



**Supplementary Figure 1:** Scatter plots linear relationship between force and von-Mises stress for (A) PFNA and (B) DHS implants. *Hence:* STF location is based on fracture distance below LT in steps of 5 mm (e.g. location 1 is 0.5 cm and location 9 is 4.5 cm below LT). Abbreviation: STF (Subtrochanteric fracture), MPa (Megapascal), N (Newton), PFNA (Proximal Femoral Nail Antitrotation), DHS (Dynamic Hip Screw) and LT (Lesser Trochanter).