

Supplementary Material. Table S1. TOP 10 parameters. Coefficient of variation (repeatability), monotonicity and consistency (% of eyes) of the best Pentacam variables, with partial scores, and global score.

| | | | | VALUES | | | PARTIAL AND GLOBAL SCORES | | | | |
|------|-------------------------|---------|------|---------------|--------------|-------------|---------------------------|--------------|-------------|--------------|--|
| RANK | VARIABLE | SURFACE | TYPE | REPEATABILITY | MONOTONICITY | CONSISTENCY | REPEATABILITY | MONOTONICITY | CONSISTENCY | GLOBAL SCORE | |
| 1 | KMaxZonalMean5mm | F | CUR | 0.42% | 0.47 | 73.54% | 4 | 2 | 18 | 24 | Redundant. 3mm area is chosen since it might be less influenced by peripheral measurements |
| 2 | KMaxZonalMean3mm | F | CUR | 0.48% | 0.47 | 73.79% | 6 | 1 | 17 | 24 | |
| 3 | KMaxZonalMean4mm | F | CUR | 0.45% | 0.47 | 72.82% | 5 | 4 | 25 | 34 | |
| 4 | K2F (D) | F | CUR | 0.61% | 0.46 | 73.06% | 11 | 6 | 21 | 38 | Redundant. Radius is chosen since it does not require assumptions about keratometric index |
| 5 | RsF (mm) | F | CUR | 0.49% | 0.45 | 72.82% | 7 | 9 | 23 | 39 | |
| 6 | BFSFront8mm | F | BFS | 0.27% | 0.43 | 73.06% | 1 | 27 | 20 | 48 | Slightly redundant One-point parameter |
| 7 | RmB (mm) | B | CUR | 0.86% | 0.43 | 75.73% | 17 | 31 | 10 | 58 | |
| 8 | LOGIK | - | IND | 3.58% | 0.47 | 76.21% | 47 | 3 | 9 | 59 | |
| 9 | RmF (mm) | F | CUR | 0.39% | 0.45 | 70.39% | 3 | 13 | 44 | 60 | |
| 10 | RMin (mm) | F | CUR | 0.84% | 0.45 | 72.09% | 16 | 14 | 33 | 63 | |

SURFACE: F (Front), B(Back).

TYPE: CUR (Curvature), BFS (Best Fit Sphere), IND (Index)

VARIABLES: KmaxZonalMean- average keratometry in areas of 3, 4 or 5mm around the point of maximum keratometry, K2- steepest keratometry (D), Rs- steepest radius (mm), BFS-Best Fit Sphere, Rm- Mean radius (mm), Rmin- Minimum radius (mm)