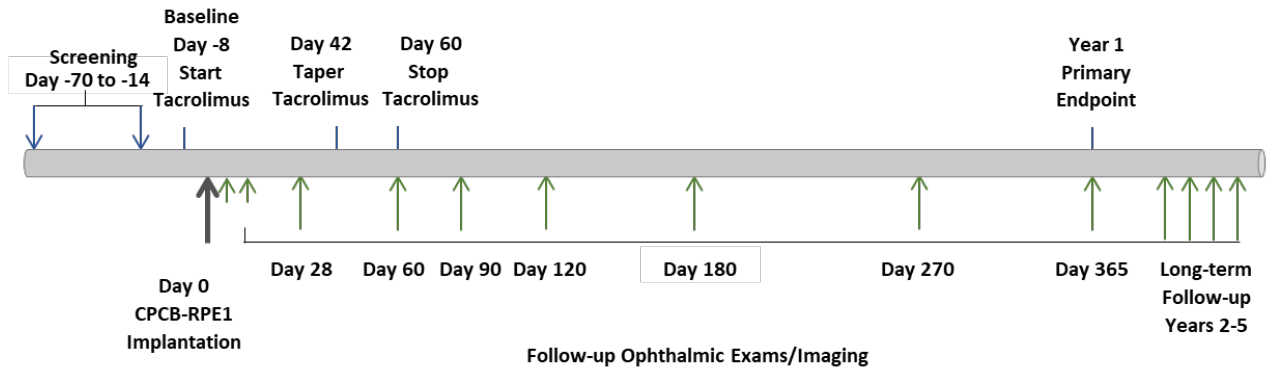


1 **Supplementary Materials TVST 21-3657**

2

3 **Supplemental Figure 1. Phase 1/2a Clinical Trial Study Schema and Timeline**



4

5 *Supplemental Figure 1 Legend*

6 Phase 1/2a Clinical Trial Study Schema and Timeline. Screening evaluations were performed

7 between day -70 and day -14. Low dose Tacrolimus immunosuppression was initiated at day -8

8 and continued through day 60 with a tapering dose regimen based on regularly assessed serum

9 trough concentrations. The CPCB-RPE1 was implanted on day 0 during a single, outpatient

10 surgery procedure. Postoperative evaluations were performed on days 7, 14, 28, 60, 90, 120,

11 180, 270 and 365. Long-term, in-person follow-up is being performed annually in years 2-5.

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13 **Supplemental Figure 2. Fixation Testing at Baseline and One-Year of Follow-up**

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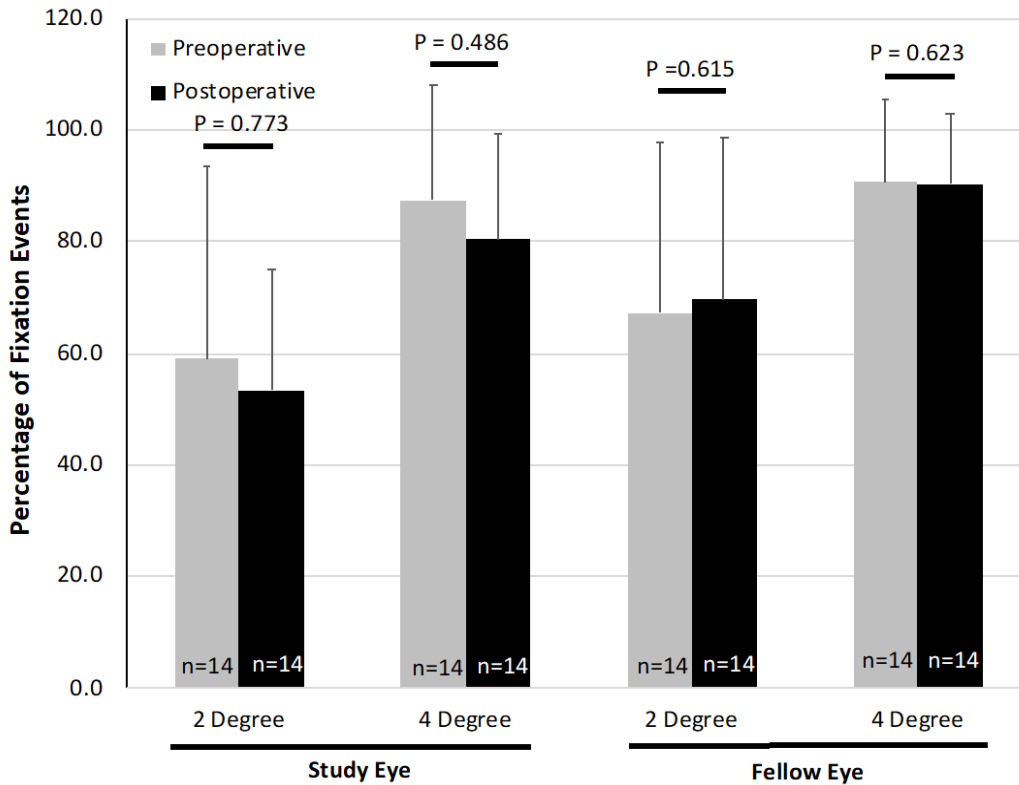
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26 *Supplemental Figure 2 Legend*

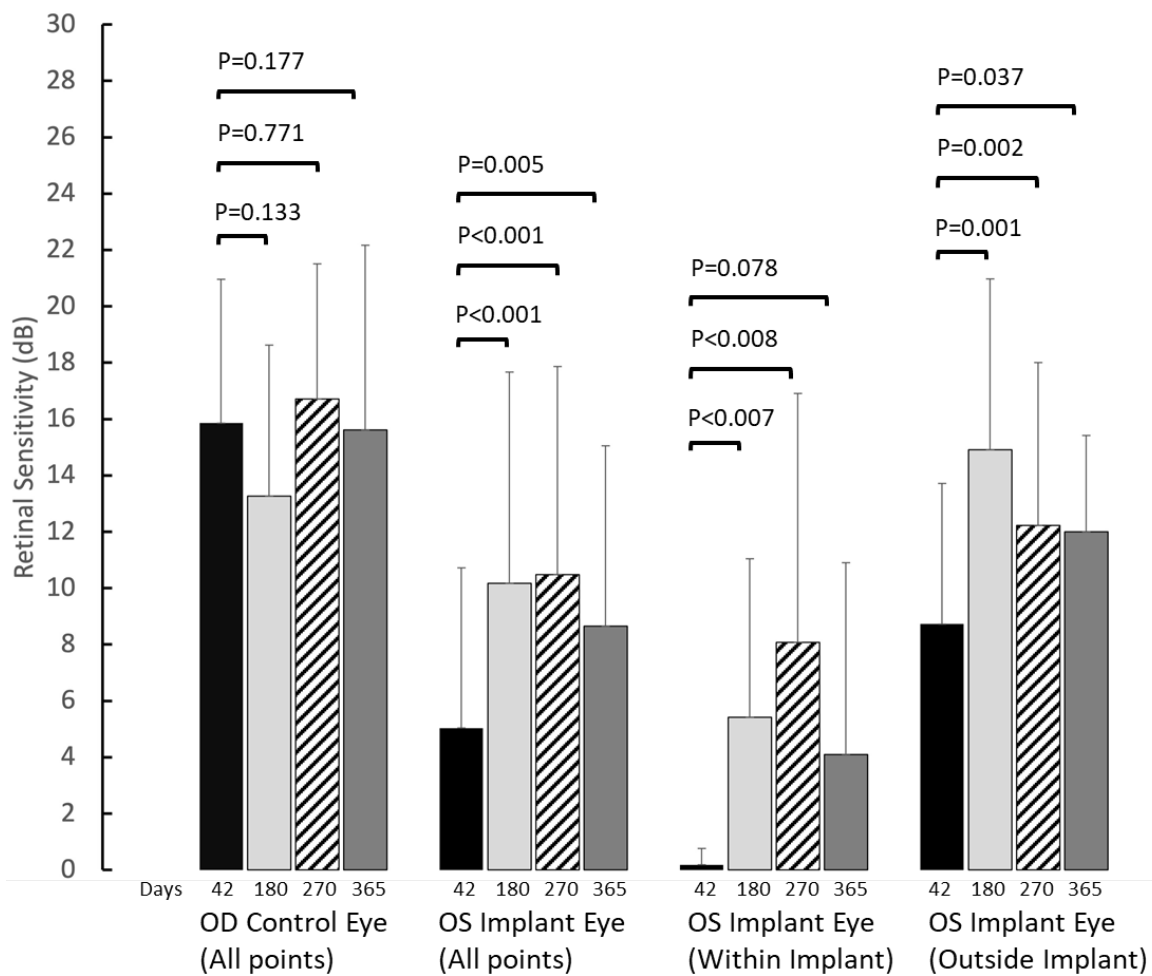
27 Fixation analyses from testing at baseline (preoperative) and 365 days postoperative follow-up
28 using central 2 and 4 degree regions centered on the preferred retinal locus. Fixation testing was
29 available for N=14 subjects excluding one subject who did not receive the implant and one
30 subject who could not make it to the day 365 study visit to complete fixation testing. There was
31 no statistically significant difference in fixation ability for either the implanted or fellow eye
32 between baseline and 365-day follow-up evaluations.

33

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35 **Supplemental Figure 3. Retinal Sensitivity Data Collected at Day 42, 180, 270 and 365**
 36 **Follow-up Visits for Subject 216**

37



39 *Supplemental Figure 3 Legend.*

40 Microperimetric retinal sensitivity data from subject 216 was available at postoperative days 42,
 41 180, 270 and 365. Mean retinal sensitivity from co-registered retinal loci that were available
 42 from all time points in the non-implanted control eye were 15.86±5.10db, 13.27±5.36dB,
 43 16.71±4.80dB, and 15.62±6.55dB (mean +/- SD) at the respective time points. In contrast, mean
 44 retinal sensitivity from all co-registered retinal loci that were available from all time points in the
 45 implanted eye were 5.04±5.69dB, 10.17±7.50dB, 10.48±7.38dB, 8.65±6.40dB (mean +/- SD) at

46 the respective time points. Mean retinal sensitivity from co-registered retinal loci located
47 immediately overlying the implant were 0.18 ± 0.59 db, 5.41 ± 5.63 dB, 8.08 ± 8.82 dB, and
48 4.10 ± 6.81 dB (mean +/- SD) at the respective time points. Mean retinal sensitivity from co-
49 registered retinal loci located outside the region of the implant were 8.72 ± 4.99 db, 14.92 ± 6.05 dB,
50 12.22 ± 5.79 dB, and 12.00 ± 3.42 dB (mean +/- SD) at the respective time points. Results of
51 pairwise, two-tailed t-tests between individual time points are illustrated in the figure.
52 Significance was assessed at the Bonferroni corrected p-value of 0.017.

53