**Table S3:**

**Associations between low lean mass changes according to SMI and BMDs (n = 1343).**

|  |  |  |
| --- | --- | --- |
| **Outcome:\*SMI （** % **）** | **Unadjusted****β coefficient (95% CI)** | **Adjusted\*****β coefficient (95% CI)** |
|  | **β** | **(95% CI)** | ***P*** | **β** | **(95% CI)** | ***P*** |
| WBTOT\_BMD | 0.03 | (0.01, 0.05) | 0.004 | 0.02 | (0.00, 0.04) | 0.034 |
| HEAD\_BMD | -0.01 | (-0.01, -0.00) | 0.002 | -0.01 | (-0.01, -0.00) | 0.009 |
| LRIB\_BMD | -0.04 | (-0.06, -0.02) | <0.001 | -0.05 | (-0.06, -0.03) | <0.001 |
| RRIB\_BMD | -0.02 | (-0.03, -0.00) | 0.009 | -0.02 | (-0.03, -0.00) | 0.014 |
| T\_S\_BMD | 0.01 | (-0.00, 0.02) | 0.114 | 0.01 | (-0.00, 0.02) | 0.094 |
| L\_S\_BMD | 0.01 | (0.00, 0.02) | 0.023 | 0.01 | (0.00, 0.02) | 0.023 |
| PELV\_BMD | 0 | (-0.01, 0.01) | 0.498 | 0 | (-0.01, 0.01) | 0.348 |
| HTOT\_BMD | 0 | (-0.02, 0.03) | 0.871 | 0 | (-0.02, 0.02) | 0.962 |
| NECK\_BMD | 0.01 | (-0.01, 0.04) | 0.383 | 0.01 | (-0.02, 0.03) | 0.665 |
| LLEG\_BMD | 0.04 | (0.02, 0.05) | <0.001 | 0.02 | (0.01, 0.04) | 0.003 |
| RLEG\_BMD | 0.05 | (0.03, 0.06) | <0.001 | 0.03 | (0.02, 0.05) | <0.001 |
| LARM\_BMD | 0.07 | (0.04, 0.10) | <0.001 | 0.05 | (0.02, 0.08) | <0.001 |
| RARM\_BMD | 0.07 | (0.04, 0.09) | <0.001 | 0.05 | (0.02, 0.07) | <0.001 |

**Notes.**

\*Adjusted for age, weight, HbA1c, HDL-C, creatinine, ALT, FT4, diastolic blood pressure, smoking, drinking and exercise.

WBTOT\_BMD, mean whole-body BMD; HEAD\_BMD, skull BMD; LRIB\_BMD, left rib BMD; RRIB\_BMD, right rib BMD; T\_S\_BMD, thoracic spinal BMD; L\_S\_BMD, lumbar spinal BMD; PELV\_BMD, pelvic BMD; HTOT\_BMD, hip BMD; NECK\_BMD, femoral neck BMD; LLEG\_BMD, left leg BMD; RLEG\_BMD, right leg BMD; LARM\_BMD, left arm BMD; RARM\_BMD, right arm BM.