

Formula	Constant	Optimized Constant Value	Signed Average Numerical Error in Refraction
Holladay1	Surgeon factor	1.990	-0.000509
SRK/T	A constant	119.303	-0.000509
Hoffer Q	ACD	5.844	-0.000499
Haigis	$a_0$	1.655	-0.000405
Olsen	ACDconst	5.155	/

**Table S1** Optimized constants and mean error of existing formulas. The constants for Holladay 1, SRK/T, Hoffer Q and Haigis were selected so that the absolute value of the mean error was minimized. The constants were searched in a space around their default value with a step of 0.001. The constant for the Olsen formula was calculated based on the publication.<sup>1</sup>

## References

1. Olsen T, Corydon L, Gimbel H. Intraocular lens power calculation with an improved anterior chamber depth prediction algorithm. *J Cataract Refract Surg.* 1995;21(3).