Advanced Wavescan Nomogram

Maloney Vision Institute VISX S4 Sphere Adjustment Nomogram

10% Default Boost in Overall Wavefront Terms for Hyperopia and Myopia less than 6.0 D

v2 Hyperopia (8/1/06) v4 Myopia (8/1/06) v1 High Myopia (3/1/06)

+6.0	-0.5	-0.5	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	**+6.0**
+5.5	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	**+5.5**
+5.0	-0.4	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	**+5.0**
+4.5	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	**+4.5**
+4.0	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	**+4.0**
+3.5	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	**+3.5**
+3.0	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	**+3.0**
+2.5	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**+2.5**
+2.0	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	**+2.0**
+1.5	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	**+1.5**
+1.0	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	**+1.0**
+0.5	-0.1	-0.1	-0.1	-0.1	-0.1	0	0	0	0	0	0	**+0.5**
Preop Sphere	**Patient Age**											**Preop Sphere**
	20	**25**	**30**	**35**	**40**	**45**	**50**	**55**	**60**	**65**	**70**	
0	-0.6	-0.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	**0**
-0.5	-0.6	-0.5	-0.5	-0.4	-0.4	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	**-0.5**
-1.0	-0.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	**-1.0**
-1.5	-0.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.1	-0.1	-0.1	-0.1	**-1.5**
-2.0	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-2.0**
-2.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-2.5**
-3.0	-0.5	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	**-3.0**
-3.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	**-3.5**
-4.0	-0.4	-0.4	-0.3	-0.2	-0.2	-0.1	-0.1	0	0	0	0	**-4.0**
-4.5	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0	0	0	0	**-4.5**
-5.0	-0.4	-0.3	-0.3	-0.2	-0.1	-0.1	0	0	0	0	0	**-5.0**
-5.5	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0	0	0	0	0	**-5.5**
-5.99	-0.3	-0.3	-0.2	-0.2	-0.1	0	0	+0.1	+0.1	+0.1	+0.1	**-5.99**
	If SE of wavescan Rx is -5.99 or below, use ABOVE adjustment table with 10% boost											
	If SE of wavescan Rx is -6.00 or above, use BELOW adjustment table with NO boost											
-6.0	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-6.0**
-6.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-6.5**
-7.0	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-7.0**
-7.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-7.5**
-8.0	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-8.0**
-8.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-8.5**
-9.0	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-9.0**
-9.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-9.5**
-10.0	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-10.0**
-10.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-10.5**
-11.0	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-11.0**
-11.5	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-11.5**
-12.0	-0.5	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	**-12.0**
	20	**25**	**30**	**35**	**40**	**45**	**50**	**55**	**60**	**65**	**70**	

Instructions:

1) Choose the column closest to the patient's age
2) Choose the row closest to the patient's wavescan refraction sphere, written in minus cylinder form (do not use spherical equivalent)
3) The entry in the table is the sphere adjustment to be programmed into the laser
4) Add -20% multiplied by wavescan cylinder to sphere adjust (this will be a *positive* number)
5)

NOTES to RKM

added -0.1 to myopic corrections to counteract effect of 20% of cyl added to sph adj to avoid undercorrecting low cylinder eyes
added 2.5% to low moderate myopes because original nomogram used 2nd eye data, which tended to overcorrect
not enough data on high myopes to adjust for 2nd eye effect
not enough data on hyperopes to judge cyl correction and effect on SE
Added 4% boost to sphere term because of undercorrections in pre version 1 eyes; version 1 was less aggessive than pre-v1