

Supplemental Table 1. Baseline and repeated intra- and inter-group analyses after age adjustment (removal of 2 patients over the age of fifty from the ICRS + CXL group)

Parameter	Preop	<i>p</i> -value*	Parameter	6 mon 12 mon	<i>p</i> -value†	<i>p</i> -value‡
BCVA (logMAR)	0.49 ± 0.22	0.552	Δ BCVA (logMAR)	-0.07 ± 0.21 -0.11 ± 0.25	0.593 0.098	0.808 0.902
UCVA (logMAR)	1.23 ± 0.25	<0.001§	Δ UCVA (logMAR)	-0.43 ± 0.14 -0.30 ± 0.00	0.137 0.748	0.015§ 0.065
Sphere (D)	-8.46 ± 1.57	0.707	Δ Sphere (D)	3.75 ± 1.84 7.56 ± 1.46	<0.001§ 0.001§	<0.001§ <0.0001§
Cylinder (D)	-5.95 ± 4.98	0.817	Δ Cylinder (D)	2.46 ± 3.31 2.03 ± 1.86	0.242 0.168	0.111 0.244
SE (D)	-11.43 ± 2.25	0.363	Δ SE (D)	7.98 ± 2.24 8.60 ± 1.16	<0.001§ 0.001§	<0.001§ <0.001§
Kmax (D)	52.95 ± 3.54	0.721	Δ Kmax (D)	-7.73 ± 1.98 -7.48 ± 0.69	<0.001§ <0.001§	<0.001§ 0.001§
Kmin (D)	48.25 ± 2.39	0.297	Δ Kmin (D)	-7.25 ± 1.98 -7.73 ± 2.03	0.003§ <0.001§	<0.001§ <0.001§
Kavg (D)	50.60 ± 2.86	0.488	Δ Kavg (D)	-7.34 ± 1.48 -7.60 ± 0.96	0.001§ <0.001§	<0.001§ <0.001§
Astig (D)	4.72 ± 1.86	0.933	Δ Astig (D)	-0.22 ± 2.00 -0.28 ± 2.46	0.054 0.027	0.700 0.335
CCT (μm)	470.0 ± 30.5	0.044	Δ CCT (μm)	17.8 ± 18.3 30.0 ± 18.2	0.469 0.736	0.029 0.074
TCT (μm)	448.7 ± 34.0	0.118	Δ TCT (μm)	21.7 ± 33.7 18.7 ± 11.2	0.642 0.785	0.022 0.069
ECD (cells/cm ²)	2,684 ± 341	0.828	Δ ECD (cells/cm ²)	-44.7 ± 198 -62.3 ± 171	0.017 0.064	0.611 0.911

Values are presented as the mean ± standard deviation.

ICRS = intrastromal corneal ring segment; CXL = corneal crosslinking; BCVA = best-corrected visual acuity; logMAR = logarithm of minimum angle of resolution; UCVA = uncorrected visual acuity; D = diopters; SE = spherical equivalents; Kmax = maximum keratometry; Kmin = minimum keratometry; Kavg = average keratometry; Astig = astigmatism; CCT = central corneal thickness; TCT = thinnest corneal thickness; ECD = endothelial cell density.

*Kruskal-Wallis tests among the three groups; †Paired *t*-tests between the preoperative measurement and the measurements at 6 and 12 months, respectively; ‡Kruskal-Wallis tests among the three groups at 6 and 12 months, respectively; §Statistical significance was established if *p* < 0.05 (paired *t*-test) or *p* < 0.017 (Kruskal-Wallis test).