

SUPPLEMENTARY MATERIAL

Comparisons of using cycloplegic biometry versus non-cycloplegic biometry in the calculation of the cycloplegic Refractive Lens Powers

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Supplementary Table 1. Some Studies on Refractive Lens Power

Study	Method	Age (year)	Ocular parameters measurements under cycloplegia	Ocular parameters at baseline						
				SE / D	AL/ mm	ACD / mm	LT / mm	CP / D	RLP / D	
Xiong et al. ¹ (n=1465)	Pentacam and IOLMaster	6-8	Yes		0.97±0.99	22.95±0.73	3.67±0.21	3.48±0.16	41.28±1.33	26.66±1.49
				All	-0.41±1.71					
Rafael et al. ² (n=1747)	A-scan ultrasonography	6-9	Yes	Males	-0.51	23.62	3.65	3.47	42.51	24.22
				Females	-0.3	23.02	3.56	2.997	43.18	25.39
Li et al. ³ (n=1889)	Optical coherence interferometry	14	Unclear		-2.10±2.19	24.60±1.12		3.42±0.19		23.08±1.54
Cheng et al. ⁴ (n=459)	Pentacam and IOLMaster	4-19	Unclear		-8.34±1.99	26.71±1.09	3.34±0.22	3.38± 0.16	41.82±1.37	24.17±1.58
Hassan et al. ⁵ (n=4870)	Allegro Biograph and Pentacam HR	6-12	Unclear							22.86±1.59
Xiong et al. ⁶ (n=1992)	Pentacam and IOLMaster	6-18	Unclear		-0.39±2.08	23.67±1.18	3.22±0.23	3.42±0.17	41.70±1.33	25.28±1.93
Iribarren et al. ⁷ (n=1885)	A-scan pachymeter	50-unknown	Unclear							25.5±3.0
Lu et al. ⁸ (n=596)	optical coherence interferometry	6-16	Unclear		-1.31±2.41	23.65±1.24	3.21±0.25	3.30±0.16		24.85±1.98
Guo et al. ⁹ (n=1127)	IOL Master	3-6	No		1.38±0.73	22.39 ± 0.68	3.34 ± 0.24			24.61±1.42
He et al. ¹⁰ (n=6099)	IOL Master	50-96	Unclear		-0.12±2.84	23.53±1.34	2.96±0.36		44.23±1.45	20.34±2.24
Bechmann et al. ¹¹ (n=66)	A-scan ultrasonography	20-30	Yes		-0.52±3.45	23.71±1.39	3.77±0.29	3.82±0.21	43.82±1.57	22.41±2.12
Jongenelen et al. ¹² (n=1069)	Pentacam, IOLMaster and optical coherence interferometry	20-85	Unclear		0.84±2.16	23.81±1.11	3.43±0.39		42.16±1.40	24.96±2.18

SE= spherical equivalent refraction; AL=axial length; ACD=anterior chamber depth; LT=lens thickness; CP=corneal power; RLP=refractive lens power; D = diopter.

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