

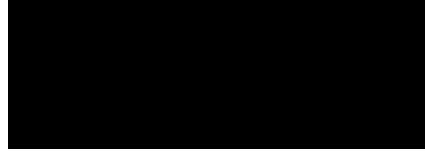
STATISTICAL ANALYSIS PLAN

The TRANQUILITY Trial: A Multi-Center Randomized, Double-Masked, Parallel Design, Vehicle-Controlled Phase 2/3 Clinical Trial to Assess the Efficacy and Safety of 0.25% Reproxalap Ophthalmic Solution Compared to Vehicle in Subjects with Dry Eye Disease

Sponsor: Aldeyra Therapeutics, Inc.

Protocol Number: ADX-102-DED-019

Author:



Date: 17-NOV-2021

Version: 2.0

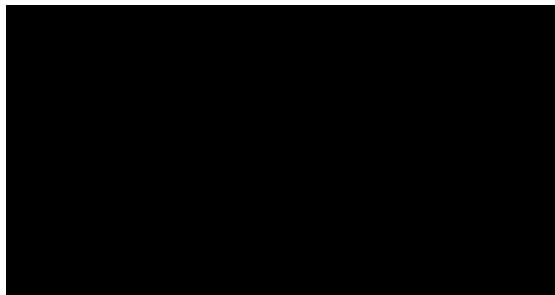
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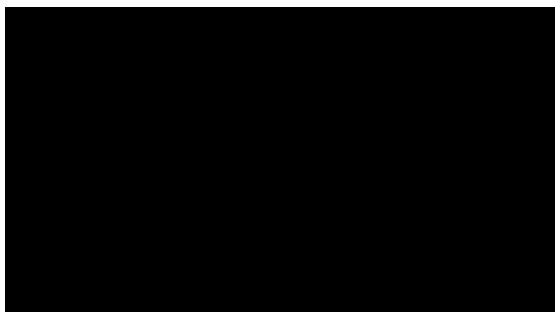
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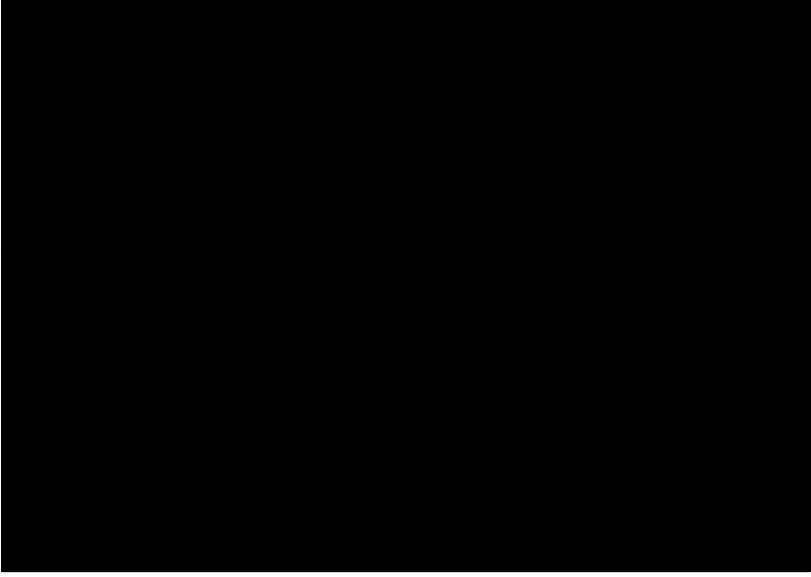


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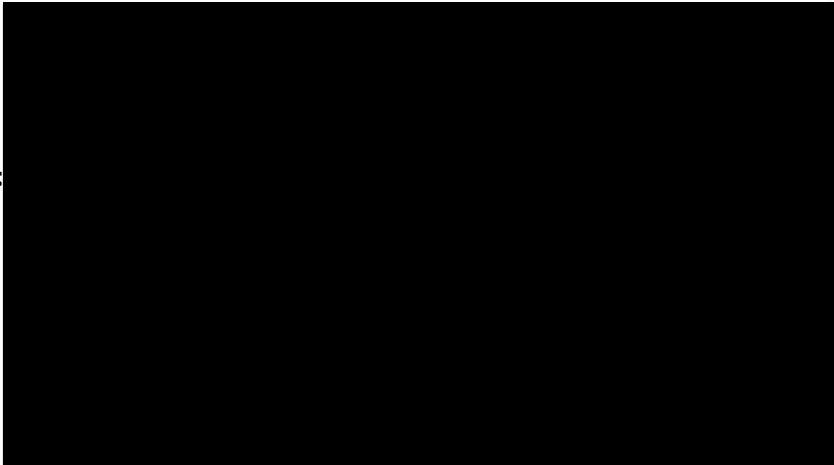
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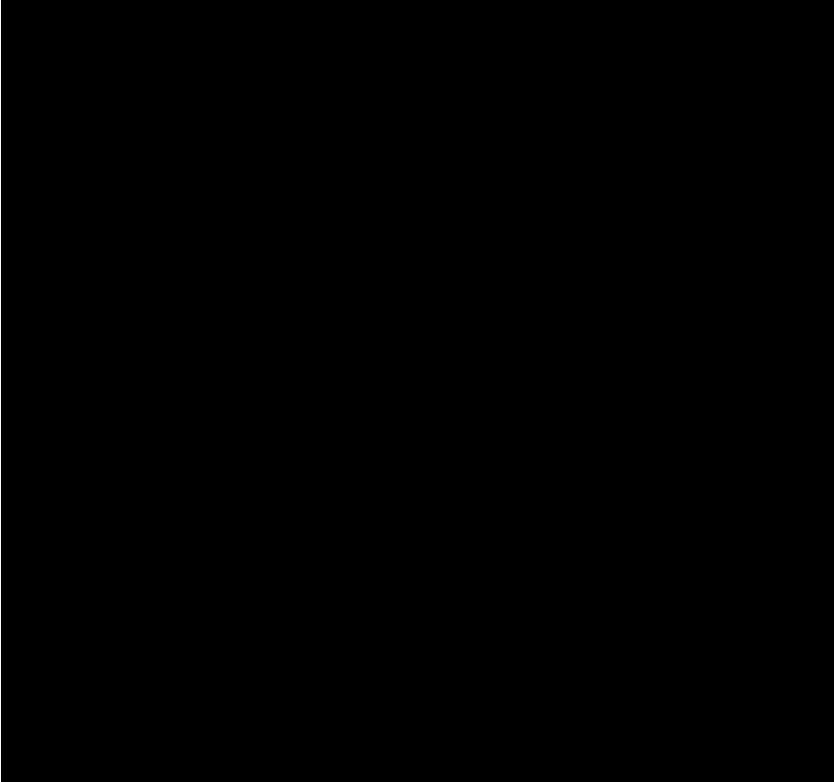
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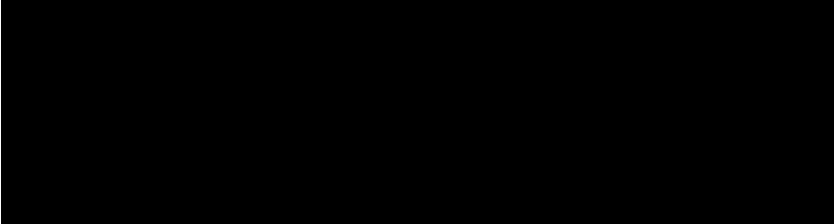
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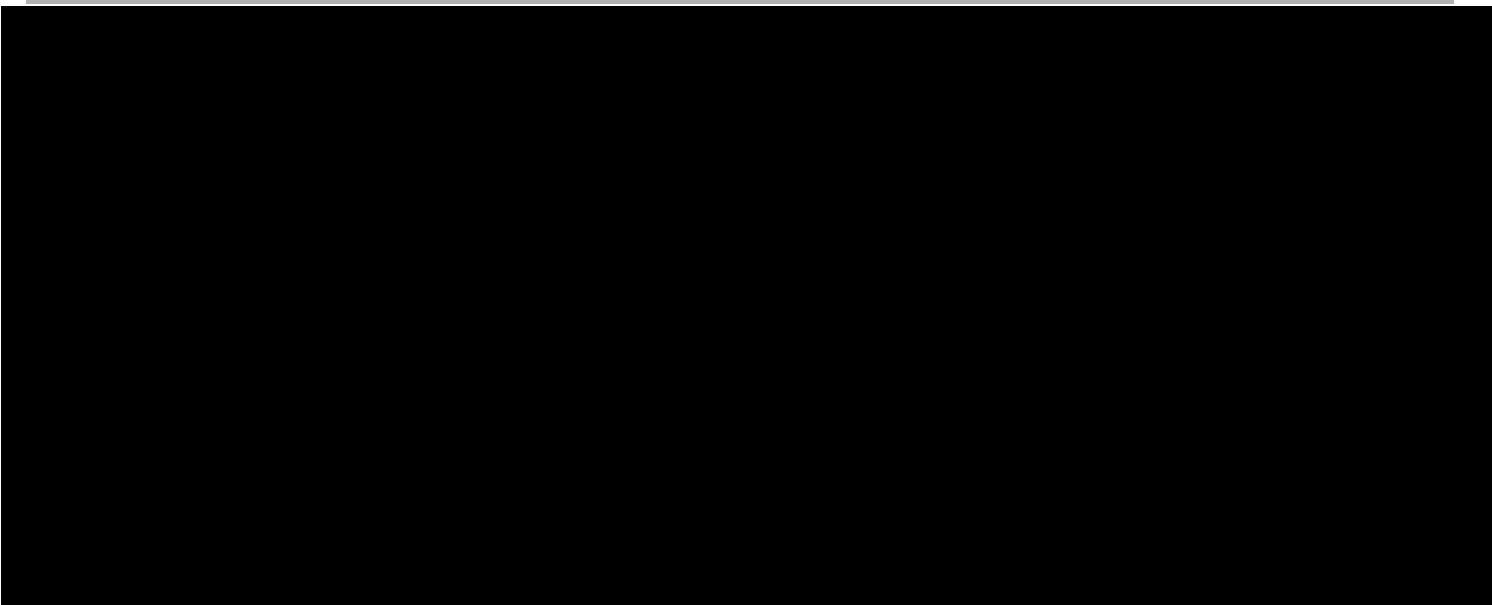


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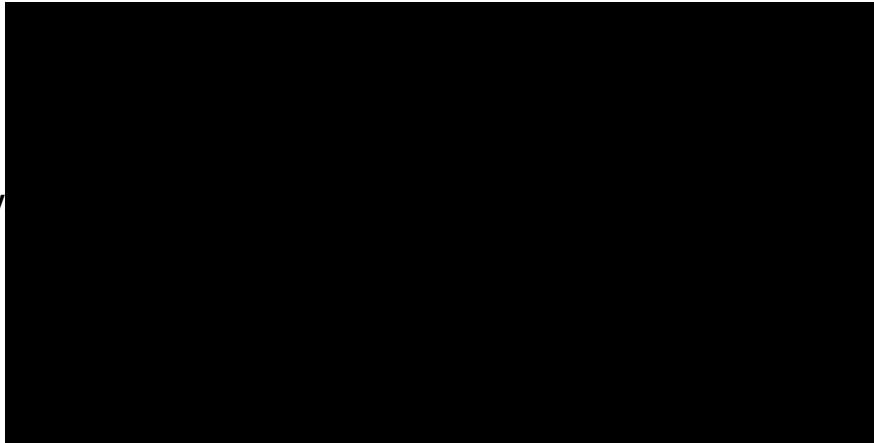
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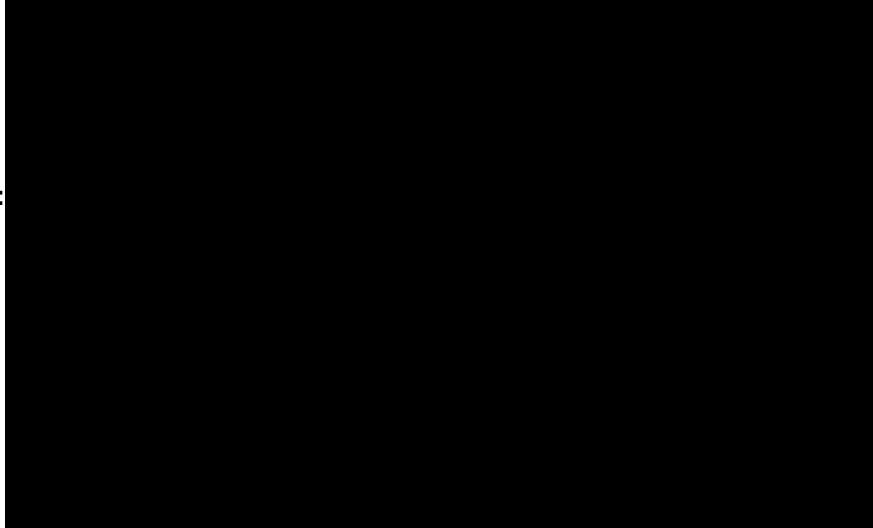


Table of Contents

1.	Introduction	9
2.	Study Objectives	9
3.	Study Endpoints	9
3.1	Primary Endpoints	9
3.2	Secondary Variables	9
3.3	Exploratory Variables	9
3.4	Safety Variables	10
3.5	Statistical Hypotheses	10
3.6	Estimands	10
4.	Study Design and Procedures	11
4.1	General Study Design	11
4.2	Schedule of Visits and Assessments	12
5.	Study Treatments	13
5.1	Method of Assigning Subjects to Treatment Groups	13
5.2	Masking and Unmasking	13
6.	Sample Size and Power Considerations	13
7.	Data Preparation	14
7.1	Input Data	14
7.2	Output Data	14
8.	Analysis Populations	15
8.1	Intent-to-Treat	15
8.2	Initial Cohort	15
8.3	Per Protocol	15
8.4	Safety	15
9.	General Statistical Considerations	15
9.1	Unit of Analysis	15
9.2	Missing or Inconclusive Data Handling	15
9.3	Definition of Baseline	16
9.4	Data Analysis Conventions	16
9.5	Adjustments for Multiplicity	17
10.	Disposition of Subjects	17
11.	Demographic, Previous Participation in Reproxalap Trials, and Pretreatment Variables	18
11.1	Demographic Variables	18
11.2	Previous Participation in Reproxalap Trials	18
11.3	Pretreatment Variables	19
12.	Medical History and Concomitant Medications	19

12.1 Medical History.....	19
12.2 Concomitant Medications and Procedures	19
13. Dosing Compliance and Treatment Exposure	20
13.1 Dosing Compliance	20
13.2 Treatment Exposure.....	20
14. Efficacy Analyses	20
14.1 Primary Analysis	21
14.1.1 Primary Analyses Methods	21
14.1.1.1 Mixed Model Repeated Measures [REDACTED]	22
14.1.1.2 Mixed Model Repeated Measures [REDACTED]	22
14.1.1.3 Additional Sensitivity Analyses.....	23
14.2 Secondary Analyses	23
14.2.1 Overall Mean Change from Baseline of Eye Dryness Score (VAS) [REDACTED]	23
14.2.2 Overall Mean Change From Baseline of Ocular Discomfort Scale (Ora Calibra® Scale) [REDACTED]	24
14.2.3 Unanesthetized Schirmer's Test at Visit 2 (Day 1) [REDACTED]	24
14.3 Exploratory Analyses	25
14.3.1 Eye Dryness Score from the Visual Analog Scale [REDACTED]	25
14.3.2 Ocular Discomfort Scale (Ora Calibra® Scale) [REDACTED]	25
14.3.3 Ocular Discomfort & 4-Symptom Questionnaire (Ora Calibra® Scale)	26
14.3.3.1 Ocular Discomfort & 4-Symptom Questionnaire (Ora Calibra® Scale) [REDACTED]	26
14.3.3.2 Ocular Discomfort & 4-Symptom Questionnaire (Ora Calibra® Scale) [REDACTED]	26
14.3.4 Conjunctival Allergen Challenge Ocular Itching Scale (Ora Calibra® Scale)	26
14.3.4.1 Conjunctival Allergen Challenge Ocular Itching Scale (Ora Calibra® Scale) [REDACTED]	26
14.3.4.2 Conjunctival Allergen Challenge Ocular Itching Scale (Ora Calibra® Scale) [REDACTED]	26
14.3.5 Conjunctival Redness [REDACTED]	27
14.3.6 Tear Reactive Aldehyde Species [REDACTED]	27
14.3.7 Conjunctival Redness (Ora Calibra® Scale) [REDACTED]	27
14.3.8 Eye Dryness (VAS) [REDACTED]	28
14.3.9 Ocular Discomfort Scale (Ora Calibra® Scale) [REDACTED]	28
15. Efficacy Analyses of the Initial Cohort.....	28
16. Summary of Efficacy Analyses	29
17. Safety Analyses	29
17.1 Adverse Events	29

17.1.1	Severity	30
17.1.2	Relationship to Study Procedures.....	31
17.1.3	Expectedness.....	31
17.1.4	Serious Adverse Events.....	32
17.2	Visual Acuity (Early Treatment Diabetic Retinopathy Study).....	32
17.3	Slit-Lamp Biomicroscopy.....	33
17.4	Dilated Fundoscopy Examination.....	33
17.5	Intraocular Pressure (IOP)	33
18.	Changes from Protocol-Stated Analyses	33
19.	References.....	33
20.	Revision History	33
21.	Tables.....	34
22.	Listings	39

List of Abbreviations

ADaM	Analysis Data Model
AE	Adverse Event
ANCOVA	Analysis of Covariance
ATC	Anatomical Therapeutic Chemical
CAC	Conjunctival Allergen Challenge
CAE®	Controlled Adverse Environment®
CI	Confidence Interval
CS	Clinically Significant
DED	Dry Eye Disease
eCRF	Electronic Case Report Form
EDC	Electronic Data Capture
ETDRS	Early Treatment of Diabetic Retinopathy Study
ICH	International Conference on Harmonisation
IOP	Intraocular Pressure
ITT	Intent-to-Treat
IWRS	Interactive Web Response System
logMAR	Logarithm of the Minimum Angle of Resolution
LS	Least Squares
MAR	Missing at Random
MCMC	Markov Chain Monte Carlo
MedDRA	Medical Dictionary for Regulatory Activities
MMRM	Mixed Model Repeated Measures
MNAR	Missing Not at Random
NCS	Not Clinically Significant
OD	<i>Oculus dexter</i> (Right Eye)
OS	<i>Oculus sinister</i> (Left Eye)
PDF	Portable Document Format
PMM	Pattern Mixture Model
PP	Per Protocol
PT	Preferred Term
RASP	Reactive Aldehyde Species
RDC	Remote Data Capture
RTF	Rich Text Format
SAE	Serious Adverse Event
SAP	Statistical Analysis Plan
SD	Standard Deviation
SDC	Statistics & Data Corporation
SDTM	Study Data Tabulation Model
SE	Standard Error
SOC	System Organ Class
TEAE	Treatment-Emergent Adverse Event
TMF	Trial Master File
VAS	Visual Analog Scale

WHODrug

World Health Organization Drug Dictionary

1. Introduction

The purpose of this statistical analysis plan (SAP) is to describe the planned analyses and reporting for protocol ADX-102-DED-019, Amendment 3.0, dated 5-NOV-2021.

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, E9(R1) Statistical Principles for Clinical Trials: Addendum: Estimands and Sensitivity Analysis in Clinical Trials, and the most recent ICH E3 Guideline entitled Guidance for Industry: Structure and Content of Clinical Study Reports.

This SAP describes the data that will be analyzed and the subject characteristics, efficacy, and safety assessments that will be evaluated. This SAP provides details of the specific statistical methods that will be used. 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.

2. Study Objectives

To evaluate the efficacy of reproxalap, as assessed by conjunctival redness, tear reactive aldehyde species (RASP) levels, Schirmer's Test, and symptoms after dosing [REDACTED] to the Controlled Adverse Environment® (CAE®) in subjects with dry eye disease (DED).

3. Study Endpoints

3.1 Primary Endpoints

The primary efficacy variable is the following:

- Conjunctival redness [REDACTED]

3.2 Secondary Variables

The secondary efficacy variables are the following:

- Visual analog scale (VAS) eye dryness score [REDACTED]
[REDACTED]
- Ora Calibra® Ocular Discomfort Scale [REDACTED]
[REDACTED]
- Schirmer's Test [REDACTED]

3.3 Exploratory Variables

The exploratory efficacy variables are the following:

- VAS eye dryness score [REDACTED]
- Ora Calibra® Ocular Discomfort Scale [REDACTED]

- Ocular Discomfort & 4-Symptom Questionnaire [REDACTED]
- [REDACTED]
- Ora Calibra® Conjunctival Allergen Challenge Ocular Itching Scale [REDACTED]
- [REDACTED]
- Change in tear RASP levels [REDACTED]
- Conjunctival redness [REDACTED]
- Conjunctival redness, Ora Calibra® Ocular Discomfort Scale, and VAS dryness score [REDACTED]
- [REDACTED]

3.4 Safety Variables

The safety variables include the following:

- Visual acuity
- Slit-lamp evaluation
- Adverse event (AE) query
- Intraocular Pressure (IOP)
- Dilated fundoscopy

3.5 Statistical Hypotheses

The following hypothesis will be tested comparing reproxalap to vehicle. The null hypothesis must be rejected for the dosing regimen to claim efficacy.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

3.6 Estimands

The primary comparisons in this trial will be between reproxalap versus vehicle [REDACTED]

[REDACTED]

[REDACTED]

Estimand 1

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

4. Study Design and Procedures

4.1 General Study Design

Study visits will be referred to in all tables and listings as the expected study day corresponding to the visit to enable reviewers to understand the assessment timing without referring to the protocol visit schedule. Table 1 shows the scheduled study visits, their planned study day (note that there is no Day 0 and that Day 1 corresponds to the day of randomization), and the acceptable visit window for each study visit:

Table 1. Study Visit Windows

Scheduled Visit	Planned Study Day	Visit Window
Visit 1	Day -14	-16/+2 days
Visit 2	Day 1	N/A
Visit 3	Day 2	N/A

4.2 Schedule of Visits and Assessments

Table 2. Schedule of Visits and Assessments

Visit/Assessment	Date	Location	Assessor	Comments
Initial Assessment	Within 14 days of admission	SDC Office	SDC Staff	
Mid-Treatment Assessment	At least 6 weeks after initial assessment	SDC Office	SDC Staff	
Final Assessment	At least 12 weeks after initial assessment	SDC Office	SDC Staff	
Follow-up Assessment	At least 12 weeks after final assessment	SDC Office	SDC Staff	

5. Study Treatments

5.1 Method of Assigning Subjects to Treatment Groups

At Visit 1 (Day -14), each subject who signs the informed consent will be assigned a screening number. All screening numbers will be assigned in strict numerical sequence at each site and no numbers will be skipped or omitted.

At Visit 2 (Day 1), a subject who meets all the eligibility criteria will be randomized in a 1:1 ratio to receive treatment with either 0.25% Reproxalap Ophthalmic Solution or placebo. Subjects will be assigned a randomization number and kit number via paper randomization list for the Initial Cohort and by interactive web response system (IWRS) for the Main Cohort.

The site staff will dispense to the subject the study kit labeled with the corresponding kit number. Both the randomization number and the dispensed study drug kit number will be recorded on the subject's source document and electronic case report form (eCRF).

5.2 Masking and Unmasking

All subjects, investigators, and study personnel involved with the conduct of the study will be masked with regard to treatment assignments. When medically necessary, the investigator may need to determine what treatment arm has been assigned to a subject. When possible (i.e., in non-emergent situations), Ora and/or the study Sponsor should be notified, when possible, before unmasking study drug as described in the following paragraph.

If an investigator identifies a medical need for unmasking the treatment assignment of a subject, he/she should contact Ora and/or the medical monitor prior to unmasking the identity of the IP, if possible. Ora will ask the site to complete and send them the Unmasking Request Form. Ora will notify Aldeyra and jointly will determine if the unmasking request should be granted. They may consult the medical monitor as needed. The result of the request will be documented on the Unmasking Request Form. If approval is granted to unmask a subject, written permission via the Unmasking Request Form will be provided to the investigator. The investigator will unmask the subject via scratch off labels on the kits for the Initial Cohort Only. The investigator will unmask the subject using IWRS for the Main Cohort. The investigator will complete the Unmasking Memo form and include it in the subject's study file and provide a copy for the Trial Master File (TMF). For each unmasked request, the reason, date, signature, and name of the person who unmasked the subject, must be noted in the subject's study file.

Planned unmasking was executed for subjects in the initial cohort for sample size and power calculations.

6. Sample Size and Power Considerations



7. Data Preparation

7.1 Input Data

Study data will primarily be recorded on the eCRFs supplied by Statistics & Data Corporation (SDC) using

[REDACTED] is delivered as a single-instance, multi-tenant [REDACTED] and is developed, maintained, and hosted by [REDACTED]

[REDACTED] These data sources are described in detail in data transfer agreements developed between data management and the respective external laboratory or reading center:

- Tear RASP data
- Conjunctival redness photography scores

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. Once the study has been unmasked, unmasked laboratory data will be sent to SDC. Any changes to the database after data have been locked can only be made with the approval of the Sponsor in consultation with SDC.

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 SDC 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.

7.2 Output Data

Data from EDC and external data will be transferred to SDC Biostatistics and incorporated into standard formats following the [REDACTED]

SDTM will follow the [REDACTED] and will be implemented using the [REDACTED] at the time of study start.

8. Analysis Populations

8.1 Intent-to-Treat

The Intent-to-Treat (ITT) Population includes all randomized subjects. Subjects in the ITT Population will be analyzed as randomized. Subjects in the initial cohort will not be included in the ITT Population for efficacy analyses.



8.2 Initial Cohort

The Initial Cohort Population includes all randomized subjects in the Initial Cohort. Subjects in the Initial Cohort will be analyzed as randomized.

8.3 Per Protocol

The Per-Protocol (PP) Population includes subjects in the ITT Population who do not have significant protocol deviations and who complete the study. Protocol deviations will be assessed prior to database lock and unmasking. Subjects in the PP Population will be analyzed as treated.

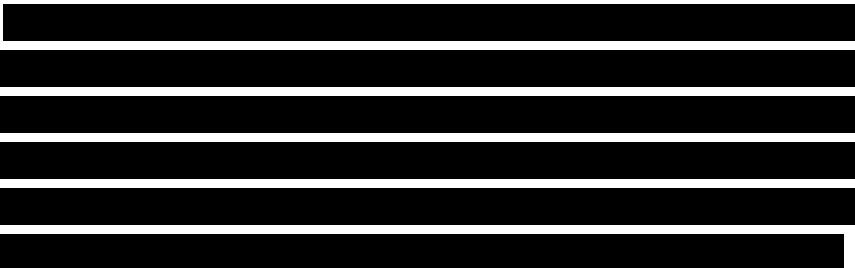
8.4 Safety

The Safety Population includes all randomized subjects who receive at least one dose of investigational product. Subjects in the Safety Population will be analyzed as treated. The Safety Population includes subjects in the initial cohort who receive at least one dose of investigational product.

9. General Statistical Considerations

9.1 Unit of Analysis

Safety endpoints will be analyzed



9.2 Missing or Inconclusive Data Handling

Partial/missing start and end dates for AEs and concomitant medications required to flag data as treatment-emergent or concomitant with treatment will be imputed as follows:



Term	Percentage
GMOs	95
Organic	95
Natural	95
Artificial	85
Organic	95
Natural	95
Artificial	85
Organic	95
Natural	95
Artificial	85
Organic	95
Natural	95
Artificial	85

Partial/missing end date:

The PP population analysis will also be conducted to assess sensitivity.

9.3 Definition of Baseline

Baseline is defined

9.4 Data Analysis Conventions

All data analysis will be performed by SDC after the study is completed and the database has been locked and released for unmasking. Statistical programming and analyses will be performed [REDACTED]

A series of horizontal black bars of varying lengths, likely representing redacted text or data. The bars are arranged vertically and vary in length, with some being very long and others very short. The overall effect is a grid of black rectangles on a white background.

9.5 Adjustments for Multiplicity

The primary endpoint of the overall mean change from baseline of conjunctival redness

10. Disposition of Subjects

Subject disposition will be presented in terms of the numbers and percentages of subjects who were

randomized

1. A subject listing will be provided that includes the date

COVID-19 will be produced.

11. Demographic, Previous Participation in Reproxalap Trials, and Pretreatment Variables

11.1 Demographic Variables

The demographic variables collected in this study

Age (years) will be summarized, overall and by treatment, using continuous descriptive statistics.

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

11.2 Previous Participation in Reproxalap Trials

The number of subjects and percentages of subjects that dosed with randomized study drug in previous Reproxalap trials will be summarized by treatment group and for all subjects in the ITT population.



Subjects who did not dose under previous Reproxalap studies will be summarized as well.

11.3 Pretreatment Variables

All baseline efficacy and safety variables will be summarized [REDACTED]

[REDACTED] Summaries will be provided of the ITT and Safety Populations.

12. Medical History and Concomitant Medications

12.1 Medical History

Medical history will be coded using Medical Dictionary for Regulatory Activities [REDACTED].

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED].

Listings of medical history will be generated separately for ocular and non-ocular data.

12.2 Concomitant Medications and Procedures

Concomitant medications and procedures will be coded using World Health Organization Drug Dictionary

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] Listings
of concomitant medications will be generated separately for ocular and non-ocular data.

13. Dosing Compliance and Treatment Exposure

13.1 Dosing Compliance

Dosing compliance (% compliance) will be assessed [REDACTED]

[REDACTED]

[REDACTED]

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

A subject listing of dosing compliance will also be produced.

13.2 Treatment Exposure

Extent of treatment exposure for subjects [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] . A subject listing of treatment exposure will also be produced.

14. Efficacy Analyses

All efficacy analyses described in this section will have SAS code specified in the SAP [REDACTED]

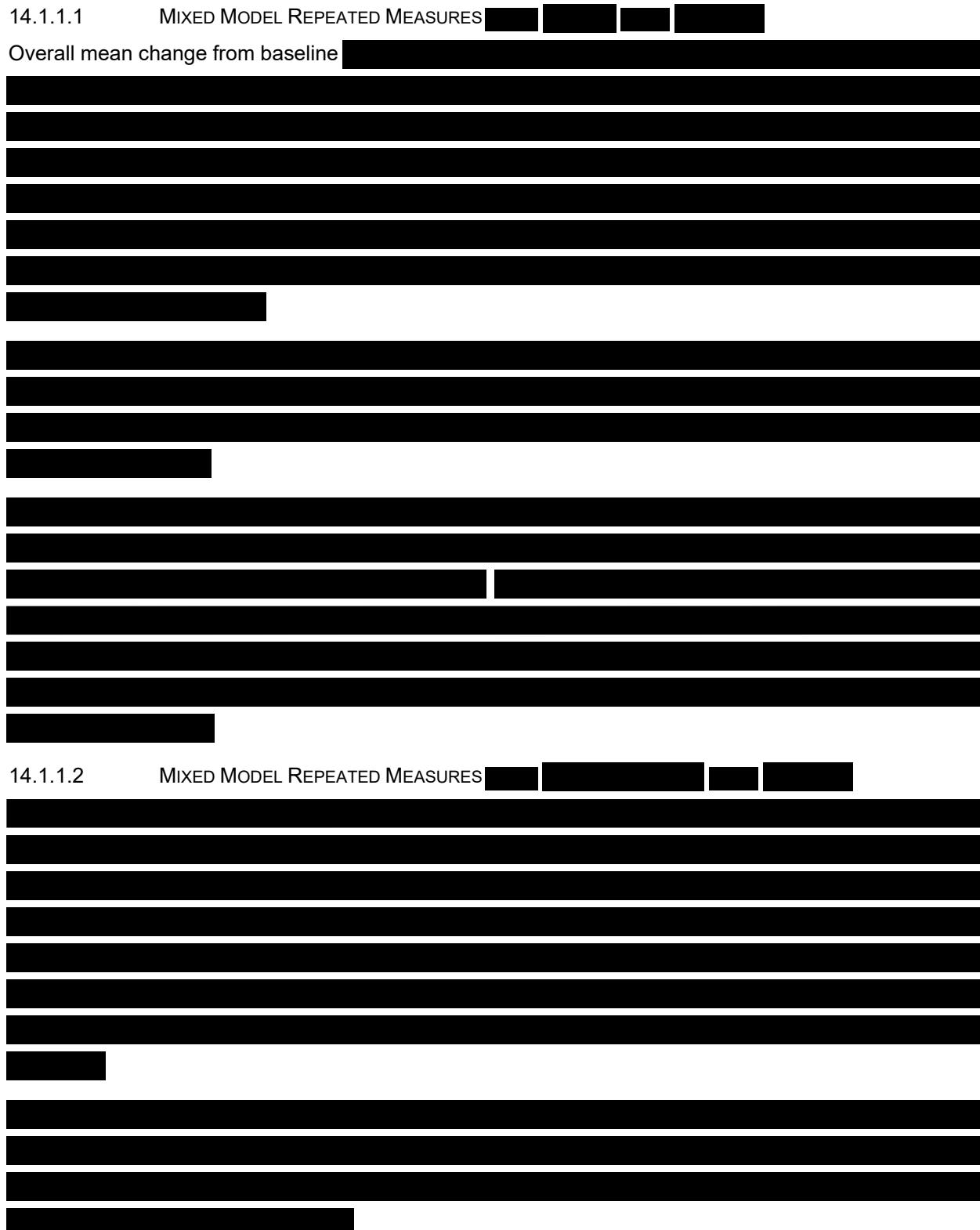
[REDACTED]

14.1 Primary Analysis

The primary endpoint will be deemed to have been met

14.1.1 PRIMARY ANALYSES METHODS

The endpoint of overall mean change from baseline



14.1.1.3 ADDITIONAL SENSITIVITY ANALYSES

Additional sensitivity analyses will be performed

Term	Percentage
GMOs	~95%
Organic	~90%
Natural	~85%
Artificial	~75%
Organic	~80%
Natural	~75%
Artificial	~65%
Organic	~70%
Natural	~65%
Artificial	~55%
Organic	~60%
Natural	~55%
Artificial	~45%
Organic	~50%
Natural	~45%
Artificial	~35%
Organic	~40%
Natural	~35%
Artificial	~25%

14.2 Secondary Analyses

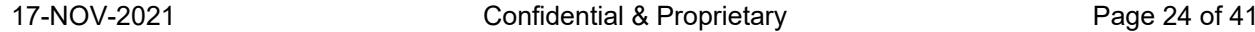
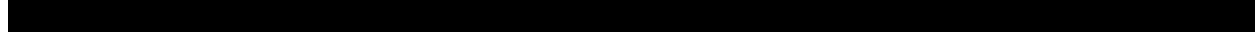
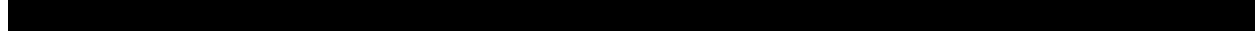
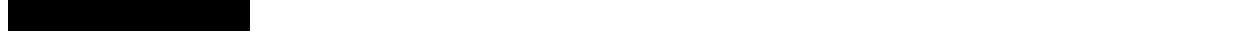
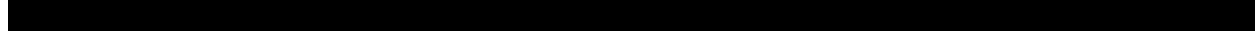
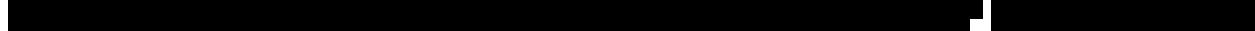
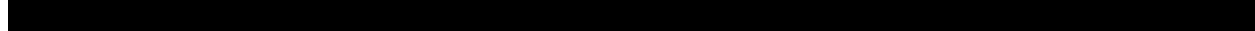
14.2.1 OVERALL MEAN CHANGE FROM BASELINE OF EYE DRYNESS SCORE

Subjects will be

[REDACTED]. A subject listing of the eye dryness during the CAE will be generated.

14.2.2 OVERALL MEAN CHANGE FROM BASELINE OF OCULAR DISCOMFORT SCALE (ORA CALIBRA® SCALE)

Ocular Discomfort will be assessed

<img alt="Redacted content" data-bbox="111 6320 880 633

14.3 Exploratory Analyses

14.3.1 EYE DRYNESS SCORE FROM THE VISUAL ANALOG SCALE

[REDACTED]

Subjects will be asked to rate eye dryness [REDACTED]

[REDACTED] A subject listing of the eye dryness outside of the CAE® will be generated.

14.3.2 OCULAR DISCOMFORT SCALE (ORA CALIBRA® SCALE)

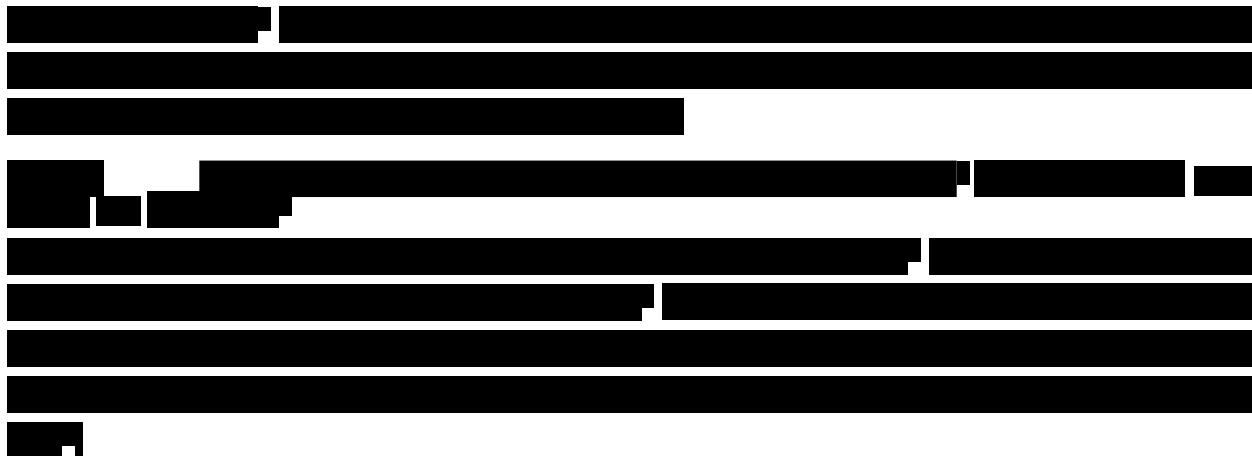
[REDACTED]

Ocular Discomfort Scale will be assessed [REDACTED]

[REDACTED] A subject listing of the Ocular Discomfort Scale outside of the CAE® will be generated.

14.3.3 OCULAR DISCOMFORT & 4-SYMPTOM QUESTIONNAIRE (ORA CALIBRA® SCALE)

Ocular Discomfort and dry eye symptoms will be assessed [REDACTED]



[REDACTED] A subject listing of the Ocular Discomfort & 4-Symptom Questionnaire will be generated.

14.3.3.2 OCULAR DISCOMFORT & 4-SYMPTOM QUESTIONNAIRE (ORA CALIBRA® SCALE) [REDACTED] [REDACTED]

Overall mean CFB of each Ocular Discomfort & 4-Symptom Questionnaire [REDACTED]



[REDACTED] A subject listing of the Ocular Discomfort & 4-Symptom Questionnaire will be generated.

14.3.4 CONJUNCTIVAL ALLERGEN CHALLENGE OCULAR ITCHING SCALE (ORA CALIBRA® SCALE)

Subjects will rate the severity of their ocular itching symptom [REDACTED]



14.3.4.1 CONJUNCTIVAL ALLERGEN CHALLENGE OCULAR ITCHING SCALE (ORA CALIBRA® SCALE) [REDACTED] [REDACTED]

Overall mean CFB of ocular itching [REDACTED]



A subject listing of the Conjunctival Allergen Challenge Ocular Itching Scale will be generated.

14.3.4.2 CONJUNCTIVAL ALLERGEN CHALLENGE OCULAR ITCHING SCALE (ORA CALIBRA® SCALE)

Overall mean CFB of ocular itching

14.3.5 CONJUNCTIVAL REDNESS (ORA CALIBRA SCALE)

Each subject eye at each visit/time point will be assessed

A subject listing of the conjunctival redness outside of the CAE® will be generated.

14.3.6 TEAR REACTIVE ALDEHYDE SPECIES

Tears will be collected

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] A subject listing of the tear RASP will be generated.

14.3.7 CONJUNCTIVAL REDNESS (ORA CALIBRA® SCALE) [REDACTED] [REDACTED]

For conjunctival redness during the CAE® [REDACTED]

14.3.8 EYE DRYNESS (VAS) [REDACTED] [REDACTED]

For eye dryness (VAS) [REDACTED]

14.3.9 OCULAR DISCOMFORT SCALE (ORA CALIBRA® SCALE) [REDACTED] [REDACTED]

For ocular discomfort [REDACTED]

15. Efficacy Analyses of the Initial Cohort

All efficacy analyses stated in section 14 using the ITT population will be repeated using the Initial Cohort only with the following exceptions:

16. Summary of Efficacy Analyses

A summary of all efficacy analyses will be presented.

17. Safety Analyses

All safety analyses will be conducted using the Safety Population using observed data only.

17.1 Adverse Events

For the purposes of this trial, an AE is defined as any untoward medical event occurring after the subject's signing of the informed consent until they are exited from the trial. An AE can therefore be any unfavorable and unintended sign, symptom, or disease occurring after the subject started the clinical trial, without any judgment about causality. Any pre-existing medical condition that worsens during the trial will also be considered a new AE. Documentation regarding the AE should be made as to the nature, date of onset, end date, severity, relationship to study procedure, expectedness, action(s) taken, seriousness, and outcome of any sign or symptom observed by the investigator or reported by the patient upon indirect questioning.

All AEs will be coded using the MedDRA

Treatment-emergent adverse events (TEAEs) are defined as any event that occurs or worsens on or after the day that randomized study treatment is initiated. Adverse events recorded in the eCRF which began prior to treatment will not be included in the summary tables but will be included in the AE data listings.

An overall summary will be presented that includes the number and percentage of subjects who experienced at least one AEs, ocular AEs, non-ocular AEs, SAEs, AEs by maximal severity, AEs by

relationship to study procedure, AEs leading to treatment discontinuation, and AEs resulting in death by treatment arm for the Safety Population. In addition, overall TEAEs and the number and percentage of subjects who experienced at least one TEAE, ocular TEAEs, non-ocular TEAEs, TE-SAEs, TEAEs by maximal severity, TEAEs by relationship to study procedure, TEAEs leading to treatment discontinuation, and TEAEs resulting in death by treatment arm for the Safety Population.

Separate summaries will be provided for the following categories of AEs:

- Ocular AEs by SOC and PT
- Non-ocular AEs by SOC and PT
- Ocular TEAEs by SOC and PT
- Non-ocular TEAEs by SOC and PT
- Instillation Site Ocular TEAEs by Duration of Time
- Ocular TEAEs by SOC, PT, and maximal severity
- Non-ocular TEAEs by SOC, PT, and maximal severity
- Ocular TEAEs by SOC, PT, and strongest relationship to study procedure
- Non-ocular TEAEs by SOC, PT, and strongest relationship to study procedure
- Ocular TEAEs by SOC, PT, maximal severity, and strongest relationship to study procedure
- Non-ocular TEAEs by SOC, PT, maximal severity, and strongest relationship to study procedure
- TEAEs That Led to Premature Treatment Discontinuation
- SAEs

Adverse Events and TEAEs will be summarized using discrete summary statistics and presented by treatment arm and all subjects for the the Safety Population. If a subject reports the same PT multiple times within the same 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. In the summaries, SOCs will be listed in ascending alphabetical order. PTs will be listed in order of descending frequency within each SOC for all subjects..

All AEs, ocular AEs, non-ocular AEs, and SAEs will be presented in subject listings.

17.1.1 SEVERITY

Severity of an AE is defined as a qualitative assessment of the degree of intensity of an AE as determined by the investigator or reported to him/her by the patient/subject. The assessment of severity is made irrespective of relationship to study procedures or seriousness of the event and should be evaluated according to the following scale:

- [REDACTED]
- [REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

Subjects experiencing more than one AE within a given SOC or PT are counted once within that SOC or PT for the maximal severity.

17.1.2 RELATIONSHIP TO STUDY PROCEDURES

The relationship of each AE to the study procedures should be determined by the investigator using these explanations. Decisive factors for the assessment of causal relationship of an AE to the study procedures include, but may not be limited to, temporal relationship between the AE and the procedure, known side effects of the procedure medical history, and/or concomitant medication:

- Definite: When there are good reason and sufficient documentation to demonstrate a direct causal relationship between study procedure and AE;
- Probable: When there are good reasons and sufficient documentation to assume a causal relationship in the sense of plausible, conceivable, likely but not necessarily highly probable.
- Possible: When there is sufficient information to accept the possibility of a causal relationship in the sense of not impossible and not unlikely, although the connection is uncertain or doubtful, for example; due to missing data or insufficient evidence.
- None: When there is sufficient information to accept a lack of a causal relationship, in the sense of impossible and improbable.
- Unclassified: When the causal relationship is not assessable for whatever reason due to insufficient evidence, conflicting data or poor documentation.

Subjects experiencing more than one AE within a given SOC or PT are counted once within that SOC or PT for the maximum relationship.

17.1.3 EXPECTEDNESS

The expectedness of an AE should be determined based upon existing safety information about the study procedures. Therefore, the following definition will be used:

- Unexpected: An AE that is not listed in the safety information available for the study procedure at the specificity or severity that has been observed.
- Expected: An AE that is listed in the safety information available for the study procedure at the specificity and severity that has been observed.
- Not Applicable: Any AE that is unrelated to the study procedure.

17.1.4 SERIOUS ADVERSE EVENTS

An AE is considered serious if, in the view of either the investigator or sponsor, it results in any of the following outcomes:

- Death;
- A life-threatening adverse event;
 - Note: An adverse event is considered “life-threatening” if, in the view of either the investigator or sponsor, its occurrence places the patient or subject at immediate risk of death. It does not include an adverse event that, had it occurred in a more severe form, might have caused death.
- Inpatient hospitalization or prolongation of existing hospitalization;
 - Note: The term “inpatient hospitalization” refers to any inpatient admission (even if less than 24 hours). For chronic or long-term inpatients, inpatient admission includes transfer within the hospital to an acute/intensive care inpatient unit. Inpatient hospitalization does not include: emergency room visits; outpatient/same-day/ambulatory procedures; observation/short stay units; rehabilitation facilities; hospice facilities; nursing homes; or clinical research/phase 1 units.
 - Note: The term “prolongation of existing hospitalization” refers to any extension of an inpatient hospitalization beyond the stay anticipated or required for the reason for the initial admission as determined by the investigator or treating physician.
- A persistent or significant incapacity or substantial disruption of the ability to conduct normal life functions;
 - Note: A serious adverse event specifically related to visual threat would be interpreted as any potential impairment or damage to the subject’s eyes (e.g., hemorrhage, retinal detachment, central corneal ulcer or damage to the optic nerve).
- A congenital anomaly/birth defect.

Important medical events that may not result in death, are not life-threatening, or do not require hospitalization may be considered serious when, based upon appropriate medical judgment, they may jeopardize the patient or subject and may require medical or surgical intervention to prevent one of the outcomes listed in this definition.

17.2 Visual Acuity (Early Treatment Diabetic Retinopathy Study)

The logarithm of the minimum angle of resolution ([REDACTED])

[REDACTED]

[REDACTED]

[REDACTED] A subject listing of visual acuity will also be produced.

17.3 Slit-Lamp Biomicroscopy

A slit-lamp biomicroscopy [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] A subject listing of the slit-lamp biomicroscopy parameters will also be produced.

17.4 Dilated Fundoscopy Examination

An dilated fundoscopy examination [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] A subject listing of the dilated fundoscopy parameters will also be produced.

17.5 Intraocular Pressure (IOP)

Subjects' IOP [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] . A subject listing of IOP will also be produced.

18. Changes from Protocol-Stated Analyses

There are no changes from protocol-stated analyses.

19. References

No references cited.

20. Revision History

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

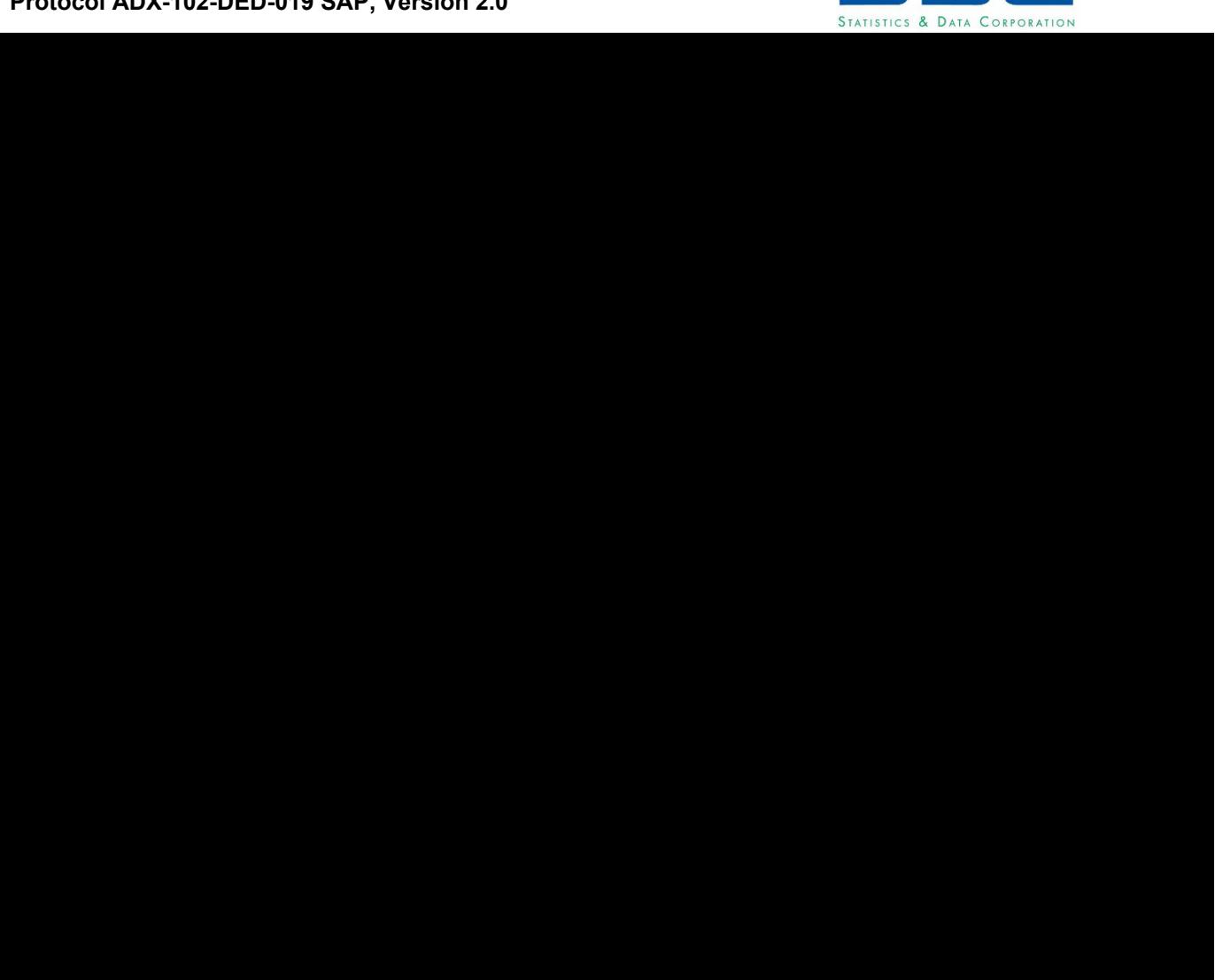
20.1 Revision 01

This revision was issued following [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



21. Tables

Tables (10 tables) in **boldface** font will be delivered in topline package.

Table Number	Title	Population
Table 14.1.1	Subject Disposition	All Screened Subjects
Table 14.1.2.1	Demographics	ITT Population
Table 14.1.2.2	Demographics	Safety Population
Table 14.1.2.3	Participation in Previous Reproxalap Trials	ITT Population
Table 14.1.3.1	Baseline Disease Characteristics	ITT Population
Table 14.1.3.2	Baseline Disease Characteristics	Safety Population
Table 14.1.4.1	Ocular Medical History	ITT Population

Table 14.1.4.2	Non-Ocular Medical History	ITT Population
Table 14.1.5.1	Ocular Concomitant Medications	ITT Population
Table 14.1.5.2	Non-Ocular Concomitant Medications	ITT Population
Table 14.1.5.3	Ocular Concomitant Procedures	ITT Population
Table 14.1.5.4	Non-Ocular Concomitant Procedures	ITT Population
Table 14.2.1.1	Overall Mean Change from Baseline of Conjunctival Redness (Ora Calibra Scale) during [REDACTED]	ITT Population with Observed Data Only
Table 14.2.1.2	Overall Mean Change from Baseline of Conjunctival Redness (Ora Calibra Scale) [REDACTED]	PP Population with Observed Data Only
Table 14.2.1.3	Overall Mean Change from Baseline of Conjunctival Conjunctival Redness (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.1.4	Overall Mean Change from Baseline of Conjunctival Conjunctival Redness (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.1.5	Overall Mean Change from Baseline of Conjunctival Redness (Ora Calibra Scale) [REDACTED]	ITT Population with PMM
Table 14.2.1.6	Overall Mean Change from Baseline of Conjunctival Redness (Ora Calibra Scale) [REDACTED]	ITT Population with MCMC
Table 14.2.2.1	Overall Mean Change from Baseline of Eye Dryness (Visual Analog Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.2.2	Overall Mean Change from Baseline of Eye Dryness (Visual Analog Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.2.3	Overall Mean Change from Baseline of Ocular Discomfort Scale (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.2.4	Overall Mean Change from Baseline of Ocular Discomfort Scale (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only

Table 14.2.2.5	Unanethetized Schirmer's Test [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.3.1	Eye Dryness (Visual Analog Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.3.2	Ocular Discomfort Scale (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.3.3	Ocular Discomfort & Four-Symptom Questionnaire (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.3.4	Ocular Discomfort & Four-Symptom Questionnaire (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.3.5	Conjunctival Allergen Challenge Ocular Itching Scale (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.3.6	Conjunctival Allergen Challenge Ocular Itching Scale (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.3.7	Tear Reactive Aldehyde Species [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.3.8	Conjunctival Redness (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.3.9	Conjunctival Redness (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.3.10	Eye Dryness (Visual Analog Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.3.11	Ocular Discomfort Scale (Ora Calibra Scale) [REDACTED] [REDACTED]	ITT Population with Observed Data Only
Table 14.2.4.1	Overall Mean Change from Baseline of Conjunctival Redness (Ora Calibra Scale) [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only

Table 14.2.4.2	Overall Mean Change from Baseline of Eye Dryness (Visual Analog Scale) [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only
Table 14.2.4.3	Overall Mean Change from Baseline of Eye Dryness (Visual Analog Scale) [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only
Table 14.2.4.4	Overall Mean Change from Baseline of Ocular Discomfort Scale (Ora Calibra Scale) [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only
Table 14.2.4.5	Overall Mean Change from Baseline of Ocular Discomfort Scale (Ora Calibra Scale) [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only
Table 14.2.4.6	Unanesthetized Schirmer's Test [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only
Table 14.2.4.7	Eye Dryness (Visual Analog Scale) [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only
Table 14.2.4.8	Ocular Discomfort Scale (Ora Calibra Scale) [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only
Table 14.2.4.9	Ocular Discomfort & Four-Symptom Questionnaire (Ora Calibra Scale) [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only
Table 14.2.4.10	Tear Reactive Aldehyde Species [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only
Table 14.2.4.11	Conjunctival Redness (Ora Calibra Scale) [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only
Table 14.2.4.12	Eye Dryness (Visual Analog Scale) [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only

Table 14.2.4.13	Ocular Discomfort Scale (Ora Calibra Scale) [REDACTED] [REDACTED]	Initial Cohort Population with Observed Data Only
Table 14.2.5	Summary of Efficacy Analyses	Multiple Populations
Table 14.3.1.1	Overall Summary of Adverse Events by Treatment Arm	Safety Population
Table 14.3.2.1	Ocular Adverse Events by System Organ Class and Preferred Term	Safety Population
Table 14.3.2.2	Non-Ocular Adverse Events by System Organ Class and Preferred Term	Safety Population
Table 14.3.3.1	Ocular Treatment-Emergent Adverse Events by System Organ Class and Preferred Term	Safety Population
Table 14.3.3.2	Non-Ocular Treatment-Emergent Adverse Events by System Organ Class and Preferred Term	Safety Population
Table 14.3.4	Instillation Site Ocular TEAEs by SOC, PT, and Duration of Time	Safety Population
Table 14.3.5.1	Ocular Treatment-Emergent Adverse Events by System Organ Class, Preferred Term, and Maximal Severity	Safety Population
Table 14.3.5.2	Non-Ocular Treatment-Emergent Adverse Events by System Organ Class, Preferred Term, and Maximal Severity	Safety Population
Table 14.3.6.1	Ocular Treatment-Emergent Adverse Events by System Organ Class, Preferred Term, and Strongest Relationship to Study Procedure	Safety Population
Table 14.3.6.2	Non-Ocular Treatment-Emergent Adverse Events by System Organ Class, Preferred Term, and Strongest Relationship to Study Procedure	Safety Population
Table 14.3.7.1	Ocular Treatment-Emergent Adverse Events by System Organ Class, Preferred Term, Maximal Severity, and Strongest Relationship to Study Procedure	Safety Population
Table 14.3.7.2	Non-Ocular Treatment-Emergent Adverse Events by System Organ Class, Preferred Term, Maximal	Safety Population

	Severity, and Strongest Relationship to Study Procedure	
Table 14.3.8	Treatment-Emergent Adverse Events That Led to Premature Discontinuation	Safety Population
Table 14.3.9	Treatment-Emergent Serious Adverse Events	Safety Population
Table 14.3.10	Visual Acuity (ETDRS) [REDACTED]	Safety Population
Table 14.3.11.1	Slit Lamp Biomicroscopy	Safety Population
Table 14.3.11.2	Shift in Slit Lamp Biomicroscopy	Safety Population
Table 14.3.12	Intraocular Pressure [REDACTED]	Safety Population
Table 14.3.13.1	Dilated Fundoscopy	Safety Population
Table 14.3.13.2	Shift in Dilated Fundoscopy	Safety Population
Table 14.3.14	Compliance to Study Drug	Safety Population
Table 14.3.15	Exposure to Study Drug	Safety Population

22. Listings

Listing Number	Title	Population
Listing 16.1.7	Randomization Schedule	All Randomized Subjects
Listing 16.2.1.1	Subject Disposition	All Randomized Subjects
Listing 16.2.1.2	Inclusion/Exclusion and Screen Failure	All Screened Subjects
Listing 16.2.2	Protocol Deviations	All Screened Subjects
Listing 16.2.3.1	Study Population Inclusion	All Randomized Subjects
Listing 16.2.3.2	Subjects Affected by COVID-19	All Screened Subjects
Listing 16.2.4.1	Demographics	All Screened Subjects
Listing 16.2.4.2	Ocular Medical History	All Randomized Subjects
Listing 16.2.4.3	Non-Ocular Medical History	All Randomized Subjects

Listing 16.2.4.4	Ocular Concomitant Medications	All Randomized Subjects
Listing 16.2.4.5	Non-Ocular Concomitant Medications	All Randomized Subjects
Listing 16.2.5.1	Run-In Instillation	All Screened Subjects
Listing 16.2.5.2	Study Drug Assignment, Instillation, and Replacement	All Randomized Subjects
Listing 16.2.5.3	Study Drug Exposure and Dosing Compliance	All Randomized Subjects
Listing 16.2.5.4	Study Drug Accountability	All Randomized Subjects
Listing 16.2.6.1	Conjunctival Redness (Ora Calibra Scale) [REDACTED]	All Randomized Subjects
Listing 16.2.6.2	Conjunctival Redness (Ora Calibra Scale) [REDACTED]	All Randomized Subjects
Listing 16.2.6.3	Eye Dryness (Visual Analog Scale) [REDACTED]	All Randomized Subjects
Listing 16.2.6.4	Eye Dryness (Visual Analog Scale) [REDACTED]	All Randomized Subjects
Listing 16.2.6.5	Ocular Discomfort Scale (Ora Calibra Scale) [REDACTED]	All Randomized Subjects
Listing 16.2.6.6	Ocular Discomfort Scale (Ora Calibra Scale) [REDACTED]	All Randomized Subjects
Listing 16.2.6.7	Ocular Discomfort & 4-Symptom Questionnaire (Ora Calibra Scale)	All Randomized Subjects
Listing 16.2.6.8	Conjunctival Allergen Challenge Ocular Itching Scale (Ora Calibra Scale)	All Randomized Subjects
Listing 16.2.6.9	Tear Reactive Aldehyde Species	All Randomized Subjects
Listing 16.2.6.10	Unanesthetized Schirmer's Test	All Randomized Subjects
Listing 16.2.6.11	Fluorescein Corneal and Conjunctival Staining (Ora Calibra Scale)	All Randomized Subjects

Listing 16.2.7.1	All Adverse Events	All Screened Subjects
Listing 16.2.7.2	Ocular Adverse Events	All Screened Subjects
Listing 16.2.7.3	Non-Ocular Adverse Events	All Screened Subjects
Listing 16.2.7.4	Serious Adverse Events	All Screened Subjects
Listing 16.2.8.1	Visual Acuity [REDACTED]	All Randomized Subjects
Listing 16.2.8.2	Slit-Lamp Biomicroscopy	All Randomized Subjects
Listing 16.2.8.3	Intraocular Pressure (IOP)	All Randomized Subjects
Listing 16.2.8.4	Dilated Fundoscopy	All Randomized Subjects
Listing 16.2.8.5	Pregnancy Test	All Female Screened Subjects
Listing 16.2.8.6	Tear Collection	All Randomized Subjects