

Supplementary Material

1 SUPPLEMENTARY TABLES AND FIGURES

1.1 Tables

Table S1. Arrangement of the PAMs

| no. | PAM length (mm) | tube length (mm) | function |
|-----|-----------------|------------------|-----------------|
| #1 | 310 | 260 | hip extension |
| #2 | 360 | 310 | hip flexion |
| #3 | 344 | 250 | knee flexion |
| #4 | 350 | 300 | knee extension |
| #5 | 380 | 280 | ankle extension |
| #6 | 396 | 270 | ankle flexion |

Table S2. Comparison of Joint Range of Motion Between Robot and Human

| Joint range of motion | Robot (flexion / extension) | Human (flexion / extension) |
|-----------------------|-----------------------------|-----------------------------|
| Hip joint pitch | +10 ~ -10° | +20 ~ -20° |
| Knee joint pitch | +50 ~ 0° | +60 ~ 0° |
| Ankle joint pitch | +30 ~ -15° | +20 ~ -5° |