

annual assessments, new cancer diagnoses (in the intervening year) were recorded by the examining physician. Confirmation of cancers was done by reviewing medical files including pathology reports. Of 1848 patients enrolled (across 1999–2011), 1676 had at least one follow-up. Patients were followed until death, last visit, or end of study interval for this analysis (August 2015).

**Results** Of 1676 patients followed, the majority (88.7%) were female and 828 (49.4%) were Caucasian (16.5% black, 15.2% Asian, 15.2% Hispanic, 3.7% other). Average age at SLE diagnosis was 34.6 (standard deviation, SD 13.3) years. At baseline, 1085 (64.7%) patients were never-smokers; the remainder were current (n = 248) or ex-smokers (n = 342). Average follow-up from cohort entry was 6.9 (SD 3.6) years. Two patients had cancer (one squamous cell skin and one breast cancer) prior to their SLE diagnosis; these cancers were not included in our analyses.

We observed 46 cancers in 46 subjects (with three other subjects reported to have cervical intraepithelial neoplasia, a premalignant condition). At cancer diagnosis, the average age was 51.7 (SD 15.3) years and the average SLE duration was 4.8 (SD 3.1) years. The most common cancer type was breast (n = 9), followed by non-melanoma skin cancer (n = 8, six of which were basal cell), lung (n = 6), prostate (n = 5), four head and neck (tonsillar, tongue, and two oral), cervical (n = 2), thyroid (n = 2), melanoma (n = 2) and one each of Non-Hodgkin lymphoma, leukaemia, multiple myeloma, medulloblastoma brain cancer, renal carcinoma, gastric carcinoid, thymoma, and cutaneous dermatofibrosarcoma. Most of the cancer cases were female (34 cases, 73.9%) and Caucasian (34 cases, 73.9%). Four cancer cases were Hispanic, 4 were black, and 4 were Asian. Twenty of the 46 patients (43.5%) who developed cancers were current (n = 4) or ex-smokers (n = 16); five of the six lung cancers were current (n = 1) or ex-smokers (n = 4).

**Conclusions** Just under 3% of the incident SLE cohort developed a cancer over an average follow-up of 6.9 years. The most common cancers were breast, non-melanoma skin, and lung cancers. The vast majority of lung cancers were smokers, supporting the belief that lung cancer risk in SLE (as in the general population) is largely driven by smoking. Further analyses will determine the standardised incidence rates for these cancers in SLE, versus the general population.

**Acknowledgements** We thank all SLICC investigators and their patients for their invaluable data and dedication to SLE research

### CE-23 EPIDEMIOLOGICAL ASPECTS AND DRUGS USED IN A COHORT OF CHILEAN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

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**Background** Systemic lupus erythematosus (SLE) is a chronic autoimmune disease with unknown aetiology and a broad clinical expression. One important problem in the management of SLE is the access, and the adherence to drugs, especially in developing countries.

**Materials and methods** The national public health system (SNSS) covered the health for 73.2% of the Chilean population. Some diseases have been included in a special program of Health Specific Guarantees (GES), in order to assure full access to drugs. SLE was included in this program in 2013 and brings us the

### Abstract CE-23 Table 1 Frequency of use and average dose of the different SLE medications

	Frequency of use (%)	Average dose
	(%)	Dose
Prednisolone	82.1	6.8 mg/day
Hydroxychloroquine	86	233 mg/day
Azathioprine	25.5	91.6 mg/day
Mycophenolate	21.2	1.750 mg/day
Methotrexate	14	15.8 mg/week
Cyclophosphamide	0.9	90 mg/day
Aspirin	43.2	100 mg/day
Calcium plus	97.4	933 mg/day
Vitamin D		1.493 IU/day

opportunity, by first time, to know the number of our patients. The pharmacy of our hospital has detailed registry of the outpatient prescribed and dispatched medication on SLE patients.

The objectives are to describe the national prevalence and annual incidence of SLE patient in SNSS system. To describe the SLE drugs prescription profile in our hospital.

**Results** At the end of 2015 a total of 6.714 SLE patient had been registered in the SNSS GES system, 6.257 (93.2%) of them are women's. For this population the SLE prevalence is 50.7/100,000, and the annual incidence is 9.2/100,000.

In our hospital at the end of 2015 there were 463 SLE GES patients. During 2015, 33.7% of them refilled medication at 12 month, and 32.4% got only 6 or less refills.

The frequency of use and average dose of the different SLE medications on this group of patients is listed on Table 1.

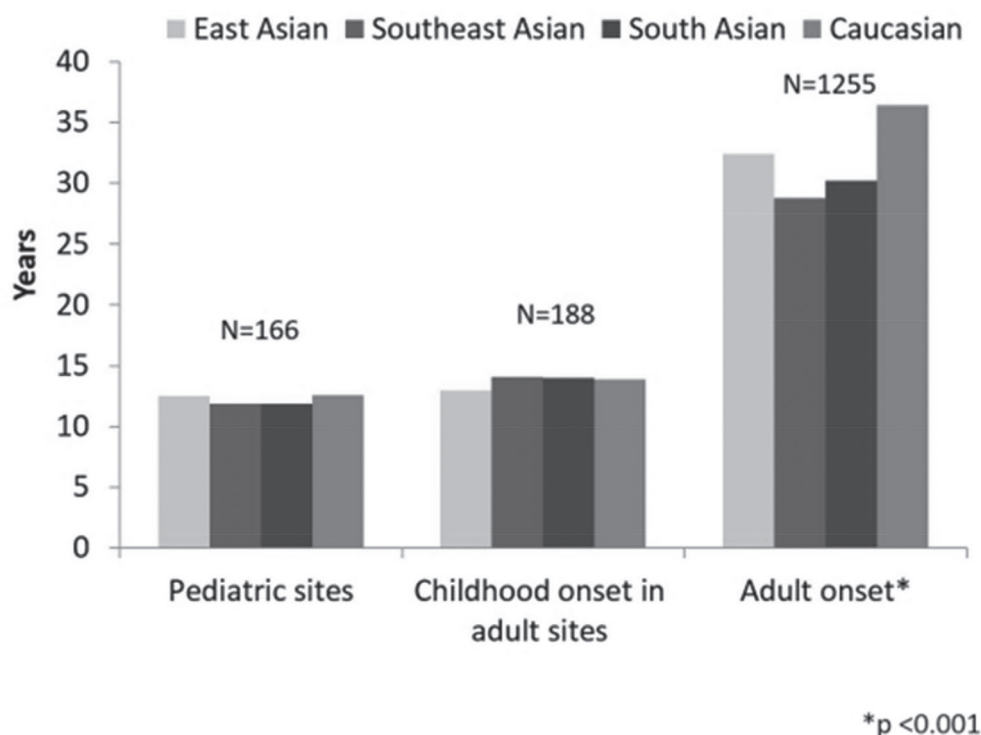
**Conclusions** We communicate prevalence and incidence rates for Chilean SLE patients similar to those reported elsewhere. A 66.3% of patients refill less medication that prescribed. The 82% are on low dose of prednisolone, 86% are on antimalarial and a 62% are on immunosuppressive drugs.

### CE-24 COMPARISON OF SYSTEMIC LUPUS ERYTHEMATOSUS IN 3 DIFFERENT ASIAN ETHNIC GROUPS: RESULTS FROM THE 1000 CANADIAN FACES OF LUPUS COHORT

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**Background** Systemic lupus erythematosus (SLE) is more prevalent and severe in non-Caucasians including Asians. However, Asian ethnicity includes broad geographic, cultural, and genetic diversity. There is limited data examining SLE among North American Asian ethnicities. We describe SLE in 3 Asian subgroups from a large SLE cohort.



**Abstract CE-24 Figure 1** Mean Age at SLE Diagnosis by Site (Paediatric or Adult)

**Materials and methods** The 1000 Faces of Lupus is a multicenter Canadian cohort of over 2000 patients. Sociodemographics, ACR classification criteria (ACRc), autoantibodies, disease activity scores (SLEDAI), Systemic Lupus International Collaborating Clinics damage index (SDI) scores, and treatments are collected using standardised tools. Ethnicity was self-reported. Asian subgroups were divided by origin country into East Asian (EA), Southeast Asian (SEA), South Asian (SA) and Central Asian (CA). Baseline data for Asians and Caucasians were abstracted and cross-sectional univariate analyses including t-tests, one-way ANOVA, and chi-square tests were performed.

**Results** There were 334 Asians (EA = 176, SEA = 78, SA = 78, CA = 2), and 1275 Caucasians. CA were excluded. Mean Asian onset age was younger (EA =  $23 \pm 13$  years; SEA =  $21 \pm 10$  years; SA =  $20 \pm 11$  years, Caucasian  $33 \pm 15$  years,  $p < 0.001$ ), but this was due to very frequent childhood onset in Asians (EA = 49%; SEA = 51%; SA = 61%) compared to Caucasians (17%,  $p < 0.001$ ) (Figure 1). Over 40% of Asians were immigrants, and a higher proportion were males (EA = 15%; SEA = 16%; SA = 19%) compared to Caucasians (10%,  $p = 0.008$ ). More Asians (90%) completed high school compared to Caucasians (83%,  $p = 0.007$ ). Income was similar between all Asian subgroups and Caucasians. ACRc and SLEDAI scores were not different, but nephritis was more frequent in all Asians: (EA = 57%; SEA = 63%; SA = 51%) compared to Caucasians (33%,  $p < 0.001$ ). Asians were more frequently (ever) seropositive: (dsDNA+: EA = 62%; SEA = 63%; SA = 78%; Caucasians 52%,  $p < 0.001$ ). (antiSm+: EA = 31%; SEA = 50%; SA = 30%;  $p = 0.01$ , Caucasian 19%,  $p < 0.001$ ). (antiRNP+: EA = 20%; SEA = 32%; SA = 22%;  $p = 0.03$ , Caucasians 16%,  $p < 0.001$ ). Treatment with prednisone (EA = 55%; SEA = 67%; SA = 65%), cyclophosphamide (EA = 13%; SEA = 21%; SA = 20%), and mycophenolate (EA = 15%; SEA = 19%; SA = 9%) was more frequent in Asians compared to Caucasians (40%, 10%, 8%, respectively,  $p < 0.001$  for all) likely reflecting renal disease.

Mean disease duration in Asians was 8 years but most had no damage (SDI = 0, EA = 66%; SEA = 64%; SA = 79%) compared to Caucasians (47%,  $p < 0.001$ ).

**Conclusions** In this analysis comparing Asian ethnic subgroups, we found only subtle differences between EA, SEA, and SA with SLE; as expected disease appeared more severe than in Caucasians. However, a strikingly high proportion of all Asians had onset in childhood. Along with the high proportion who were new Canadians, this suggests the potential for a growing burden of SLE in this population. Future studies of outcomes and optimal treatments are indicated.

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#### CE-25

#### FROM CHILDHOOD TO ADULTHOOD: LONGITUDINAL TRAJECTORY OF DAMAGE IN PATIENTS WITH CHILDHOOD-ONSET SYSTEMIC LUPUS ERYTHEMATOSUS (CSLE)

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**Background** Outcomes of patients with cSLE into adulthood are poorly understood. There is no information about the longitudinal trajectory of damage in cSLE patients. We undertook this study to: 1) Determine the longitudinal damage trajectory— as measured by the ACR/SLICC SLE damage index (SDI)— in