

Supplementary Material A:

Information about the subjects and the CT Scan protocol.

Subjects' information	
Number of subjects	24
Age [years]	42,4 (8,1)
Sex [M : F]	24 : 0
Height [cm]	179,5 (8,1)
Weight [Kg]	84,6 (14,9)
BMI [Kg/m ²]	26,1 (3,6)
Kellgren & Lawrence Grade	≤ 3
Varus angle [°]	1° to 9°
Leg side [Left : Right]	11 : 13

Table 1: Information about the subjects, for continuous variables information are presented as "mean (sd)"

The subjects were extracted from the Sainte Marguerite Hospital (Marseille, France) database and they presented the same CT Scan protocol designed for high tibial valgus osteotomy surgery planning. They presented none to mild osteoarthritis in the medial compartment of the knee.

The CT scan protocol of the lower limb is oriented towards patient specific surgery planning, it consists of 3 acquisition windows at different resolution to limit the patient X-rays exposure. The knee acquisition window distal limit is located 15 cm under the articulation, and its proximal limit is 10 cm above the articulation. In this window, the obtained resolutions range from 0.4x0.4x0.6mm³ to 0.9x0.9x0.6mm³. The ankle and hip acquisition windows are 10 cm high and are respectively centered on the transmalleolar axis and the femoral head. In those window, the resolutions were set to 0.98x0.98x2mm³. All the subject were CT scanned using this protocol on the same LightSpeed VCT scanner (GE Healthcare, Milwaukee, WI, USA). The mid-diaphysis of long bones is not acquired in this protocol.