

Appendix A

Table A1. Distribution of scan numbers by technology, device, implant configuration, and scan body.				
Technology	Device	Number of implants	Scan body	Scan (N)
Intraoral Scanner	TRIOS 3	4	PEEK	20
		4	Titanium	20
		6	PEEK	20
		6	Titanium	20
	iTero	4	PEEK	20
		4	Titanium	20
		6	PEEK	20
		6	Titanium	20
	Medit i700	4	PEEK	20
		4	Titanium	20
		6	PEEK	20
		6	Titanium	20
	Virtuo Vivo	4	PEEK	20
		4	Titanium	20
		6	PEEK	20
		6	Titanium	20
	Sirios	4	PEEK	20
		4	Titanium	20
		6	PEEK	20
		6	Titanium	20
Photogrammetry	iCam	4	N/A	20
		6	N/A	20
	PIC	4	N/A	20
		6	N/A	20
	Oxocore	4	N/A	20
		6	N/A	20
	Aoralscan Elite	4	N/A	20
		6	N/A	20
TOTAL			N/A	560

Table A2. Bonferroni-adjusted pairwise comparisons within the intraoral-scanner (IOS) subset that were significant at the measurement level, with corresponding scan-level p values. Overall Kruskal-Wallis tests were significant for DIST and ANG at both levels (measurement level, n = 4,200: DIST, H(4) = 175.005, p < 0.001; ANG, H(4) = 75.489, p < 0.001; scan level, n = 400: DIST, H(4) = 19.190, p < 0.001; ANG, H(4) = 13.250, p = 0.010). DIST, absolute linear discrepancy (µm); ANG, absolute angular discrepancy (°). Omitted comparisons were non-significant at both levels.

Outcome	Pairwise comparison	Bonferroni-adjusted p	Bonferroni-adjusted p (scan level)
DIST	Sirios vs TRIOS 3	< 0.001	> 0.999
DIST	Sirios vs Virtuo Vivo	< 0.001	0.001
DIST	Medit i700 vs TRIOS 3	< 0.001	> 0.999
DIST	Medit i700 vs Virtuo Vivo	< 0.001	0.008
DIST	iTero vs TRIOS 3	0.029	> 0.999
DIST	iTero vs Virtuo Vivo	< 0.001	0.011
DIST	TRIOS 3 vs Virtuo Vivo	< 0.001	0.102
ANG	iTero vs TRIOS 3	< 0.001	0.225
ANG	iTero vs Sirios	< 0.001	0.184
ANG	iTero vs Virtuo Vivo	< 0.001	0.067
ANG	iTero vs Medit i700	< 0.001	0.006

Table A3. Bonferroni-adjusted pairwise comparisons within the photogrammetry-mode subset that were significant at the measurement level, with corresponding scan-level p values. Overall Kruskal-Wallis tests were significant for DIST and ANG at both levels (measurement level, n = 1,680: DIST, H(3) = 308.725, p < 0.001; ANG, H(3) = 83.434, p < 0.001; scan level, n = 160: DIST, H(3) = 64.365, p < 0.001; ANG, H(3) = 30.815, p < 0.001). DIST, absolute linear discrepancy (μm); ANG, absolute angular discrepancy (°). Omitted comparisons were non-significant at both levels.

Outcome	Pairwise comparison	Bonferroni-adjusted p	Bonferroni-adjusted p (scan level)
DIST	iCam vs Aoralscan Elite	0.010	> 0.999
DIST	iCam vs PIC	< 0.001	0.020
DIST	iCam vs Oxocore	< 0.001	< 0.001
DIST	Aoralscan Elite vs PIC	< 0.001	0.422
DIST	Aoralscan Elite vs Oxocore	< 0.001	< 0.001
DIST	PIC vs Oxocore	< 0.001	< 0.001
ANG	iCam vs Oxocore	< 0.001	< 0.001
ANG	Aoralscan Elite vs Oxocore	< 0.001	< 0.001
ANG	PIC vs Oxocore	< 0.001	< 0.001