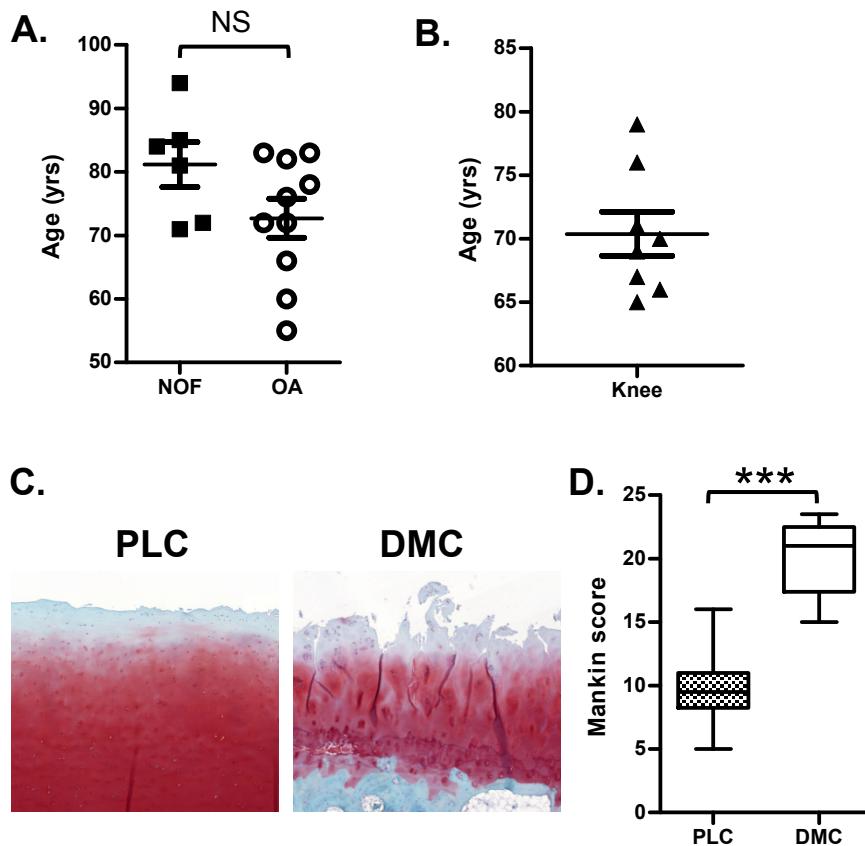


## Supplementary Figure 1



**A.** Age (in years) of patients at time of arthroplasty. Ten OA hip samples are on average younger than the NOF (mean OA 72.7 years old; NOF 81.2 yo), however using a variety of statistical tests these are not significantly different. OA, are patients undergoing arthroplasty due to hip osteoarthritis; NOF, are patients undergoing arthroplasty due to a neck of femur fracture. **B.** Age of the donors of the knee cartilage specimens. The age of the patients was not significantly different from the hip OA patients. Box plots include a line for the mean, error bars are maximum and minimum. **C.** Histological comparison from paired (knee) osteochondral samples exemplifying the undamaged (PLC - intact posterior lateral condyle and damaged (DMC - distal medial condyle). Osteochondral blocks were processed, sectioned and stained as described in Dunn et al., (2016). **D.** The PLC and DMC OA samples were graded histologically using a modified Mankin score (Little et al., 2010). The DMC samples showed significantly more damaged cartilage compared to the PLC (Mann Whitney u test, \*\*\*  $p < 0.001$ ).