, Emory School of Medicine, Atlanta, USA; [8]Servicio de Reumatología, Hospital Privado, Centro Medico de Córdoba, Córdoba, Argentina; [9]Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil; [10]Faculdade de Ciências Médicas, Universidade Estadual de Campinas, Brazil; [11]Escuela de Medicina, Pontificia Universidad Católica de Chile, Santiago, Chile; [12]Universidad del Bosque, Bogotá, Colombia; [13]Centro de Investigaciones Médico Quirúrgicas- CIMEQ, Havana, Cuba; [14]Reumatología, Centro Medico ABC, Ciudad de México, Mexico; [15]Centro de Investigación Clínica de Morelia SC, Morelia, Michoacan, Mexico; [16]Hospital de Especialidades Miguel Hidalgo, Aguascalientes, Mexico; [17]Hospital Central de San Cristóbal, San Cristóbal, Venezuela; [18]Hospital Provincial de Rosario, Rosario, Argentina*

10.1136/lupus-2016-000179.107

Abstract CE-28 Table 1 Multivariable cox proportional hazard model: Time-to-thrombosis

Variable	HR	95% CI:
Antimalarials*	0.57	0.38–0.85
Gender	0.52	0.31–0.88
Previous Thrombosis	7.53	4.75–11.95
Age at enrolment (Spline)		
5 years increase at 20 years	0.92	0.81–1.04
5 years increase at 40 years	1.07	0.98–1.18
5 years increase at 50 years	1.67	1.12–2.35
Corticosteroids Dose*		
<7.5 mg/d vs. No	0.81	0.36–1.84
7.5 – 15 mg/d vs. No	1.00	0.46–2.16
≥15 – 60 mg/d vs. No	1.56	0.79–3.05
≥60 mg/d vs. No	3.15	1.43–6.94
Hospitalizations*	1.19	1.07–1.31

* Time dependent covariates.
**Variables considered as candidate for inclusion in the multivariable model but not selected in the final model were: ethnic group, medical coverage, hemolytic anaemia, renal disease, neurological disease, SLEDAI and SLICC-SDI at cohort enrolment and anticoagulant use (time-dependent).

Background Antimalarials (AMs) have shown to exert a thromboprotective effect in SLE patients, but studies thus far have been limited to North American and European patients. This study was conducted to assess whether a similar effect is observed in Latin American SLE patients.

Materials and methods SLE patients with a recent diagnosis (≤2 years) recruited and followed longitudinally as part of the GLADEL cohort were examined to establish risk factors for thrombotic events (TEs) and the possible preventive role of AMs. The end-point of this study was thrombosis defined as either arterial or venous occurring after entry into the cohort.

Independent variables included were socio-demographic characteristics, clinical manifestations as measured by the ACR classification criteria, laboratory, history of previous TEs and hospitalisation. For descriptive purposes, patients were divided according to use or non-use of an AMs agent (chloroquine and/or hydroxychloroquine) based on each patient's entire follow-up period during the study. Patients were classified as "users" if they had received AMs for at least 6 months, whereas "non-users" comprised patients who had received AMs for less than 6 months or who had never received them.

Treatment with AMs, glucocorticoids and anticoagulants along with hospitalizations were considered as time-dependent covariates. The effect of AM use on thrombosis after adjustment for potential confounders (variables known to affect thrombosis and the use of AMs) was examined using a multivariable Cox regression model. A backward selection algorithm was used to select the variables retained in the model with α-level to stay in the model set to 0.05.

Results Of the 1,480 patients included in the GLADEL cohort, 1,208 (82%) were considered AMs users with median exposure time of 42.1 months (Q1–Q3: 19.1–62.3). TEs occurred in 103 (7%) of the patients during a median follow up time since enrolment of 15.4 months (Q1–Q3: 4.6–38.2). The rate of thrombosis for AM users was 1.44 per 100 patient/years of follow-up vs. 3.01 for non-AM users (HR 0.55, 95% CI: 0.37–0.82).

After adjusting for potential confounders in the Cox proportional hazards regression model, the use of AMs was associated with a 43% reduction in the thrombosis rate (HR 0.57, 95% CI:

0.38–0.85). Other variables significantly associated with TEs are depicted in Table 1.

Conclusions After adjusting for possible confounding factors related to AMs use, a clear protective effect of AMs in the development of TEs in SLE patients from this Latin American cohort was observed.

Acknowledgements On behalf of the Grupo Latino Americano De Estudio del Lupus (GLADEL) cohort.

CE-29 DO PATIENTS WITH SYSTEMIC LUPUS GET BETTER QUALITY OF CARE IN LUPUS CLINICS THAN IN GENERAL RHEUMATOLOGY CLINICS?

Shilpa Arora, Ailda Nika, Joel A Block, Winston Sequeira, **Meenakshi Jolly***. *Rush University Medical Centre, Chicago, Illinois, USA*

10.1136/lupus-2016-000179.108

Background Patients with SLE receive care from several physicians in varied health care settings worldwide. Herein, we compared the quality of care received by SLE patients at two settings within the same academic institution (lupus clinic or general rheumatology clinic) using validated SLE quality indicators (QI).

Methods 100 consenting, consecutive patients fulfilling the American College of Rheumatology (ACR) classification criteria for SLE who were receiving longitudinal care at Rush University Rheumatology outpatient clinic and at subspecialty Lupus clinic were recruited. A validated QI survey was updated, modified for self-report and administered during participants' routine SLE care visit. Retrospective rheumatology medical chart reviews were done in addition for complete evaluation of performance on each QI. The overall performance rate and performance rates on 20 QIs were calculated for the two groups and compared using non-parametric tests. P-value <0.05 was considered significant.

Results 60 patients from sub-specialty lupus clinic and 40 patients from general rheumatology clinic participated. Patients receiving care at lupus clinic had longer disease duration [10 ± 6.6 vs 6.5 ± 6.9 years; P = 0.01] and met more number of ACR criteria [5.4 ± 1.7 vs 4.7 ± 1.0; P = 0.01] compared to patients from general rheumatology clinics. The overall performance rate was significantly greater among lupus clinic as compared to rheumatology clinic SLE patients [87.5% (IQR: 16%) vs.71.1% (IQR: 19%), P = 0.001]. Differences noted among the two groups were in counselling for use of sunscreen (98% vs 87%, p < 0.036), testing for antiphospholipid antibodies within 6 months of diagnosis (70% vs 30%, p < 0.001), recommendation for pneumococcal vaccine if on immunosuppressive medication/s (86% vs 50%, p < 0.003), bone mineral density test performance if on chronic steroids (95% vs 48%, p < 0.001) and prescribing a steroid sparing agent (100% vs 82%, p < 0.007) (Table 1).

Conclusions SLE patients seen in the dedicated lupus clinic had better overall and specific QI performance relative to general rheumatology clinics. This may suggest greater recognition among lupus clinic physicians of the importance of preventive care and disease monitoring among SLE patients. Of particular importance were the findings regarding vaccination and preventive use of sunscreen, as these may substantially affect morbidity in this patient population.

Abstract CE-29 TABLE 1 Performance on Quality Indicatore (QI)

		Lupus clinic			General Rheumatology clinic			P-value
QI No.	Description of QI	QI eligible (N)	Met QI (n)	PP (%)	QI eligible (N)	Met QI (n)	PP (%)	
1	ANA, CBC, Platelet, Creatinine, UA at diagnosis of lupus	60	60	100	40	39	97.5	0.4
2	AntidsDNA, C3/4, APL within 6 months of diagnosis	60	42	**70.0**	40	12	30.0	**<0.001**
3	Counselling for use of sunscreen	60	59	**98.3**	40	35	87.5	**0.036**
4	Influenza vaccine in last year if on ISM	37	36	97.3	24	20	83.3	0.07
5	Pneumococcal vaccine if on ISM	37	32	**86.5**	24	12	50.0	**0.003**
6	DEXA if have received ≥7.5 mg/day CS for ≥3 months	42	40	**95.2**	25	12	48.0	**< 0.001**
7	Calcium and Vitamin D if have received ≥7.5 mg/d CS for ≥3 months or is post-menopausal	45	38	84.4	31	22	71.0	0.25
8	Antiresorptive agent if have received ≥7.5 mg/d CS for ≥1 month & central T score ≤ 2.5 or h/o fragility fracture	10	10	100	3	3	100	N\A
9	Counselling about drugs at initiation	60	54	90.0	40	36	90.0	1.00
10	Baseline tests at initiation of drugs	59	58	98.3	40	38	95.0	0.56
11	Tests for drug monitoring	59	53	89.8	38	33	86.8	0.74
12	Steroid sparing agent if have taken ≥10 mg/day CS for ≥3 months	38	38	**100**	22	18	81.8	**0.007**
13	Follow up tests (UA, CBC, Creatinine) done for LN at every 3 months	17	12	70.6	7	5	71.4	1.00
14	Treatment with ISM & CS within 1 month of diagnosis of Class 3/4 LN	13	13	100	7	7	100	N\A
15	Antihypertensive if have proteinuria ≥ 300 mg/d or GFR < 60 ml/min & ≥ 2 BP readings > 130/80	14	13	92.9	9	9	100	1.00
16	ACE inhibitor or ARB if have proteinuria ≥300 mg/d	15	14	93.3	7	4	57.1	0.07
17	Assessment of CVD risk & counselling	60	19	31.7	40	7	17.5	0.16
18	Tests in pregnancy (AntiSSA/SSB, APL)	9	6	66.7	5	2	40.0	0.58
19	Treatment of APS in future pregnancies	1	1	100	1	1	100	N\A
20	Reproductive health counselling	23	20	87.0	13	10	76.9	0.64

Abbreviations: PP – Performance percentage, ANA – Antinuclear antibody, CBC – Complete Blood Count, UA – Urinalysis, APL – Anti- phospholipid antibodies, ISM – Immunosuppressive medications, CS – Corticosteroids, HCQ – Hydroxychloroquine, MTX – Methotrexate, MMF – Mycophenolate mofetil,LN – Lupus Nephritis, ARB – Angiotensin receptor blocker, CVD – Cardiovascular Disease, APS – Antiphospholipid antibody syndrome