## **Supplementary Appendix**

## **Supplement figure 1** Radiation protection screens



**Supplement Fig. 1** Commonly used mobile radiation protection shields (RPS), comparing size for explanatory purposes.

## **Supplement table 1** Scatter radiation behind radiation protection screens

Position (cm)	Distance (+cm)	No RPS (μGy)	Difference (%)	Small (µGy)	Difference (%)	Large (μGy)	Difference (%)
150	30	8.84	100	0.84	9.54	0.50	5.62
	60	6.42	72.7	0.86	9.76	0.54	6.05
	120	3.96	44.8	0.74	8.47	0.49	5.54
	240	1.96	22.2	0.46	5.24	0.31	3.54
300	30	2.72	30.8	0.37	4.22	0.25	2.88
	60	2.30	26.0	0.41	4.70	0.28	3.19
	120	1.74	19.7	0.39	4.40	0.27	3.01
500	30	1.31	14.8	0.16	1.85	0.10	1.12
	60	1.18	13.4	0.18	2.05	0.12	1.30
	120	0.96	10.9	0.18	2.05	0.12	1.31

Supplement Table 1 Scatter radiation (air kerma) measured per rotational acquisition at various distances in cm (+cm) behind a large RPS (2.0 mm Pb) or a small RPS (0.5 mm Pb), at three different positions: 150, 300 and 500 cm from the device isocenter. For comparison, measurements without an RPS are included (No RPS). The results were obtained using the standard hCBCT clinical imaging protocols. The relative standard deviation was for all measured scatter dose values less than 0.01  $\mu Gy$ .