- **Official Title:** A Randomized, Double-Blind, Vehicle-Controlled Study to Evaluate the Mechanism of Action of Ruxolitinib Cream for Vitiligo (TRuE-V MOA)
- NCT Number: NCT04896385
- **Document Date:** Statistical Analysis Plan Original: 14-October-2022

Statistical Analysis Plan



INCB 18424-214

A Randomized, Double-Blind, Vehicle-Controlled Study to Evaluate the Mechanism of Action of Ruxolitinib Cream for Vitiligo (TRuE-V MOA)

IND Number:	
EudraCT Number:	2021-000361-32
Sponsor:	Incyte Corporation 1801 Augustine Cut-Off Wilmington, DE 19803 United States
Protocol Version:	Protocol dated 03 MAR 2021
CRF Approval Date:	24 MAR 2022
SAP Version:	Original
SAP Author:	
Date of Plan:	14 OCT 2022

This study is being conducted in compliance with Good Clinical Practice, including the archiving of essential documents.

TABLE OF CONTENTS

TITLE PA	GE	1
TABLE OF	F CONTENTS	2
LIST OF A	BBREVIATIONS	5
1.	INTRODUCTION	5
2.	STUDY INFORMATION, OBJECTIVES, AND ENDPOINTS	7
2.1.	Protocol and Case Report Form Version	7
2.2.	Study Objectives and Endpoints	7
3.	STUDY DESIGN	3
3.1.	Randomization	3
3.2.	Control of Type I Error	3
3.3.	Sample Size Considerations	3
3.4.	Schedule of Assessments	9
4.	DATA HANDLING DEFINITIONS AND CONVENTIONS)
4.1.	Scheduled Study Evaluations and Study Periods)
4.1.1.	Day 1)
4.1.2.	Study Day)
4.1.3.	Baseline Value	9
4.1.4.	Handling of Missing and Incomplete Data)
4.1.5.	Handling of Missing and Incomplete Dates10)
4.2.	Variable Definitions)
4.2.1.	Body Mass Index10)
4.2.2.	Prior and Concomitant Medication10)
5.	STATISTICAL METHODOLOGY1	1
5.1.	General Methodology1	1
5.2.	Treatment Groups	1
5.3.	Analysis Populations1	1
5.3.1.	All-Screened Population1	1
5.3.2.	Intent-to-Treat Population1	1
5.3.3.	Safety Population1	1
5.3.4.	Treatment-Extension Evaluable Population1	1
6.	BASELINE, EXPOSURE, AND DISPOSITION	2

6.1.	Demographics, Baseline Characteristics, and Disease History	12
6.1.1.	Demographics and Baseline Characteristics	12
6.1.2.	Baseline Disease Characteristics and Disease History	12
6.1.3.	Prior Therapy for Vitiligo	12
6.1.4.	Medical History	12
6.2.	Disposition of Participants	13
6.3.	Protocol Deviations	13
6.4.	Exposure	13
6.5.	Study Drug Compliance	13
6.6.	Prior and Concomitant Medication	13
		14
		14
		14
		14
		14
		15
8.	PHARMACODYNAMICS	15
9.	SAFETY AND TOLERABILITY	16
9.1.	General Considerations	16
9.2.	Adverse Events	16
9.2.1.	Adverse Event Definitions	16
		17
9.2.3.	Adverse Event Summaries	17
9.3.	Clinical Laboratory Tests	18
9.3.1.	Laboratory Value Definitions	18
9.3.2.	Laboratory Value Summaries	18
10.	VITAL SIGNS	19
11.	PLANNED ANALYSES	19
12.	CHANGES AND MODIFICATIONS TO THE ANALYSIS PLAN	20
12.1.	Changes to Protocol-Defined Analyses	20
12.2.	Changes to the Statistical Analysis Plan	20
13.	REFERENCES	21
APPENDE	X A. PLANNED TABLES AND LISTINGS	22

LIST OF TABLES

Table 1:	Objectives and Endpoints	7
Table 2:	Normal Ranges for Vital Sign Values1	9
Table 3:	Statistical Analysis Plan Versions	0

LIST OF FIGURES

Figure 1:	Study Design Schema	8
-----------	---------------------	---

LIST OF ABBREVIATIONS

Abbreviations	Definition
AE	adverse event
ASR	application site reaction
BID	twice daily
BMI	body mass index
BSA	body surface area
CI	confidence interval
CRF	case report form
CTCAE	Common Terminology Criteria for Adverse Events
eCRF	electronic case report form
F-BSA	facial body surface area
F-VASI	facial Vitiligo Area Scoring Index
F-VASI25/50/75/90	\geq 25%/50%/75%/90% improvement from baseline in facial Vitiligo Area Scoring Index
IFN-γ	interferon gamma
MedDRA	Medical Dictionary for Regulatory Activities
NCI	National Cancer Institute
РТ	preferred term
SAP	Statistical Analysis Plan
SOC	system organ class
STD	standard deviation
T-BSA	total body surface area
TEE	treatment-extension evaluable
TEAE	treatment-emergent adverse event
T-VASI	total body Vitiligo Area Scoring Index
T-VASI25/50/75/90	$\geq 25\%/50\%/75\%/90\%$ improvement in total body Vitiligo Area Scoring Index
VASI	Vitiligo Area Scoring Index

1. INTRODUCTION

This is a multicenter, randomized, double-blind, vehicle-controlled study with an open-label treatment extension period in adult participants (age ≥ 18 years) with nonsegmental vitiligo who have depigmented areas including $\geq 0.5\%$ BSA on the face, ≥ 0.5 F-VASI, $\geq 3\%$ BSA on nonfacial areas, and ≥ 3 T-VASI. Total body involved vitiligo area (facial and nonfacial) should not exceed 50% BSA. Approximately 60 participants will be randomized 2:1 to receive initial double-blind study treatment (ruxolitinib 1.5% cream:vehicle cream) administered BID for 24 weeks. Participants will be stratified by age (≤ 40 years old and > 40 years old).

During the study, participants will apply study drug to depigmented areas on the face and body up to 20% T-BSA (facial and nonfacial). After completion of the Week 24 assessments from the double-blind treatment period, eligible participants will be offered the opportunity to continue the study in the 28-week, open-label, treatment extension period. Participants initially randomized to vehicle cream will be crossed over to active drug (ruxolitinib 1.5% cream BID), and participants initially randomized to ruxolitinib cream will continue to receive treatment with ruxolitinib 1.5% cream BID. Following the last application of ruxolitinib cream at Week 52, there will be a 30-day safety follow-up period.

Section 2 of the Protocol provides a detailed description of the investigational product, target patient population, rationale for doses to be examined, and potential risks and benefits of treatment with ruxolitinib cream.

The purpose of this SAP is to provide details of the statistical analyses that have been outlined in the INCB 18424-214 Protocol. The scope of this plan will be executed by the Department of Biostatistics or designee. The details of the analysis methodology of biomarkers and pharmacodynamics and results will appear in a separate report.

2. STUDY INFORMATION, OBJECTIVES, AND ENDPOINTS

2.1. Protocol and Case Report Form Version

This SAP is based on INCB 18424-214 Protocol dated 03 MAR 2021 and CRFs approved 09 APR 2021. Unless superseded by an amendment, this SAP will be effective for all subsequent Protocol amendments and CRF versions.

2.2. Study Objectives and Endpoints

Table 1 presents the objectives and endpoints.

Table 1:Objectives and Endpoints

Objectives	Endpoints
Primary	
To evaluate the change in immune biomarkers in participants with vitiligo.	Percentage change from baseline in immune biomarkers, including CXCL10, at Week 4, Week 12, and Week 24.
Secondary	
To correlate the change in key serum and skin biomarkers of vitiligo to efficacy.	Correlation of key skin inflammatory biomarkers of vitiligo in target lesions to efficacy readouts at Week 12 and Week 24.
To assess the safety and local tolerability of ruxolitinib cream.	The frequency and severity of AEs.

3. STUDY DESIGN

This is a multicenter, randomized, double-blind, vehicle-controlled study with an open-label treatment extension period in adult participants (age ≥ 18 years) with nonsegmental vitiligo who have depigmented areas including $\geq 0.5\%$ BSA on the face, ≥ 0.5 F-VASI, $\geq 3\%$ BSA on nonfacial areas, and ≥ 3 T-VASI. Total body involved vitiligo area (facial and nonfacial) should not exceed 50% BSA. Approximately 60 participants will be randomized 2:1 to receive initial double-blind study treatment (ruxolitinib 1.5% cream:vehicle cream) administered BID for 24 weeks. Participants will be stratified by age (≤ 40 years old and > 40 years old).

After completion of the Week 24 assessments from the double-blind treatment period, eligible participants will be offered the opportunity to continue the study in the 28-week, open-label, treatment extension period. Participants initially randomized to vehicle cream will be crossed over to active drug (ruxolitinib 1.5% cream BID), and participants initially randomized to ruxolitinib cream will continue to receive treatment with ruxolitinib 1.5% cream BID.

The study schema is shown below in Figure 1. All participants will have follow-up assessments 30 (+7) days after the last application of study drug.

Double-Blind **Treatment Extension** Screening (up to 42 days) (24 weeks) Randomization (2:1) (28 weeks) **Rux Cream** • Adult aged ≥ 18 years Follow-Up 1.5% BID (n =40) Non-segmental vitiligo (30 days) Rux Cream \geq 0.5% BSA on the face and \geq 0.5 F-VASI \geq 3% BSA on nonfacial areas and \geq 3 T-VASI 1.5% BID Total not to exceed 50% BSA Vehicle BID (n =20) N= 60 12 24 28 40 EOS Week 0 4 52 (Day 1) FOT

Figure 1: Study Design Schema

3.1. Randomization

Approximately 60 participants will be randomized 2:1 to receive initial double-blind study treatment (ruxolitinib 1.5% cream BID:vehicle cream BID) for 24 weeks. Participants will be stratified by age (≤ 40 years old and > 40 years old).

3.2. Control of Type I Error

No alpha control will be implemented. Unless otherwise specified, all CIs provided will be at the 95% confidence level.

3.3. Sample Size Considerations

Due to the exploratory nature of the study, the sample size is not based on calculation of statistical power. The sample size is considered to be sufficient to obtain adequate safety, tolerability, tolerability,

Approximately 60 participants will be randomized 2:1 to ruxolitinib 1.5% cream BID or vehicle cream BID to ensure approximately 45 participants will have multiple biomarker data (eg, CXCL10; Rashighi and Harris 2015) available at Week 24.

On the basis of the results of a Phase 2 study (INCB 18424-211), the anticipated difference in percentage change from baseline in CXCL10 between ruxolitinib 1.5% cream BID and vehicle cream BID is 22% (STD = 0.25%). Using a 2-sample t-test, the sample size of 45 will provide great power ($\geq 80\%$) to detect such difference with a 2-sided alpha of 0.10.

3.4. Schedule of Assessments

Refer to Protocol dated 03 MAR 2021 for a full description of all study procedures and assessment schedules for this study.

4. DATA HANDLING DEFINITIONS AND CONVENTIONS

4.1. Scheduled Study Evaluations and Study Periods

4.1.1. Day 1

Day 1 is the date that the first application of ruxolitinib cream or vehicle cream is administered to the participants in the specific period.

For randomized participants not treated with any study drug, Day 1 is defined as the date of randomization.

4.1.2. Study Day

If a visit/reporting date is on or after Day 1, then the study day at the visit/reporting date will be calculated as

Day # = (visit/reporting date - Day 1 date + 1).

If the visit/reporting date is before Day 1, then the study day at the visit/reporting date will be calculated as

Day # = (visit/reporting date - Day 1 date).

A study day of -1 indicates 1 day before Day 1.

4.1.3. Baseline Value

Baseline is the last nonmissing measurement obtained before the first application of ruxolitinib cream or vehicle cream in the double-blind period.

For randomized participants not treated with any study drug, baseline is defined as the last nonmissing assessment before randomization for all parameters.

4.1.4. Handling of Missing and Incomplete Data

In general, values for missing data will not be imputed unless methods for handling missing data are specified in this section or relevant sections.

4.1.5. Handling of Missing and Incomplete Dates

In general, values for missing dates will not be handled unless methods for handling missing dates are specified in this section or relevant sections. The original reported dates collected on the eCRF should be used in all relevant listings. The following rules will be used for handling partial dates for analyses requiring dates.

When calculating the time since diagnosis of vitiligo, a partial vitiligo diagnosis date will be handled as follows in the calculation:

- If only the day is missing, then the first day of the month will be used.
- If both the month and day are missing, then 01 JAN of the year will be used.
- If the diagnosis date is completely missing, then the time since diagnosis will not be calculated.

When the date of the last application is used in deriving variables such as duration of treatment or TEAE flag, a missing or partial date of the last application will be handled as follows:

- If only the day is missing, then the earlier date of the last day of the month or the date that the participant discontinued treatment will be used.
- If both the month and day are missing, then the earlier date of 31 DEC of the year or the date that the participant discontinued treatment will be used.
- Otherwise, the earlier date of treatment discontinuation date, end of study date, last contact date, or the cutoff date will be used as the date of the last application.

4.2. Variable Definitions

The following variables will only be calculated if not reported on the eCRF.

4.2.1. Body Mass Index

Body mass index will be calculated as follows:

BMI $(kg/m^2) = [weight (kg)] / [height (m)]^2$.

4.2.2. Prior and Concomitant Medication

Prior medication is defined as any nonstudy medication started before the first application of study treatment.

Concomitant medication is defined as any nonstudy medication that is started accordingly:

- Before the date of first application of study treatment and is ongoing throughout the study or ends on/after the date of first application of study treatment.
- On/after the date of first application of study treatment and is ongoing or ends during the course of study treatment.

A prior medication could also be classified as "both prior and concomitant medication" if the end date is on or after the first application of study treatment. In the listing, it will be indicated whether a medication is prior-only, concomitant-only, or both prior and concomitant.

For the purposes of analysis, all medications will be considered concomitant medications unless the medications can unequivocally be defined as not concomitant.

5. STATISTICAL METHODOLOGY

5.1. General Methodology

Unless otherwise noted, SAS[®] software (SAS Institute Inc, Cary, NC; v9.1 or later) will be used for the generation of all tables, graphs, and statistical analyses. Descriptive summaries for continuous variables will include but not be limited to the number of observations, mean, STD, median, minimum, maximum, first quartile, third quartile, and 95% CI. Descriptive summaries for categorical variables will include the number and percentage of participants in each category.

5.2. Treatment Groups

This is a randomized, double-blind, vehicle-controlled study followed by an open-label treatment extension period. Data will be summarized based on the treatment regimen that was assigned at randomization (ITT population) or based on the treatment the participant actually applied on Day 1 (safety population).

During the double-blind period, the treatment groups will be ruxolitinib 1.5% cream BID and vehicle cream.

During the open-label treatment extension period, the treatment groups will be ruxolitinib 1.5% cream BID and vehicle cream to ruxolitinib 1.5% cream BID.

5.3. Analysis Populations

5.3.1. All-Screened Population

The all-screened population will include all participants who signed the informed consent form.

5.3.2. Intent-to-Treat Population

All participants who were randomized to the study will constitute the ITT population. Treatment groups for this population will be defined according to the treatment assignment at the time of randomization regardless of the actual study treatment the participant might apply during their participation in the study.

The ITT population will be used for the summary of demographics, baseline characteristics, participant disposition,

5.3.3. Safety Population

All randomized participants who applied ruxolitinib cream or vehicle cream at least once will constitute the safety population. Treatment groups for this population will be determined according to the actual treatment the participant applied on Day 1 regardless of assigned study treatment.

All safety analyses will be conducted using the safety population.

5.3.4. Treatment-Extension Evaluable Population

Participants who applied ruxolitinib cream at least once in the treatment extension period will constitute the TEE population. The TEE population will be used for summary of safety during the treatment extension period.

6. **BASELINE, EXPOSURE, AND DISPOSITION**

Appendix A provides a list of data displays. Sample data displays are included in a separate document.

6.1. Demographics, Baseline Characteristics, and Disease History

6.1.1. Demographics and Baseline Characteristics

The following demographics and baseline characteristics will be summarized for the ITT and TEE populations: age, age group, sex, race, ethnicity, region, weight, height, BMI, and skin type (Fitzpatrick scale Type I/II/III/IV/V/VI).

6.1.2. Baseline Disease Characteristics and Disease History

Baseline disease characteristics summarized for the ITT population include but are not limited to the following:

- Time since initial diagnosis of vitiligo
- Vitiligo diagnosed in childhood (No/Yes [age]: 0-5 years, 6-11 years, 12-17 years)
- Other autoimmune disorders
- Prior therapy given for vitiligo (predefined systemic treatments, phototherapy, and surgical procedures)
- History of acne vulgaris (No/Yes)
- Currently have acne vulgaris on the face (No/Yes)
- Vitiligo in genital area (No/Yes)



6.1.3. **Prior Therapy for Vitiligo**

Prior medication information for vitiligo will be used to identify other, non-predefined medication received by participants before enrollment into the study. Prior medications for vitiligo will be summarized by treatment group.

6.1.4. Medical History

For participants in the ITT population, medical history will be summarized by treatment group. This summary will include the number and percentage of participants with medical history for each SOC/PT as documented in the eCRF.

6.2. Disposition of Participants

The number and percentage of participants who were enrolled, who were randomized (double-blind period only), who were treated, and who completed treatment for each period will be summarized for the ITT and TEE populations. The number of participants enrolled by country and/or site will also be provided by treatment group.

6.3. **Protocol Deviations**

Protocol deviations will be summarized and listed.

6.4. Exposure

For participants in the safety population during the double-blind period and overall treatment period and for participants in the TEE population during the treatment extension period, descriptive statistics will be provided for duration of treatment, average daily dose, and total dose.

6.5. Study Drug Compliance

Overall compliance (%) for the application of ruxolitinib cream or vehicle cream during the double-blind period and overall treatment period (safety population) and ruxolitinib cream during the treatment extension period (TEE population) will be calculated for all participants as follows:

Overall application compliance (%) = $100 \times [\text{total number of nonmissing applications}] / [total number of intended applications]$

The total number of nonmissing applications is the total number of applications that the participant actually applied in each period during the study. The total number of intended applications is the number of planned applications minus the number of interrupted applications.

6.6. Prior and Concomitant Medication

Prior medications and concomitant medications will be coded using the WHO Drug Dictionary and summarized as the number and percentage of participants with prior and concomitant medications by WHO drug class and WHO drug term.

For participants in the ITT population, prior and concomitant medications will be summarized by treatment group as well as listed. For participants in the TEE population, concomitant medications will be summarized by treatment group as well as listed.

I



8. PHARMACODYNAMICS

Serum CXCL10 levels and skin biomarkers will be evaluated for percentage change from baseline at Week 4, Week 12, and Week 24. Likewise, a change from baseline in CXCL10 gene expression and skin biomarkers will be evaluated in skin samples at Week 12 and Week 24.

9. SAFETY AND TOLERABILITY

Appendix A provides a list data displays. Sample data displays are included in a separate document.

9.1. General Considerations

Summary tables may be replaced with listings when appropriate. For instance, an AE frequency table may be replaced with a listing if it only contains a few unique PTs reported on relatively few participants.

9.2. Adverse Events

9.2.1. Adverse Event Definitions

A TEAE is any AE either reported for the first time or worsening of a pre-existing event after the first application of study drug and within 30 days of the last application of study drug. For participants who cross over treatments, the first application date is period-specific, and the end date is 30 days after the last application date in the period, or the day before the first application date in the next period, whichever comes first. Analysis of AEs (as discussed below) will be limited to TEAEs, but data listings will include all AEs regardless of their timing in relation to study drug application.

Adverse events will be tabulated by MedDRA PT and SOC. Severity of AEs will be graded using the NCI CTCAE v5.0. The CTCAE reporting guidelines and grading details are available on the Cancer Therapy Evaluation Program website.

The subset of AEs considered by the investigator to be related to study drug will be considered to be treatment-related AEs. If the investigator does not specify the relationship of the AE to study drug, the AE will be considered to be treatment-related. The incidence of AEs and treatment-related AEs will be tabulated. Serious AEs will also be tabulated.

Any missing onset date, causality, or severity must be queried for resolution. Unresolved missing causality and severity will be handled according to the following rules:

- An unresolved missing causality will be considered treatment-related.
- An unresolved missing severity will be identified as an unknown severity.

For purposes of analysis, all AEs will be considered TEAEs unless the AE can unequivocally be defined as not treatment-emergent.

Application site reactions are AEs that occur at the site of study drug application. A summary of ASRs will be provided. Exposure-adjusted summaries will be provided for the safety population including cumulative TEAEs.



9.2.3. Adverse Event Summaries

An overall summary of AEs by treatment group will include:

- Number (%) of participants reporting any TEAEs
- Number (%) of participants reporting any serious TEAEs
- Number (%) of participants reporting any Grade 3 or higher TEAEs
- Number (%) of participants reporting any treatment-related TEAEs
- Number (%) of participants who temporarily interrupted study drug because of TEAEs
- Number (%) of participants who permanently discontinued study drug because of TEAEs
- Number (%) of participants who had a fatal TEAE

The following summaries will be produced by MedDRA term (if 5 or fewer participants appear in a table, a listing may be appropriate):

- Summary of TEAEs by SOC and PT
- Summary of TEAEs by PT in decreasing order of frequency
- Summary of Grade 3 or higher TEAEs by SOC and PT
- Summary of Grade 3 or higher TEAEs by PT in decreasing order of frequency
- Summary of serious TEAEs by SOC and PT
- Summary of serious TEAEs by PT in decreasing order of frequency
- Summary of ASRs by SOC and PT

CONFIDENTIAL

- Summary of ASRs by PT in decreasing order of frequency
- Summary of treatment-related TEAEs by SOC and PT
- Summary of treatment-related TEAEs by PT in decreasing order of frequency
- Summary of Grade 3 or higher treatment-related TEAEs by SOC and PT
- Summary of treatment-related serious TEAEs by SOC and PT
- Summary of TEAEs with a fatal outcome by SOC and PT
- Summary of TEAEs leading to dose interruption of study drug by SOC and PT
- Summary of TEAEs leading to discontinuation of study drug by SOC and PT

9.3. Clinical Laboratory Tests

9.3.1. Laboratory Value Definitions

All laboratory assessments will be performed using a central laboratory except for urine pregnancy tests (as applicable). Laboratory values and change from baseline values will be summarized descriptively by visit, and non-numeric test values will be tabulated when necessary.

The baseline value will be determined using the last nonmissing value collected before the first application, prioritizing scheduled assessments for baseline identification over unscheduled visits. The last record before application in the highest priority will be considered the baseline record. For baseline laboratory candidates with the same date and time in the same priority category, additional rules may be provided after consultation with the medical monitor to delineate which value will be defined as baseline.

9.3.2. Laboratory Value Summaries

Actual values and changes from baseline in clinical laboratory test results will be summarized using descriptive statistics. Laboratory test values outside the normal range will be assessed for severity based on the normal ranges for the clinical reference laboratory. The incidence of abnormal laboratory values will be tabulated.

Laboratory data will be classified into Grades 1 through 5 using CTCAE v5.0. The following summaries will be produced for the laboratory data:

- Number and percentage of participants with worst postbaseline CTCAE grade (regardless of baseline value). Each participant will be counted only for the worst grade observed postbaseline.
- Shift tables from baseline to the worst postbaseline value using CTCAE grade.
- For laboratory parameters where CTCAE grades are not defined, shift tables to the worst postbaseline value using the low/normal/high classifications based on laboratory reference ranges.

10. VITAL SIGNS

Values at each scheduled visit, change, and percentage change from baseline for vital signs, including systolic blood pressure, diastolic blood pressure, pulse, temperature, and respiratory rate, will be summarized descriptively.

Normal ranges for vital sign values are defined in Table 2. For participants exhibiting vital sign abnormalities, the abnormal values will be listed along with their assigned treatment group. Alert vital signs are defined as an absolute value outside the defined normal range and percentage change > 25%. The abnormal values for participants exhibiting alert vital sign abnormalities will be listed.

Parameter	Low Threshold	High Threshold	
Systolic blood pressure	\geq 85 mmHg	≤ 155 mmHg	
Diastolic blood pressure	\geq 40 mmHg	$\leq 100 \text{ mmHg}$	
Pulse	\geq 45 bpm	$\leq 100 \text{ bpm}$	
Temperature	≥ 35.5°C	≤ 38°C	
Respiratory rate	\geq 8 breaths/min	\leq 24 breaths/min	

Table 2:Normal Ranges for Vital Sign Values

11. PLANNED ANALYSES

No formal interim analysis is planned in this study.

The primary analysis will occur after the primary database lock, when all participants have completed the vehicle-controlled, double-blind treatment period. After the primary database lock, the sponsor will be unblinded and investigators and participants will remain blinded to the study treatment. After Week 52, investigators and participants will be unblinded.

12. CHANGES AND MODIFICATIONS TO THE ANALYSIS PLAN

All versions of the SAP are listed in Table 3.

Table 3:Statistical Analysis Plan Versions

SAP Version	Date
Original	14 OCT 2022

12.1. Changes to Protocol-Defined Analyses

Not applicable.

12.2. Changes to the Statistical Analysis Plan

Not applicable.

13. REFERENCES

Rashighi M, Harris JE. Interfering with the IFN γ /CXCL10 pathway to develop new targeted treatments for vitiligo. Ann Transl Med 2015;3:343.

APPENDIX A. PLANNED TABLES AND LISTINGS

This appendix provides a list of the planned tables and listings for the Clinical Study Report. All tables are standard and will follow the conventions in the Standard Safety Tables v1.12.

The lists of tables and listings are to be used as guidelines. Modifications of the lists that do not otherwise affect the nature of the analysis will not warrant an amendment to the SAP.

Tables

Table No.	Title	Population	
Demographics and disposition			
1.1.1	Analysis Populations	All-screened	
1.1.2.1	Summary of Participant Disposition in Double-Blind Period	ITT	
1.1.2.2	Summary of Participant Disposition in Treatment Extension Period	TEE	
1.1.3	Summary of Number of Participants Enrolled by Country and Site	ITT	
1.1.4.1	Summary of Protocol Deviations in Double-Blind Period	ITT	
1.1.4.2	Summary of Protocol Deviations in Treatment Extension Period	TEE	
1.2.1	Summary of Demographics and Baseline Characteristics	ITT	
1.2.2	Summary of Demographics and Baseline Characteristics in Treatment Extension Period	TEE	
1.3	Summary of Baseline Disease Characteristics	ITT	
1.4.1	Summary of Prior Therapy for Vitiligo	ITT	
1.4.2	Summary of Prior Medications	ITT	
1.4.3.1	Summary of Concomitant Medications in Double-Blind Period	ITT	
1.4.3.2	Summary of Concomitant Medications in Treatment Extension Period	TEE	
1.5	Summary of General Medical History	ITT	
1.6	Summary of Participants With Assessments Not Done Due to COVID-19 Pandemic	ITT	
Biomarkers			
2.1.1	Summary and Analysis of CXCL10 During the Double-Blind Period	ITT	
2.1.2	Summary and Analysis of Skin Biomarkers During the Double-Blind Period	ITT	

Table No.	Title	Population
Ì		
Exposure and	1 compliance	
3.1.1.1	Summary of Exposure in Double-Blind Period	Safety
3.1.1.2	Summary of Exposure in Treatment Extension Period	TEE
3.1.1.3	Summary of Exposure During Treatment Period	Safety
3.1.2.1	Summary of Study Drug Compliance in Double-Blind Period	Safety
3.1.2.2	Summary of Study Drug Compliance in Treatment Extension Period	TEE
3.1.2.3	Summary of Study Drug Compliance During Treatment Period	Safety
Adverse even	ts	
3.2.1.1.X	Overall Summary of Treatment-Emergent Adverse Events	Safety/TEE
3.2.1.1.Y	Overall Summary of Exposure-Adjusted Treatment-Emergent Adverse Events	Safety
3.2.2.1.X	Summary of Treatment-Emergent Adverse Events by MedDRA System Organ Class and Preferred Term	Safety/TEE
3.2.3.1.X	Summary of Treatment-Emergent Adverse Events by MedDRA Preferred Term in Decreasing Order of Frequency	Safety/TEE
3.2.3.1.2.X	Summary of Application Site Reactions by MedDRA System Organ Class and Preferred Term	Safety/TEE
3.2.3.1.3.X	Summary of Application Site Reactions by MedDRA Preferred Term in Decreasing Order of Frequency	Safety/TEE
3.2.3.1.Y	Summary of Treatment-Emergent Adverse Events With Vehicle Group by MedDRA Preferred Term in Decreasing Order of Frequency During the Treatment Period	Safety
3.2.3.1.2.Y	Summary of Application Site Reactions With Vehicle Group by MedDRA Preferred Term in Decreasing Order of Frequency During the Treatment Period	Safety
3.2.3.1.3.Y	Summary of Exposure-Adjusted Incidence Rates of Treatment-Emergent Adverse Events With Vehicle Group by MedDRA Preferred Terms in Decreasing Order of Frequency During the Treatment Period	Safety
3.2.3.1.5.Y	Summary of Exposure-Adjusted Incidence Rates of Application Site Reactions With Vehicle Group by MedDRA Preferred Term in Decreasing Order of Frequency During the Treatment Period	Safety
3.2.4.1.X	Summary of Grade 3 or Higher Treatment-Emergent Adverse Events by MedDRA System Organ Class and Preferred Term	Safety/TEE
3.2.4.2.X	Summary of Grade 3 or Higher Treatment-Emergent Adverse Events by MedDRA Preferred Term in Decreasing Order of Frequency	Safety/TEE
3.2.5.1.X	Summary of Serious Treatment-Emergent Adverse Events by MedDRA System Organ Class and Preferred Term	Safety/TEE
3.2.5.2.X	Summary of Serious Treatment-Emergent Adverse Events by MedDRA Preferred Term in Decreasing Order of Frequency	Safety/TEE
3.2.6.1.X	Summary of Treatment-Related Treatment-Emergent Adverse Events by MedDRA System Organ Class and Preferred Term	Safety/TEE
3.2.6.2.X	Summary of Treatment-Related Treatment-Emergent Adverse Events by MedDRA Preferred Term in Decreasing Order of Frequency	Safety/TEE
3.2.7.1.X	Summary of Grade 3 or Higher Treatment-Related Treatment-Emergent Adverse Events by MedDRA System Organ Class and Preferred Term	Safety/TEE

Table No.	Title	Population
3.2.8.1.X	Summary of Treatment-Related Serious Treatment-Emergent Adverse Events by MedDRA System Organ Class and Preferred Term	Safety/TEE
3.2.9.1.X	Summary of Treatment-Emergent Adverse Events With a Fatal Outcome by MedDRA System Organ Class and Preferred Term	Safety/TEE
3.2.10.1.X	Summary of Treatment-Emergent Adverse Events Leading to Dose Interruption of Study Drug by MedDRA System Organ Class and Preferred Term	Safety/TEE
3.2.11.1.X	Summary of Treatment-Emergent Adverse Events Leading to Discontinuation of Study Drug by MedDRA System Organ Class and Preferred Term	Safety/TEE
Laboratory values and vital signs		
3.3.1.X	Summary of Laboratory Values – Hematology	Safety/TEE
3.3.3.X	Shift Summary of Hematology Laboratory Values in CTCAE Grade – To the Worst Abnormal Value	Safety/TEE
3.3.4.X	Summary of Laboratory Values – Chemistry	Safety/TEE
3.3.6.X	Shift Summary of Chemistry Laboratory Values in CTCAE Grade – To the Worst Abnormal Value	Safety/TEE
3.4.1.X	Summary of Systolic Blood Pressure	Safety/TEE
3.4.2.X	Summary of Diastolic Blood Pressure	Safety/TEE
3.4.3.X	Summary of Pulse	Safety/TEE
3.4.4.X	Summary of Respiration Rate	Safety/TEE
3.4.5.X	Summary of Body Temperature	Safety/TEE

Note: For AE tables ending with X, separate tables will be provided for the double-blind period (safety population) and treatment extension period (TEE population).

Note: For AE tables ending with Y, tables will be provided for the overall treatment period (double-blind and treatment extension periods). Participants who cross over should be included in both treatment groups.

Note: For laboratory values/vital sign tables ending with X, separate tables will be provided for the double-blind period (safety population) and treatment extension period (TEE population).

Listings

Listing No.	Title		
Demographic and baseline characteristics			
2.1.1	Participant Enrollment and Disposition Status		
2.1.2	Participants Who Discontinued Treatment or Discontinued From Study Due to COVID-19		
2.1.3	Participants With Assessments Not Done Due to COVID-19 Pandemic		
2.2.1	Protocol Deviations		
2.2.2	Participant Inclusion and Exclusion Criteria Violations		
2.3	Analysis Populations		
2.4.1	Demographic Characteristics		
2.4.2	Baseline Disease Characteristics		
2.4.3	Medical History		
2.4.4	Prior and Concomitant Medications		
2.4.5	Prior Medications for Vitiligo		
2.5.1	Study Drug Exposure and Compliance		
-			
-			
Adverse even	ts		
2.7.1	Adverse Events		
2.7.2	Adverse Events Leading to Study Drug Discontinuation		
2.7.3	Serious Adverse Events		
2.7.4	Treatment-Related Adverse Events		
2.7.5	Adverse Events With a Fatal Outcome		
2.7.6	Adverse Events Leading to Interruption of Study Drug		
2.7.8	Grade 3 or Higher Adverse Events		
2.7.9	Application Site Reactions		
Laboratory d	lata		
2.8.1.1	Clinical Laboratory Values – Hematology		
2.8.1.2	Clinical Laboratory Values – Chemistry		
2.8.1.3	Abnormal Clinical Laboratory Values – Hematology		
2.8.1.4	Abnormal Clinical Laboratory Values – Chemistry		
Vital signs			
2.8.2.1	Vital Signs		
2.8.2.2	Abnormal Vital Sign Values		
2.8.2.3	Alert Vital Sign Values		