

Supplement 6.a. Number of residuals and sum of residuals of transfer task at test time T1-T5.

Test Time	Residuals (n)				Sum of residuals (mm)			
	Group I	Group II	Group III	Group IV	Group I	Group II	Group III	Group IV
	Mean $\pm$ SD (Range; Median)	Mean $\pm$ SD (Range; Median)	Mean $\pm$ SD (Range; Median)	Mean $\pm$ SD (Range; Median)	Mean $\pm$ SD (Range; Median)	Mean $\pm$ SD (Range; Median)	Mean $\pm$ SD (Range; Median)	Mean $\pm$ SD (Range; Median)
T1	8.5 $\pm$ 6.3 (1-20; 8)	9.33 $\pm$ 5.18 (4-22; 8.5)	7.25 $\pm$ 4.65 (0-16; 8.5)	7 $\pm$ 3.05 (3-14; 6.5)	166.08 $\pm$ 273.38 (3-989; 94)	123.5 $\pm$ 58.53 (22-227; 128.5)	100.67 $\pm$ 137.32 (0-519; 67)	85.92 $\pm$ 81.22 (9-256; 70.5)
T2	5.08 $\pm$ 4.98 (0-14; 3.5)	9.25 $\pm$ 4.62 (4-21; 8)	7.17 $\pm$ 4.06 (2-13; 8)	6.75 $\pm$ 4.98 (0-18; 7)	88.67 $\pm$ 94.1 (0-327; 81.5)	88.33 $\pm$ 57.32 (8-216; 75)	61.25 $\pm$ 48.82 (11-178; 57.5)	67.08 $\pm$ 59.15 (0-190; 46.5)
T3	4.08 $\pm$ 3.5 (0-10; 4)	8.83 $\pm$ 3.76 (2-14; 9.5)	7.25 $\pm$ 5.36 (1-14; 8.5)	5.42 $\pm$ 2.97 (0-11; 6)	40.5 $\pm$ 46.85 (0-138; 14.5)	112.75 $\pm$ 70.73 (8-237; 117.5)	77.17 $\pm$ 60.99 (3-159; 99.5)	41.83 $\pm$ 29.62 (0-119; 36.5)
T4	4.67 $\pm$ 3.6 (0-13; 4)	9.42 $\pm$ 3.97 (4-17; 9)	6.33 $\pm$ 4.14 (2-15; 5)	4.17 $\pm$ 2.04 (1-8; 4)	38.17 $\pm$ 35.5 (0-102; 25.5)	80.17 $\pm$ 61.31 (5-215; 56)	54.83 $\pm$ 51.68 (8-155; 29.5)	26.67 $\pm$ 34.46 (2-129; 14)
T5	3.42 $\pm$ 3.45 (0-11; 2.5)	7.5 $\pm$ 2.58 (3-11; 7.5)	5.25 $\pm$ 3.36 (0-11; 4.5)	3.58 $\pm$ 2.94 (0-11; 3.5)	20 $\pm$ 25.84 (0-78; 10)	57.75 $\pm$ 35.54 (8-116; 48)	43.92 $\pm$ 36.34 (0-120; 47.5)	37.67 $\pm$ 52.16 (0-187; 25)

The red marked residual tissue was also evaluated as number (number of residuals) and distance value (sum of residuals). Group I: 2D visualization with straight instruments. Group II: 2D visualization with curved instruments. Group III: 3D visualization with straight instruments. Group IV: 3D visualization with curved instruments. SD: Standard deviation.