| Incomes / Medications | N | Mean | Std. Deviation | Median | Minimum | Maximum |
|---|---|---|---|---|---|---|
| **Steroids** | | | | | | |
| No | 91 | 43955 | 10357 | 40565 | 17946 | 67091 |
| Yes | 12 | 39702 | 8927 | 39643 | 32285 | 63629 |
| **Hydroxychloroquine** | | | | | | |
| No | 11 | 40530 | 7320 | 40159 | 31013 | 52924 |
| Yes | 92 | 43810 | 10525 | 40159 | 17946 | 67091 |
| **Azathioprine** | | | | | | |
| No | 85 | 43303 | 10028 | 40159 | 17946 | 67091 |
| Yes | 18 | 44199 | 11541 | 41050 | 31977 | 66374 |
| **Cyclophosphamide** | | | | | | |
| No | 102 | 43454 | 10304 | 40159 | 17946 | 67091 |
| Yes | 1 | 44010 | | 44010 | 44010 | 44010 |
| **Methotrexate** | | | | | | |
| No | 95 | 43282 | 10351 | 40159 | 17946 | 67091 |
| Yes | 8 | 45567 | 9358 | 41625 | 38887 | 66374 |
| **Myocphenolate** | | | | | | |
| No | 86 | 43809 | 10774 | 40362 | 17946 | 67091 |
| Yes | 17 | 41689 | 7035 | 39808 | 32566 | 51055 |
| **Belimumab** | | | | | | |
| No | 100 | 43369 | 10380 | 40159 | 17946 | 67091 |
| Yes | 3 | 46468 | 3779 | 44574 | 44010 | 50819 |
| **Tacrolimus** | | | | | | |
| No | 100 | 43709 | 10284 | 40362 | 17946 | 67091 |
| Yes | 3 | 35124 | 4361 | 32646 | 32566 | 40159 |
| **Any of the above*** | | | | | | |
| No | 4 | 40431 | 9947 | 38893 | 31013 | 52924 |
| Yes | 99 | 43582 | 10296 | 40159 | 17946 | 67091 |

*p-value=0.592 (Mann-Whitney U Test)

## 400 ANA-NEGATIVE SLE: RE-EVALUATION IN AN INTERNATIONAL INCEPTION COHORT

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**Background and aims** The prevalence of ANA-negative SLE is reportedly 5%–20%. Cytoplasmic or mitotic cell indirect immunofluorescence (IIF) patterns are usually reported as ANA-negative. This study examined the prevalence of ANA-negativity (no intracellular IIF pattern) and pure cytoplasmic and/or mitotic IIF patterns (CMP) in the Systemic Lupus International Collaborating Clinics (SLICC) inception cohort and examined demographic, clinical and autoantibody associations.

**Methods** Three groups were examined 1) ANA-positive (presence of nuclear IIF pattern), 2) ANA-negative (no IIF pattern), and 3) pure CMP. ANA were detected by IIF on HEp-2000 substrate, SLE-related autoantibodies by laser bead immunoassay, and anti-dsDNA and anti-dense fine speckles 70 (DFS70) by chemiluminescence immunoassay.

**Results** 1137 patients were included; 89.9% were female. 92.3% were ANA-positive, 6.2% were ANA-negative, and 1.5% had a CMP. In the multivariate analysis (Tables 1 and 2), patients from Canada (Odds Ratio (OR) 2.07 [95% CI: 1.28, 3.36]) or with anti-DFS70 (OR 4.45 [95% CI: 1.37, 14.39]) were more likely to be ANA-negative or have CMP. Patients of Asian descent (OR 0.34 [95% CI: 0.13, 0.86]) or with anti-dsDNA (OR 0.53 [95% CI: 0.30, 0.94]), anti-SSA/Ro60 (OR 0.51 [95% CI: 0.30, 0.87]), or anti-UI-RNP (OR 0.35 [95% CI: 0.17, 0.70]) were less likely to be ANA-negative or CMP.

**Conclusions** In newly diagnosed SLE, the prevalence of ANA-negativity was at the lower end (6.2%) of the range previously published and an additional 1.5% had a CMP pattern. The prevalence of true ANA-negativity will likely decrease as future guidelines are expected to recommend that non-nuclear patterns, such as CMP, are also reported.

## 401 HIGHEST FREQUENCY OF CLINIC VISITS AND HOSPITALIZATIONS IN SLE AMONG RHEUMATIC DISEASES: 8 YEAR CENSUS OF A TERTIARY RHEUMATOLOGY CENTRE

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**Background and aims** We describe the frequency of clinic visits and hospitalizations among rheumatic diseases seen at a tertiary Rheumatology centre in Manila, Philippines

**Methods** The University of Santo Tomas (UST) Hospital is a tertiary care centre, with specialised subspecialty training in Rheumatology. This study is derived from the patient census of UST Hospital Rheumatology Clinics from 2008 to 2015.

**Results** Mean age of the total 15 730 rheumatic disease patients (10 808, 69% females; 13 607, 86.5% adults; 2123, 13.5% paediatrics) was 47.51±21.55 (range <1–103). Most common rheumatic conditions were osteoarthritis (OA) (2828, 17.98%), gout/pseudogout (2378, 15.12%) and systemic lupus

**Abstract 400 Table 1** Baseline, univariate and multivariate associations of demographic and clinical profiles of ANA-positive (presence of nuclear IIF pattern), ANA-negative (no IIF pattern), and pure cytoplasmic/mitotic (CMP) groups

| | ANA+ Mean or % n=1049 | ANA- Mean or % n=71 | Pure CMP Mean or % n=17 | ANA- or Pure CMP Mean or % n=88 | Univariate model Odds ratio 95% CI | Primary multivariate model Odds ratio 95% CI | Secondary multivariate model Odds ratio 95% CI |
|---|---|---|---|---|---|---|---|
| Demographics | | | | | | | |
| Age at diagnosis, yr | 34.7* | 40.9* | 35.8 | 39.9* | 1.03 (1.01, 1.04)* | 1.02 (1.00, 1.03)* | |
| Female | 89.7 | 90.1 | 100 | 92.0 | 1.33 (0.60, 2.95) | | |
| Post-secondary educ. | 66.7* | 76.1† | 31.3†* | 67.5 | 1.04 (0.64, 1.67) | | |
| Ethnicity | | | | | | | |
| Asian | 23.2* | 4.2* | 11.8 | 5.7* | 0.20 (0.08, 0.50)* | 0.29 (0.11, 0.74)* | 0.34 (0.13, 0.86)* |
| Black | 16.2* | 7.0* | 5.9 | 6.8* | 0.38 (0.16, 0.88)* | | |
| Hispanic | 3.4 | 2.8 | 0 | 2.3 | 0.67 (0.16, 2.83) | | |
| White | 52.4†* | 84.5* | 76.5† | 83.0* | 4.42 (2.50, 7.81)* | | |
| Other[1] | 4.8* | 1.4* | 5.9 | 2.3 | 0.46 (0.11, 1.93) | | |
| Country of Residence | | | | | | | |
| Canada | 29.3* | 42.3* | 47.1 | 43.2* | 1.83 (1.18, 2.85)* | | 2.07 (1.28, 3.36)* |
| USA | 26.7 | 28.2 | 23.5 | 27.3 | 1.03 (0.63, 1.68) | | |
| Europe | 28.3 | 25.4 | 23.5 | 25.0 | 0.84 (0.51, 1.39) | | |
| Asia | 15.7* | 4.2* | 5.9 | 4.5* | 0.26 (0.09, 0.71)* | | |
| Smoking | | | | | | | |
| Current smoker | 15.1 | 21.9 | 18.8 | 21.3 | 1.52 (0.86, 2.66) | | |
| Former smoker | 21.1 | 26.6 | 25.0 | 26.3 | 1.33 (0.79, 2.24) | | |
| Alcohol use, F: >10/wk; M: >15/wk | 1.5 | 1.5 | 0 | 1.2 | 0.84 (0.11, 6.40) | | |
| Hypertension, on meds or SBP > 140 or DBP >90 | 32.6* | 29.6† | 58.8†* | 35.2 | 1.12 (0.71, 1.77) | | |
| Nephritis[2] at enrollment | 28.7 | 26.6 | 50.0 | 31.3 | 1.13 (0.69, 1.85) | | |
| # ACR criteria | 4.8 | 4.7 | 4.7 | 4.7 | 0.89 (0.71, 1.12) | | |
| SLEDAI-2Kscore | 5.4* | 4.1* | 5.4 | 4.3 | 0.96 (0.91, 1.00) | | |
| Neurological | 0.3 | 0.3 | 0.0 | 0.3 | 1.01 (0.88, 1.16) | | |
| Mucocutaneous | 1.1 | 1.0 | 1.3 | 1.1 | 0.99 (0.88, 1.11) | | |
| Musculoskeletal | 0.8 | 0.7 | 1.3 | 0.8 | 1.01 (0.89, 1.16) | | |
| Renal | 1.4 | 0.7 | 1.8 | 0.9 | 0.94 (0.86, 1.03) | | |
| Serositis | 0.1 | 0.1 | 0.0 | 0.1 | 1.03 (0.66, 1.61) | | |
| Constitutional | 0.0 | 0.0 | 0.0 | 0.0 | 0.30 (0.04, 2.17) | | |
| Immunological | 1.6* | 1.1* | 1.1 | 1.1* | 0.82 (0.71, 0.95)* | | |
| Hematological | 0.1 | 0.0 | 0.0 | 0.0* | 0.33 (0.11, 1.03) | | |
| Medications, % ever using | | | | | | | |
| Steroids | 80.6 | 74.6 | 82.4 | 76.1 | 0.77 (0.46, 1.28) | | |
| Antimalarials | 74.3 | 69.0 | 52.9 | 65.9 | 0.67 (0.42, 1.06) | | |
| Immunosuppressants | 43.6* | 23.9†* | 58.8† | 30.7* | 0.57 (0.36, 0.92)* | | |
| Biologics | 0.48 | 2.8 | 5.9 | 3.4 | 7.32 (1.72, 31.15)* | 7.29 (1.57, 33.7)* | 12.63 (2.12, 75.26)* |

†, *, or in combination: values with the same superscript are significantly different from each other, i.e. †* is different from† and *, but † and *are not.
Abbreviations: ACR, American College of Rheumatology; ANA, anti-nuclear antibody; IIF, indirect immunofluorescence; SLE, systemic lupus erythematosus; SLEDAI, SLE disease activity index; wk, weeks; yr, years.
[1]Native North American, Native Hawaiian or other Pacific Islanders, others
[2]Lupus nephritis was diagnosed by renal biopsy or fulfilling the ACR criteria for lupus nephritis
[3]The SLEDAI-2K organ system scores were calculated by grouping the following items: Neurological: seizures, psychosis, organic brain syndrome, visual disturbance, cranial nerve disorder, lupus headache, CVA; Mucocutaneous: vasculitis, rash, alopecia, mucosal ulcers; Musculoskeletal: arthritis, myositis; Renal: urinary casts, hematuria, proteinuria, pyuria; Serositis: pleurisy, pericarditis; Constitutional: fever; Immunological: low complement, increased DNA binding; Hematological: thrombocytopenia, leukopenia

erythematosus (SLE) (2152, 14%). There were a total 38 738 patient encounters including 34 267 outpatient clinic visits and 4471 hospitalizations. Of these, SLE consistently had highest frequency outpatient encounters (9534, 28%) averaging 1192/yr (range 1–16, median 7), and hospitalizations (1956, 43%) averaging 245/yr (range 1 to 9; median 4). Polyarthritides (4726, 14%) and OA (4346, 13%) had next most frequent outpatient visits; other connective tissue diseases (641, 14.37%) and gout/pseudogout (612, 13.72%) ranked next to SLE in hospitalisation frequency (Figure 1). Mean age of OA patients (2258, 79.84% female) was 62.49+12.37 (20–101) years, gout/pseudogout (487, 20% female) 55.08+15.24 (18-94) years, and SLE (2004, 93% female) 30.7+14.3 SD (range 2–84) years.

**Conclusions** This 8 year patient census in a tertiary care Rheumatology training centre illustrates the burden of illness in SLE, with consistently the highest frequency of clinic visits and hospitalizations, affecting relatively young individuals.