

## Supplementary data

**Table 2. Precision of RSA**

|                 | Translation (mm) (n = 49) |        |        | Rotation (°) (n = 49) |        |        |
|-----------------|---------------------------|--------|--------|-----------------------|--------|--------|
|                 | X-axis                    | Y-axis | Z-axis | X-axis                | Y-axis | Z-axis |
| Mean difference | 0.03                      | -0.01  | 0.00   | -0.12                 | -0.45  | 0.10   |
| SD diff.        | 0.18                      | 0.11   | 0.31   | 0.80                  | 0.76   | 0.36   |
| CR              | 0.35                      | 0.21   | 0.61   | 1.56                  | 1.49   | 0.36   |
| LoA             |                           |        |        |                       |        |        |
| upper limit     | 0.38                      | 0.20   | 0.61   | 1.45                  | 1.04   | 0.80   |
| lower limit     | -0.32                     | -0.22  | -0.61  | -1.68                 | -1.94  | -0.60  |

Mean diff: The systematic difference of RSA.  
 SD diff: Random variation of RSA.  
 CR: Coefficient of repeatability ( $SD \times 1.96$ ). Indicates the RSA precision for individual recordings.  
 LoA: Limits of agreement/prediction interval.