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| **Supplemental Table A. Characteristics**α **of Patients Eligible for Current Analysis Compared to Larger Cohort** | | | | | | | |
| **Characteristics** | **Larger Cohort**β(N=330) | **In Current Analysis**γ  (N=260) | | **Not in Current Analysis** (N=70) | | | **P**δ |
| Sociodemographic Factors: |  | |  | |  |
| Age, mean ± SD | 45.0 ± 14.0 | 45.6 ± 14.2 | | 42.5 ± 12.9 | | | 0.095 |
| Female | 89% | 91% | | 83% | | | **0.045** |
| Race and ethnicity§ |  |  | |  | | | 0.877 |
| Asian | 36% | 36% | | 34% | | |  |
| White | 29% | 30% | | 29% | | |  |
| Hispanic | 23% | 22% | | 26% | | |  |
| Black | 10% | 11% | | 9% | | |  |
| Unspecified or other | 2% | 2% | | 34% | | |  |
| Below poverty | 17% | 18% | | 14% | | | 0.599 |
| Education at least bachelor’s degree | 47% | 47% | | 47% | | | 0.980 |
| Marital Status |  |  | |  | | | 0.414 |
| Never married | 35% | 36% | | 27% | | |  |
| Married or living w/ partner | 54% | 53% | | 59% | | |  |
| Divorced | 10% | 10% | | 11% | | |  |
| Widowed | 2% | 1% | | 3% | | |  |
| Lupus Specific Characteristics: |  |  | |  | | |  |
| SLE disease duration, years, mean ± SD | 16.3 ± 10.5 | 16.6 ± 10.5 | | 15.1 ± 10.4 | | | 0.270 |
| Disease activity by SLAQ, mean ± SD | 9.0 ± 7.4 | 9.0 ± 7.4 | | 8.9 ± 7.3 | | | 0.900 |
| Disease activity by SLEDAI, mean ± SD | 3.0 ± 3.1 | 2.9 ± 3.0 | | 3.3 ± 3.3 | | | 0.357 |
| Disease damage by SDI, mean ± SD | 1.8 ± 2.0 | 1.8 ± 2.0 | | 1.9 ± 2.2 | | | 0.810 |
| History of lupus nephritis | 48% | 44% | | 60% | | | **0.019** |
| Systemic steroid use over prior year | 62% | 59% | | 71% | | | 0.055 |
| Current hydroxychloroquine use | 69% | 69% | | 67% | | | 0.785 |
| Comorbidites and Health Status: |  |  | |  | | |  |
| Cardiovascular disease | 13% | 13% | | 16% | | | 0.509 |
| Diabetes mellitus | 6% | 6% | | 3% | | | 0.383 |
| History of malignancy | 8% | 8% | | 7% | | | 0.715 |
| Depression by PHQ-8 score ≥ 10 | 25% | 26% | | 21% | | | 0.456 |
| Obesity (BMI ≥ 30 kg/m2) | 23% | 24% | | 21% | | | 0.671 |
| BMI (kg/m2), mean ± SD | 26.5 ± 6.7 | 26.6 ± 6.4 | | 25.9 ± 7.7 | | | 0.465 |
| Current nicotine use | 6% | 4% | | 10% | | | 0.074 |
| Perceived Stress Scale, mean ± SD | 5.1 ± 3.4 | 5.0 ± 3.3 | | 5.1 ± 3.7 | | | 0.801 |
| αValues are percent unless otherwise indicated.  βLarger cohort - All patients in CLUES with an in-person baseline study visit.  γCurrent Analysis - Required perceived stress scale and SLEDAI at baseline and follow-up.  δP-values calculated using chi-squared tests for categorical measures and t-tests for continuous measures comparing patients in current analysis versus those not in current analysis.  §This is a combined race/ethnicity variable. White, African American, and Asian are non-Hispanic.  BMI – body mass index  SLAQ - Systemic Lupus Activity Questionnaire  SLEDAI - Systemic Lupus Erythematosus Disease Activity Index  SDI - Systemic Lupus International Collaborating Clinics Damage Index  Cardiovascular disease - history of stroke, coronary artery disease, and/or myocardial infarction  PHQ-8 – 8-item Patient Health Questionnaire depression scale | | | | | | | |

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| **Supplemental Table B. Association of Increase in Perceived Stress with Lupus Outcomes at Year 3 Follow-up Adjusted for Obesity** | | | |
|  | Adjusted Mean\* (95% CI) | |  |
| Disease Outcomes at  Follow-up | Increase in Perceived Stress§ (N=50) | Stable/Decreased Perceived Stress (N=207 | P |
| SLE Disease Activity: |  |  |  |
| Physician-assessed1 | 3.7 (2.9, 4.6) | 2.5 (2.1, 2.9) | **0.017** |
| Self-reported2 | 12.1 (10.2, 13.9) | 8.2 (7.4, 9.1) | **<0.001** |
| Symptoms: |  |  |  |
| Pain Interference3 | 54.6 (51.7, 57.6) | 50.8 (49.4, 52.2) | **<0.001** |
| Fatigue4 | 56.8 (53.7, 59.9) | 50.7 (49.2, 52.2) | **<0.001** |
| \*Adjusted means calculated from multivariable regression adjusted for age, sex, race and ethnicity, educational attainment, smoking, disease duration, and obesity. The N for the multivariable regression was 257 (vs. 260 eligible participants) as 3 participants had missing data for smoking status.  §Participants with an increase in Perceived Stress Scale score by ≥0.5 standard deviation (2 points) from year 2 to year 3.  1Assessed by Systemic Lupus Disease Activity Index (SLEDAI), score range 0-105.  2Assessed by Systemic Lupus Activity Questionnaire (SLAQ), score range 0-44.  3Assessed by Patient-Reported Outcome Measurement Information System (PROMIS) 4-item Pain Interference scale, score range 41.6 - 75.6.  4Assessed by PROMIS 4-item Fatigue scale, score range 33.7 - 75.89. | | | |