**PRELIMINARY RESULTS**

**I. Oxygen Test + 6MWT**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **6 Minute Walk Test** | | |
|  |  |  |  |
|  | **SUBJECT** | | |
|  | **RSS04** | **RSS05** | **RSS06** |
| **Distance [m]** | 352 | 399 | 119 |
| **HR [bpm]** | 97 | 95 | 77 |
| **VO2 [L/min]** | 0.89 | 1.24 | 0.56 |
| **RER** | 0.82 | 0.75 | 0.81 |
| **EE [kcal/h]** | 257 | 352 | 161 |

**II. Gait Analysis**

**a) Spatiotemporal Parameters:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Gait Spatiotemporal Parameters** | | | | |  |
|  |  |  |  |  |  |  |
|  | **SUBJECT** | | | | | |
|  | **RSS04** | | **RSS05** | | **RSS06** | |
|  | Left | Right | Left | Right | Left | Right |
| **Cadence [steps/min]** | 113 | 109 | 114 | 112 | 32 | 37 |
| **Walking Speed [m/s]** | 0.66 | 0.64 | 1.19 | 1.19 | 0.14 | 0.16 |
| **Stride Time [s]** | 1.07 | 1.10 | 1.05 | 1.07 | 3.75 | 3.25 |
| **Step Time [s]** | 0.52 | 0.55 | 0.53 | 0.52 | 1.66 | 1.59 |
| **Opposite Foot Off [%]** | 14.272 | 16.530 | 11.429 | 12.150 | 38.400 | 27.385 |
| **Opposite Foot Contact [%]** | 51.174 | 50.500 | 49.524 | 51.402 | 55.733 | 51.077 |
| **Foot Off [%]** | 71.455 | 64.305 | 63.810 | 62.617 | 79.467 | 77.538 |
| **Single Support [s]** | 0.393 | 0.374 | 0.400 | 0.420 | 0.650 | 0.770 |
| **Double Support [s]** | 0.368 | 0.334 | 0.270 | 0.250 | 2.330 | 1.750 |
| **Stride Length [m]** | 0.701 | 0.709 | 1.248 | 1.278 | 0.522 | 0.528 |
| **Step Length [m]** | 0.361 | 0.340 | 0.606 | 0.635 | 0.256 | 0.269 |
| **Step Width [m]** | 0.229 | 0.229 | 0.190 | 0.210 | 0.187 | 0.183 |

**b) Kinematics & Kinetics:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Kinematics Parameters** | | |  |  |  |
|  |  |  |  |  |  |  |  |
|  | | **SUBJECT** | | | | | |
| **RSS04** | | **RSS05** | | **RSS06** | |
| Left | Right | Left | Right | Left | Right |
| **Thorax** | **Mean Anterior Tilt** | 2.22 | 2.14 | 0.92 | 1.35 | 12.72 | 12.76 |
| **Pelvis** | **Mean Anterior Tilt** | 13.80 | 13.89 | 16.38 | 16.67 | 20.55 | 20.47 |
| **Maximum Obliquity Up** | 3.67 | 3.98 | 5.83 | 6.34 | 0.64 | 6.81 |
| **Maximum Obliquity Down** | 4.15 | 4.16 | 6.34 | 5.82 | 6.81 | 0.65 |
| **Maximum External Rotation** | 2.34 | 6.42 | 8.29 | 9.98 | 8.60 | 8.55 |
| **Maximum Internal Rotation** | 5.50 | 1.98 | 9.98 | 8.54 | 8.52 | 8.51 |
| **Hip** | **Minimum Flexion** | 5.39 | 4.22 | 5.83 | 7.68 | 24.04 | 25.25 |
| **Maximum Flexion** | 41.09 | 41.10 | 49.90 | 49.33 | 57.06 | 47.14 |
| **Maximum Abduction** | 12.47 | 11.71 | 14.85 | 13.39 | 10.73 | 4.67 |
| **Maximum Adduction** | 1.35 | 1.68 | 4.79 | 4.38 | 0.49 | 2.81 |
| **Knee** | **Minimum Flexion** | 4.17 | 0.34 | 7.52 | 8.12 | 21.14 | 15.91 |
| **Maximum Flexion** | 47.48 | 58.78 | 56.67 | 51.80 | 44.68 | 36.13 |
| **Ankle** | **Maximum Dorsiflexion** | 27.53 | 20.19 | 34.69 | 32.50 | 36.12 | 31.17 |
| **Maximum Plantarflexion** | -0.91 | 1.47 | -0.89 | -0.56 | 12.81 | 22.51 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Kinetics Parameters** | | | | | |
|  |  | **SUBJECT** | | | |
| **RSS04** | | **RSS05** | |
| Left | Right | Left | Right |
| **Hip** | **Maximum Flexion Moment [Nm/kg]** | 0.621 | 0.582 | 1.003 | 0.996 |
| **Maximum Extension Moment [Nm/kg]** | 0.959 | 0.962 | 1.072 | 0.727 |
| **Maximum Adduction Moment [Nm/kg]** | 0.064 | 0.178 | 0.193 | 0.344 |
| **Maximum Abduction Moment [Nm/kg]** | 0.772 | 0.688 | 0.996 | 0.843 |
| **Maximum Power Generated [W/kg]** | 0.947 | 0.997 | 1.363 | 1.204 |
| **Maximum Power Absorbed [W/kg]** | 0.393 | 0.380 | 1.101 | 0.723 |
| **Knee** | **Maximum Flexion Moment [Nm/kg]** | 0.227 | 0.286 | 0.626 | 0.508 |
| **Maximum Extension Moment [Nm/kg]** | 0.744 | 0.571 | 1.576 | 1.341 |
| **Maximum Power Generated [W/kg]** | 0.472 | 0.535 | 1.944 | 1.455 |
| **Maximum Power Absorbed [W/kg]** | 1.712 | 1.549 | 3.214 | 2.284 |
| **Ankle** | **Maximum Dorsiflexion Moment [Nm/kg]** | 0.361 | 0.373 | 0.652 | 0.463 |
| **Maximum Plantarflexion Moment [Nm/kg]** | 0.556 | 0.507 | 0.879 | 0.623 |
| **Maximum Power Generated [W/kg]** | 1.095 | 0.562 | 2.252 | 1.903 |
| **Maximum Power Absorbed [W/kg]** | 1.081 | 0.855 | 1.103 | 1.002 |

**Diagram

Description automatically generated**

**RSS04**

**Diagram, line chart

Description automatically generated**

**RSS04**

**Chart, diagram, line chart

Description automatically generated**

**RSS05**

**Chart, line chart

Description automatically generated**

**RSS05**

**Chart, diagram, line chart

Description automatically generated**

**RSS06**

**III. EMG Analysis**

**Chart, line chart

Description automatically generated**

**Chart, diagram

Description automatically generated**

**Chart, histogram

Description automatically generated**