

1 Collection of multimodal osteoporosis cases



Patient: 803 cases



X-ray: 1620 images



CT: 280 cases

2 Harmonization of clinical data

- **Demographic information:** Age, gender, and ethnicity
- **Anthropometric measurements:** Height, weight, and BMI
- **Osteoporosis Label:** 0 = Normal; 1 = Osteopenia; 2 = Osteoporosis
- **Lumbar DXA scan data** (for L1-L2, L1-L3, L1-L4, L2-L3, L2-L4, L3-L4):



- bmd: Bone Mineral Density values
- T,Z: T-scores and Z-scores derived from BMD measurements
- bmc, s: Bone Mineral Content (bmc) and area measurements
- avgh/avgw: Computed vertebral height/width averages

3 Clear folder structure



LUMOS_clinical_data.xlsx



images



X



lumos_001_x



lumos_002_x

...



lumos_803_x



CT



lumos_001_ct



lumos_002_ct

...



lumos_280_ct



lumos_001_x_0.dcm



lumos_001_x_1.dcm



lumos_001_ct_000.dcm



lumos_001_ct_001.dcm



lumos_001_ct_002.dcm

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