|  | Normal | | Slightly Elevated | | Highly Elevated | | Overall | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | control (N=9) | exercise (N=7) | control (N=6) | exercise (N=3) | control (N=11) | exercise (N=2) | control (N=26) | exercise (N=12) |
| **Sex** |  |  |  |  |  |  |  |  |
| Female | 8 (88.9%) | 6 (85.7%) | 6 (100%) | 2 (66.7%) | 10 (90.9%) | 1 (50.0%) | 24 (92.3%) | 9 (75.0%) |
| Male | 1 (11.1%) | 1 (14.3%) | 0 (0%) | 1 (33.3%) | 1 (9.1%) | 1 (50.0%) | 2 (7.7%) | 3 (25.0%) |
| **Ethnicity** |  |  |  |  |  |  |  |  |
| Caucasian | 8 (88.9%) | 7 (100%) | 5 (83.3%) | 2 (66.7%) | 8 (72.7%) | 2 (100%) | 21 (80.8%) | 11 (91.7%) |
| Middle-Eastern | 1 (11.1%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (3.8%) | 0 (0%) |
| Latin America | 0 (0%) | 0 (0%) | 1 (16.7%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (3.8%) | 0 (0%) |
| African | 0 (0%) | 0 (0%) | 0 (0%) | 1 (33.3%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (8.3%) |
| Asian | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 3 (27.3%) | 0 (0%) | 3 (11.5%) | 0 (0%) |
| **Age (Years)** | 37.0 [30.0, 41.0] | 35.0 [28.5, 48.0] | 41.5 [36.0, 45.5] | 52.0 [49.5, 56.0] | 32.0 [24.5, 39.5] | 45.0 [40.5, 49.5] | 35.5 [29.0, 42.5] | 45.5 [34.3, 52.5] |
| **Weight** | 69.1 [62.2, 86.7] | 62.1 [58.0, 68.7] | 69.3 [55.7, 80.4] | 89.7 [71.0, 94.6] | 61.0 [58.0, 70.4] | 80.8 [76.4, 85.1] | 62.7 [59.0, 78.7] | 67.5 [58.2, 89.5] |
| **Waist/Height Ratio at baseline (cm)** | 0.441 [0.429, 0.550] | 0.441 [0.399, 0.477] | 0.445 [0.423, 0.494] | 0.495 [0.461, 0.532] | 0.464 [0.425, 0.503] | 0.496 [0.482, 0.510] | 0.446 [0.424, 0.508] | 0.460 [0.422, 0.508] |
| **Body Mass Index (kg/m²)** | 22.7 [22.1, 29.9] | 20.8 [19.6, 24.2] | 24.1 [20.0, 27.6] | 25.9 [23.9, 29.0] | 23.3 [21.6, 24.9] | 25.4 [24.8, 25.9] | 23.0 [21.8, 26.8] | 24.0 [20.6, 26.0] |
| **SLE Duration (Months)** | 102 [50.0, 133] | 105 [83.0, 211] | 26.0 [3.00, 105] | 235 [138, 263] | 121 [71.0, 230] | 33.5 [27.8, 39.3] | 100 [44.5, 183] | 101 [48.8, 247] |
| **SLEDAI** | 4.00 [2.00, 6.00] | 6.00 [4.00, 6.00] | 8.00 [8.00, 10.0] | 10.0 [5.50, 10.0] | 4.00 [3.25, 7.50] | 8.00 [8.00, 8.00] | 6.00 [2.75, 8.00] | 6.00 [4.00, 8.50] |
| **SLICC-Eular/ACR-2019** | 30.0 [18.0, 34.0] | 17.0 [16.0, 24.5] | 24.5 [20.8, 29.0] | 26.0 [23.0, 31.5] | 34.0 [26.0, 37.5] | 32.0 [30.0, 34.0] | 30.0 [20.5, 35.0] | 24.0 [17.0, 29.5] |
| **Aerobic Capacity - Baseline** | 29.8 (5.06) | 29.8 (9.90) | 26.1 (6.01) | 25.4 (3.91) | 26.6 (4.67) | 30.3 (5.99) | 27.6 (5.12) | 28.8 (7.98) |
| **HRmax - Baseline** | 179 [173, 191] | 180 [161, 181] | 174 [171, 177] | 159 [153, 164] | 181 [164, 185] | 168 [162, 174] | 179 [173, 186] | 170 [155, 180] |
| **Borg-Scale - Baseline** | 18.5 [17.8, 19.0] | 18.0 [17.5, 18.5] | 18.0 [18.0, 20.0] | 18.0 [16.5, 18.0] | 18.0 [17.0, 19.0] | 17.0 [16.5, 17.5] | 18.0 [17.0, 19.0] | 18.0 [16.8, 18.0] |
| **Maximal Wattage - Baseline (Watt)** | 178 [173, 214] | 180 [123, 225] | 181 [161, 187] | 163 [136, 207] | 181 [122, 230] | 210 [191, 229] | 181 [160, 200] | 176 [127, 229] |
| **FSS** | 5.22 [4.22, 5.56] | 4.44 [3.89, 5.22] | 5.44 [4.75, 5.81] | 6.00 [5.67, 6.39] | 4.00 [3.28, 5.61] | 5.78 [5.44, 6.11] | 5.11 [3.67, 5.72] | 5.22 [4.31, 6.08] |
| **VAS Fatigue - Patient (1-100)** | 60.0 [30.0, 70.0] | 30.0 [20.0, 40.0] | 32.5 [30.0, 53.8] | 33.0 [31.5, 36.5] | 60.0 [29.0, 70.0] | 20.0 [20.0, 20.0] | 55.0 [30.0, 70.0] | 30.0 [20.0, 40.0] |
| **VAS overall disease activity - patient (1-10)** | 2.00 [2.00, 4.00] | 2.00 [2.00, 2.50] | 5.00 [4.00, 5.00] | 7.00 [5.00, 8.00] | 4.00 [1.25, 5.75] | 5.50 [4.25, 6.75] | 4.00 [2.00, 5.00] | 3.00 [2.00, 5.50] |
| **VAS overall disease activity - physician (1-100)** | 15.0 [9.00, 19.1] | 7.30 [3.57, 25.3] | 25.3 [16.8, 29.8] | 26.2 [17.9, 27.0] | 11.0 [7.54, 32.0] | 34.8 [34.5, 35.2] | 15.8 [8.09, 26.2] | 21.7 [6.67, 33.5] |
| **Daily time in MVPA (Minutes)** | 34.1 (25.4) | 20.8 (12.4) | 34.6 (25.5) | 15.5 (17.1) | 37.2 (25.5) | 38.9 (20.2) | 35.6 (24.4) | 22.5 (15.4) |
| **Energy Intake (kJ)** | 7260 (425) | 8010 (1330) | 6500 (3390) | 9060 (3470) | 7340 (1390) | 9090 (751) | 7100 (1860) | 8490 (1910) |
| **Lipid intake (g)** | 78.7 [69.5, 89.6] | 61.7 [51.1, 78.2] | 54.0 [39.7, 76.3] | 108 [81.1, 112] | 74.9 [69.8, 86.3] | 76.6 [76.1, 77.1] | 74.6 [60.8, 88.1] | 75.6 [54.9, 86.7] |
| **Carbohydrate intake (g)** | 173 [158, 185] | 191 [156, 282] | 149 [124, 201] | 223 [168, 274] | 204 [148, 211] | 265 [251, 279] | 166 [140, 205] | 223 [161, 299] |
| **Protein intake (g)** | 73.3 [70.3, 75.2] | 81.5 [79.4, 82.9] | 53.1 [45.2, 69.5] | 107 [80.3, 112] | 76.4 [60.6, 84.3] | 85.9 [85.2, 86.6] | 72.2 [57.7, 77.1] | 83.3 [80.1, 90.1] |
| **Adipose Tissue on DXA scan (%)** | 36.3 [31.9, 38.8] | 36.3 [28.0, 39.4] | 38.8 [25.9, 42.7] | 32.4 [31.3, 39.3] | 31.9 [27.1, 38.3] | 35.1 [34.8, 35.3] | 34.5 [30.5, 40.3] | 35.1 [30.2, 39.0] |
| **Android fat mass (kg)** | 1.30 [1.15, 3.50] | 1.98 [1.23, 2.97] | 1.72 [0.582, 2.43] | 2.93 [1.85, 5.36] | 1.90 [1.53, 3.09] | 2.71 [2.17, 3.25] | 1.80 [1.15, 3.25] | 2.36 [1.42, 3.35] |
| **Gynoid fat mass (kg)** | 4.51 [4.36, 5.13] | 4.41 [3.24, 6.72] | 5.07 [2.81, 7.17] | 4.51 [4.17, 6.15] | 5.00 [4.13, 7.26] | 4.81 [4.64, 4.97] | 4.65 [4.12, 6.78] | 4.49 [3.77, 6.21] |
| **Total lean mass (kg)** | 42.6 [40.4, 46.0] | 40.4 [34.4, 42.3] | 39.3 [36.6, 43.9] | 47.5 [40.2, 56.8] | 42.8 [36.0, 45.5] | 50.1 [47.3, 52.8] | 42.3 [37.0, 45.7] | 42.3 [35.0, 48.0] |
| **All IFN Z-Score (SD)** | 0.390 (0.738) | 0.519 (0.898) | 3.25 (0.360) | 2.79 (0.948) | 4.64 (0.381) | 4.88 (0.871) | 2.85 (1.97) | 1.81 (1.93) |
| **IFN-1 Z-Score (SD)** | 0.361 (0.755) | 0.548 (0.747) | 3.55 (0.459) | 2.93 (0.624) | 4.81 (0.365) | 5.19 (0.819) | 2.98 (2.07) | 1.92 (1.96) |
| **Hemoglobin (mmol/L)** | 7.55 (0.497) | 8.20 (0.762) | 7.62 (0.898) | 7.83 (0.764) | 7.72 (0.572) | 7.70 (0.424) | 7.63 (0.601) | 8.03 (0.698) |
| **Thrombocytes (10^9/L)** | 250 (40.8) | 233 (43.9) | 250 (64.3) | 206 (53.0) | 226 (71.3) |  | 242 (52.9) | 220 (41.4) |
| **Estimated Glomerular Filtration Rate (ml/min/1.73m²)** | 83.5 [82.8, 84.3] | 85.5 [83.8, 87.3] | 75.0 [73.0, 77.0] |  | 77.0 [71.5, 82.5] | 79.0 [79.0, 79.0] | 80.5 [73.0, 84.3] | 82.0 [80.5, 85.5] |
| **β2 microglobuline (mg/L)** | 1.68 [1.66, 1.97] | 1.95 [1.74, 2.06] | 2.61 [2.59, 2.63] | 2.16 [1.79, 2.54] | 2.36 [2.25, 3.30] | 2.84 [2.84, 2.84] | 2.14 [1.74, 2.52] | 2.00 [1.65, 2.54] |
| Table 1 | | | | | | | | |
| Categorical variables given as N(Percentage)     Variables assumed to be normally distributed given as Mean(SD)    Variables without assumption of normality given as Median [Q1,Q3] | | | | | | | | |
| Test 1 denotes the first test done on the initial visit.    Test 2 denotes the second test done following the OGTT    SLE: Systemic Lupus Erythematosus, SLEDAI: Systemic Lupus Erythematosus Disease Activity Index, SLICC EULAR/ACR 2019: Systemic Lupus International Classification Criteria point as defined by American College of Rheumatology & European League Against Rheumatism in 2019    FSS: Fatigue Severity Scale, IFN: Interferon, DXA: Dual X-ray Absorptiometry Scan, VO₂max: Maximal Oxygen Uptake, not corrected for body weight, MVPA: Moderate or Vigorous Activity | | | | | | | | |