



Supplementary Fig. 2. Three steps of registration with intraoperatively scanned O-arm image and postoperative CT image. (A) By image segmentation procedure, the instrumented vertebrae were obtained in the pre- and postoperative images. (B) Paired-point registration was performed using several anatomical markers on the vertebral surfaces. (C) Two different image sets went through the iterative closest point registration algorithm which minimize the difference between 2 clouds of points and used to reconstruct 2-dimensional or 3-dimensional surfaces from different scans.