**Supplemental Tables & Figures**

Plantinga *et al*., Geriatric Assessment of Physical and Cognitive Functioning in a Diverse Cohort of Systemic Lupus Erythematosus Patients: A Pilot Study

**Figure S1.** Flow of study participants from initial recruitment to completed visits.

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**Figure S2.** Physical performance of 60 SLE patients, overall and by patient characteristics.

A, mean ± SD balance score (scale, 0-4); B, mean ± SD gait speed score (scale, 0-4); C, mean ± SD lower body strength score (scale, 0-4); and D, mean ± SD overall physical performance score (scale, 0-12). Higher scores reflect better functioning for all scales. \**P*<0.10; \*\**P*<0.05, by ANOVA/*t* test. Disease damage: low vs. high = Brief Index of Lupus Damage score ≤3 vs. >3. Disease activity: low vs. high = Systemic Lupus Activity Questionnaire score ≤16 vs. ≥17. Obesity: no vs. yes = BMI<30 vs. ≥30 kg/m2.

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**Figure S3.** Cognitive performance among 60 SLE patients, overall and by patient characteristics.

Scores represent t-scores adjusted for age, race, ethnicity, and education level and are scaled 0-100, with 50 representing the average score. A 10-point increment = 1 SD, such that scores of 40 and 60 = 1 SD below and above the mean score for the same age, race, ethnicity, and education level, respectively. A, mean ± SD Picture Sequence test score (episodic memory); B, mean ± SD List Sorting score (working memory); C, mean ± SD Pattern Comparison test score (processing speed); D, mean ± SD Flanker Inhibitory Control score (attention/executive function); E, mean ± SD Dimensional Change Card Sort score (cognitive flexibility/executive function); and F, mean ± SD composite fluid cognition score. \**P*<0.05, by ANOVA/*t* test. Disease damage: low vs. high = Brief Index of Lupus Damage score ≤3 vs. >3. Disease activity: low vs. high = Systemic Lupus Activity Questionnaire score ≤16 vs. ≥17. Obesity: no vs. yes = BMI<30 vs. ≥30 kg/m2. Perceived stress: low vs. high = Perceived Stress Scale score <24 vs. ≥ 24.



**Table S1.** Self-reported physical functioning among 60 SLE patients, overall and by patient characteristics.

| **Characteristic** | **Mean (SD) PF-12 Score** | **P\*** |
| --- | --- | --- |
| All patients | 38.8 (10.9) | --- |
| Age |  |  |
|  20-39 | 41.0 (12.8) | 0.7 |
|  40-59 | 38.2 (10.6) |  |
|  60+ | 37.7 (9.8) |  |
| Sex |  |  |
|  Male | 46.7 (3.9) | 0.06 |
|  Female | 37.9 (11.1) |  |
| Patient race |  |  |
|  White | 44.2 (6.6) | 0.06 |
|  Black | 37.5 (11.4) |  |
| Disease damage |  |  |
|  Low | 40.6 (11.4) |  |
|  High | 36.0 (9.7) | 0.1 |
| Disease activity |  |  |
|  Low  | 41.1 (10.8) |  |
|  High | 36.6 (10.8) | 0.1 |
| Obesity |  |  |
|  No | 40.9 (10.7) | 0.08 |
|  Yes | 35.7 (11.1) |  |
| PROMIS PF-12 t-scores, actual range = 13.3-66.1, with higher scores representing higher self-reported physical functioning (50=average). Disease damage: low vs. high = Brief Index of Lupus Damage score ≤3 vs. >3. Disease activity: low vs. high = Systemic Lupus Activity Questionnaire score ≤16 vs. ≥17. Obesity: no vs. yes = BMI <30 vs. ≥30kg/m2. \*By ANOVA/*t* test. |

**Table S2.** Self-reported activities of daily living among 60 SLE patients, overall and by patient characteristics.

| **Task/characteristic** | **No. (%) reporting difficulty with task** | **P\*** |
| --- | --- | --- |
| Basic activities of daily living\*\* |
| Bathing |  |  |
|  All patients | 8 (13.3) | --- |
|  Age |  |  |
|  20-39 | 2 (12.5) | >0.9 |
|  40-59 | 4 (13.3) |  |
|  60+ | 2 (14.3) |  |
|  Sex |  |  |
|  Male | 0 (0.0) | 0.6 |
|  Female | 8 (13.3) |  |
|  Patient race |  |  |
|  White | 0 (0.0) | 0.3 |
|  Black | 8 (16.7) |  |
|  Disease damage |  |  |
|  Low | 3 (8.1) | 0.2 |
|  High | 5 (21.7) |  |
|  Disease activity |  |  |
|  Low | 3 (10.0) | 0.7 |
|  High | 5 (16.7) |  |
|  Obesity |  |  |
|  No | 3 (8.3) | 0.2 |
|  Yes | 5 (21.7) |  |
| Dressing |  |  |
|  All patients | 9 (15.0) | --- |
|  Age |  |  |
|  20-39 | 3 (18.8) | 0.9 |
|  40-59 | 4 (13.3) |  |
|  60+ | 2 (14.3) |  |
|  Sex |  |  |
|  Male | 1 (16.7) | >0.9 |
|  Female | 8 (14.8) |  |
|  Patient race |  |  |
|  White | 0 (0.0) | 0.2 |
|  Black | 9 (18.8) |  |
|  Disease damage |  |  |
|  Low | 5 (13.5) | 0.7 |
|  High | 4 (17.4) |  |
|  Disease activity |  |  |
|  Low | 5 (16.7) | >0.9 |
|  High | 4 (13.3) |  |
|  Obesity |  |  |
|  No | 4 (11.1) | 0.7 |
|  Yes | 4 (17.4) |  |
| Toileting |  |  |
|  All patients | 1 (1.7) | --- |
|  Age |  |  |
|  20-39 | 0 (0.0) | >0.9 |
|  40-59 | 1 (3.3) |  |
|  60+ | 0 (0.0) |  |
|  Sex |  |  |
|  Male | 0 (0.0) | >0.9 |
|  Female | 1 (1.9) |  |
|  Patient race |  |  |
|  White | 0 (0.0) | >0.9 |
|  Black | 1 (2.1) |  |
|  Disease damage |  |  |
|  Low | 1 (2.7) | >0.9 |
|  High | 0 (0.0) |  |
|  Disease activity |  |  |
|  Low | 0 (0.0) | >0.9 |
|  High | 1 (3.3) |  |
|  Obesity |  |  |
|  No | 0 (0.0) | 0.4 |
|  Yes | 1 (4.4) |  |
| Transferring |  |  |
|  All patients | 5 (8.3) | --- |
|  Age |  |  |
|  20-39 | 1 (6.3) | 0.7 |
|  40-59 | 2 (6.7) |  |
|  60+ | 2 (14.3) |  |
|  Sex |  |  |
|  Male | 0 (0.0) | >0.9 |
|  Female | 5 (9.3) |  |
|  Patient race |  |  |
|  White | 0 (0.0) | 0.6 |
|  Black | 5 (10.4) |  |
|  Disease damage |  |  |
|  Low | 3 (8.1) | >0.9 |
|  High | 2 (8.7) |  |
|  Disease activity |  |  |
|  Low | 2 (6.7) | >0.9 |
|  High | 3 (10.0) |  |
|  Obesity |  |  |
|  No | 1 (2.8) | 0.07 |
|  Yes | 4 (17.4) |  |
| Incontinence |  |  |
|  All patients | 12 (20.0) | --- |
|  Age |  |  |
|  20-39 | 4 (25.0) | 0.1 |
|  40-59 | 3 (10.0) |  |
|  60+ | 5 (35.7) |  |
|  Sex |  |  |
|  Male | 1 (16.7) | >0.9 |
|  Female | 11 (20.4) |  |
|  Patient race |  |  |
|  White | 0 (0.0) | 0.1 |
|  Black | 12 (25.0) |  |
|  Disease damage |  |  |
|  Low | 4 (10.8) |  |
|  High | 8 (34.8) | 0.04 |
|  Disease activity |  |  |
|  Low | 5 (16.7) |  |
|  High | 7 (23.3) | 0.8 |
|  Obesity |  |  |
|  No | 7 (19.4) | >0.9 |
|  Yes | 5 (21.7) |  |
| Instrumental activities of daily living\*\*\* |
| Shopping |  |  |
|  All patients | 25 (41.7) | --- |
|  Age |  |  |
|  20-39 | 6 (37.5) | >0.9 |
|  40-59 | 13 (43.3) |  |
|  60+ | 6 (42.9) |  |
|  Sex |  |  |
|  Male | 0 (0.0) | 0.04 |
|  Female | 25 (46.3) |  |
|  Patient race |  |  |
|  White | 3 (25.0) | 0.3 |
|  Black | 22 (45.8) |  |
|  Disease damage |  |  |
|  Low | 14 (37.8) |  |
|  High | 11 (47.8) | 0.6 |
|  Disease activity |  |  |
|  Low | 12 (40.0) |  |
|  High | 13 (43.3) | >0.9 |
|  Obesity |  |  |
|  No | 14 (38.9) | 0.8 |
|  Yes | 10 (41.7) |  |
| Food preparation |  |  |
|  All patients | 21 (35.0) | --- |
|  Age |  |  |
|  20-39 | 6 (37.5) | 0.7 |
|  40-59 | 9 (30.0) |  |
|  60+ | 6 (42.9) |  |
|  Sex |  |  |
|  Male | 1 (16.7) | 0.4 |
|  Female | 20 (37.0) |  |
|  Patient race |  |  |
|  White | 2 (16.7) | 0.2 |
|  Black | 19 (39.6) |  |
|  Disease damage |  |  |
|  Low | 10 (27.0) |  |
|  High | 11 (47.8) | 0.2 |
|  Disease activity |  |  |
|  Low | 7 (23.3) |  |
|  High | 14 (46.7) | 0.1 |
|  Obesity  |  |  |
|  No | 12 (33.3) | >0.9 |
|  Yes | 8 (34.8) |  |
| Housework |  |  |
|  All patients | 8 (13.3) | --- |
|  Age |  |  |
|  20-39 | 1 (6.3) | 0.7 |
|  40-59 | 5 (16.7) |  |
|  60+ | 2 (14.3) |  |
|  Sex |  |  |
|  Male | 0 (0.0) | 0.6 |
|  Female | 8 (14.8) |  |
|  Patient race |  |  |
|  White | 0 (0.0) | 0.3 |
|  Black | 8 (16.7) |  |
|  Disease damage |  |  |
|  Low | 3 (8.1) |  |
|  High | 5 (21.7) | 0.2 |
|  Disease activity |  |  |
|  Low | 2 (6.7) |  |
|  High | 6 (20.0) | 0.3 |
|  Obesity  |  |  |
|  No | 3 (8.3) | 0.2 |
|  Yes | 5 (21.7) |  |
| Laundry |  |  |
|  All patients | 2 (3.3) | --- |
|  Age |  |  |
|  20-39 | 0 (0.0) | 0.7 |
|  40-59 | 2 (6.7) |  |
|  60+ | 0 (0.0) |  |
|  Sex |  |  |
|  Male | 0 (0.0) | >0.9 |
|  Female | 2 (3.7) |  |
|  Patient race |  |  |
|  White | 0 (0.0) | >0.9 |
|  Black | 2 (4.2) |  |
|  Disease damage |  |  |
|  Low | 1 (2.7) |  |
|  High | 1 (4.4) | >0.9 |
|  Disease activity |  |  |
|  Low | 1 (3.3) |  |
|  High | 1 (3.3) | >0.9 |
|  Obesity |  |  |
|  No | 0 (0.0) | 0.1 |
|  Yes | 2 (8.7) |  |
| Transportation |  |  |
|  All patients | 7 (11.7) | --- |
|  Age |  |  |
|  20-39 | 0 (0.0) | 0.3 |
|  40-59 | 5 (16.7) |  |
|  60+ | 2 (14.3) |  |
|  Sex |  |  |
|  Male | 0 (0.0) | >0.9 |
|  Female | 7 (13.0) |  |
|  Patient race |  |  |
|  White | 0 (0.0) | 0.3 |
|  Black | 7 (14.6) |  |
|  Disease damage |  |  |
|  Low | 2 (5.4) |  |
|  High | 5 (21.7) | 0.1 |
|  Disease activity |  |  |
|  Low | 1 (3.3) |  |
|  High | 6 (20.0) | 0.1 |
|  Obesity |  |  |
|  No | 3 (8.3) | 0.4 |
|  Yes | 4 (17.4) |  |
| Managing finances |  |  |
|  All patients | 2 (3.3) | --- |
|  Age |  |  |
|  20-39 | 0 (0.0) | 0.7 |
|  40-59 | 2 (6.7) |  |
|  60+ | 0 (0.0) |  |
|  Sex |  |  |
|  Male | 1 (16.7) | 0.2 |
|  Female | 1 (1.9) |  |
|  Patient race |  |  |
|  White | 0 (0.0) | >0.9 |
|  Black | 2 (4.2) |  |
|  Disease damage |  |  |
|  Low | 1 (2.7) |  |
|  High | 1 (4.4) | >0.9 |
|  Disease activity |  |  |
|  Low | 1 (3.3) |  |
|  High | 1 (3.3) | >0.9 |
|  Obesity |  |  |
|  No | 2 (5.6) | 0.5 |
|  Yes | 0 (0.0) |  |
| Disease damage: low vs. high = Brief Index of Lupus Damage score ≤3 vs. >3. Disease activity: low vs. high = Systemic Lupus Activity Questionnaire score ≤16 vs. ≥17. Obesity: no vs. yes = BMI <30 vs. ≥30kg/m2. \*By Fisher’s exact test. \*\*Not reported: feeding self (*n*=0 reported difficulty). \*\*\*Not reported: using the phone or managing medications (*n*=0 patients reported difficulty). |

**Table S3.** Self-reported falls in prior year among 60 SLE patients, overall and by patient characteristics.

| **Domain/characteristic** | **No. (%) reporting falls in prior year** | **P\*** |
| --- | --- | --- |
| All patients | 27 (45.0) | --- |
| Age |  |  |
|  20-39 | 6 (37.5) | 0.8 |
|  40-59 | 14 (46.7) |  |
|  60+ | 7 (50.0) |  |
| Sex |  |  |
|  Male | 1 (16.7) | 0.2 |
|  Female | 26 (48.2) |  |
| Patient race |  |  |
|  White | 3 (25.0) | 0.2 |
|  Black | 24 (50.0) |  |
| Disease damage |  |  |
|  Low | 13 (35.1) | 0.07 |
|  High | 14 (60.9) |  |
| Disease activity |  |  |
|  Low | 9 (30.0) | 0.04 |
|  High | 18 (60.0) |  |
| Obesity  |  |  |
|  No | 14 (38.9) | 0.3 |
|  Yes | 13 (56.5) |  |
| Disease damage: low vs. high = Brief Index of Lupus Damage score ≤3 vs. >3. Disease activity: low vs. high = Systemic Lupus Activity Questionnaire score ≤16 vs. ≥17. Obesity: no vs. yes = BMI <30 vs. ≥30kg/m2. \*By Fisher’s exact test. |

**Table S4.** Self-reported life-space mobility among 60 SLE patients, overall and by patient characteristics.

| **Domain/characteristic** | **Mean (SD) LSA score** | **P\*** |
| --- | --- | --- |
| All patients | 54.4 (34.4) | --- |
| Age |  |  |
|  20-39 | 51.6 (39.3) | 0.7 |
|  40-59 | 52.4 (36.2) |  |
|  60+ | 62.0 (23.7) |  |
| Sex |  |  |
|  Male | 78.3 (33.6) | 0.07 |
|  Female | 51.8 (33.7) |  |
| Patient race |  |  |
|  White | 79.9 (30.2) | 0.003 |
|  Black | 48.1 (32.6) |  |
| Disease damage |  |  |
|  Low | 58.6 (37.4) |  |
|  High | 47.8 (28.2) | 0.2 |
| Disease activity |  |  |
|  Low | 65.7 (37.4) |  |
|  High | 43.2 (27.2) | 0.01 |
| Obesity |  |  |
|  No | 53.5 (33.4) | 0.8 |
|  Yes | 56.2 (37.2) |  |
| LSA, Life-Space Assessment; scores range from 0 to 120 with higher scores indicating greater life-space mobility. Disease damage: low vs. high = Brief Index of Lupus Damage score ≤3 vs. >3. Disease activity: low vs. high = Systemic Lupus Activity Questionnaire score ≤16 vs. ≥17. Obesity: no vs. yes = BMI <30 vs. ≥30kg/m2. \*By ANOVA/*t* test. |