**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 | p-value | Parameter | 6 mon | p-value | 12 mon | p-value | 12 mon | p-value |
|--------------------|-------|---------|-----------|-------|---------|--------|---------|--------|---------|
| BCVA (logMAR)      | 0.49 ± 0.22 | 0.552   | Δ BCVA (logMAR) | -0.07 ± 0.21 | 0.593 | 0.808 |
|                    |       |         |           | -0.11 ± 0.25 | 0.998 | 0.902 |
| UCVA (logMAR)      | 1.23 ± 0.25 | <0.001^ † | Δ UCVA (logMAR) | -0.43 ± 0.14 | 0.137 | 0.015^‡ |
|                    |       |         |           | -0.30 ± 0.00 | 0.748 | 0.065 |
| Sphere (D)         | -8.46 ± 1.57 | 0.707   | Δ Sphere (D) | 3.75 ± 1.84 | <0.001^ § | <0.001^ § |
|                    |       |         |           | 7.56 ± 1.46 | 0.001^ § | <0.0001^ § |
| Cylinder (D)       | -5.95 ± 4.98 | 0.817   | Δ Cylinder (D) | 2.46 ± 3.31 | 0.242 | 0.111 |
|                    |       |         |           | 2.03 ± 1.86 | 0.168 | 0.244 |
| SE (D)             | -11.43 ± 2.25 | 0.363   | Δ SE (D) | 7.98 ± 2.24 | <0.001^ † | <0.001^ † |
|                    |       |         |           | 8.60 ± 1.16 | 0.001^ † | <0.001^ † |
| Kmax (D)           | 52.95 ± 3.54 | 0.721   | Δ Kmax (D) | -7.73 ± 1.98 | <0.001^ § | <0.001^ § |
|                    |       |         |           | -7.48 ± 0.69 | <0.001^ § | 0.001^ § |
| Kmin (D)           | 48.25 ± 2.39 | 0.297   | Δ Kmin (D) | -7.25 ± 1.98 | 0.003^ § | <0.001^ § |
|                    |       |         |           | -7.73 ± 2.03 | <0.001^ § | <0.001^ § |
| Kavg (D)           | 50.60 ± 2.86 | 0.488   | Δ Kavg (D) | -7.34 ± 1.48 | 0.001^ § | <0.001^ § |
|                    |       |         |           | -7.60 ± 0.96 | <0.001^ § | <0.001^ § |
| Astig (D)          | 4.72 ± 1.86 | 0.933   | Δ Astig (D) | -0.22 ± 2.00 | 0.054 | 0.700 |
|                    |       |         |           | -0.28 ± 2.46 | 0.027 | 0.335 |
| CCT (μm)           | 470.0 ± 30.5 | 0.044   | Δ CCT (μm) | 17.8 ± 18.3 | 0.469 | 0.029 |
|                    |       |         |           | 30.0 ± 18.2 | 0.736 | 0.074 |
| TCT (μm)           | 448.7 ± 34.0 | 0.118   | Δ TCT (μm) | 21.7 ± 33.7 | 0.642 | 0.022 |
|                    |       |         |           | 18.7 ± 11.2 | 0.785 | 0.069 |
| ECD (cells/cm²)    | 2,684 ± 341 | 0.828   | Δ ECD (cells/cm²) | -44.7 ± 198 | 0.017 | 0.611 |
|                    |       |         |           | -62.3 ± 171 | 0.064 | 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).