|  | Normal | | Slightly Elevated | | Highly Elevated | | Overall | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | control (N=9) | exercise (N=13) | control (N=6) | exercise (N=9) | control (N=11) | exercise (N=4) | control (N=26) | exercise (N=26) |
| **Sex** |  |  |  |  |  |  |  |  |
| Female | 8 (88.9%) | 11 (84.6%) | 6 (100%) | 7 (77.8%) | 10 (90.9%) | 3 (75.0%) | 24 (92.3%) | 21 (80.8%) |
| Male | 1 (11.1%) | 2 (15.4%) | 0 (0%) | 2 (22.2%) | 1 (9.1%) | 1 (25.0%) | 2 (7.7%) | 5 (19.2%) |
| **Ethnicity** |  |  |  |  |  |  |  |  |
| Caucasian | 8 (88.9%) | 13 (100%) | 5 (83.3%) | 8 (88.9%) | 8 (72.7%) | 2 (50.0%) | 21 (80.8%) | 23 (88.5%) |
| Middle-Eastern | 1 (11.1%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (25.0%) | 1 (3.8%) | 1 (3.8%) |
| 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 (11.1%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (3.8%) |
| Asian | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 3 (27.3%) | 1 (25.0%) | 3 (11.5%) | 1 (3.8%) |
| **Age (Years)** | 37.0 [30.0, 41.0] | 44.0 [33.0, 52.0] | 41.5 [36.0, 45.5] | 56.0 [47.0, 63.0] | 32.0 [24.5, 39.5] | 45.0 [35.0, 55.5] | 35.5 [29.0, 42.5] | 47.0 [38.0, 59.0] |
| **Weight** | 69.1 [62.2, 86.7] | 67.2 [60.4, 77.4] | 69.3 [55.7, 80.4] | 73.4 [62.2, 74.6] | 61.0 [58.0, 70.4] | 73.3 [70.9, 78.2] | 62.7 [59.0, 78.7] | 73.2 [62.1, 77.0] |
| **Waist/Height Ratio at baseline (cm)** | 0.441 [0.429, 0.550] | 0.474 [0.441, 0.526] | 0.445 [0.423, 0.494] | 0.497 [0.494, 0.539] | 0.464 [0.425, 0.503] | 0.524 [0.496, 0.533] | 0.446 [0.424, 0.508] | 0.497 [0.450, 0.526] |
| **Body Mass Index (kg/m²)** | 22.7 [22.1, 29.9] | 24.7 [20.8, 27.7] | 24.1 [20.0, 27.6] | 25.9 [24.0, 26.2] | 23.3 [21.6, 24.9] | 25.5 [24.5, 27.6] | 23.0 [21.8, 26.8] | 25.3 [23.8, 26.7] |
| **SLE Duration (Months)** | 102 [50.0, 133] | 71.0 [50.0, 139] | 26.0 [3.00, 105] | 178 [88.0, 235] | 121 [71.0, 230] | 106 [39.3, 212] | 100 [44.5, 183] | 101 [50.0, 231] |
| **SLEDAI** | 4.00 [2.00, 6.00] | 6.00 [4.00, 8.00] | 8.00 [8.00, 10.0] | 6.00 [4.00, 10.0] | 4.00 [3.25, 7.50] | 7.00 [5.00, 8.00] | 6.00 [2.75, 8.00] | 6.00 [4.00, 8.00] |
| **SLICC-Eular/ACR-2019** | 30.0 [18.0, 34.0] | 18.0 [17.0, 27.0] | 24.5 [20.8, 29.0] | 20.0 [18.0, 26.0] | 34.0 [26.0, 37.5] | 25.0 [19.0, 30.0] | 30.0 [20.5, 35.0] | 20.5 [17.0, 27.0] |
| **Aerobic Capacity - Baseline** | 29.8 (5.06) | 29.1 (8.56) | 26.1 (6.01) | 23.1 (3.78) | 26.6 (4.67) | 26.9 (7.31) | 27.6 (5.12) | 26.6 (7.25) |
| **HRmax - Baseline** | 179 [173, 191] | 176 [166, 182] | 174 [171, 177] | 159 [147, 167] | 181 [164, 185] | 174 [165, 177] | 179 [173, 186] | 169 [156, 180] |
| **Borg-Scale - Baseline** | 18.5 [17.8, 19.0] | 17.5 [16.0, 18.3] | 18.0 [18.0, 20.0] | 18.0 [17.0, 19.0] | 18.0 [17.0, 19.0] | 17.0 [16.0, 18.5] | 18.0 [17.0, 19.0] | 18.0 [16.0, 19.0] |
| **Maximal Wattage - Baseline (Watt)** | 178 [173, 214] | 181 [130, 228] | 181 [161, 187] | 139 [120, 163] | 181 [122, 230] | 154 [108, 191] | 181 [160, 200] | 168 [121, 220] |
| **FSS** | 5.22 [4.22, 5.56] | 4.44 [3.89, 5.44] | 5.44 [4.75, 5.81] | 5.78 [5.33, 6.11] | 4.00 [3.28, 5.61] | 4.78 [3.94, 5.44] | 5.11 [3.67, 5.72] | 5.22 [3.97, 5.94] |
| **VAS Fatigue - Patient (1-100)** | 60.0 [30.0, 70.0] | 35.0 [30.0, 40.0] | 32.5 [30.0, 53.8] | 40.0 [30.0, 50.0] | 60.0 [29.0, 70.0] | 25.0 [20.0, 32.5] | 55.0 [30.0, 70.0] | 34.0 [26.3, 40.0] |
| **VAS overall disease activity - patient (1-10)** | 2.00 [2.00, 4.00] | 2.00 [2.00, 3.00] | 5.00 [4.00, 5.00] | 5.00 [3.00, 7.00] | 4.00 [1.25, 5.75] | 4.50 [3.00, 6.50] | 4.00 [2.00, 5.00] | 3.00 [2.00, 6.00] |
| **VAS overall disease activity - physician (1-100)** | 15.0 [9.00, 19.1] | 6.03 [2.85, 20.0] | 25.3 [16.8, 29.8] | 27.0 [18.5, 34.5] | 11.0 [7.54, 32.0] | 34.8 [27.4, 47.2] | 15.8 [8.09, 26.2] | 20.0 [4.76, 33.5] |
| **Daily time in MVPA (Minutes)** | 34.1 (25.4) | 21.4 (11.2) | 34.6 (25.5) | 26.8 (32.4) | 37.2 (25.5) | 26.7 (18.4) | 35.6 (24.4) | 24.1 (21.1) |
| **Energy Intake (kJ)** | 7260 (425) | 8440 (1950) | 6500 (3390) | 8070 (2740) | 7340 (1390) | 7890 (2130) | 7100 (1860) | 8230 (2170) |
| **Lipid intake (g)** | 78.7 [69.5, 89.6] | 67.2 [57.6, 89.2] | 54.0 [39.7, 76.3] | 108 [51.1, 108] | 74.9 [69.8, 86.3] | 75.6 [60.2, 76.6] | 74.6 [60.8, 88.1] | 71.8 [53.2, 103] |
| **Carbohydrate intake (g)** | 173 [158, 185] | 191 [148, 305] | 149 [124, 201] | 223 [125, 244] | 204 [148, 211] | 237 [192, 265] | 166 [140, 205] | 217 [146, 296] |
| **Protein intake (g)** | 73.3 [70.3, 75.2] | 82.5 [79.4, 89.7] | 53.1 [45.2, 69.5] | 63.1 [59.8, 92.5] | 76.4 [60.6, 84.3] | 84.5 [77.4, 85.9] | 72.2 [57.7, 77.1] | 81.5 [68.4, 88.4] |
| **Adipose Tissue on DXA scan (%)** | 36.3 [31.9, 38.8] | 37.4 [30.0, 40.7] | 38.8 [25.9, 42.7] | 37.3 [32.4, 40.5] | 31.9 [27.1, 38.3] | 38.5 [35.3, 43.9] | 34.5 [30.5, 40.3] | 37.3 [31.6, 41.3] |
| **Android fat mass (kg)** | 1.30 [1.15, 3.50] | 2.42 [1.52, 2.74] | 1.72 [0.582, 2.43] | 2.20 [2.02, 2.93] | 1.90 [1.53, 3.09] | 2.51 [1.92, 3.20] | 1.80 [1.15, 3.25] | 2.25 [1.79, 2.98] |
| **Gynoid fat mass (kg)** | 4.51 [4.36, 5.13] | 5.21 [3.82, 5.71] | 5.07 [2.81, 7.17] | 4.51 [3.83, 5.67] | 5.00 [4.13, 7.26] | 5.37 [4.97, 5.71] | 4.65 [4.12, 6.78] | 5.08 [3.96, 5.70] |
| **Total lean mass (kg)** | 42.6 [40.4, 46.0] | 40.5 [39.7, 42.8] | 39.3 [36.6, 43.9] | 42.1 [38.3, 47.5] | 42.8 [36.0, 45.5] | 40.7 [36.5, 47.3] | 42.3 [37.0, 45.7] | 40.6 [37.9, 44.4] |
| **All IFN Z-Score (SD)** | 0.304 [0.178, 0.912] | 0.378 [-0.268, 1.09] | 3.11 [3.00, 3.53] | 3.03 [2.27, 3.50] | 4.64 [4.37, 4.88] | 5.04 [4.83, 5.17] | 3.40 [1.00, 4.57] | 1.77 [0.383, 3.42] |
| **IFN-1 Z-Score (SD)** | 0.190 [-0.0391, 0.743] | 0.296 [-0.105, 0.965] | 3.51 [3.37, 3.84] | 3.13 [2.59, 3.33] | 4.82 [4.51, 5.07] | 5.27 [5.09, 5.41] | 3.75 [0.889, 4.73] | 1.81 [0.301, 3.33] |
| **Hemoglobin (mmol/L)** | 7.55 (0.497) | 8.16 (0.815) | 7.62 (0.898) | 7.49 (0.833) | 7.72 (0.572) | 7.40 (0.648) | 7.63 (0.601) | 7.81 (0.848) |
| **Thrombocytes (10^9/L)** | 250 (40.8) | 250 (55.7) | 250 (64.3) | 259 (101) | 226 (71.3) | 200 (44.1) | 242 (52.9) | 246 (77.6) |
| **Estimated Glomerular Filtration Rate (ml/min/1.73m²)** | 83.5 [82.8, 84.3] | 84.5 [79.3, 87.5] | 75.0 [73.0, 77.0] | 76.0 [74.5, 77.5] | 77.0 [71.5, 82.5] | 82.5 [80.8, 84.3] | 80.5 [73.0, 84.3] | 80.5 [77.5, 86.3] |
| **β2 microglobuline (mg/L)** | 1.68 [1.66, 1.97] | 2.00 [1.62, 2.12] | | | | | | | | | 2.61 [2.59, 2.63] | 1.98 [1.91, 2.47] | 2.36 [2.25, 3.30] | 2.84 [2.30, 2.92] | 2.14 [1.74, 2.52] | 2.00 [1.87, 2.71] |
| 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 |