

# STATISTICAL ANALYSIS PLAN

## Clinical Investigation of the Safety and Effectiveness of FINEVISION HP Trifocal IOL

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**Clinical Investigation of the Safety and Effectiveness of FINEVISION HP Trifocal IOL**

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**Statistical Analysis Plan Approval**

**Prepared by:**

**Reviewed by:**

**Approved by:**

Protocol PHY1903 SAP, Version 2.0

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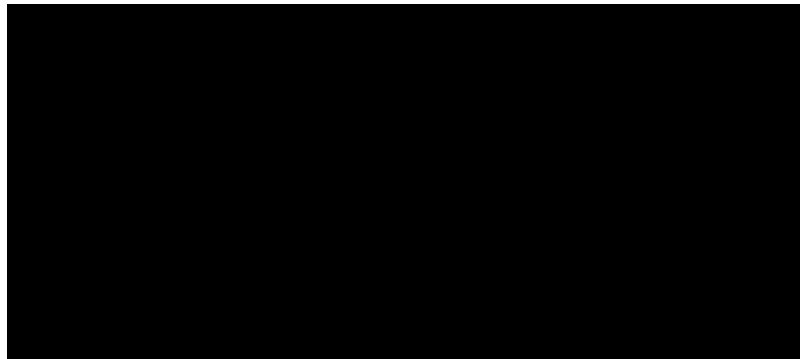
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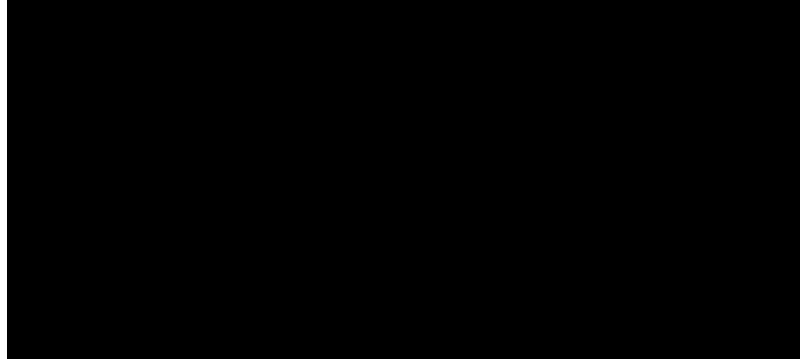
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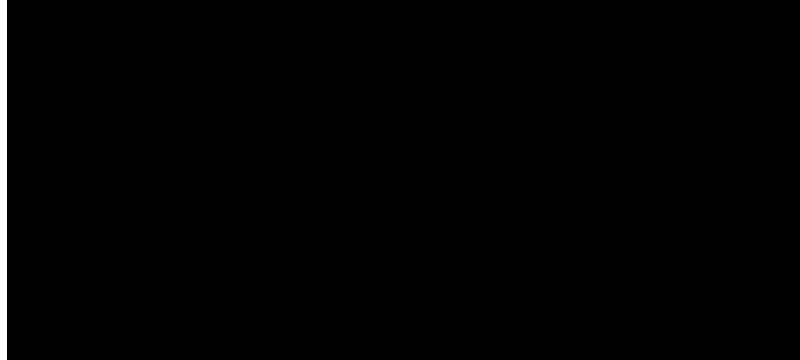
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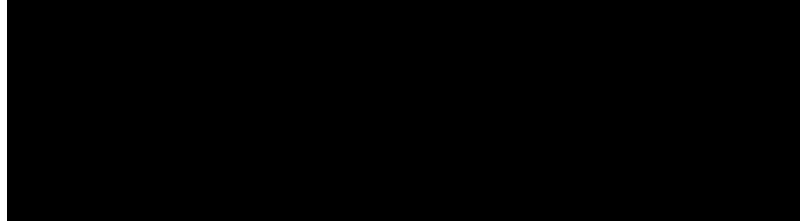
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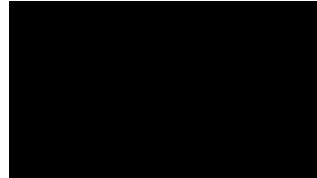
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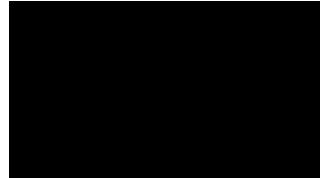




## List of Abbreviations

Abbreviation	Definition
AAO	American Academy of Ophthalmology
AAS	All-Implanted Analysis Set
AE	Adverse Event
ANSI	American National Standards Institute
ATC	Anatomical Therapeutic Chemical
BCDVA	Best Corrected Distance Visual Acuity
BCIVA	Best Corrected Intermediate Visual Acuity
BCNVA	Best Corrected Near Visual Acuity
CI	Confidence Interval
cpd	Cycles per Degree
CRF	Case Report Form
D	Diopters
DCVA	Distance Corrected Visual Acuity
DCIVA	Distance Corrected Intermediate Visual Acuity
DCNVA	Distance Corrected Near Visual Acuity
ETDRS	Early Treatment of Diabetic Retinopathy Study
HIPAA	Health Insurance Portability and Accountability Act
ICH	International Conference on Harmonisation
IOL	Intraocular Lens
IOP	Intraocular Pressure
ISO	International Organization for Standardization
ITT	Intent-to-Treat
K1	Flat Keratometry
K2	Steep Keratometry
logMAR	Logarithm of the Minimum Angle of Resolution
MAR	Missing at Random
MCMC	Markov Chain Monte Carlo
MedDRA	Medical Dictionary for Regulatory Activities
MNAR	Missing Not at Random
PCO	Posterior Capsule Opacification
PRSIQ	Patient-Reported Spectacle Independence Questionnaire
PT	Preferred Term
QoV	Quality of Vision
SAE	Serious Adverse Event
SAP	Statistical Analysis Plan
SD	Standard Deviation
SOC	System Organ Class
SPE	Safety and Performance Endpoints
SSI	Secondary Surgical Intervention
TEAE	Treatment Emergent Adverse Event
TE-SAE	Treatment-Emergent Serious Adverse Event

Abbreviation	Definition
UCDVA	Uncorrected Distance Visual Acuity
UCIVA	Uncorrected Intermediate Visual Acuity
UCNVA	Uncorrected Near Visual Acuity
WHO	World Health Organization
YAG	Yttrium Aluminum Garnet



## 1. Introduction

The purpose of this statistical analysis plan (SAP) is to describe in detail the planned analyses and reporting for protocol PHY1903, Version 1.7 dated 09FEB2024. The statistical analysis methods presented in this document will supersede the statistical analysis methods described in the clinical protocol. If additional analyses are required to supplement the planned analyses described in this SAP, they may be completed and will be identified in the clinical study report.

This SAP is being written with due consideration of the recommendations outlined in the most recent International Conference on Harmonisation (ICH) E9 Guideline entitled Guidance for Industry: Statistical Principles for Clinical Trials, the most recent ICH E9 (R1) Guideline entitled Guidance for Industry: Statistical Principles for Clinical Trials: Addendum: Estimands and Sensitivity Analysis in Clinical Trials, the most recent ICH E3 Guideline entitled Guidance for Industry: Structure and Content of Clinical Study Reports, International Standard (ISO) 11979-7:2018: Ophthalmic implants – Intraocular lenses – Part 7: Clinical investigations of intraocular lenses for the correction of aphakia, American National Standard (ANSI) Z80.12-2007 (R2017): for Ophthalmics – Multifocal Intraocular Lenses, and ANSI Z80.30-2018: for Ophthalmics – Toric Intraocular Lenses.

## 2. Study Objectives

The objective of this clinical study is to assess the visual outcomes of the FINEVISION HP Trifocal intraocular lens (IOL) compared to a monofocal IOL (AcrySof® SN60AT [REDACTED] Monofocal IOL; Alcon) in order to demonstrate comparable distance vision and superior intermediate and near vision.

### 2.1 Effectiveness Objectives

The co-primary effectiveness objectives are to:

- Demonstrate non-inferiority of FINEVISION HP trifocal IOL to the control in mean photopic monocular best corrected distance visual acuity (BCDVA) for the first operative eye at Month 6 (Visit 4)
- Demonstrate superiority of FINEVISION HP trifocal IOL to the control in mean photopic monocular distance corrected near visual acuity (DCNVA) for the first operative eye at Month 6 (Visit 4)

The secondary effectiveness objective is to:

- Demonstrate superiority of FINEVISION HP trifocal IOL to the control in mean photopic monocular DCVA at intermediate (66 cm) for the first operative eye at Month 6 (Visit 4)

The additional effectiveness objectives are to:

- Characterize all visual acuity measurements at Months 6 and 12 (Visits 4 and 5)
- Characterize monocular and binocular defocus curves at Month 6 (Visit 4)

- Evaluate spectacle independence using the Patient-Reported Spectacle Independence Questionnaire (PRSIQ) at Month 6 (Visit 4)

## 2.2 Safety Objectives

The co-primary safety objectives are to:

- Estimate the cumulative rate of secondary surgical interventions (SSIs) related to the optical properties of the IOL for the first operative eye up to Month 12 (Visit 5)
- Evaluate the mean monocular contrast sensitivity for the first operative eye, with and without glare for mesopic conditions and photopic conditions, at Month 12 (Visit 5)

The secondary safety objectives are to evaluate:

- Rates of cumulative and persistent adverse events (AEs) in first operative eyes at Month 12 (Visit 5) in comparison to the International Organization for Standardization (ISO) Safety and Performance Endpoint (SPE) rates as described in ISO 11979-7
- Visual disturbances using the Quality of Vision (QoV) questionnaire and QoV Supplemental Questions at Month 12 (Visit 5)

2.3

## 2.4 Clinical Parameters

- Projected Visual Acuity
- Target Refraction
- Axial Length
- Anterior Chamber Depth
- Keratometry
- Corneal Topography
- Manifest Refraction
- Patient-Reported Outcome Questionnaires

- Visual disturbances via the QoV and QoV Supplemental Questionnaire
- Spectacle independence via the PRSIQ
- Pupil Size (photopic and mesopic)
- Intraocular Pressure (IOP)
- Slit Lamp Examination
- IOL Tilt and Centration
- [REDACTED]
- Dilated Fundus Examination
- Posterior Capsule Assessment
- IOL observations
- Adverse Events
- Visual Acuity
- Contrast Sensitivity
- Defocus Curves

### **3. Study Variables**

#### **3.1 Primary Variables**

##### **3.1.1 PRIMARY EFFECTIVENESS VARIABLES**

The co-primary effectiveness variables are the following:

- Photopic monocular logarithm of the minimum angle of resolution (logMAR) BCDVA in first operative eyes at Month 6 (Visit 4)
- Photopic monocular logMAR near (40 cm) visual acuity with distance correction (DCNVA) in first operative eyes at Month 6 (Visit 4)

##### **3.1.2 PRIMARY SAFETY VARIABLES**

The co-primary safety variables are the following:

- Cumulative rate of SSIs related to the optical properties of the IOL in first operative eyes through Month 12 (Visit 5)
- Mean monocular distance contrast sensitivity (mesopic with and without glare at 1.5, 3, 6, and 12 cycles per degree (cpd) measured at 2.5 m, and photopic with and without glare at 3, 6, 12, and 18 cpd, measured at 2.5 m) in first operative eyes at Month 12 (Visit 5)

#### **3.2 Secondary Variables**

##### **3.2.1 SECONDARY EFFECTIVENESS VARIABLES**

The secondary effectiveness variables include the following:

- Photopic monocular logMAR intermediate (66 cm) visual acuity with distance correction (DCIVA) in first operative eyes at Month 6 (Visit 4)

### 3.2.2 SECONDARY SAFETY VARIABLES

The secondary safety variables include the following:

- Rates of cumulative and persistent AEs in first operative eyes through Month 12 (Visit 5), compared to the ISO SPE rates as described in ISO 11979-7
- Visual disturbances using the Quality of Vision (QoV) questionnaire and QoV Supplemental Questions at Month 12 (Visit 5)

### 3.3 Additional Effectiveness Variables

The additional effectiveness variables include the following:

- Photopic monocular logMAR BCDVA, [REDACTED], DCIVA (66 cm), and DCNVA in first operative eyes at Month 6 (Visit 4) and Month 12 (Visit 5)
- Mesopic monocular logMAR [REDACTED], DCIVA (66 cm), and DCNVA in first operative eyes at Month 6 (Visit 4) and Month 12 (Visit 5)
- Photopic binocular logMAR BCDVA, [REDACTED] DCIVA (66 cm), and DCNVA at Month 6 (Visit 4) and Month 12 (Visit 5)
- Mesopic binocular logMAR [REDACTED] DCIVA (66 cm), and DCNVA at Month 6 (Visit 4) and Month 12 (Visit 5)
- Photopic monocular logMAR UCDVA, [REDACTED], UCIVA (66 cm), and UCNVA in first operative eyes at Month 6 (Visit 4) and Month 12 (Visit 5)
- Photopic binocular logMAR uncorrected distance visual acuity (UCDVA), uncorrected intermediate visual acuity ([REDACTED], UCIVA (66 cm), and uncorrected near visual acuity (UCNVA) at Month 6 (Visit 4) and Month 12 (Visit 5)
- Photopic monocular logMAR best corrected intermediate visual acuity ([REDACTED]) and best corrected near visual acuity (BCNVA) in first operative eyes at Month 6 (Visit 4) and Month 12 (Visit 5)
- Photopic binocular logMAR [REDACTED] and BCNVA at Month 6 (Visit 4) and Month 12 (Visit 5)
- Monocular and binocular defocus curves at Month 6 (Visit 4)
- Spectacle Independence using the PRSIQ at Month 6 (Visit 4)

### 3.4 [REDACTED]

- [REDACTED]  
[REDACTED]



### 3.5 Statistical Hypotheses

#### 3.5.1 PRIMARY EFFECTIVENESS HYPOTHESES

##### 3.5.1.1 BEST CORRECTED DISTANCE VISUAL ACUITY

The null ( $H_{01e}$ ) and alternative ( $H_{11e}$ ) hypotheses for the first co-primary effectiveness variable, photopic monocular logMAR BCDVA in first operative eyes at Month 6 (Visit 4), are as follows:

$$H_{01e}: \mu_{t1e} - \mu_{c1e} \geq 0.10$$

$$H_{11e}: \mu_{t1e} - \mu_{c1e} < 0.10$$

where  $\mu_{t1e}$  and  $\mu_{c1e}$  denote the population mean photopic monocular logMAR BCDVA at 4 m in the first operative eyes at Month 6 (Visit 4) for the test and control IOLs, respectively.

##### 3.5.1.2 DISTANCE CORRECTED NEAR VISUAL ACUITY

The null ( $H_{02e}$ ) and alternative ( $H_{12e}$ ) hypotheses for the second co-primary effectiveness variable, photopic monocular logMAR DCNVA in first operative eyes at Month 6 (Visit 4), are as follows:

$$H_{02e}: \mu_{t2e} - \mu_{c2e} \geq 0$$

$$H_{12e}: \mu_{t2e} - \mu_{c2e} < 0$$

where  $\mu_{t2e}$  and  $\mu_{c2e}$  denote the population mean photopic monocular logMAR DCNVA at 40 cm in the first operative eyes at Month 6 (Visit 4) for the test and control IOLs, respectively.

#### 3.5.2 PRIMARY SAFETY HYPOTHESES

##### 3.5.2.1 SECONDARY SURGICAL INTERVENTIONS

The null ( $H_{01s}$ ) and alternative ( $H_{11s}$ ) hypotheses for the first co-primary safety variable, cumulative rate of SSIs related to the optical properties of the FINEVISION HP trifocal IOL through Month 12 (Visit 5), are as follows:

$$H_{01s}: p_{t1s} - p_{c1s} \geq 0.014$$

$$H_{11s}: p_{t1s} - p_{c1s} < 0.014$$

where  $p_{t1s}$  and  $p_{c1s}$  denote the population proportion of first operative eyes at Month 12 (Visit 5) requiring SSI related to the optical properties of the IOL for the test and control IOLs, respectively.

#### 3.5.3 SECONDARY EFFECTIVENESS HYPOTHESES

##### 3.5.3.1 DISTANCE CORRECTED INTERMEDIATE VISUAL ACUITY

The null ( $H_{03e}$ ) and alternative ( $H_{13e}$ ) hypotheses for the secondary effectiveness variable, photopic monocular logMAR DCIVA in first operative eyes at Month 6 (Visit 4), are as follows:

$$H_{03e}: \mu_{t3e} - \mu_{c3e} \geq 0$$

$$H_{13e}: \mu_{t3e} - \mu_{c3e} < 0$$

where  $\mu_{t3e}$  and  $\mu_{c3e}$  denote the population mean photopic monocular logMAR DCIVA at 66 cm in the first operative eyes at Month 6 (Visit 4) for the test and control IOLs, respectively.

### 3.6 Estimands

[Section 8.2](#) details the handling of missing data, including intercurrent events.

## 4. Study Design and Procedures

### 4.1 General Study Design

This study is a prospective, multicenter, randomized, active controlled, double masked pivotal study conducted at up to 24 study sites located in the United States. The study compares an investigational trifocal IOL, FINEVISION HP Trifocal IOL, and a commercially available monofocal IOL, AcrySof® SN60AT Monofocal IOL Model SN60AT (Alcon) [REDACTED] [REDACTED]. [REDACTED]

[REDACTED] The study will randomize approximately 501 adult subjects with operable cataracts in both eyes, which are eligible for phacoemulsification cataract surgery followed by IOL implantation. Potential subjects, after signature of the study informed consent document, will be screened for eligibility. Subjects who meet all protocol-specified eligibility criteria will be randomized at a 2:1 ratio to receive either the FINEVISION HP Trifocal IOL (test) or the AcrySof® SN60AT [REDACTED] Monofocal IOL (control) in both eyes. The first eye undergoing cataract surgery/IOL implantation will be the eye with the worse preoperative BCDVA. If BCDVA of both eyes is the same, the first operative eye will be the right eye. Subjects will undergo cataract surgery/IOL implantation in the second eye 7 to 30 days subsequent to the first eye surgery. Subjects will attend 5 post-operative evaluation visits for each eye where they will undergo ophthalmic examinations over a period of approximately 12 months (Table 1).

Standard clinical trial methods will be used to minimize bias, such as the use of a masked vision assessor as well as masking of subjects, standardized test procedures, common investigator training and common inclusion and exclusion criteria. [REDACTED]

[REDACTED]

[REDACTED]

Study visits will be referred to in all tables and listings as the visit followed by the expected study day range corresponding to the visit in parentheses to enable reviewers to understand the assessment timing without referring to the protocol visit schedule. Study visits pertaining to study endpoints in the SAP are presented as the study day, week, or month following by the visit number in parentheses to be consistent with the endpoint descriptions from the protocol. The two study visit naming conventions are linked by the visit

number; for example, “Month 6 (Visit 4)” and “Visit 4 (Day 150 to 180)” refer to the the scheduled study visits, eyes evaluated, and the acceptable visit window for each study visit:

**Table 1. Schedule of Study Visits**

Scheduled Visit	Eyes Evaluated	Visit Window
Pre-Operative Visit 0	Both Eyes	Day -90 to -1
Operative Visit 00A	1 <sup>st</sup> Operative Eye	Day 0
Post-Operative Visit 1A	1 <sup>st</sup> Operative Eye	Day 1 to 2 post Operative Visit 00A
Post-Operative Visit 2A	1 <sup>st</sup> Operative Eye	Day 7 to 14 post Operative Visit 00A
Post-Operative Visit 3A	1 <sup>st</sup> Operative Eye	Day 30 to 60 post Operative Visit 00A
Operative Visit 00B	2 <sup>nd</sup> Operative Eye	Day 7 to 30 post Operative Visit 00A
Post-Operative Visit 1B	2 <sup>nd</sup> Operative Eye	Day 1 to 2 post Operative Visit 00B
Post-Operative Visit 2B	2 <sup>nd</sup> Operative Eye	Day 7 to 14 post Operative Visit 00B
Post-Operative Visit 3B	2 <sup>nd</sup> Operative Eye	Day 30 to 60 post Operative Visit 00B
Post-Operative Visit 4	Both Eyes	Day 150 to 180 post Operative Visit 00A
Post-Operative Visit 5	Both Eyes	Day 360 to 420 post Operative Visit 00A

#### **4.2 Schedule of Visits and Assessments**

The schedule of visits and assessments is provided in the [Appendix](#).

#### **4.3 Study Treatments**

#### **4.4 Method of Assigning Subjects to Treatment Groups**

During the Pre-Operative Visit, subjects who sign the informed consent form will be assigned a unique 4-digit screening number, where the first two digits correspond to the site number. Subjects who meet eligibility criteria for cataract surgery/IOL implantation will be randomized in a 2:1 ratio to receive either the FINEVISION HP (Test) IOL or the AcrySof® SN60AT [REDACTED] Control) IOL in both eyes according to the randomization schedule. Randomization will be stratified by site. The randomization schedule will be created using computer-generated randomization methodology ([REDACTED] [REDACTED]) by an independent statistician who is not involved in the day-to-day conduct of the study. Randomization is to occur following the completion of informed consent and screening procedures.

The 4-digit subject ID will be used to identify subjects in all datasets and listings for this study.

#### **4.5 Masking and Unmasking**

In order to minimize bias, site personnel performing postoperative study assessments of visual performance, including manifest refraction, visual acuity, defocus curve testing, and contrast sensitivity will be masked to subject treatment assignment until after the final database lock (“masked assessors”). Any

unmasking of the masked assessor or any study subjects must be reported to t [REDACTED] should be made to have the same masked assessor perform the same postoperative measurements for an individual subject throughout the subject's study participation.

Subjects will also be masked to their assigned treatment group (test or control group). Any material that may indicate the subjects' assigned treatment (e.g., packaging, documents) should be removed from areas where subjects and/or masked personnel may see it. Unmasked personnel should further be instructed to avoid conversation and communication with masked personnel, subjects, and persons other than the study investigator regarding subjects' assignments, outcomes, clinical courses, and all other information potentially relevant to the study and its conduct.

## 5. Sample Size and Power Considerations

As specified in ANSI Z80.12:2007 (R2017) –C.4, a minimum of 300 subjects implanted with the investigational IOL and 150 subjects implanted with the comparator IOL must be available for analysis at Visit 5 (postoperative days 330-420).

To consider the potential loss of subjects between the time of enrollment and study completion, a total of approximately 501 subjects will be randomized and undergo surgery in this study. It is assumed that of approximately 501 subjects who undergo surgery, 51 subjects (10%) will be discontinued prematurely or lost to follow-up. Subjects will be randomized to receive either the investigational or comparator IOL in a 2:1 ratio. Of 501 subjects who undergo surgery, approximately 334 subjects will receive the investigational IOL, and 167 subjects will receive the comparator IOL. Expecting a screen failure rate of 7%, up to 539 subjects will be enrolled in the study to have 501 subjects randomized and scheduled for surgery.

### 5.1 Primary Effectiveness Variable Sample Sizes

#### 5.1.1 BEST CORRECTED DISTANCE VISUAL ACUITY

For effectiveness, 300 subjects (first operative eyes) randomized to FINEVISION HP IOL and 150 subjects (first operative eyes) randomized to AcrySof® SN60AT [REDACTED] IOL completing through Month 6 (Visit 4) yields greater than 99% power to reject  $H_{01e}$  in favor of  $H_{11e}$  and conclude the FINEVISION HP IOL is non-inferior to the AcrySof® SN60AT [REDACTED] IOL in BCDVA (logMAR) at Month 6 (Visit 4), using a one-sided t-test with an alpha level of 0.05 and assuming no difference in mean BCDVA between the IOLs, a common standard deviation (SD) of 0.10 logMAR, and a non-inferiority margin of 0.10 logMAR.

#### 5.1.2 DISTANCE CORRECTED NEAR VISUAL ACUITY

300 subjects (first operative eyes) randomized to FINEVISION HP IOL and 150 subjects (first operative eyes) randomized to AcrySof® SN60AT [REDACTED] IOL completing through Month 6 (Visit 4) will have more than 99% power to demonstrate superiority of FINEVISION HP IOL to AcrySof® SN60AT [REDACTED] IOL in DCNVA (reject  $H_{02e}$  in favor of  $H_{12e}$ ) using a two-sided t-test with an alpha level of 0.05 and assuming a true

difference in means of -0.10 logMAR (FINEVISION HP minus AcrySof® SN60A [REDACTED] SD of 0.14 logMAR.

## 5.2 Primary Safety Variable Sample Sizes

### 5.2.1 SECONDARY SURGICAL INTERVENTIONS

For safety (based on ANSI Z80.12) 300 first operative eyes with FINEVISION HP IOL and 150 first operative eyes with AcrySof® SN60AT [REDACTED] IOL completing through Month 12 (Visit 5) yields approximately 80% power to reject  $H_{01s}$  in favor of  $H_{11s}$  and conclude the FINEVISION HP IOL is non-inferior to the AcrySof® SN60AT [REDACTED] IOL in SSIs related to the optical properties of the IOL, using a one-sided Farrington-Manning score test with an alpha level of 0.05 and assuming the true proportions of SSIs related to the optical properties of the FINEVISION HP IOL and of the AcrySof® SN60AT [REDACTED] IOL are both equal to 0.001, and a non-inferiority margin of 0.014 (1.4%). Similarly, ISO 11979-7 specifies that a minimum of 300 subjects should complete a clinical evaluation of an IOL to obtain appropriate specificity around AE and visual acuity rates.

## 5.3 Secondary Effectiveness Variable Sample Sizes

### 5.3.1 DISTANCE CORRECTED INTERMEDIATE VISUAL ACUITY

300 subjects (first operative eyes) randomized to FINEVISION HP IOL and 150 subjects (first operative eyes) randomized to AcrySof® SN60AT [REDACTED] IOL completing through Month 6 (Visit 4) will have more than 99% power to demonstrate superiority of FINEVISION HP IOL to AcrySof® SN60AT [REDACTED] IOL in DCIVA (reject  $H_{03e}$  in favor of  $H_{13e}$ ) using a two-sided t-test with an alpha level of 0.05 and assuming a true difference in means of -0.10 logMAR (FINEVISION HP minus AcrySof® SN60AT [REDACTED]) with a common SD of 0.14 logMAR.

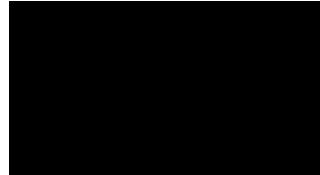
## 5.4 [REDACTED]s

### 5.4.1 [REDACTED] [REDACTED]

## 6. Data Preparation

### 6.1 Input Data

Study data will primarily be recorded on the eCRFs supplied by [REDACTED] In addition, the following study data which is not captured directly within the EDC system but is obtained from external vendors will also be included for analysis. These data sources are described in detail in data transfer agreements developed between data management and the respective external laboratory or reading center:



- IOL axis orientation

When all prerequisites for database lock have been met, including availability of all masked external data, the database will be locked. Following database lock, approval will be obtained from the Sponsor to unmask the study. Any changes to the database after data have been locked can only be made with the approval of the Sponsor in consultation with [REDACTED]

Final analysis will be carried out after the following have occurred:

- Database lock has occurred, including receipt of all final versions of external vendor data, with written authorization provided by appropriate [REDACTED] and Sponsor personnel.
- Protocol deviations have been identified and status defined (major/minor deviations).
- Analysis populations have been determined.
- Randomized treatment codes have been unmasked.

## 6.2 Output Data

Data from the EDC system and external data will be transferred to [REDACTED] Biostatistics and mapped to analysis datasets using the Analysis Data Model (ADaM). Both raw and ADaM-formatted data will be used to create the subject listings, while all tables and figures will be based on the ADaM-formatted data.

# 7. Analysis Populations

## 7.1 Intent-to-Treat Population

The Intent-to-Treat (ITT) Set will include all randomized subjects (eyes). Summaries and analyses based on the ITT Set will analyze subjects as randomized.

## 7.2 All-Implanted Analysis Set

The All-Implanted Analysis Set (AAS) will include all subjects (eyes) with successful IOL implantation with at least one postoperative visit. Summaries and analyses based on the All-Implanted Analysis Set will analyze subjects as treated.

## 7.3 Best Case Set

The Best Case Set will include subjects with all of the following characteristics:

- No major protocol deviations potentially affecting any of the primary effectiveness endpoints (BCDVA, DCNVA). Major protocol deviations that may potentially affect the primary effectiveness endpoints include, but are not limited to:
  - Inclusion of ineligible subjects
  - Implantation of incorrect IOL
  - Missed assessments for effectiveness endpoints at Month 6 (Visit 4)
  - Receipt of medication likely to interfere with visual performance at Month 6 (Visit 4)

- At least one eye implanted with a study lens
- No clinically significant preoperative ocular pathology in the first operative eye, including any of the following present prior to the Operative Visit:
  - Pseudoexfoliation of lens capsule
  - Glaucoma
  - Uveitis
  - Retinal detachment
  - Diabetic retinopathy
  - Macular degeneration
  - Amblyopia
  - Other preoperative pathologies that are likely to affect central acuity
- No macular degeneration detected at any time in the first operative eye
- No previous surgery for the correction of refractive errors in the first operative eye

Summaries and analyses based on the Best Case Set will analyze subjects as treated.

#### **7.4 Safety Set**

The Safety Set will include all subjects with at least one eye implanted with a study lens. Summaries and analyses based on the Safety Set will analyze subjects as treated.

#### **7.5 [REDACTED]**

### **8. General Statistical Considerations**

#### **8.1 Unit of Analysis**

The unit of analysis in this study will be the first operative eye for all primary effectiveness and safety summaries, and the unit of analysis will be the second operative eye and all eyes for supportive safety summaries; [REDACTED]

[REDACTED]. Both eyes of each subject will be treated during the study. For those subjects whose eyes are both determined to be eligible for cataract surgery/IOL implantations at Pre-Operative Visit 0, the eye with the worse BCDVA will be scheduled for surgery first. If BCDVA is the same for both eyes, the right eye will be implanted first. Additionally, non-ocular AEs and medical history will be presented at the subject level.



## 8.2 Missing or Inconclusive Data Handling

Missing data for primary and secondary effectiveness analyses will be imputed under the following strategies.

Nonmonotone missing data will be multiply-imputed using treatment-based Markov chain Monte Carlo (MCMC) methods; monotone missing data will be multiply imputed using regression methods assuming data as either missing at random (MAR) or missing not at random (MNAR) as described below.

### Primary Strategy

1. Withdrawal due to physician decision: missing data assumed to be MNAR. Control-based multiple imputations will be completed for superiority hypotheses and treatment-based multiple imputations will be completed for non-inferiority hypotheses. [hypothetical strategy]
2. Missing data without withdrawal or withdrawal due to reasons other than due to physician decision: missing data assumed to be MAR. Treatment-based multiple imputations will be completed. [hypothetical strategy]

### Secondary Strategy (non-inferiority hypotheses only)

1. Withdrawal due to physician decision: missing data assumed to be MNAR. Treatment-based multiple imputations, *using the worst half of the subjects who have data within the same treatment group*, will be completed. [hypothetical strategy]
2. Missing data without withdrawal or withdrawal due to reasons other than due to physician decision: missing data assumed to be MAR. Treatment-based multiple imputations will be completed. [hypothetical strategy]

Partial/missing start and end dates for AEs and concomitant medications will be imputed as follows:

Partial/missing start date:

- Dates with missing day only will be imputed as the 1st of the month unless the month and year are same as the month and year of study lens implantation, in which case missing day will be imputed as the day of study lens implantation.
- Dates with both day and month missing will be imputed as 1 Jan unless the year is same as the year of study lens implantation, in which case missing day and month will be imputed as the first day and month of study lens implantation.
- Completely missing dates will be imputed as the date of study lens implantation unless the end date is on or before the date of study lens implantation, in which case missing date will be imputed as 1 Jan of the same year as the end date.

Partial/missing end date:

- Dates with missing day only will be imputed as the last day of the month.



- Dates with both day and month missing will be imputed as 31 Dec.
- If the ongoing flag is missing or “Yes” then the date will not be imputed. If ongoing is “No” then the missing end date will be imputed as the study completion or discontinuation date.

The original dates will be displayed in data listings and the imputed dates will be used in derivations only (study day, treatment-emergence status, etc).

### **8.3 Definition of Baseline**

Baseline will refer to measurements performed during the Pre-Operative Visit (Visit 0).

### **8.4 Data Analysis Conventions**

All data analysis will be performed by [REDACTED]. Statistical programming and analyses will be performed using SAS® version 9.4 or higher. Output will be provided in rich text format (RTF) for tables and portable document format (PDF) for tables, listings, and figures using landscape orientation.

Summaries for continuous and ordinal variables will include the number of observations (n), arithmetic mean, SD, median, minimum, and maximum. Minima and maxima will be reported with the same precision as the raw values; means and medians will be presented to one additional decimal place than reported in the raw values. Standard deviations will be presented to two additional decimal places than reported in the raw values. Summaries for discrete variables will include counts and percentages. All percentages will be rounded to one decimal place (i.e., XX.X%). Differences between test and control treatment groups will be calculated as test minus control and change from baseline will be calculated as follow-up visit minus baseline.

All statistical tests will be one-sided with a significance level of 0.05 ( $\alpha = 0.05$ ), except for the two superiority tests of DCIVA and DCNVA which will be two-sided with a significance level of 0.05. Correspondingly, confidence intervals (CI) for differences between treatment groups will be two-sided at 90% or 95% confidence. All p-values will be rounded to 4 decimal places; p-values less than 0.0001 will be presented as “<0.0001”; p-values greater than 0.9999 will be presented as “>0.9999.”

Unless otherwise specified, summaries will be presented by treatment group and, where appropriate, visit. Listings will be presented by subject number, treatment group, visit/time point, and parameter as applicable.

### **8.5 Adjustments for Multiplicity**

The Type I error rate for the primary effectiveness hypothesis tests will be controlled by requiring all primary effectiveness hypothesis test results to be statistically significant to declare effectiveness success for the study. The overall Type I error rate including the primary and secondary effectiveness hypothesis tests will be controlled by a hierarchical testing strategy in which statistical inference for the secondary effectiveness endpoint will only be performed if the primary effectiveness analyses are successful.



## 9. Disposition of Subjects

The total number of screened subjects and screen failures prior to randomization will be presented. The number of subjects randomized as well as the number and percentage of subjects with at least one eye implanted with an IOL and subjects not implanted with an IOL will be presented by treatment group and overall. Inclusion in the ITT Set, All-Implanted Analysis Set, Best Case Set, Safety Set, [REDACTED]

[REDACTED] as well as study completion status will be summarized by treatment group and for all subjects using discrete summary statistics. The number of discontinuations and reasons for discontinuation will be summarized by treatment group and for all subjects using discrete summary statistics. A subject listing will be provided which includes the study exit date, study completion status, and the reason for premature study discontinuation (if applicable).

In addition, the prevalence of any protocol deviations, major protocol deviations, and minor protocol deviations will be summarized by treatment group and for all subjects using discrete summary statistics. A subject listing will be provided for protocol deviations which will include the date of the deviation, the visit at which the deviation occurred, the deviation code, the deviation description, action taken in response to the protocol deviation, and the classification of whether the deviation was judged to be major or minor in a masked review.

Subject accountability at each of the post-operative visits will be summarized overall for all subjects and by treatment group for first operative eyes and second operative eyes using discrete summary statistics, based on Table A.1 from ISO 11979-7.

Details of the study randomization, including the first eye to be implanted, randomization number, randomization date, randomized treatment, and actual treatment, will also be included within a subject listing.

A subject listing indicating whether a subject met all eligibility criteria, was a screen failure, the screen failure date (if applicable), and the eligibility criteria not met (if applicable) will also be provided.

## 10. Demographic and Baseline Disease Characteristics

### 10.1 Demographic Variables

The demographic variables collected in this study include age, sex, ethnicity, and race. Subjects who record more than one race will be grouped into a single category denoted as multi-racial. Demographic variables will be summarized for the AAS.

Age (years) will be summarized by treatment group and for all subjects using continuous summary statistics. Age will also be categorized as follows: < 65 years and  $\geq$  65 years. Age will be reported in years and calculated using the following formula:

$$\text{Age} = (\text{Informed Consent Date} - \text{Date of Birth}) / 365.25, \text{ truncated as an integer}$$

Age category, sex, ethnicity, and race will be summarized by treatment group discrete summary statistics.

A subject listing that includes all demographic variables will be provided.

## **10.2 Baseline Disease Characteristics**

Baseline clinical parameters will include potential visual acuity (logMAR), target refraction sphere (D), target refraction cylinder (D), target refraction axis (degrees), IOL power calculation (D), axial length (mm), and anterior chamber depth (mm). Baseline clinical parameters will be summarized at the eye level for the AAS by treatment group and for all subjects using continuous summary statistics.

Subject listings for the baseline clinical parameters above, as well as corneal topography and urine pregnancy test results, will be provided.

## **11. Medical History and Concomitant Medications**

### **11.1 Medical History**

Medical history will be coded using Medical Dictionary for Regulatory Activities (MedDRA), Version 24.1.

Ocular and non-ocular medical history will be summarized separately at the subject level by treatment group and overall for all subjects using discrete summary statistics for the Safety Set. If a subject reports the same preferred term (PT) multiple times within the same system organ class (SOC), that PT will only be reported once within that SOC. As with the PT, if a subject reports multiple conditions within the same SOC, that SOC will only be reported once.

Separate listings of ocular and non-ocular medical history will be presented. Ophthalmic pathology of cataract will be excluded from the data listing.

### **11.2 Prior and Concomitant Medications**

Prior and concomitant medications will be coded using World Health Organization Drug Dictionary (WHODrug) Global (B3, September 2021) and summarized to the therapeutic drug class (Anatomical Therapeutic Chemical [ATC] 4 classification) and preferred name. If the ATC 4 classification is not provided, then the next highest classification that is provided in the coding dictionary will be used. The preferred name will be defined as the active ingredient; if the active ingredient is not provided or includes more than two ingredients (e.g., multivitamins), then the drug name will be summarized as the preferred name. Prior to database lock, any uncoded terms will be summarized under the ATC classification and preferred name of “Uncoded.”

Prior medications for a respective eye are defined as those medications that start and stop before the operation for the respective eye. Concomitant medications for a respective eye are defined as those medications listed as having been taken (1) prior to the respective eye IOL implantation and continuing for

any period of time following the respective eye implantation or (2) at any time following IOL implantation.

Ocular and non-ocular concomitant medications will be summarized separately at the subject level by treatment group using discrete summary statistics for the Safety Set. Subjects may have more than one medication per ATC text. At each level of subject summarization, a subject will be counted once if he/she reports one or more medications. Percentages will be based on the number of subjects in each treatment group. In the summaries, ATC classes and preferred names within an ATC class will be presented in alphabetical order. Listings of concomitant medications will be generated separately for ocular and non-ocular data.

## **12. Operative Procedures**

Operative procedure data will be recorded at the operative visit for each eye. The operative parameters include incision size (mm), incision axis (degrees), incision type (corneal, limbal, other), lens extraction method (phacoemulsification, other), capsulotomy shape (continuous curvilinear capsulorhexis, other), position of the haptics (in the bag, partially in the bag, in the sulcus, uncertain), IOL power, whether the subject experienced any intraoperative complications, and whether any SSIs were performed.

Operative procedure variables will be summarized at the eye level by treatment group using discrete or continuous summary statistics, as appropriate, for the Safety Set. A listing of the operative variables will also be provided for each subject for each eye.

## **13. Effectiveness Analyses**

### **13.1 Primary Analyses**

The co-primary effectiveness endpoints are:

- Photopic monocular logMAR best corrected distance visual acuity (BCDVA) in first operative eyes at Month 6 (Visit 4)
- Photopic monocular logMAR near visual acuity with distance correction (DCNVA) in first operative eyes at Month 6 (Visit 4)

The primary analyses of the primary effectiveness endpoints will be based on the AAS with intercurrent events handled using the primary strategy presented in [Section 8.2](#).

If a subject has no observed data for an endpoint at any of the scheduled visits (e.g. subject exits study prior to Month 1 [Visit 3A] study visit and therefore has no DCNVA data), the endpoint will be imputed at the earliest scheduled visit as a normal random variable with mean equal to the respective treatment group mean and SD equal to the respective treatment group SD based on observed data for the respective treatment group at the earliest scheduled visit for that endpoint. If the imputed value is less than the minimum observed value within the respective treatment group or greater than the maximum observed

value within the respective treatment group, the imputed value will be set equal to the minimum or maximum value, respectively. This initial imputation procedure will be performed for BCDVA using SAS® code similar to the code below:

```

proc means data = indata noprint;
  var base;
  by trt;
  output out = A3_stats(drop = _TYPE_ _FREQ_) mean = mean std
= sd min = min max = max;
run;

data indata(drop = mean sd min max Z);
  call streaminit(938428);
  merge indata indata_stats;
  by trt;

  if cmiss(base, aval_v2, aval_v3, aval_v4, aval_v5) = 5 then
do;
  Z = round(rand('Normal', mean, sd), 0.02);
  if Z > max then Z = max;
  else if Z < min then Z = min;
  base = Z;
end;
run;

```

where

- trt = treatment group coded as 1 for the test IOL and 2 for the control IOL
- base = BCDVA at baseline
- aval\_v<sub>i</sub> = BCDVA at Visit i, i = 2, 3, 4, and 5.

Similar code as above will be used for DCNVA with "base" replace by "aval\_v3" in the means procedure block of code and the data step cmiss if-condition updated to "if cmiss(aval\_v3, aval\_v4, aval\_v5) = 3" and clause "base = Z" updated to "aval\_v3 = Z".

Non-monotone missing data for BCDVA will first be multiply imputed using treatment-based MCMC methodology similarly as in the SAS® code below:

```

/* Impute non-monotone missing data using treatment-based MCMC
for the first operative eye*/
proc mi data = indata out = mcmc nimpute = 30 seed = 891567 round
= 0.02;
  by trt;
  mcmc impute = monotone;
  var base aval_v2 aval_v3 aval_v4 aval_v5;
run;

```

Similar code as above will be used for DCNVA with the variables in the var statement updated to "aval\_v3 aval\_v4 aval\_v5".

Monotone missing data will be imputed for BCDVA using treatment-based re

BCDVA using SAS® code similar to the code below:

```
/* Treatment-based monotone regression imputation */
proc mi data = mcmc out = mi n impute = 1 seed = 891568 round =
0.02;
  by trt _imputation_;
  var base aval_v2 aval_v3 aval_v4 aval_v5;
  MONOTONE REG(aval_v2 = base);
  MONOTONE REG(aval_v3 = aval_v2 base);
  MONOTONE REG(aval_v4 = aval_v3 aval_v2 base);
  MONOTONE REG(aval_v5 = aval_v4 aval_v3 aval_v2 base);

run;
```

After imputation of non-monotone missing data, the DCNVA data will be partitioned into a dataset containing missing data due to withdrawal due to physician decision and a data set containing the remaining DCNVA data, including missing data due to any other reason:

```
/* Split mcmc into cases where missing is due to withdrawal due
to physician decision or other */
data mcmc1;
  set mcmc (where = (DSDECOD ne "Physician Decision"));
run;

data mcmc2;
  set mcmc (where = (DSDECOD = "Physician Decision"));
run;
```

where

- DSDECOD = reason for discontinuation.

The monotone missing data not due to withdrawal due to physician decision will be imputed using treatment-based regression methodology using SAS® code similar to the code below:

```
/* Impute missing data not due to Physician Decision using
treatment-based regression methodology */
proc sort data = mcmc1;
  by PARAMCD &trt. _imputation_;
run;

proc mi data = mcmc1 out = mil n impute = 1 seed = 891568 round =
0.02;
  by PARAMCD &trt. _Imputation_;
  var aval_v3 aval_v4 aval_v5;
  monotone reg(aval_v4 = aval_v3);
  monotone reg(aval_v5 = aval_v4 aval_v3);

run;
```

The resulting imputed data will then be combined with the missing data due to withdrawal due to physician decision. If there is any missing data due to withdrawal due to physician decision, it will be imputed using control-based regression methodology using SAS® code similar to the code below:



```

data mcmc2;
  set mil mcmc2;
run;

proc sort data = mcmc2;
  by _imputation_;
run;

/* Control-based monotone regression imputation */
proc mi data = mcmc out = mi nimpute = 1 seed = 891568 round =
0.02;
  by _imputation_;
  class trt;
  var base aval_v3 aval_v4 aval_v5;
  MONOTONE REG(aval_v4 = aval_v3);
  MONOTONE REG(aval_v5 = aval_v4 aval_v3);
  MNAR MODEL(aval_v4 aval_v5 / MODELOBS=(trt= "2"));
run;

```

Thirty complete datasets will be generated from the above code.

A two-sample t-test will be performed for each imputed dataset and the results of the t-tests will be pooled using PROC MIANALYZE. SAS® code similar to the code below will be used to perform the primary analysis for each imputed dataset and then combine inferences across the imputed datasets:

```

proc sort data = mi;
  by _imputation_;
run;

ods output statistics = stat1(where = (Method ne
"Satterthwaite"));
proc ttest data = mi alpha = &alpha;
  by _imputation_;
  class trt;
  var aval_v4;
run;

proc sort data = stat1;
  by class _imputation_;
run;

ods output ParameterEstimates = pes;
proc mianalyze data = stat1 alpha = &alpha theta0 = &theta0;
  modeleffects Mean;
  stderr STDERR;
  by class;
run;

```

where

- $\&\alpha$ lpha = the significance level; 0.10 for BCDVA and 0.05 for DCNVA

- $\theta_0$  = the assumed difference in population means under the null hypothesis, 0.10 for BCDVA and 0 for DCNVA

After pooling the statistical analyses across the imputation datasets, the output dataset resulting from PROC MIANALYZE will contain means and standard errors for each treatment group and for the difference in treatment groups (test minus control), a CI for the treatment group difference (90% CI for BCDVA and 95% CI for DCNVA), and a two-sided p-value testing for whether the difference in treatment group means equals 0. These statistics from PROC MIANALYZE will comprise the primary effectiveness analyses for the primary effectiveness endpoints. If the upper confidence limit of the 90% confidence interval for the difference in treatment group means for BCDVA at Month 6 (Visit 4) is less than 0.1, then  $H_{0e}$  will be rejected in favor of  $H_{1e}$ , and the FINEVISION HP IOL will be considered to be statistically non-inferior to the AcrySof® SN60AT [REDACTED] IOL in BCDVA. If the two-sided p-value < 0.05 in favor of FINEVISION HP IOL for DCNVA at Month 6 (Visit 4), then the FINEVISION HP IOL will be considered to be statistically superior to the AcrySof® SN60AT [REDACTED] IOL in DCNVA.

The study will be considered a success only if both primary effectiveness endpoints are met.

### 13.1.1 SENSITIVITY ANALYSIS I

The sensitivity analysis described in this section will only be performed for BCDVA in first operative eyes at Month 6 (Visit 4) for the AAS. The handling of intercurrent events will be updated as follows:

1. Withdrawal due to physician decision: missing data assumed to be MNAR. Treatment-based multiple imputations, *using the worst half of the subjects who have data within the same treatment group*, will be completed for non-inferiority hypotheses. [hypothetical strategy]
2. Missing data without withdrawal or withdrawal due to reasons other than due to physician decision: missing data assumed to be MAR. Treatment-based multiple imputations will be completed. [hypothetical strategy]

SAS® code similar to the code below will be used to identify the worst half of subjects for BCDVA by treatment group at Month 6 (Visit 4):

```

proc sort data = indata;
  by trt;
run;

proc means data = indata noprint;
  var aval_v4;
  by trt;
  output out = v4_median(drop = _TYPE_ _FREQ_) median =
median_v4;
run;

data indata(drop = median_v4);
  merge indata v4_median;
  by trt;

```



```

  if aval_v4 >= median_v4 then worse_median_flg = "Y";
  else worse_median_flg = "N";
run;

```

If a subject has no observed BCDVA data at any of the scheduled visits, BCDVA will be imputed at the earliest scheduled visit as described in [Section 13.1](#). Non-monotone missing data will first be imputed using treatment-based MCMC methodology as described in [Section 13.1](#).

After imputation of non-monotone missing data, the BCDVA data will be partitioned into a dataset containing missing data due to withdrawal due to physician decision and a data set containing the remaining BCDVA data, including missing data due to any other reason:

```

/* Split mcmc into cases where missing is due to withdrawal due
to physician decision or other */
data mcmc1;
  set mcmc (where = (DSDECOD ne "Physician Decision"));
run;

data mcmc2;
  set mcmc (where = (DSDECOD = "Physician Decision"));
run;

```

where

- DSDECOD = reason for discontinuation.

The monotone missing data not due to withdrawal due to physician decision will be imputed using treatment-based regression methodology using SAS® code similar to the code below:

```

/* Impute missing data not due to Physician Decision using
treatment-based regression methodology */
proc sort data = mcmc1;
  by trt _imputation_;
run;

proc mi data = mcmc1 out = mil nimpute = 1 seed = 891568 round =
0.02;
  by trt _Imputation_;
  var base aval_v2 aval_v3 aval_v4 aval_v5;
  monotone reg(aval_v2 = base);
  monotone reg(aval_v3 = aval_v2 base);
  monotone reg(aval_v4 = aval_v3 aval_v2 base);
  monotone reg(aval_v5 = aval_v4 aval_v3 aval_v2 base);
run;

```

The resulting imputed data will then be combined with the missing data due to withdrawal due to physician decision. If there is any missing data due to withdrawal due to physician decision, it will be imputed using treatment-based regression methodology, using the worst half of the subjects who have data within the same treatment group, for BCDVA using SAS® code similar to the code below:

```

/* Impute missing data due to Physician Decision
median subjects using regression methodology */
data mcmc2;
  set mil mcmc2;
run;

proc sort data = mcmc2;
  by trt _imputation_;
run;

proc mi data = mcmc2 out = mi2 nimpute = 1 seed = 891568 round =
0.02;
  by trt _imputation_;
  class worse_median_fl;
  var base aval_v2 aval_v3 aval_v4 aval_v5;
  MONOTONE REG(aval_v2 = base);
  MONOTONE REG(aval_v3 = aval_v2 base);
  MONOTONE REG(aval_v4 = aval_v3 aval_v2 base);
  MONOTONE REG(aval_v5 = aval_v4 aval_v3 aval_v2 base);
  MNAR MODEL(aval_v2 aval_v3 aval_v4 aval_v5 /
  MODELOBS=(worse_median_fl = "Y"));
run;

```

where

- worse\_median\_fl = Y if the BCDVA at Month 6 (Visit 4) is greater than or equal to than the treatment group median

The imputed datasets will be analyzed and pooled using the same methodology and summarized similarly as the primary analyses.

### 13.1.2 SENSITIVITY ANALYSIS II

The primary analyses will be repeated for the ITT Set using the primary multiple imputation strategy as specified in [Section 13.1](#) for both primary effectiveness endpoints.

For subjects from the ITT Set who are not implanted with an IOL, the first operative eye will be imputed using the same criteria for selecting the first operative eye as described in [Section 8.1](#).

### 13.1.3 SENSITIVITY ANALYSIS III

The primary analyses will be repeated for the Best Case Set using the primary multiple imputation strategy as specified in [Section 13.1](#) for both primary effectiveness endpoints.



### 13.1.4 SUBGROUP ANALYSES

As subgroup analyses, the primary analyses of photopic monocular BCDVA and DCNVA will be repeated for first operative eyes from the AAS at Month 6 (Visit 4) for the following photopic pupil size subgroups: small (< 2.5 mm), medium (2.5 to  $\leq$  4mm), and large (> 4 mm). Photopic pupil size at Month 6 (Visit 4) will be used to create the pupil size subgroups.

### 13.1.5 POOLABILITY ANALYSES

As poolability analyses, photopic monocular BCDVA and DCNVA in first operative eyes from the AAS observed data at Month 6 (Visit 4) will be summarized by treatment group and site using continuous summary statistics. Additionally, linear models will be fit with explanatory variables for site, treatment group, and site by treatment group interaction, including sites with 6 or more subjects. Sites with fewer than 6 subjects will not be arbitrarily pooled into a single larger site to be included in this model. If the site by treatment interaction is significant at a two-sided alpha = 0.15, then inferential statistics will be presented by site.

SAS® code similar to the code below will be used for the by site poolability analyses.

```
ods output tests3 = atest(where = (find(Effect, "SITEID") > 0)) lsmeans =
lsmeans diff = lsmean_diffs(where = (SITEID = _SITEID));
proc mixed data = indata;
  class trt SITEID;
  model AVAL = trt SITEID trt * SITEID / solution;
  lsmeans trt * SITEID / cl pdiff alpha = alpha;
run;

data lsmeans;
  set lsmeans;
  lsmean = estimate;
  se = StdErr;
run;

data lsmean_diffs;
  set lsmean_diffs;
  mean_diff = estimate;
  mean_diff_se = StdErr;
  mean_diff_ci_lcl = Lower;
  mean_diff_ci_ucl = Upper;
  test_stat = (estimate - theta0) / StdErr;
  pval = 2 * (1 - cdf("T", abs(test_stat), DF));
run;
```

where

- alpha = the type I error probability; 0.10 for BCDVA and alpha = 0.05 for DCNVA
- theta0 = value for difference in treatment group means under the null hypothesis; 0.10 for BCDVA and 0 for DCNVA



### 13.2 Secondary Analyses

The secondary effectiveness endpoint is:

- Photopic monocular logMAR intermediate (66 cm) visual acuity with distance correction (DCIVA) in first operative eyes at Month 6 (Visit 4)

The secondary effectiveness endpoint will be based on the AAS. The primary analysis for DCNVA will be repeated for photopic DCIVA (66 cm) in first operative eyes at Month 6 (Visit 4). If the two-sided p-value < 0.05 in favor of FINEVISION HP IOL for DCIVA, then the FINEVISION HP IOL will be considered to be statistically superior to the AcrySof® SN60AT [REDACTED] IOL in DCIVA.

Inference will be conducted for the secondary effectiveness analysis only if all primary effectiveness endpoints are met.

The sensitivity analyses for DCNVA will also be repeated for photopic DCIVA (66 cm) in first operative eyes at Month 6 (Visit 4).

Subgroup and poolability analyses of photopic monocular DCIVA (66 cm) in first operative eyes from the AAS at Month 6 (Visit 4) will be performed similarly as those for DCNVA.

## 14. Additional Effectiveness Analyses

All additional effectiveness analyses will be based on the AAS observed data unless otherwise stated.

### 14.1 Visual Acuity Analyses

The visual acuity exploratory endpoints are as follows:

- Photopic monocular logMAR BCDVA, [REDACTED] DCIVA (66 cm), and DCNVA in first operative eyes at all applicable visits
- Mesopic monocular logMAR [REDACTED], DCIVA (66 cm), and DCNVA in first operative eyes at all applicable visits
- Photopic binocular logMAR BCDVA, [REDACTED] DCIVA (66 cm), and DCNVA at all applicable visits
- Mesopic binocular logMAR [REDACTED] DCIVA (66 cm), and DCNVA at all applicable visits
- Photopic monocular logMAR UCDVA, [REDACTED], UCIVA (66 cm), and UCNVA in first operative eyes at all applicable visits
- Photopic binocular logMAR UCDVA, [REDACTED], UCIVA (66 cm), and UCNVA at all applicable visits
- Photopic monocular logMAR [REDACTED] and BCNVA in first operative eyes at all applicable visits
- Photopic binocular logMAR [REDACTED] and BCNVA at all applicable visits

The above endpoints will be summarized by treatment group and visit using continuous descriptive statistics. Additionally, photopic monocular logMAR BCDVA, DCNVA, and DCIVA (66 cm) in first operative eyes at Month 12 (Visit 5) will be analyzed by repeating the primary and secondary effectiveness analyses as appropriate.

A visual acuity variable will be summarized categorically by logMAR score within the following visual acuity ranges:

- 0.00 logMAR or better
- 0.10 logMAR or better
- 0.20 logMAR or better
- 0.30 logMAR or better
- Worse than 0.30 logMAR

A visual acuity variable will be summarized categorically by Snellen score within the following visual acuity ranges:

- 20/20<sup>-2</sup> or better ( $\leq 0.04$  logMAR)
- 20/25<sup>-2</sup> or better ( $\leq 0.14$  logMAR)
- 20/32<sup>-2</sup> or better ( $\leq 0.24$  logMAR)
- 20/40<sup>-2</sup> or better ( $\leq 0.34$  logMAR)
- Worse than 20/40<sup>-2</sup> ( $> 0.34$  logMAR)

The frequency and percentage of subjects achieving the above logMAR visual acuity thresholds for all endpoints listed above will be presented by treatment group and visit. Similar analyses will also be performed using Snellen visual acuity thresholds.

The frequency and percentage of subjects achieving the above logMAR visual acuity threshold at all distances for photopic binocular logMAR UCDVA, UCIVA (66 cm), and UCNVA will also be presented. Similar analyses will also be performed using Snellen visual acuity thresholds.

## 14.2 Defocus Curves

Defocus curve testing will be performed under photopic conditions at a test distance of 4 m at Month 6 (Visit 4) and Month 12 (Visit 5). [REDACTED]

[REDACTED] Each subject will be defocused with spherical lenses from +2.00 D through -4.00 D over the subject's manifest distance correction in -0.50 D increments.

Monocular and binocular defocus curves from Month 6 (Visit 4) and Month 12 (Visit 5) based on the Best Case Set will be summarized by treatment group and visit utilizing continuous descriptive statistics. Defocus curve summaries by treatment group will also be presented for each of the following post-operative photopic pupil size groups:



- Small (< 2.5mm)
- Medium (2.5mm to  $\leq$  4mm)
- Large (> 4mm)

For summaries of binocular defocus curves by pupil size, the average pupil size computed over both eyes will be used to determine the pupil size subgroup.

The defocus curve means will be plotted for each treatment group and for each pupil size group with error bars representing one standard deviation.

### **14.3 Spectacle Independence**

The Patient-Reported Spectacle Independence Questionnaire (PRSIQ) will be used to assess subjective spectacle independence at Month 6 (Visit 4). For distance vision (5 or more feet away), intermediate vision (1.5 to 5 feet away), and near vision (less than 1.5 feet away), the PRSIQ asks the subject the following questions:

- During the last 7 days, did you need glasses or contacts?
- During the last 7 days, how often did you wear glasses or contacts?
- During the last 7 days, were you able to function comfortably without glasses or contacts?

The response options for the “need” item are “Yes” (1) and “No” (2). The response options for the “wear” and “function” items are “All of the time” (1), “Most of the time” (2), “Some of the time” (3), “A little of the time” (4), and “None of the time” (5).

The responses of subjects for each item will be summarized by treatment group using discrete summary statistics.

## **15. Safety Analyses**

All safety analyses will be conducted using the Safety Set unless otherwise stated.

### **15.1 Primary Safety Analyses**

The co-primary safety endpoints are:

- Cumulative rate of SSIs related to the optical properties of the IOL in first operative eyes through Month 12 (Visit 5)
- Mean monocular distance contrast sensitivity (mesopic with and without glare at 1.5, 3, 6, and 12 cpd measured at 2.5m, and photopic with and without glare at 3, 6, 12, and 18 cpd, measured at 2.5 m) in first operative eyes at Month 12 (Visit 5)

The analyses of co-primary safety variables will be based on first operative eyes and repeated as supportive analyses using second operative eyes as well as all operative eyes.

Secondary surgical interventions related to the optical properties of the IOL will be evaluated using discrete summary statistics. Noninferiority of FINEVISION HP IOL compared to AcrySof® SN60AT [REDACTED] IOL in the proportions of first operative eyes with secondary surgical interventions related to the optical properties of the IOL will be evaluated using two-sided 90% Farrington method CIs around the difference in proportions between the FINEVISION HP IOL and AcrySof® SN60AT [REDACTED] IOL. If the upper limit of the CI is less than 0.014 (1.4%), then  $H_{01s}$  will be rejected in favor of  $H_{11s}$ , and the FINEVISION HP IOL will be considered statistically non-inferior to the AcrySof® SN60AT [REDACTED] IOL in rate of SSIs related to optical properties of the IOL.

SAS® code similar to the code below will be used to compute the Farrington CIs:

```
proc freq data = indata;
  table TRTAN * resp / nocol nopercent riskdiff(noninf margin = 0.014
method = fm column = 1) alpha = 0.05;
  ods output CrossTabFreqs = freqs(where = (resp = "Y")) PdiffNoninf =
cis;
run;

data freqs;
  set freqs;
  freq = Frequency;
  pct = RowPercent;
run;

/* Adjust CIs to convert limits to percentages and convert diff estimate, CI
for p_control - p_test to diff estimate, CI for p_test - p_control */
data cis;
  set cis;
  diff_pct = -100*Estimate;
  diff_ci_LCL = -100*UpperCL;
  diff_ci_UCL = -100*LowerCL;
run;
```

where

- TRTAN equals 1 for the test IOL (FINEVISION HP IOL) and 2 for the control IOL (AcrySof® SN60AT [REDACTED] IOL)
- resp equals "Y" if a subject has any SSIs related to the optical properties of the IOL or "N" if a subject has no SSIs related to the optical properties of the IOL.

Monocular best-corrected distance contrast sensitivity (mesopic with and without glare at 1.5, 3, 6, and 12 cpd measured at 2.5 m, and photopic with and without glare at 3, 6, 12, and 18 cpd, measured at 2.5 m) in first operative eyes based on the Best Case Set will be summarized by treatment group using continuous summary statistics. The treatment group difference (mean Test group contrast sensitivity minus mean Control group contrast sensitivity) in log units will be presented by testing condition and frequency. Additionally, for each testing condition and frequency, the 5th percentile for the control group log contrast sensitivity will be determined, and the number and percentage of subjects in the investigational arm who have achieved a log contrast sensitivity lower than this value will be reported.

As a subgroup analysis, the primary analysis of the cumulative rate of SSIs related to the IOL will be repeated for the following Pre-Operative Visit photopic pupil size subgroups: small (< 2.5 mm), medium (2.5 to ≤ 4mm), and large (> 4 mm). Similar subgroup analyses will be performed for mean monocular best-corrected distance contrast sensitivity at Month 12 (Visit 5) with subgroups based on photopic pupil size at Month 12 (Visit 5) for photopic lighting conditions or mesopic pupil size at Month 12 (Visit 5) for mesopic lighting conditions.

As poolability analyses, the co-primary safety endpoints will be summarized by treatment group and site using discrete or continuous summary statistics as appropriate.

## 15.2 Secondary Safety Analyses

The secondary safety endpoints include the following:

- Rates of cumulative and persistent AEs in first operative eyes through Month 12 (Visit 5), compared to the ISO SPE rates as described in ISO 11979-7
- Visual disturbances using the QoV questionnaire and QoV Supplemental Questions at Month 12 (Visit 5)

The ISO defines cumulative adverse events as the “total number of adverse events that have occurred at any time up to a specified time point post-operatively” and a persistent adverse event as an “adverse event that is present at the conclusion of a clinical investigation”.<sup>1</sup> Cumulative and persistent AEs from ISO 11979-7 Table E.2 will be summarized by AE and treatment group using discrete summary statistics separately for first operative eyes, second operative eyes, and all operative eyes. Cumulative AEs which occur at any time during the study will be counted. If a subject experiences a specific cumulative AE more than once during the study, they will only be counted once for that specific cumulative AE. Persistent AEs which are classified as ongoing at the time of study exit will be counted, and a subject will only be counted at most one time for a specific persistent AE.

The p-values from one-sided exact binomial tests comparing the observed AE rates to the SPE rates from Table E.2 will also be presented by treatment group. Additionally, cumulative and persistent adverse events will be summarized separately by age group (< 65 years vs. ≥ 65 years) and by site for first operative eyes, second operative eyes, and all operative eyes. The binomial test p-values will be computed as in the SAS® code below:

```
data ae_tbl;
  set ae_tbl;
  percent = 100*FREQ/N;
  pval = 1 - cdf('BINOMIAL', FREQ - 1, spe/100, N);
run;
```

where

- FREQ = number of unique eyes for each AE from ISO 11979-7 Table E.2



- $N$  = number of eyes in the Safety Set for each treatment group
- $spe$  = SPE rate for each AE from ISO 11979-7 Table E.2

The Quality of Vision (QoV) questionnaire will be used to assess subjective visual disturbances reported by subjects receiving IOLs. The QoV asks the subject to rate the frequency, severity, and degree of bothersomeness for 10 items/visual disturbances in their everyday life based on the past week. The rating scales for frequency, severity, and degree of bothersomeness are:

- Frequency: 0 (Never), 1 (Occasionally), 2 (Quite Often), 3 (Very Often)
- Severity: 0 (Not at all), 1 (Mild), 2 (Moderate), 3 (Severe)
- Bothersome: 0 (Not at all), 1 (A little), 2 (Quite), 3 (Very)

An example set of questions for the glare item/visual disturbance is provided below:

a) How often do you experience glare?  
Never    Occasionally    Quite often    Very often

b) How severe is the glare?  
Not at all    Mild    Moderate    Severe

c) How bothersome is the glare?  
Not at all    A little    Quite    Very

Scores for each subscale (frequency, severity, degree of bothersomeness) ranging from 0 to 100, with higher scores indicating a higher degree of visual disturbances, will be computed using a Rasch scoring algorithm which utilizes data from the original validation of the QoV.<sup>2</sup>

The QoV Supplemental Questions will include the following questions:

1. How much trouble do you have with distance vision outdoors in daylight?
2. How much trouble do you have with distance vision outdoors at night or in dark situations?
3. How much trouble do you have with distance vision when indoors?
4. How much trouble do you have with near vision outdoors in daylight?
5. How much trouble do you have with near vision outdoors at night or in dark situations?
6. How much trouble do you have with near vision when indoors?
7. How much trouble do you have with blurred vision when looking at things in the distance?
8. How much trouble do you have with blurred vision when looking at things that are near?
9. How much trouble do you have with night vision?
10. How much trouble do you have with night driving?
11. How much trouble do you have with color disturbances?
12. If given the opportunity, would you again elect to be implanted with the same intraocular lens (IOL)?

The response options for questions 1 to 11 from the QoV Supplemental Questions will be "none," "a little," or "a lot." For question 12 regarding satisfaction with the IOL, responses of "yes" or "no" will be recorded.

The QoV Rasch subscale scores (frequency, severity, bothersomeness) will be summarized by treatment group using continuous summary statistics. As additional analyses of the QoV questionnaire, the categorical responses for each item at Month 12 (Visit 5) will be summarized by treatment group using discrete summary statistics.

The categorical responses from the QoV Supplemental Questions at Month 12 (Visit 5), including subjects' satisfaction with the IOL, will be summarized by treatment group using discrete summary statistics.

As poolability analyses, the secondary safety endpoints will be summarized by treatment group and site using discrete or continuous summary statistics as appropriate.

As subgroup analyses, the analyses of the rates of cumulative and persistent AEs through Month 12 (Visit 5) will be repeated for the following Pre-Operative Visit photopic pupil size subgroups: small (< 2.5 mm), medium (2.5 to  $\leq$  4mm), and large (> 4 mm). Similar subgroup analyses will be performed for visual disturbances using the QoV questionnaire and QoV Supplemental Questions at Month 12 (Visit 5) with subgroups based on photopic pupil size at Month 12 (Visit 5).

### **15.3 Adverse Events**

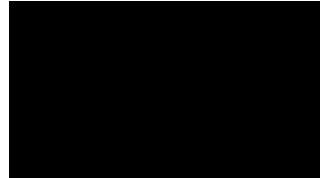
Adverse events (AEs) will be coded using MedDRA Version 24.1.

Non-ocular treatment-emergent adverse events (TEAE) include all AEs occurring or worsening during or after the first eye operation. Ocular TEAEs for a respective eye will include all AEs occurring or worsening during or after the operation for the respective eye.

TEAEs based on consensus definitions as set forth by the American Academy of Ophthalmology (AAO)'s Task Force<sup>3</sup> will be summarized by treatment group using discrete summary statistics. Separate summaries will be provided for first operative eyes, second operative eyes, and all operative eyes.

An overall summary will be presented that includes the number and percentage of subjects who experienced at least one event by treatment group for the following AEs:

- TEAEs
- Ocular TEAEs
- Non-ocular TEAEs
- Treatment-emergent Serious Adverse Events (TE-SAEs)
- Ocular TE-SAEs
- Non-ocular TE-SAEs
- Ocular device-related TEAEs
- Ocular TEAEs by strongest relationship to study device
- Ocular TEAEs by strongest relationship to surgical procedure
- Ocular TE-SAEs by strongest relationship to study device
- Ocular TE-SAEs by strongest relationship to surgical procedure



- Ocular TEAEs of moderate to severe severity
- Ocular TEAEs by maximum severity
- Ocular TEAEs by study day of onset
- Ocular TEAEs by age group (< 65 years vs  $\geq$  65 years)
- Ocular TEAEs by pre-operative photopic pupil size (Small [ $<$  2.5 mm], Medium [2.5 to  $\leq$  4 mm], Large [ $>$  4 mm])
- Ocular TEAEs by site
- TEAEs leading to discontinuation from study
- TEAEs leading to death

For the summary of ocular TEAEs by pupil size, the average pupil size computed over both eyes will be used to determine the pupil size subgroup.

In addition, the following summaries by SOC, PT, and treatment group will be provided at eye level (first operative eyes, second operative eyes, and all operative eyes separately) or subject level as appropriate:

- Ocular TEAEs
- Non-ocular TEAEs
- Ocular TE-SAEs
- Non-ocular TE-SAEs
- Ocular TEAEs related to study device
- Ocular TEAEs related to surgical procedure
- Ocular TEAEs by maximal severity

In the summaries, SOCs are listed in alphabetical order, and PTs within an SOC are listed in order of descending frequency for FINEVISION HP treatment.

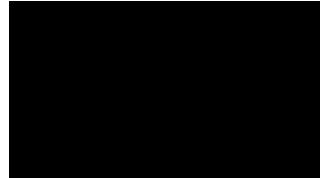
All AEs and all TE-SAEs will be presented in separate listings.

## 16. Additional Clinical Parameters

### 16.1 Visual Acuity (Early Treatment of Diabetic Retinopathy Study)

Actual values, changes from baseline, and changes between consecutive post-operative visits for photopic monocular logMAR BCDVA will be summarized using continuous summary statistics for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) for the Safety Set. Additionally, the numbers and percentages of subjects with changes greater than or equal to 0.20 logMAR (loss of at least 10 ETDRS letters) for changes from baseline and changes between consecutive post-operative visits will be presented by visit. Change between consecutive post-operative visits will be computed as the current visit minus the previous visit.

Subject listings of visual acuity variables will also be provided.



## 16.2 Slit-Lamp Biomicroscopy Examination

A slit-lamp biomicroscopy examination will be performed for the eyelid, conjunctiva, cornea, anterior chamber, lens, and iris at each visit, except for the operative visits. Observations will be graded as Normal or Abnormal.

The results will be summarized using counts and percentages for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) using the Safety Set. Percentages will be based on the number of unique eyes in each treatment group with responses. Shift tables for the slit-lamp biomicroscopy parameters will also be provided comparing each follow-up visit to baseline for first operative eyes, second operative eyes, and all operative eyes separately.

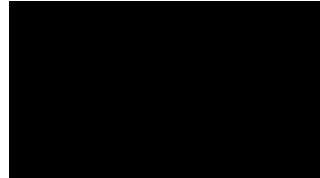
Subject listings of the slit lamp biomicroscopy examination results will also be provided.

## 16.3 Anterior Chamber Cells and Flare

Anterior chamber cells and flare assessments will be performed at each visit, except for the operative visits. Cells and flare will be graded according to the scales described in Table 2 and Table 3, respectively.

**Table 2. Anterior Chamber Cells Grading Scale**

Grade	Cells in Field (Field is a 1x1 mm slit beam)
0	<1
0.5+	1-5
1+	6-15
2+	16-25
3+	26-50
4+	>50

**Table 3. Anterior Chamber Flare Grading Scale**

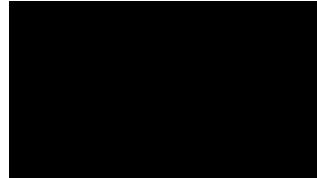
Grade	Description
<b>0</b>	None
<b>1+</b>	Faint
<b>2+</b>	Moderate (iris and lens details clear)
<b>3+</b>	Marked (iris and lens details hazy)
<b>4+</b>	Intense (fibrin or plastic aqueous)

The results will be summarized using counts and percentages for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) using the Safety Set. Percentages will be based on the number of unique eyes in each treatment group with responses. Shift tables for anterior chamber cells and flare will also be provided comparing each follow-up visit to baseline for first operative eyes, second operative eyes, and all operative eyes separately.

A subject listing containing the results of the anterior chamber cells and anterior chamber flare assessments will also be provided.

#### **16.4 Corneal Edema**

Corneal edema assessments will be performed at each visit, except for the operative visits. Corneal edema will be graded according to the scale described in Table 4.

**Table 4. Corneal Edema Grading Scale**

Amount	Grade	Description
<b>None</b>	<b>0</b>	Normal transparency: a. No epithelial or sub-epithelial haziness b. No microcysts c. No stromal cloudiness
<b>Trace</b>	<b>+1</b>	a. Barely discernible localized epithelial or sub-epithelial haziness, and/or b. 1 to 20 microcysts, and/or c. Barely discernible localized stromal cloudiness
<b>Mild</b>	<b>+2</b>	a. Faint but definite localized or generalized epithelial, sub-epithelial or stromal haziness/cloudiness, and/or b. 21 to 50 microcysts
<b>Moderate</b>	<b>+3</b>	a. Significant localized or generalized epithelial, sub-epithelial or stromal haziness/cloudiness, and/or b. 51 to 100 microcysts
<b>Severe</b>	<b>+4</b>	a. Definite widespread epithelial or stromal cloudiness, giving dull glass appearance to cornea or numerous coalescent bullae (note number and location of bullae), and/or b. >100 microcysts or bullae, and/or c. Numerous striae (note the number and location of striae or folds)

The results will be summarized using counts and percentages for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) using the Safety Set. Percentages will be based on the number of unique eyes in each treatment group with responses. Shift tables for corneal edema will also be provided comparing each follow-up visit to baseline for first operative eyes, second operative eyes, and all operative eyes separately.

### 16.5 Posterior Capsule Opacification

Posterior capsule opacification (PCO) will be assessed at every post-operative visit. PCO will be graded according to the scale described in Table 5.

**Table 5. Posterior Capsule Opacification Grading Scale**

Amount	Grade	Description
<b>None</b>	<b>0</b>	No evidence of PCO. Bright red reflex.
<b>Trace</b>	<b>+1</b>	Some loss of transparency involving the posterior capsule visible on retroillumination. Red reflex fairly bright.
<b>Mild</b>	<b>+2</b>	Mild loss of transparency with cloudiness extending through most of the posterior capsule. There may be a few Elschnig's pearls in the posterior capsule.
<b>Moderate</b>	<b>+3</b>	Moderate loss of transparency with difficulty visualizing the retina. There may be multiple Elschnig's pearls in the posterior capsule. Red reflex markedly diminished.
<b>Severe</b>	<b>+4</b>	Posterior capsule very opaque with inability to view the retina. The posterior capsule may have confluent Elschnig's pearls and fibrous scarring. Red reflex barely visible.

During the posterior capsule opacification assessment, whether the subject has undergone an Yttrium Aluminum Garnet (YAG) capsulotomy (yes/no) will also be recorded.

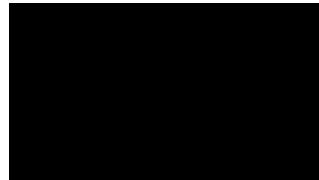
The results will be summarized using counts and percentages for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) using the Safety Set. Percentages will be based on the number of unique eyes in each treatment group with responses.

A subject listing of PCO assessment results will also be provided.

## 16.6 IOL Observations and Glistenings

IOL observations and assessments of IOL glistening will be recorded at every post-operative visit. The results will be graded as described below and on Table 6:

- IOL Observations
  - Does the IOL have scratches or cracks? (Yes/No)
  - Does the IOL have surface haze? (Yes/No)
  - Does the IOL have optic discoloration? (Yes/No)
  - Is the IOL clear? (Yes/No)
- IOL Glistenings

**Table 6. IOL Glistenings Grading Scale**

Grade	Description
<b>Trace</b>	Fewer than 10
<b>1+</b>	10 to 20
<b>2+</b>	20 to 30
<b>3+</b>	30 to 40
<b>4+</b>	More than 40

The results will be summarized using counts and percentages for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) using the Safety Set. Percentages will be based on the number of unique eyes in each treatment group with responses.

A subject listing of IOL observation results will also be provided.

### **16.7 Manifest Refraction**

Manifest refraction parameters, including sphere (D), cylinder (D), axis (degrees), and spherical equivalent (D), at 4 m will be collected at Preoperative Visit 0, Week 1 (Post-Operative Visit 2A/2B), Month 1 (Post-Operative Visit 3A/3B), Month 6 (Post-Operative Visit 4) and Month 12 (Post-Operative Visit 5).

Spherical equivalent (D) will be computed using the following formula:

$$\text{Spherical Equivalent} = \text{Sphere} + 0.5 * \text{Cylinder}$$

The actual values and changes from baseline for the manifest refraction parameters will be summarized using continuous summary statistics for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) for the Safety Set.

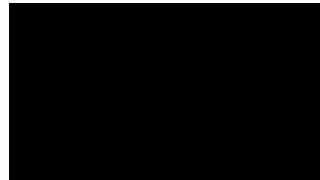
A subject listing of manifest refraction parameters will also be provided.

### **16.8 Pupil Size**

Pupil size will be measured using a pupil gauge with measurement accuracy of 0.5 mm at Preoperative Visit 0, Month 6 (Post-Operative Visit 4), and Month 12 (Post-Operative Visit 5). For the mesopic and photopic pupil size measurements, lighting conditions will be identical to those used for mesopic and photopic contrast sensitivity testing, respectively. Subjects will initially dark adapt for 10 minutes prior to mesopic pupil size measurements.

The actual values and changes from baseline for pupil size (mesopic and photopic) will be summarized using continuous summary statistics and the pupil size categorizations used in subgroup analyses [( $\leq 4$  mm,  $> 4$  mm) and ( $\leq 2.5$  mm,  $> 2.5$  mm to  $< 4$  mm,  $\geq 4$  mm)] will be summarized using counts and percentages for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) for the Safety Set.

A subject listing of pupil size will also be provided.



### 16.9 Dilated Fundoscopy Examination

A dilated fundoscopy examination of the vitreous, retina, macula, and optic nerve as well as an assessment of the cup-to-disc (C/D) ratio will be performed for first and second operative eyes at Preoperative Visit 0, Month 1 (Post-Operative Visit 3A/3B), Month 6 (Post-Operative Visit 4) and Month 12 (Post-Operative Visit 5). The results will be graded as normal or abnormal.

For subjects implanted with a multifocal IOL, gradings of the clarity of the retinal image through the multifocal IOL compared to previous monofocal IOL experience will be recorded as described on Table 7.

**Table 7. Clarity of the Retinal Image Grading Scale**

Grade	Description
1	Poor clarity compared to view through monofocal IOL.
2	Fair clarity compared to view through monofocal IOL.
3	Good clarity compared to view through monofocal IOL.
4	Excellent clarity compared to view through monofocal IOL.

The dilated fundoscopy results of the vitreous, retina, macula, and optic nerve will be summarized using counts and percentages for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) using the Safety Set. Percentages will be based on the number of unique eyes in each treatment group with responses. Shift tables for dilated fundoscopy will also be provided comparing each follow-up visit to baseline for first operative eyes, second operative eyes, and all operative eyes separately.

C/D ratio will be summarized using continuous summary statistics for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) for the Safety Set.

Gradings of the clarity of the retinal image will be summarized using counts and percentages for the FINEVISION HP treatment group at Month 1 (Post-Operative Visit 3A/3B), Month 6 (Post-Operative Visit 4) and Month 12 (Post-Operative Visit 5) for each eye (first eye, second eye, and all eyes separately) for the Safety Set.

A subject listing of the dilated fundoscopy results will also be provided.

### 16.10 Intraocular Pressure (IOP)

Intraocular pressure (IOP) will be assessed using Goldmann applanation tonometry at all visits, except for the operative visits (Operative Visit 0A/0B). Results will be recorded in mmHg. If more than one measure is obtained for a protocol specified visit, the mean IOP value will be used for the summaries.

The IOP actual values and changes from baseline will be summarized using continuous summary statistics for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) for the Safety Set.

A subject listing of IOP will also be provided.

#### **16.11 IOL Tilt and Decentration**

Evaluation of tilt and decentration will be performed with the pupil dilated at Day 1 (Post Operative Visit 1A/B), Week 1 (Post Operative Visit 2A/B), Month 1 (Post Operative Visit 3A/B), Month 6 (Post Operative Visit 4), and Month 12 (Post Operative Visit 5).

Tilt will be recorded in degrees and decentration will be recorded in millimeters.

IOL tilt and decentration will be summarized using continuous summary statistics for each treatment group at each visit for each eye (first eye, second eye, and all eyes separately) for the Safety Set.

A subject listing of IOL tilt and decentration will also be provided.

#### **16.12 Device Deficiencies**

Device deficiencies will be presented in a data listing.

#### **16.13 Keratometric Measurements**

Keratometric measurements will be collected during the Pre-Operative Visit, Month 1 (Post-Operative Visit 3A/3B), Month 6 (Post-Operative Visit 4), and Month 12 (Post-Operative Visit 5).

Keratometric measurements (K1 [D], K1 Axis [degrees], K2 [D], and K2 Axis [degrees]) will be summarized using continuous summary statistics for each treatment group and for all actively treated subjects at each visit for each eye (first eye, second eye, and all eyes separately) for the Safety Set.

A subject listing of keratometric measurements will be provided.

17. [REDACTED]

17.1 [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]:



17.3

18. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

## 19. Changes from Protocol-Stated Analyses

The SAP includes the following changes from the protocol-stated analyses:

1. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

3. The reason for missing data “withdrawal due to investigator’s request” from the protocol has been updated to “withdrawal due to physician decision” in the SAP to match the corresponding reason for discontinuation term from the end of study eCRF.
4. Summaries of AEs by investigator from the protocol have been updated to summaries of AEs by site in the SAP.
5. Pupil size subgroups for sub-group analyses of primary and secondary effectiveness and safety endpoints have been updated from ( $\leq 4\text{mm}$ ,  $> 4\text{mm}$ ) in the protocol to small ( $< 2.5\text{ mm}$ ), medium ( $2.5\text{ to } \leq 4\text{mm}$ ), and large ( $> 4\text{ mm}$ ) in the SAP per sponsor request. Pupil size subgroup analyses of the secondary safety endpoints and overall adverse events were added to the SAP to address FDA comments requesting safety and effectiveness subgroup analyses by pupil size.

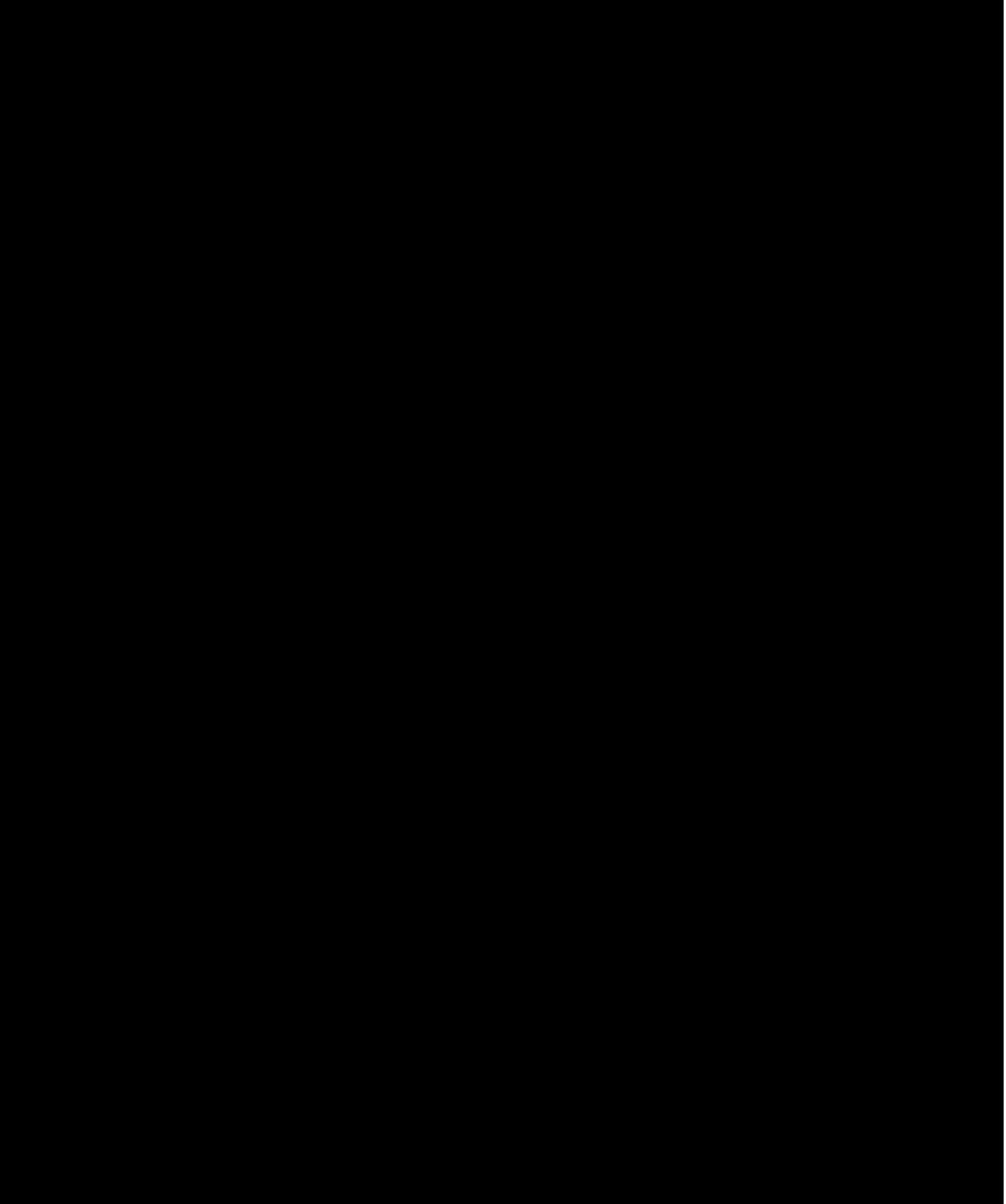
## 20. References

1. ISO 11979-1:2018. *Ophthalmic Implants – Intraocular Lenses – Part 1: Vocabulary*. International Organization for Standardization. November 2018.
2. McAlinden C, Pesudovs K, Moore J. The Development of an Instrument to Measure Quality of Vision: The Quality of Vision (QoV) Questionnaire. Preprint. Posted online November 2010. *Investigative Ophthalmology & Visual Science*. doi: <https://doi.org/10.1167/iovs.10-5341>
3. Maskit S, Rorer E, Stark W, et al. Special Report: The American Academy of Ophthalmology Task Force Consensus Statement on Adverse Events with Intraocular Lenses. Preprint. Posted online October 7, 2016. *Ophthalmology*. doi: <https://doi.org/10.1016/j.ophtha.2016.09.031>

## 21. Revision History

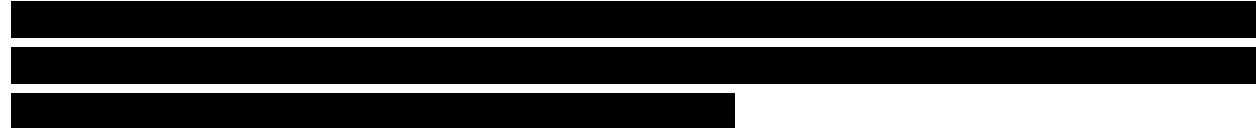
Documentation of revision to the SAP will commence after approval of the final version 1.0.

**Summary of Changes**





**22. Tables**

















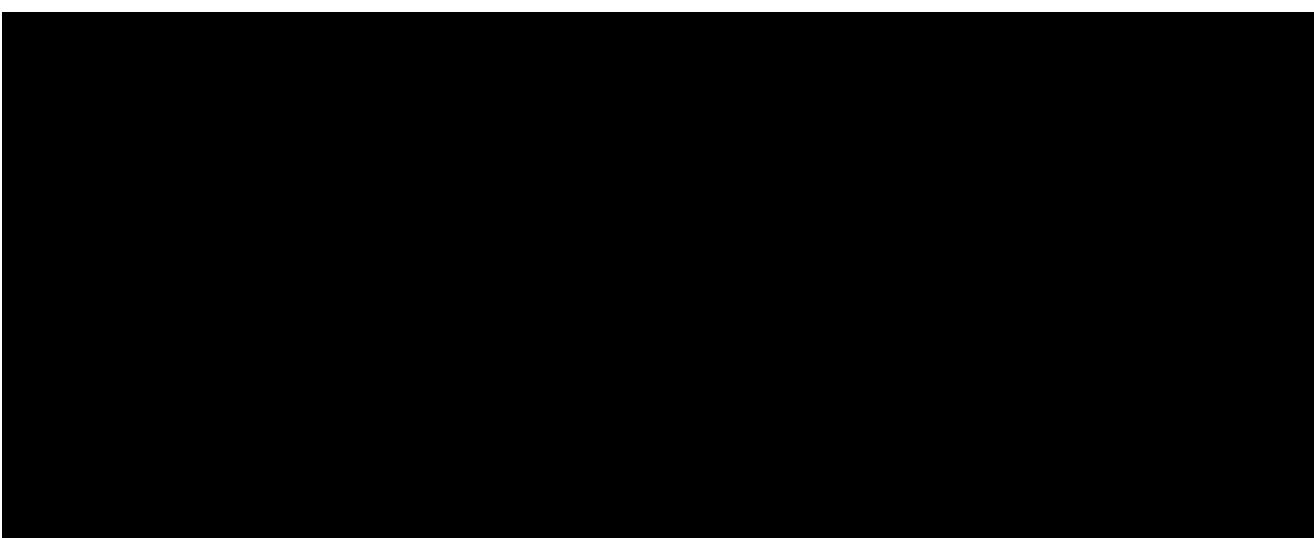




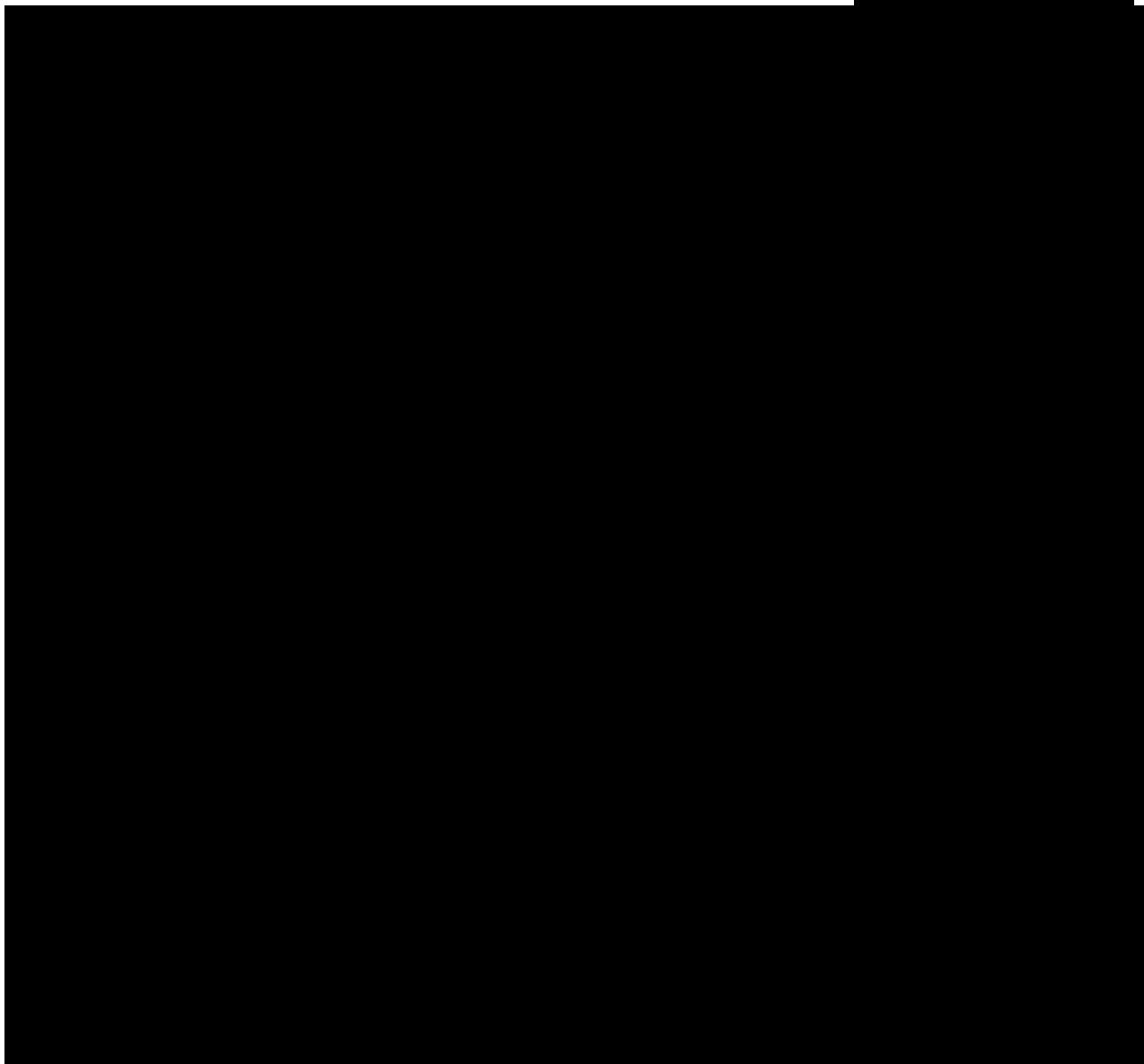




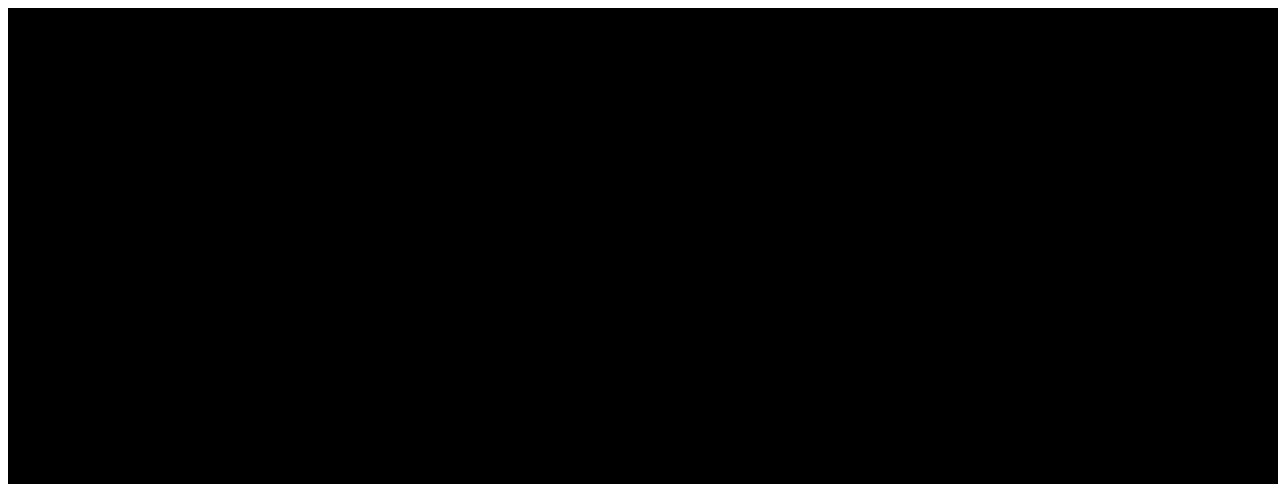
**23. Listings**

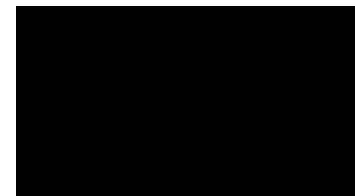






**24. Figures**

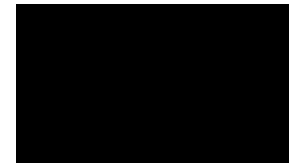




## 25. Appendix

### 25.1 Schedule of Visits and Assessments

			Visit 0	Visit 00 A	Visit 00 B	Visit 1 A/B	Visit 2 A/B	Visit 3 A/B	Visit 4	Visit 5	USV <sup>2</sup>
Examination	Light Condition	Mono-cular / Binocular	Pre-Op / Screen D -90 to -1	Implant A <sup>1</sup> D 0	Implant B <sup>1</sup> (D 7 to D 30 after Visit 00 A)	Post-Op D 1-2	Post-Op D 7-14	Post-Op D 30-60	Post-Op D 150-180 (from 1 <sup>st</sup> eye)	Post-Op D 360-420 (from 1 <sup>st</sup> eye)	N/A
Informed Consent and HIPAA			X								
Demographics			X								
Inclusion & Exclusion Criteria Evaluation			X								
Inclusion & Exclusion Criteria Review				X							
Ocular and non-ocular Medical History			X	X	X	X	X	X	X	X	X
Urine Pregnancy Test (if applicable)			X								
Projected Visual Acuity			X								
Target Refraction			X								
IOL Power Calculation			X								
Axial Length and Anterior Chamber Depth			X								
Keratometry Measurement			X					X	X	X	X
Corneal Topography			X								
Manifest Refraction (ETDRS) – 4 meters			X				X	X	X	X	X
Randomization			X								
Operative Procedures				X	X						
Patient Reported Outcome Questionnaires <sup>3</sup>			X						X	X	X
Pupil Size <sup>4</sup>	Photopic	Monocular	X						X	X	
	Mesopic		X						X	X	
Intraocular Pressure			X			X	X	X	X	X	X
Slit Lamp Examination			X			X	X	X	X	X	X
IOL Tilt and Decentration Grading						X	X	X	X	X	X
[REDACTED]				█	█	█	█	█	█	█	█



			Visit 0	Visit 00 A	Visit 00 B	Visit 1 A/B	Visit 2 A/B	Visit 3 A/B	Visit 4	Visit 5	USV <sup>2</sup>
Examination	Light Condition	Mono-cular / Binocular	Pre-Op / Screen D -90 to -1	Implant A <sup>1</sup> D 0	Implant B <sup>1</sup> (D 7 to D 30 after Visit 00 A)	Post-Op D 1-2	Post-Op D 7-14	Post-Op D 30-60	Post-Op D 150-180 (from 1 <sup>st</sup> eye)	Post-Op D 360-420 (from 1 <sup>st</sup> eye)	N/A
Dilated Fundus Examination			X						X	X	X
Posterior Capsule Assessment (PCO grade assessment)						X	X	X	X	X	X
IOL Observations						X	X	X	X	X	X
Adverse Events			X	X	X	X	X	X	X	X	X
Device Deficiencies				X	X	X	X	X	X	X	X
Concomitant Medications			X	X	X	X	X	X	X	X	X
Exit from Study											X
Visual Acuity	UCDVA (4 meters)	Photopic	Monocular	X			X	X	X	X	X
			Binocular					X	X	X	X
	BCDVA (4 meters)	Photopic	Monocular	X				X	X	X	X
			Binocular					X	X	X	X
	UCNVA (40 cm)	Photopic	Monocular						X	X	X
			Binocular						X	X	X
	BCNVA (40 cm)	Photopic	Monocular						X	X	X
			Binocular						X	X	X
	DCNVA (40 cm)	Photopic	Monocular						X	X	X
			Binocular						X	X	X
		Mesopic	Monocular						X	X	X
			Binocular						X	X	X
UCIVA (66 cm)	Photopic		Monocular						X	X	X
			Binocular							X	X
DCIVA (66 cm)	Photopic		Monocular						X	X	X
			Binocular							X	X

			Visit 0	Visit 00 A	Visit 00 B	Visit 1 A/B	Visit 2 A/B	Visit 3 A/B	Visit 4	Visit 5	USV <sup>2</sup>		
Examination		Light Condition	Mono-cular / Binocular	Pre-Op / Screen D -90 to -1	Implant A <sup>1</sup> D 0	Implant B <sup>1</sup> (D 7 to D 30 after Visit 00 A)	Post-Op D 1-2	Post-Op D 7-14	Post-Op D 30-60	Post-Op D 150-180 (from 1 <sup>st</sup> eye)	Post-Op D 360-420 (from 1 <sup>st</sup> eye)	N/A	
		Mesopic	Monocular							X	X	X	
			Binocular							X	X		
Contrast Sensitivity with Glare – 2.5 meters		Photopic	Monocular								X	X	
Contrast Sensitivity without Glare – 2.5 meters											X	X	
Contrast Sensitivity with Glare – 2.5 meters		Mesopic	Monocular								X	X	
Contrast Sensitivity without Glare – 2.5 meters											X	X	
Defocus Curve (Best Distance Corrected) – 4 meters <sup>6</sup>		Monocular									X	X	
		Binocular									X	X	

<sup>1</sup> A – First Operative Eye, B – Second Operative Eye<sup>2</sup> USV – Unscheduled Visit; for unscheduled visits, mandatory assessments to be completed are defined in the table. Additional assessments may be performed as appropriate, based on the subject's condition.<sup>3</sup> Patient Reported Outcome Questionnaires include the PRSIQ, QoV and QoV Supplemental Questions<sup>4</sup> Pupil size measurements in mesopic and photopic lighting conditions must be taken right before contrast sensitivity testing (see instructions for Pupil Size Measurements in Manual of Procedures)