# Appendix A

# A.1. Preferred SuitX™ support modes and levels





# A.2. Preferred Laevo™ support modes and levels





# Appendix B

# Mean percentage change in peak muscle activity of each muscle group for all combinations of *Posture*, *Symmetry,* and *Gender* for two BSEs (i.e., Laevo™ and SuitX™)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Posture | Symmetry | Intervention | Gender | TEM | AM | NM | SM | LM |
| Standing | Symmetric | Laevo™ | Female | -23.8 | -8.5 | -13.9 | -14.7 | -9.0 |
| Male | -8.0 | 12.7 | -1.4 | -2.0 | -11.3 |
| SuitX™ | Female | -22.0 | -9.3 | -9.8 | -12.9 | -4.6 |
| Male | -15.4 | -15.5 | -8.5 | -7.4 | 0.7 |
| Asymmetric | Laevo™ | Female | -12.9 | 3.9 | -5.4 | -10.5 | -4.0 |
| Male | -5.6 | 11.2 | -4.8 | -3.1 | -6.3 |
| SuitX™ | Female | -12.3 | -15.7 | -14.4 | -16.2 | -6.7 |
| Male | -8.9 | -17.6 | -1.2 | -4.8 | 4.9 |
| Kneeling | Symmetric | Laevo™ | Female | -26.8 | -3.4 | -0.8 | 0.0 | -15.5 |
| Male | -11.1 | -6.7 | 4.7 | 4.0 | -1.9 |
| SuitX™ | Female | -30.6 | -6.7 | -0.8 | -2.4 | -13.4 |
| Male | -24.5 | -8.3 | 4.7 | 2.9 | 38.9 |
| Asymmetric | Laevo™ | Female | -27.2 | 1.2 | 6.6 | -6.0 | -16.9 |
| Male | -12.4 | 2.9 | 4.1 | 3.5 | -7.0 |
| SuitX™ | Female | -18.4 | 1.8 | 7.8 | 1.0 | -25.7 |
| Male | -12.4 | 1.9 | 8.3 | 2.5 | 14.0 |

# Appendix C

# Descriptive statistics for the percentage changes in energy expenditure for all combinations of *Posture* and *Symmetry* for two BSEs (i.e., Laevo™ and SuitX™)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Intervention | Posture | Symmetry | Minimum (%) | 25th Percentile (%) | Mean (%) | 75th Percentile (%) | Maximum (%) |
| Laevo™ | Kneeling | Asymmetric | 33.0 | 2.7 | -5.3 | -12.7 | -26.8 |
| Symmetric | 5.9 | -3.3 | -10.8 | -18.7 | -24.3 |
| Standing | Asymmetric | 21.3 | -0.7 | -5.5 | -9.7 | -35.8 |
| Symmetric | 1.8 | -0.5 | -8.9 | -14.9 | -24.0 |
| SuitX™ | Kneeling | Asymmetric | 20.4 | -1.3 | -6.2 | -12.6 | -25.2 |
| Symmetric | 14.3 | -5.2 | -9.1 | -15.5 | -19.4 |
| Standing | Asymmetric | 25.1 | 0.8 | -3.7 | -8.2 | -25.3 |
| Symmetric | 13.5 | 1.9 | -12.6 | -23.8 | -26.3 |

#

# Appendix D

Distribution of responses to usability questions regarding fit, comfort, and body movement restrictions. Note that [0,1) = strongly disagree, [3,4) = moderately agree, and [6,7] = strongly agree.

|  |  |
| --- | --- |
|  |  |
|  |