SUPPLEMNTARY MATERIAL

Table S1. Criteria used to classify regular and irregular astigmatism

Category	Definition used in this study	Objective/supportive criteria
With-the-rule regular astigmatism	Symmetric bow-tie pattern with two approximately orthogonal principal meridians; steep meridian 60°-120°	No asymmetric/skewed tomographic pattern suggesting irregular astigmatism
Against-the-rule regular astigmatism	Symmetric bow-tie pattern with two approximately orthogonal principal meridians; steep meridian 0°-30° or 150°-180°	No asymmetric/skewed tomographic pattern suggesting irregular astigmatism
Oblique regular astigmatism	Symmetric bow-tie pattern with two approximately orthogonal principal meridians; steep meridian 31°-59° or 121°-149°	No asymmetric/skewed tomographic pattern suggesting irregular astigmatism
Irregular astigmatism	Asymmetric or non-orthogonal curvature pattern, asymmetric bowtie, inferior/superior focal steepening, skewed radial axes, or localized irregular steepening	SAI >0.50 D and/or IAI >0.50 D, interpreted together with the tomography map pattern

SAI: surface asymmetry index; IAI: irregular astigmatism index.