

Supplementary data

2-year follow-up results of BMD measurements of the proximal tibia (g/cm²), and ΔBMD (%) of the proximal tibia ROI 1, ROI 2, and ROI 3 and BMC (g) of the ankles (ROI 4).

| | Postoperative | | 3 months | | 6 months | | 12 months | | 24 months | |
|--|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | Monoblock | Modular | Monoblock | Modular | Monoblock | Modular | Monoblock | Modular | Monoblock | Modular |
| ROI 1, BMD (g/cm²) | | | | | | | | | | |
| Mean (SD) | 0.93 (0.16) | 0.87 (0.13) | 0.91 (0.17) | 0.90 (0.12) | 0.88 (0.18) | 0.89 (0.14) | 0.84 (0.15) | 0.88 (0.15) | 0.79 (0.22) | 0.86 (0.14) |
| ΔBMD (%) | | | -1.3 | 3.7 | -4.7 | 3.2 | -9.4 | -0.2 | -15.0 | -0.01 |
| p-value ^a | | | | | | | | | 0.004 | 0.03 |
| p-value ^b | | | | | | | | | 0.03 | |
| ROI 2, BMD (g/cm²) | | | | | | | | | | |
| Mean (SD) | 0.98 (0.17) | 0.95 (0.13) | 0.98 (0.18) | 0.93 (0.20) | 0.96 (0.18) | 0.98 (0.16) | 0.92 (0.15) | 0.98 (0.16) | 0.85 (0.24) | 0.95 (0.17) |
| ΔBMD (%) | | | 0.2 | -1.8 | -1.9 | 3.1 | -6.7 | 0.8 | -13.3 | 0.0 |
| p-value ^a | | | | | | | | | 0.01 | 0.5 |
| p-value ^b | | | | | | | | | 0.02 | |
| ROI 3, BMD (g/cm²) | | | | | | | | | | |
| Mean (SD) | 1.13 (0.15) | 1.13 (0.11) | 1.14 (0.18) | 1.15 (0.12) | 1.13 (0.21) | 1.14 (0.13) | 1.11 (0.18) | 1.13 (0.13) | 1.09 (0.18) | 1.13 (0.13) |
| ΔBMD (%) | | | 1.0 | 1.3 | 0.1 | 0.8 | -1.5 | -0.2 | -3.5 | 0.0 |
| p-value ^a | | | | | | | | | 0.8 | 0.5 |
| p-value ^b | | | | | | | | | 1.0 | |
| Ankle of operated limb, BMC (g) | | | | | | | | | | |
| Mean (SD) | 7.89 (0.49) | 7.77 (0.42) | 7.50 (0.37) | 7.97 (0.34) | 7.70 (0.38) | 8.14 (0.33) | 7.54 (0.38) | 8.21 (0.36) | 7.60 (0.36) | 8.19 (0.32) |
| ΔBMD (%) | | | -5.0 | 2.6 | -2.4 | 4.8 | -4.5 | 5.8 | -3.7 | 5.4 |
| p-value ^a | | | | | | | | | 0.7 | 0.6 |
| p-value ^b | | | | | | | | | 0.2 | |
| Ankle of non-operated limb, BMC (g) | | | | | | | | | | |
| Mean (SD) | 8.01 (0.39) | 7.97 (0.40) | 8.05 (0.38) | 8.42 (0.30) | 8.09 (0.39) | 8.48 (0.35) | 7.75 (0.36) | 8.53 (0.34) | 7.94 (0.36) | 8.45 (0.34) |
| ΔBMC (%) | | | 0.4 | 5.7 | 1.0 | 6.5 | -3.2 | 7.1 | -0.9 | 6.1 |
| p-value ^a | | | | | | | | | 0.9 | 0.4 |
| p-value ^b | | | | | | | | | 0.3 | |

^a Paired t-test for BMC change within groups

^b Unpaired t-test for difference in BMC change between groups.