

Supplementary Table S1 Comparison of total WA, LOA and HOA in the baseline and postoperatively visit of both group

Group	Parameter	(I)Time	(J)Time	MD(J-I)	P value*	95% CI for difference	
						Lower	Upper
						bound	bound
<b>BLR</b>	Total WA	Baseline	3D post-op	1.233	<b>0.020</b>	0.323	2.143
			6W post-op	0.516	0.154	-0.393	1.426
	Total LOA	Baseline	3D post-op	1.160	<b>0.029</b>	0.286	2.034
			6W post-op	0.371	0.276	-0.503	1.245
<b>R&amp;R</b>	Total WA	Baseline	3D post-op	0.466	<b>0.044</b>	0.094	0.838
			6W post-op	-0.026	0.745	-0.399	0.346
	Total LOA	Baseline	3D post-op	1.703	<b>0.004</b>	0.719	2.687
			6W post-op	0.174	0.373	-0.810	1.158
	Total HOA	Baseline	3D post-op	1.690	<b>0.005</b>	0.775	2.604
			6W post-op	0.083	0.590	-0.831	0.997
	Total HOA	Baseline	3D post-op	0.372	< <b>0.001</b>	0.150	0.595
			6W post-op	0.101	0.067	-0.122	0.323

**Abbreviations:** BLR, bilateral lateral rectus recession; R&R, lateral rectus recession and medial rectus resection; MD, mean difference; CI, confidence interval; WA, wavefront aberration; LOA, lower-order aberration; HOA, higher-order aberration; D, day; W, week; post-op, post-operation.

\*One-way ANOVA with Dunnett multiple comparison (2-sided).

Supplementary Table S2 Comparison of individual LOA in the baseline and postoperatively visit of both group

Group	Parameter	(I)Time	(J)Time	MD(J-I)	P value*	95% CI for difference	
						Lower	Upper
						bound	bound
<b>BLR</b>	Defocus	Baseline	3D post-op	0.073	0.906	-1.771	1.918
			6W post-op	0.115	0.703	-1.730	1.960
	Astigmatism	Baseline	3D post-op	0.386	<b>0.006</b>	0.074	0.698
			6W post-op	0.125	0.355	-0.187	0.437
<b>R&amp;R</b>	Defocus	Baseline	3D post-op	0.913	0.206	-1.107	2.933
			6W post-op	0.068	0.503	-1.952	2.088
	Astigmatism	Baseline	3D post-op	0.542	<b>0.025</b>	0.060	1.024
			6W post-op	0.290	0.194	-0.192	0.772

**Abbreviations:** BLR, bilateral lateral rectus recession; R&R, lateral rectus recession and medial rectus resection; MD, mean difference; CI, confidence interval; LOA, lower-order aberration; D, day; W, week; post-op, post-operation.

\*One-way ANOVA with Dunnett multiple comparison (2-sided).

Supplementary Table S3 Comparison of individual HOA in the baseline and postoperatively visit of both group

Group	Parameter	(I)Time	(J)Time	MD(J-I)	P value*	95% CI for difference	
						Lower	Upper
						bound	bound
BLR	Coma	Baseline	3D post-op	0.337	0.101	-0.047	0.722
			6W post-op	-0.006	0.875	-0.390	0.379
	Spherical aberration	Baseline	3D post-op	0.119	0.294	-0.077	0.314
			6W post-op	-0.043	0.831	-0.239	0.152
R&R	Secondary Astigmatism	Baseline	3D post-op	0.190	<b>0.041</b>	0.053	0.328
			6W post-op	-0.017	0.579	-0.154	0.120
	Trefoil	Baseline	3D post-op	0.202	<b>0.038</b>	0.095	0.309
			6W post-op	0.031	0.726	-0.075	0.138
	Coma	Baseline	3D post-op	0.038	0.084	-0.023	0.099
			6W post-op	0.017	0.352	-0.044	0.079
	Spherical aberration	Baseline	3D post-op	-0.020	0.761	-0.119	0.079
			6W post-op	-0.008	0.733	-0.107	0.091
	Secondary Astigmatism	Baseline	3D post-op	0.081	<b>0.001</b>	0.029	0.132
			6W post-op	0.065	0.139	0.013	0.117
	Trefoil	Baseline	3D post-op	0.232	<b>0.002</b>	0.060	0.404
			6W post-op	0.065	0.595	-0.107	0.237

**Abbreviations:** BLR, bilateral lateral rectus recession; R&R, lateral rectus recession and medial rectus resection; HOA, higher-order aberration; MD, mean difference; CI, confidence interval; D, day; W, week; post-op, post-operation.

\*One-way ANOVA with Dunnett multiple comparison (2-sided).