

Statistical Analysis Plan

Study Title:	A Phase 2, Open-Label, Multi-Center Trial of Mavorixafor in Patients with WHIM Syndrome
Phase:	2
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Sponsor:	X4 Pharmaceuticals, Inc. 61 North Beacon Street, 4 th Floor
	Boston, MA 02134
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Approvals



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Document History

Version	Date	Author	Description
1.0	01Jun 2016		Initial Draft: Submitted to FDA (Initial IND 129092, 10 June 2016
2.0	21 Feb 2018		Updated based on protocol amendments, increase total daily dose to 400mg, specify exploratory analyses and other various administrative updates
3.0	18 Sep 2020		• Updated based on protocol amendment 4.6 (added objectives for the extension phase, added an updated schedule of events), Infection rate calculation has been added in section 6.1.2
			• Added Figure 1 and Box plot analysis in section 6.1.4
			• Time above threshold analysis added as section 6.1.5
			• Re-enrollment due to COVID-19 added as section 6.1.6
			• Local lab analysis and Cerba Research lab corrections added in section 9.2
			• Added derivations for infection rate & infection score for 6 month time intervals in section 6.1.2
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			• Add handling of partial dates for infection events
			• Updated based on protocol amendment 5.0

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3.0	29 July 2021	 Updated infection rate calculations and corresponding TLFs Added in 6 month time interval for infection rate
3.0	16 February 2022	 Updated TLF shells Updated section 2.2.3 to note that local lab was used to analyze whole blood samples due to COVID-19 Added in DRC meeting timelines for extension phase to sections 3 and 4.3. Updated laboratory baseline derivation Updated medical history text to reference 12 months prior to study start instead of 6 months Updated protocol deviations classification to be important/non- important instead of major/minor Updated per protocol population definition to reference important protocol violations.

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Abbreviations	

ABBREVIATION	DEFINITION OR DESCRIPTION
AE	Adverse event
ALC	Absolute lymphocyte count
AMC	Absolute monocyte count
ANC	Absolute neutrophil count
ATC	Anatomical Therapeutic Chemical classification
AUC	Area under the plasma concentration curve
AUC _{ALC}	Area under the plasma concentration curve for absolute lymphocyte
	count
AUCANC	Area under the plasma concentration curve for absolute neutrophil count
BLQ	Below the limit of quantification
BMI	Body mass index

BOCF	Baseline-observation-carried-forward
C _{max}	Maximum concentration
CRF	Case report form
CSR	Clinical study report
CTCAE	Common Terminology Criteria for Adverse Events
CXCR4	Chemokine receptor type 4
DRC	Data review committee
ECG	Electrocardiogram
eCRF	Electronic Case report form
EMA	European Medicines Agency
FDA	Food and Drug Administration
FACS	Fluorescence activated cell sorting
G-CSF	Granulocyte-colony stimulating factor
HIP	HPV Impact Profile
ICH	International Council for Harmonisation
iCSR	Interim Clinical Study Report
Ig	Immunoglobulin
LOCF	Last-observation-carried-forward
MedDRA	Medical Dictionary for Regulatory Activities
NCI	National Cancer Institute
PBMC	Peripheral blood mononuclear cells
PD	Pharmacodynamic
РК	Pharmacokinetic
QD	Once Daily
SAE	Serious adverse event
SAP	Statistical analysis plan
SOC	System organ class
TEAE	Treatment-emergent adverse event
T _{max}	Time to maximum concentration
WBC	White blood cell
WHIM	Warts, Hypogammaglobulinemia, Infections, and Myelokathexis
WHO-DD	World Health Organization Drug Dictionary

1. Overview

This Statistical Analysis Plan (SAP) describes the planned analyses and data presentation for the Phase 2 component of the Phase 2 Study X4P-001-MKKA, titled "A Phase 2, Open-Label, Multi-Center Trial of Mavorixafor in Patients with WHIM Syndrome".

The development of this SAP is based on Protocol Version 5.0, dated 21st December 2020. The structure and content of this SAP provides sufficient detail to meet the requirements identified by the Food and Drug Administration (FDA), European Medicines Agency (EMA), and International Council for Harmonisation (ICH) of Technical Requirements for Registration of Pharmaceuticals for Human Use: Guidance on Statistical Principles in Clinical Trials. All work planned and reported in this SAP will follow internationally accepted guidelines, published by the American Statistical Association and the Royal Statistical Society, for statistical practice.

The analyses described in this SAP will be used to support the clinical study reports (CSRs), regulatory submissions, or future manuscripts. Post-hoc exploratory analyses not identified in this SAP may be performed to further examine study data. Any post-hoc analyses will be clearly identified as such in the CSR.

2. Study Objectives and Endpoints

2.1. Study Objectives

2.1.1. Primary Objectives

The objectives of the initial treatment period are:

- To evaluate safety and tolerability of mavorixafor (X4P-001) in patients with WHIM syndrome.
- To assess the dose required to achieve a consistent increase in circulating neutrophils and lymphocytes in patients with WHIM syndrome.

The objectives of the extension phase are:

- To evaluate the safety of long-term treatment with mavorixafor.
- To evaluate the efficacy of long-term mavorixafor treatment on infection rate, cutaneous warts, vaccine titers, and neutrophil and lymphocyte counts.

2.2. Study Endpoints

2.2.1. **Primary Endpoints**

The primary endpoints of the study are:

- To determine the safety and tolerability of X4P-001; and
- To evaluate the mean area under the curve (AUC) of the absolute neutrophil count (ANC) AUC_{ANC} and/or AUC_{ALC} (absolute lymphocyte count) collected over 24-hour period

above clinically meaningful thresholds during the initial treatment phase of the study (first 6 month).

2.2.1.1. Safety and Tolerability

Safety and tolerability will be evaluated by the following:

- Treatment-emergent adverse events (TEAEs)
- Adverse events (AEs) assessed as related, possibly, or probably related to treatment by grade (all grades and grade ≥3)
- Serious adverse events (SAEs)
- Deaths
- Discontinuations due to AEs
- 0
- Vital signs
- Clinical laboratory test results
 - o Hematology
 - Serum chemistry
 - Pregnancy test (as applicable)
- Physical examination findings
- 12-lead ECG results
- Ophthalmology (local and central)

2.2.1.2. 24-Hour AUCanc and/or AUCalc

The primary efficacy endpoint is the mean 24-hour AUC_{ANC} and/or AUC_{ALC} above the clinically meaningful thresholds. The clinically meaningful threshold for ANC is $\geq 600/\mu$ L and for ALC is $\geq 1000/\mu$ L.

2.2.2. Exploratory Endpoints

- Time above threshold values for ANC, AMC, and ALC, as applicable, will be calculated using the ANC and ALC assessments collected during the 24-hour collection times and analyzed as percentage of time (from initial to final value obtained during each of these visits) above the clinically meaningful thresholds of 500/µL and 1000/µL Time (hours)>ANC Threshold₅₀₀, Time (hours)>ALC Threshold₁₀₀₀), respectively. These parameters will be compared between dose levels to determine if there is a dose-dependent change in the respective Time (hours)>Time Above Thresholds.
- Frequency and severity of infections (severity assessed as Grade 1 to 5 (protocol only mention Grade 1 to 4) using National Cancer Institute [NCI] Common Terminology Criteria for Adverse Events (CTCAE) Version 4.03 or higher).
- Number of Cutaneous warts applicable only to patients with cutaneous warts at baseline, and comparing number at baseline to number at end of Treatment Period.
- Severity of genital warts applicable only to patients with genital warts, and comparing number of lesions, size of largest lesion, and patient-reported morbidity at baseline to end of Treatment Period.

- Antibody levels following revaccination applicable only to patients who were (a) previously administered approved vaccines, (b) found at baseline to have predefined sub-protective levels of antibody, and (c) agree to repeat administration of the vaccine after 12 weeks of treatment.
- **Frequency of events requiring rescue therapy** (granulocyte-colony stimulating factor [G- CSF] and/or intravenous immunoglobulins [Ig]).
- **Rate of hospitalization events** will be evaluated based on the information collected in the 12 months prior to start of participation in Study X4P-001-MKKA through end of Phase 2 Treatment Period and end of the study or data cutoff for the interim and final Clinical Study Report (CSR).
- **Circulating white blood cells (WBCs)** Absolute and fold change from baseline in total WBC counts, and in absolute numbers of lymphocytes, neutrophils, monocytes, and lymphocyte subpopulations cells.
 - Correlation of ANC and ALC levels with plasma drug levels
- Ig and specific antibodies
 - Changes from baseline in levels of total IgG, IgG subclasses, IgA, IgD, IgE and IgM.
- Bone marrow aspirates Optional (analyzed centrally by a blinded reviewer) Change from baseline in cellularity. Change from baseline in frequency of apoptotic cells.
- **Quality of Life** as assessed by SF-36 short form survey, Life Quality Index (LQI) and Human papillomavirus (HPV) Impact Profile (HIP).

2.2.3. Pharmacokinetic and Pharmacodynamic (PK/PD) Endpoints

For all patients receiving study drug, dense PK samples will be obtained during the 24-hour periods in-residence at the following time points:

• Time 0 (-15 min), 30, 60, 90 min (each ±5 min) and 2, 3, 4, 8, 12, 16, 24 hr (each ±15 min).

Additional time point 0 samples (trough) will be collected at Day 1 and Weeks 9, 17 and 25. Blood samples for plasma levels of X4P-001 will be analyzed for X4P-001 concentration using reversed-phase high performance liquid chromatography with tandem mass spectrometry detection. The PK parameters include AUC, maximum concentration (C_{max}) and time to maximum concentration (T_{max}). X4P-001 concentration and PK parameters will be analyzed by treated patients and dosage regimen over the preceding week.

The in-residence stay will be rescheduled in the event of recent infection, administration of antibiotics, or of rescue therapy with G-CSF or intravenous Ig. Whole blood samples could be analyzed in local laboratories instead of a central laboratory due to COVID-19 restrictions, ANC and ALC were determined by standard methods. ANC and/or ALC will be calculated over time by patient and by dose. A full PK analysis plan will be developed separately from this document.

2.2.4. Biomarker Endpoints

Biomarker samples will be collected concurrent with time point 0 PK samples. Assessments may include samples analyzed by flow cytometry for subpopulations of peripheral blood mononuclear cells (PBMC). Candidate subsets are naïve T cells, memory T cells, B cells, transitional B cells, NK cells, and monocytes.

3. Overall Study Design and Plan

Patients will be scheduled for several 24-hour visits to permit collection of serial samples over 24 hours for determination of ANC/ALC and plasma drug levels. This will be calculated as the mean AUC over the 24-week Treatment Phase and Extension Phase, as data are available.

During the initial Treatment Phase, all available safety data will be reviewed approximately every 12 weeks by a Phase 2 Data Review Committee (DRC). The DRC will include participating Investigator(s), an independent physician with relevant experience in clinical research and/or immune deficiency diseases, the Medical Monitor, and a representative of the Sponsor. During the Extension Phase, the DRC will review data approximately every 6 months.

During the scheduled treatment period, patients will attend monthly office visits and will be monitored daily using an automated telephone- or web-based reporting system for temperature, activities of daily living, antibiotic usage, and unscheduled healthcare visits. Patients may receive standard of care antibiotics in the event of infection, but may not receive routine G-CSF or immunoglobulin therapy as a prophylactic treatment. In the event of an episode consistent with acute, severe bacterial infection, the investigator may add rescue therapy consisting of a course of G-CSF and/or immunoglobulin therapy if applicable (see Section 7.4.4.2 of the Protocol).

Participation in the initial Treatment Phase of the study is considered complete after 24 weeks of treatment with X4P-001 or until development of a TLT. For the definition of a treatment limiting toxicity, please see Section 5.7 of the Protocol. Thereafter, patients may continue participation in an open-label Phase 2 Extension Phase of the protocol where dose escalation and/or additional in-residence stays may be permitted.

Phase 2 Extension Phase

With the agreement of the Investigator, patients may enter the Extension Phase of the study and receive study drug until it becomes available via an alternative mechanism (e.g., drug is commercially available, an expanded access program, etc.). At the discretion of the Sponsor and with agreement from the investigator, patients may have their dose escalated and have additional in-residence or dense-sampling visits conducted during the Extension Phase.

Patients from the Phase 2 study receiving less than the selected Phase 3 dose may choose to receive the recommended Phase 3 dose once determined. The patient's participation in the Extension Phase will be complete when study treatment is discontinued, and all Extension Phase visits are complete. The procedures during the extension phase are described in Section 7.3.1 of the Protocol in detail.

3.1. Sample Size and Power

Given the rarity of the disease under study as well as the known PK and PD profile of mavorixafor, albeit in populations other than WHIM syndrome, a traditional 3+3 dose escalation design was not selected. Alternatively, a small number of adult subjects (N= up to 15) will be treated with mavorixafor on an open-label basis. A sample size of up to 15 patients is considered adequate for the study objectives of assessing safety, tolerability, and preliminary efficacy for planning Phase 3.

3.2. Study Population

The target patient population is adult patients with a confirmed diagnosis of WHIM syndrome to be eligible for the study.

3.3. Treatments Administered

The investigational drug is X4P-001, which is administered orally once daily not to exceed 400 mg daily dose. Patients either received a 25 mg capsule strength or a 100 mg capsule strength. Patients who received lower doses (50 mg to 200 mg QD) received 25 mg capsules until it was determined that higher doses would be necessary (i.e., total daily dose not to exceed 400 mg). Therefore, after September 2017 patients either switched to or started initial dosing at a larger capsule strength (100 mg) when it was determined by the Investigator and Sponsor that higher daily doses (300 mg and 400 mg) would be appropriate.

3.4. Method of Assigning Patients to Treatment Groups

All patients will be treated with X4P-001 open-label. The decision for dose-escalation, if necessary, will be based on ANC and ALC analyzed as AUCs relative to pre-specified clinically meaning thresholds of 600/ μ L and 1000/ μ L, respectively. The 24-hour AUC will be calculated using the trapezoidal method with area above threshold being positive, and area below threshold, negative (see Section 10.4.2 of the protocol). Patients with AUC_{ANC} <2000 cell•hr/ μ L or AUC_{ALC} <5000 cell•hr/ μ L at the Week 5 or Week 13 evaluations will have mavorizafor daily dose increased to a maximum daily dose of 400 mg as indicated below:

- Planned doses: 100 mg QD, 200 mg QD, 300 mg QD, 400 mg QD.
- Based on the emerging safety, PK, and pharmacodynamic (PD) data, the planned dose may be omitted, an intermediate dose may be used to substitute the planned dose, or a BID dosing regimen may be explored. However, the maximum daily dose will be ≤400 mg.

Subsequent dose-escalations may be conducted in both treatment periods after prior approval from the Data Monitoring Committee, based on AUC_{ANC/ALC} values, safety data, and review of clinical efficacy, up to a maximum dose of 400 mg daily. Dose-escalation may occur to determine the Phase 3 dose that will provide the most consistent increase in circulating neutrophils and lymphocytes in the most number of patients. Patients who experience $a \ge Grade$ 3 treatment-related SAE will not be escalated.

3.5. Blinding and Unblinding

Not applicable.

3.6. Schedule of Events

For a detailed schedule of events, please see Table 1.

						Study Per	riod / Visit					
	Initial Treatment Period ¹											
Procedure	Screen- ing ²	Day 1	Week 2 ³ (± 3D)	Week 3 ³ (± 3D)	Week 4 ³ (± 3D)	Week 5 ⁴ (-7D/ +14D)	Week 9 ³ (± 7D)	Week 13 ⁴ (± 14D)	Week 17 ³ (± 7D)	Week 21 ⁴ (± 14D)	Week 25 (EOT) (± 7D)	EOS ^{5 6}
Informed consent	Х										X6	X6
General medical history	Х											
History of WHIM syndrome	Х											
Inclusion / exclusion criteria	X											
Genotyping for eligibility	Х											
ANC and ALC for eligibility	X											
Serology	Х											
Height	Х	Х				Х		Х			Х	Х
Body weight	Х	Х				Х		Х			Х	Х
Physical examination	Х	Х				Х		Х			Х	Х
Vital signs ⁷	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Safety laboratory tests ⁸	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
12-lead ECG ⁹	Х	Х				Х		Х		Х		
Ophthalmologic examination ¹⁰	X							X			Х	
Pregnancy test ¹¹	Х	X ¹²				Х	Х	Х	Х	Х	Х	Х
Serial WBC, AMC, ANC and ALC sampling (for time above threshold and AUC) ¹³						X ¹⁴		X		Х		
Assessment of warts ¹⁵	Х	Х				Х		X ¹⁶		Х		

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	Study Period / Visit											
Procedure		Initial Treatment Period ¹										
	Screen- ing ²	Day 1	Week 2 ³ (± 3D)	Week 3 ³ (± 3D)	Week 4 ³ (± 3D)	Week 5 ⁴ (-7D/ +14D)	Week 9 ³ (± 7D)	Week 13 ⁴ (± 14D)	Week 17 ³ (± 7D)	Week 21 ⁴ (± 14D)	Week 25 (EOT) (± 7D)	EOS ^{5 6}
Serum Ig and specific antibodies		Х					Х		Х		Х	
Revaccination								X				
Quality of life questionnaires		Х		Х		Х	Х	Х	Х	Х	х	
PK and Biomarker Time 0 sample ¹⁷		Х					Х		Х		Х	
PK dense sampling ¹⁷						Х		Х		Х		
Bone marrow aspirate <i>(optional)</i> ¹⁸	Х										Х	
Study drug administration						X (D	aily)					
Diary completion ¹⁹		X (Daily)										
Concomitant medication monitoring		Continuous from Screening to EOS										
Adverse event monitoring		Continuous from Informed Consent to EOS										

Abbreviations: ALC=Absolute lymphocyte count; AMC=Absolute monocyte count; ANC=Absolute neutrophil count; AUC=Area under the curve; ECG=electrocardiogram; EOS=End-of-Study; EOT=End-of-Treatment; HR=heart rate; Ig=immunoglobulin; PK=pharmacokinetics; WBC=white blood cell count; **Note**: Home-health visits are authorized if there are extenuating circumstances that would impede patients from coming to the study site for a scheduled visit. Requests for home health visits will be reviewed and approved by X4 on a case-by-case basis. Home health visits will be an option applicable for all study visits, including screening and baseline.

¹ The schedule is presented relative to Study Week and Time of Dosing. The calendar day of the first administration of study drug is designated Day 1. All weeks are relative to Week 1, defined as Day 1 through Day 7, inclusive. Pre-and post-dose intervals are relative to the time of oral administration, designated 0 hr. ²Screening Visit and Day 1 may be done during the same visit.

³ Depending upon patient situation the Week 2, 3, 4, 9 and 17 vital signs and blood draws could be done at either the study site or by a visiting research nurse in the patient's home.

⁴ In-residence visits are conducted at Week 5 + 14 days and Weeks 13 and 21 ± 14 days. If a patient cannot return to the study site for an in-residence visit, a densesampling visit may be conducted by visiting research nurse or by the patient's primary care physician; however, in-residence visits at the study site are preferred. If a patient has their dose escalated during the Extension Phase, additional in-residence or dense-sampling visits may be conducted after the patient has received the escalated dose for at least 2 weeks. Additional in-resident or dense-sampling visits may also be conducted in the absence of dose escalation in order to collect additional data regarding a specific dose. Patients will have all of the same assessments conducted at the Weeks 5, 13 and 21 visits repeated at these additional inresidence or dense-sampling visit intervals.

⁵ The EOS visit is scheduled for 30 days \pm 5 days after the last dose of study drug.

⁶ Patients may be considered eligible for the Extension Phase after the EOT or EOS visit; informed consent will be completed before entry into the Extension Phase. ⁷ Vital signs comprise heart rate, blood pressure, and temperature. For patients dosed in clinic for PK dense sampling, vital signs will be performed and safety laboratory tests collected pre-dose.

⁸ Safety laboratory tests – hematology and chemistry; see Section 7.2.1.1 of the Protocol for details. Safety laboratory tests may be conducted by a central or local laboratory

⁹12-lead ECG to be done pre-dose on Day 1 and at 2 hours post-dose during each in-residence dense PK sampling.

¹⁰Ophthalmologic examination – see Section 7.1.1.8 of the Protocol for details.

¹¹ Women of childbearing potential only.

¹² Women of childbearing potential (see Section 7.4.1.1 of the Protocol for definition) will have a urine or serum pregnancy test done at the site on Day 1 and the results obtained prior to dosing.

¹³ Samples to be collected during an in-residence stay. See Section 7.1.4.1 of the Protocol for details of times for serial WBC, ANC, ALC and AMC blood samples. ¹⁴ WBC, ANC, ALC and AMC performed by a Central Laboratory determined by the Sponsor.

¹⁵ Wart assessment details are further described in Section 7.1.1.7 of the Protocol.

¹⁶ After consultation with the medical monitor, treatment with imiquimod to a sub-set of warts.

¹⁷ See Section 7.1.2 and Section 7.1.3 of the Protocol for details of times and permitted variances for collection of PK and biomarker blood samples at time 0 and during dense sampling.

¹⁸ Bone marrow aspirates are considered optional for this study (see Section 7.1.1.3 of the Protocol).

¹⁹ Daily diary for study drug administration, temperature, activities of daily living, antibiotic usage, and unscheduled healthcare visits for infection.

Table 2: Schedule of Event	ts – Extension Phase
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	Office Visits:	Office Visits:	
	Every 6 Months	Every 12 Months	End of Study
Procedure	(±30 days)	(±30 days)	(30 days ±5 days)
Body weight		Х	X
Physical examination		Х	Х
Vital signs (HR, BP, temp)	Х	Х	Х
Safety laboratory tests (Section 7.2.1.1 of the Protocol)	Х	Х	Х
Pregnancy test (WOCBP only)	Х	X	X
Ophthalmological examination (Section 7.1.1.8 of the Protocol)	Х		
Mavorixafor metabolite assessment ¹		X ¹	
Trough WBC, ANC, ALC, AMC, and PK sampling		X	
ANC, ALC, and AMC sampling for time above threshold and AUC (optional) (Section 7.1.4.1 of the Protocol)		Х	
PK dense sampling (optional) (Section 7.1.2 of the Protocol)		X	
Assessments of warts		Х	
Serum Ig and specific antibodies		Х	
Revaccination (optional) (Section 7.1.1.4 of the Protocol)		X	
Biomarker Time 0 sample (Section 7.1.3 of the Protocol)		X	
Study drug administration	Cor	tinuous	
Diary completion ²	Cor	tinuous	
Concomitant medication monitoring	Cor		
Adverse event monitoring		Continuous	
Quality of life questionnaires		X	
Pharmacogenetic sampling (optional) ³		X ³	
Qualitative patient interview conducted by a third party (optional) (Section 7.1.5.3) ⁴		X ⁴	
Research blood (optional)	Х	Х	

Abbreviations: ALC=Absolute lymphocyte count; AMC=Absolute monocyte count; ANC=Absolute neutrophil count; AUC=Area under the curve; BP=Blood pressure; HR=Heart rate; Ig=Immunoglobulin; PK=Pharmacokinetic; WBC=White blood cell count; WOCBP=Woman of childbearing potential.

Note: Home-health visits are authorized if there are extenuating circumstances that would impede patients from coming to the study site for a scheduled visit. Requests for home health visits will be reviewed and approved by X4 on a case-by-case basis. Home health visits will be an option applicable for all study visits, including screening and baseline.

¹ A single sample will be obtained for evaluation of mavorixafor metabolites at the yearly visit (e.g., Month 12, 24, etc.), whichever occurs earliest for each patient after implementation of the v5.0 protocol amendment.

² Daily diary for study drug administration, temperature, activities of daily living, antibiotic usage, and unscheduled healthcare visits for infection.

³ Optional assessment that may occur one time during the course of the study.

⁴ The qualitative patient interview can be performed by telephone at any time during the Extension Phase. For additional details see Section 7.1.5.3 of the Protocol.

4. Statistical Analysis and Reporting

After at least 4 patients have completed treatment during the Phase 2 treatment period, the DRC will review all available data and make a recommendation regarding the recommended Phase 3 dose (RP3D). At that point, the iCSR was generated summarizing all planned analyses identified in the protocol and in this SAP for the Phase 2 treatment and extension portion of the study.

A final clinical study report (CSR) summarizing all planned analyses identified in the study protocol and in this analysis plan will be generated after the last patient has completed his/her last visit and the database has been locked. Any post-hoc analysis not identified in this SAP but completed will be documented and reported in the CSR.

4.1. Introduction Of Statistical and Reproting Section

Descriptive statistics will be provided for all safety, exploratory and PK endpoints. The analyses results will be presented by dose levels.

For continuous variables, the number of patients (n) with non-missing values, the mean, standard deviation, median, and ranges will be provided. The minimum and maximum will be reported with the same degree of precision (i.e., the same number of decimal places) as the observed data. Measures of location (mean and median) will be reported to 1 degree of precision more than the observed data and measures of spread (standard deviation [SD]) will be reported to 2 degrees of precision more than the observed data.

For categorical variables, summaries will include the frequency and percentage of patients who are in the particular category. In general, the denominator for the percentage calculation will be based upon the total number of patients in the study population, unless otherwise specified. Percentages will be presented to 1 decimal place, unless otherwise specified.

4.2. Statistical Hypothesis

Statistical hypothesis testing will be performed in order to evaluate the Phase 2 primary and exploratory objectives. All statistical analyses will be descriptive. Statistical evaluation for the primary endpoint of increase in ALC and/or ANC will be based on demonstration of a significant increase in these parameters as threshold-corrected AUC relative to clinically meaningful values, as described in protocol Section 10.4.2. The null hypothesis test is defined as an AUC ≤ 0 , with an alternative that the respective parameter (ALC or ANC) is >0.

4.3. Interim Analysis and Data Monitoring

No formal interim analyses are planned for this study; however, safety data will be reviewed by a Phase 2 DRC that includes all participating investigator(s), an independent physician with relevant experience in clinical research and/or immune deficiency diseases, the medical monitor, and a representative of the Sponsor. During the initial Treatment Phase, all available safety data will be reviewed approximately every 12 weeks by a Phase 2 DRC. During the Extension Phase, the DRC will review data approximately every 6 months. Detailed information regarding the DRC is described in the DRC Charter.

After at least 4 patients have completed 12 weeks of treatment, the DRC will review all available safety data and make recommendations regarding the course of the study. The expected outcomes of the DRC review include:

• Continuation of the Phase 2 component with further observation.

In addition, based on the experience in Phase 2 with both safety and efficacy data, a recommended dose regimen for Phase 3 will be selected by the Sponsor with input from the DRC. A subset of analyses will be performed for meetings with the scientific community (e.g., American Society for Hematology).

Once the recommended Phase 3 dose has been determined, an iCSR will be generated to summarize the open label, Phase 2 findings prior to proceeding to the Phase 3 portion of the study.

5. Analysis Populations

The analysis populations for this study are as follows:

- Intent to Treat (ITT): The ITT Population includes all patients who received at least one dose of the study medication(mavorixafor).
- Safety Population (SP): The Safety Population includes all patients who received at least one dose of the study medication (mavorixafor). Safety and ITT populations are identical.
- **Per Protocol (PP) Population:** All patients in the ITT population without any important protocol violations (as defined in the SAP) and at least one efficacy evaluation. Active infections during efficacy evaluation and/or missing samples may be excluded.

6. General Issues for Statistical Analysis

6.1. General Statistical Methodology

All data will be presented in data listings. Descriptive summaries will be provided where appropriate for each of the safety and exploratory endpoints. Baseline characteristics and safety data will be summarized using the safety population unless otherwise specified.

Data processing, statistical analyses and graphical representations will be performed primarily using SAS[®] (version 9.4 or higher). All PK parameter estimations will be performed using Phoenix WinNonlin[®] software (Version 6.4 or higher; Pharsight, Cary, NC).

Unless otherwise indicated, all statistical tests will be 2-sided and tested at a significance level of p-value=0.05. All tests performed for secondary or for exploratory endpoints (specified in Section 8.1) will be exploratory in nature.

6.1.1. Handling of Missing Data

For the mean of AUC_{ANC} and/or AUC_{ALC} during 24-hour sampling, last-observation-carried-forward (LOCF) method will be used to impute missing AUC values. Each AUC will be

calculated based on 11 samples collected over a 24-hour period. There will be no imputation for intermediate missing values within any AUC calculations during 24-hour sampling. If the last sample (the sample for 24-hour) is missing, the baseline-observation-carried-forward (BOCF) method will be used to impute the missing value. For patients who are missing all AUC assessments, the mean AUC value will be set to missing.

A sensitivity analysis will be performed in which there are no modifications made for missing data. For the Phase 2 analysis, comparisons of the results with and without imputations will be reviewed and analyzed in order to determine appropriate data handling methods to be used in a future Phase 3 trial.

The following rules will be applied to the programming logic to handle missing or partial concomitant medication dates.

For prior infection events with partial dates (day and/or month missing), the following rules will be applied to identify events occurring approximately a year before first study treatment administration and to include them as occurring 12 months prior to treatment initiation in infection reporting outputs:

- If infection onset year is the same as year of first study treatment administration, or
- If infection onset year is one less than year of first study treatment administration and initial treatment was administered in January, or
- If infection onset year is one less than year of first study treatment administration and infection onset month is on or after the month of initial treatment administration.

If the prior infection onset date is complete, then the event will be classed as taking place 12 months prior to first study treatment administration if it falls within 365 days prior to first study treatment dose.

6.1.2. Derived Variables

- Day 1 is defined as the day that first study dose is administered.
- If the assessment is prior to Day 1, then Study day = Assessment date date of Day 1; otherwise Study Day = Assessment date date of Day 1 + 1.
- Baseline = Last non-missing observation immediately prior to the first dose of study medication. For the laboratory data, if an infection event occurred ± 1 day of the baseline observation or the baseline value is 2x higher than the inclusion criteria value then the screening value will be assigned as the baseline value. If a patient had a Splenectomy prior to screening then the values can be 2x higher than the inclusion criteria.
- Change from Baseline = post baseline value value at Baseline.
- Fold-change = Value ÷ Baseline.
- Infection Rate = Number of infection events ÷ duration of treatment exposure (in years).
- Summary of dose level infection rate: 1. total number of infection events for all patients within each dose level ÷ total duration of exposure (in years) for all patient within each dose level; 2. For each patient calculate the infection rate for each dose level, then calculate the average for all patients for each dose level.
- Infection Score = (Number of infection events \times severity) \div exposure (in years).

- Summary of dose level infection score: For each patient calculate the infection score for each dose level, then calculate the average for all patients for each dose level.
- For each 6 month time interval:
 - Infection Rate of 6 month time interval = Number of infection events occurred in 6 month time interval ÷ 0.5.
 - Infection Score 6 month time interval = (Number of infection events occurred in 6 month time interval \times severity) \div 0.5.

6.1.3. Data Conventions

All collected data will be presented in listings. Data not subject to analysis according to this plan will not appear in any tables or figures but will be included in listings. Adverse events will be coded using the Medical Dictionary for Regulatory Activities (MedDRA) (Version 19.0 or higher). A treatment related AE is any AE with a relationship to the study drug (i.e., possibly, probably or related).

- Missing severity of an AE will be imputed to the maximum severity (In case the severity is graded and the maximum grade corresponds to death, the grade immediately below the maximum grade should be used).
- Missing relationship to study drug of an AE will be imputed to the strongest possible relationship.
- Any TEAE will be summarized under the dose level of onset.
- If the start date and the dose of onset is missing, the TEAE will be summarized in the lowest possible dose level the patient received.

6.1.4. Calculation of the AUC_{ANC} and/or AUC_{ALC}

The ANC and ALC sampling will be performed during the in-residence stays. The area under curve (AUC) for each parameter ANC and ALC will be calculated and analyzed relative to pre-specified clinically meaningful thresholds of AUC_{ANC} \geq 600/µL and AUC_{ALC} \geq 1000/µL, respectively. A separate table for AUC for ANC by dose level will be presented where the threshold of AUC_{ANC} \geq 500/µL.

Patients are scheduled for 24-hour measurements of ANC and ALC via blood samples collected as follows:

• Time 0 (-15 min), 30, 60, 90 min (each ± 5 min) and 2, 3, 4, 8, 12, 16, 24 hr (each ±15 min)

Additional visits may occur at the discretion of the Sponsor and with the agreement of the Investigator both during the 24-week treatment period and/or the Extension Phase. For patients receiving study drug, time 0 represents time of oral dosing that morning (typically between 7 and 8 am) and the sample will be drawn pre-dose. The 24-hour AUC will be calculated using the trapezoidal rule with area above threshold being positive, and area below threshold, negative. The results are referred to as threshold-adjusted AUC.

Patients with AUC_{ANC} <2000 cell•hr/ μ L or AUC_{ALC} <5000 cell•hr/ μ L after an in-residence stay will have X4P-001 daily dose increased in 100 mg increments up to a maximum daily dose of 400 mg QD.

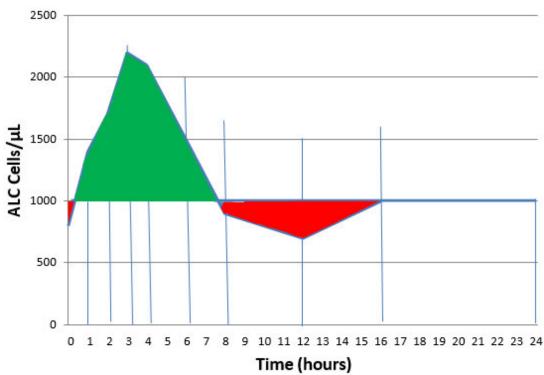


Figure 1: Calculation of 24-hr AUC for a Hypothetical Set of ALC Data.

Abbreviations: ALC=Absolute lymphocyte count; AUC=Area under the curve. Note: 24-hr AUC is the net sum of the interval areas.

To calculate the AUC above the clinically meaningful threshold for each in-residence stay, the area below the clinically meaningful threshold will be subtracted from the total AUC. Figure 1 illustrates the calculation of the AUC for ALC, where the red shaded area represents the area below the clinically meaningful threshold of $1000/\mu$ L, and the vertical blue lines represent the data collection time points.

Patients with fewer than the required 3 AUC calculations for ANC or ALC, as appropriate, will have the last available AUC carried forward for calculation of the mean of 3 AUC values post-treatment.

Box-plots of AUC for ANC at doses up to 400 mg doses will be generated.

The mean ANC, ALC and absolute monocyte count (AMC) values will be plotted from 0-24 hours at all the dose levels.

6.1.5. Time above threshold analysis

Patients are scheduled for 24-hour measurements of ANC and ALC via blood samples collected at the following scheduled timepoints: Time 0 (-15 min), 30, 60, 90 min (each \pm 5 min) and 2, 3,

4, 8, 12, 16, 24 hr (each ± 15 min). During these time points, the time above thereshold is the total time a patients ANC and ALC values were above a pre-defined threshold. The threshold is defined as 500/uL for ANC and as 1000/uL for ALC. For example, if a patients ANC value is 600 at 30 mins and 700 at 60 mins, then the patients ANC values was above the threshold for 30 mins (60 mins – 30 mins). If the ANC value was 800 at 4 hours and 400 at 8 hours then the patients ANC value was above the threshold from 4 hours until the time between 4 and 8 hours when the ANC value went below the pre-defined threshold of 500. This time is estimated using linear interpolation.

The time above threshold will be calculated for AMC based on the age and gender specific threshold as described in the following table:

Age (year)	Gender	Threshold (/uL)
>=18	F	250
	М	290

A scatter plot showing the correlation of time above threshold for ANC, ALC vs AUC for ANC and ALC will be generated.

The dense samples collected on 9th to 10th October 2017 (Extension visit 1, 300mg dose) for patient **and the dense samples collected on 12th to 13th February 2018 (Extension visit 3, 400mg dose) for patient and the dense samples collected on 21st February 2018 (Week 21, 400mg dose) for patient and the dense samples collected on 21st February 2018 (Week 21, 400mg dose) for patient and the dense samples collected on 21st February 2018 (Week 21, 400mg dose) for patient and the dense samples collected on 21st February 2018 (Week 21, 400mg dose) for patient and a during an infection event. These values will be excluded from the summary tables of absolute WBC, ANC, ALC, AMC; and TAT and AUC of ANC, ALC, and AMC. Dense sample data for subject and the dense sample will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening.**

As a sensitivity analysis, separate summary tables of TAT will be presented including the dense sample data for **analysis**.

6.1.6. Re-enrollment due to COVID-19

The re-enrollment visit for the two patients (**1999**, **1999**) who dropped out the study due to study fatigue for about 6 months (400mg dose), and were re-enrolled on the study due to the fear of infection during the covid pandemic, will be mapped as Extension Visit 6 (re-enroll). All data will be presented in the listings. Data within the drop-out period will be excluded from the summary tables for infection, warts and other safety data analyses.

7. Study Patients and Demographics

7.1. Disposition of Patients and Withdrawals

The patient disposition table will include the number and percentage of patients who completed the initiation phase of the study, the number and percentage of patients entered into the extension phase, the number and percentage of patients who discontinue from the study along with the reasons for discontinuation, and number and percentage of patients analysis population The percentage in this table will be based on all patients enrolled in the Phase 2 study.

7.2. Protocol Violations and Deviations

Protocol deviations will be identified and classified as non-important or important and if COVID-19-related, and reviewed when preparing the Phase 2 analysis prior to the final database lock. Protocol deviations will be summarized by catogory using the Safety population.

7.3. Demographics and Other Baseline Characteristics

Descriptive summaries of demographics and other baseline conditions will include age, gender, race, ethnicity, height, weight, body mass index (BMI) and will be presented by dose levels and capsule strength received.

7.4. Medical History

The number and percent of patients reporting medical histories, grouped by MedDRA system organ class (SOC) and preferred term (PT) (coded using MedDRA Version 19.0 or higher), will be presented by dose level and a listing will be provided. Similarly, the history of WHIM syndrome manifestations (i.e., date of diagnosis, mutational status, and the following history in the 12 months prior to study entry: hospitalizations for infection, number and type of infections managed as an out-patient, any prior medical treatments for WHIM disease) will be summarized and presented by dose level and a listing will be provided. The Safety population will be used to perform these analyses.

8. Efficacy Analysis

8.1. Primary Efficacy Analysis

The AUC_{ANC} and/or AUC_{ALC} will be analyzed by week using descriptive statistics and presented by dose level. A patient listing of the AUC values will be provided.

The primary efficacy analysis will be performed with the missing data handling method described in Section 6.1.1 and without imputations.

8.2. Exploratory Efficacy Analysis

The following exploratory analyses will be performed:

- Time above threshold values for ANC, AMC, and ALC, as applicable, will be calculated using the ANC, AMC, and ALC assessments collected during the 24-hour collection times and analyzed as percentage of time (from initial to final value obtained during each of these visits) above the clinically meaningful thresholds of 500/µL and 1000/µL (Time (hours) >ANC Threshold₅₀₀, Time (hours) >ALC Threshold₁₀₀₀, and age and gender specific AMC thresholds), respectively. These parameters will be compared between dose levels to determine if there is a dose-dependent change in the respective Time (hours)>Thresholds.
- Frequency and severity of infections (severity assessed as Grade 1 to 5 using NCI CTCAE Version 4.03 or higher).

- Number of warts applicable only to patients with cutaneous warts at baseline and comparing number of warts to that at end of Treatment Period.
- Severity of genital warts applicable only to patients with genital warts, and comparing number of lesions, size of largest lesion, and patient-reported morbidity.
- **Improvement in antibody levels following revaccination** applicable only to patients who were (a) previously administered approved vaccines, (b) found at baseline to have predefined sub-protective levels of antibody, and (c) agree to repeat administration of the vaccine after 12 weeks of treatment.
- Frequency of events requiring rescue therapy (granulocyte-colony stimulating factor [G-CSF] and/or intravenous immunoglobulins [Ig]).
- **Rate of hospitalization events** for the X4P-001 treated patients will be evaluated based on the information collected in the 12 months prior to start of participation in Study X4P-001-MKKA through end of Phase 2 Treatment Period or data cutoff for the iCSR.
- **Circulating white blood cells (WBCs)** Absolute and fold change from baseline in total WBC counts, and in absolute numbers of lymphocytes, neutrophils, monocytes, and lymphocyte subpopulations cells. Correlation of ANC and ALC levels with plasma drug levels
- Ig and specific antibodies
 - Changes from baseline in levels of total IgG, IgG subclasses, IgA, IgD, IgE and IgM.
- **Bone marrow aspirates (**analyzed centrally by a blinded reviewer) Change from baseline in cellularity. Change from baseline in frequency of apoptotic cells.
- Quality of Life as assessed by SF-36, LQI and HIP.

The Safety population will be used to perform all the exploratory analyses.

8.3. Subgroup Analysis

There are no planned subgroup analyses for the Phase 2 study.

9. Safety and Tolerability Analysis

Safety variables will include TEAEs, SAEs, deaths, discontinuations due to AEs, vital signs, physical examinations, ophthalmology, laboratory tests, 12-Lead electrocardiograms (ECG), , concomitant medications and study drug exposure. The safety population will be used to perform these analyses.

9.1. Adverse Events

Adverse events will be coded using MedDRA Version 19.0 or higher. The severity of an AE will be graded according to the NCI CTCAE, Version 4.03 or higher.

The causal relationship of an AE to the study drug is determined by the investigator as Unrelated, Unlikely Related, Possibly Related, Probably Related, and Definitely Related. These will be mapped to Unrelated (Unrelated and Unlikely Related) and Related (Possibly Related, Probably Related, and Definitely Related). A summary table will be presented for the following:

- All TEAEs
- TEAEs all grades and grade 3 or higher
- TEAEs by relationship to study drug all grades and grade 3 or higher
- TEAEs leading to discontinuation of study drug
- SAEs regardless of causality and treatment related
- AEs leading to death
- AEs of special interest
- TLTs

TEAEs are defined as any AEs that begin or worsen on or after the start of study drug through 10 days after the last dose of study drug.

The incidence of TEAEs will be summarized by SOC and PT. TEAEs will also be summarized using Investigator assessment of the relationship to study drug (related or not related) and by maximum severity. TEAEs leading to study drug discontinuation and those resulting in premature withdrawal from study will be tabulated and listed.

If a patient experiences multiple AEs under the same PT within a SOC, then the patient will be counted only once for that PT within that SOC. If a patient experiences the same AE more than once with different intensity or grade, then the event with the highest grade will be tabulated in "by grade" tables.

9.1.1. Adverse Events Leading to Withdrawal

Summary tables of TEAEs leading to the discontinuation of the study drug and AEs leading to premature withdrawal from the study will be provided. Data listings will be provided as well.

9.1.2. Deaths and Serious Adverse Events

A summary of serious adverse events will be provided by SOC and PT and presented by dose level. The SAEs will also be listed. In addition, any deaths that occur during the study will be listed.

9.1.3. Treatment Limiting Toxicities

A TLT event for X4P-001 is defined as an AE that meets *both* of the following criteria:

- 1. Is assessed by the Investigator as possibly or probably related, or related to X4P-001 (see Section 8.2.3 of the study Protocol).
- 2. Represents one of the following events (grading as defined by the NCI CTCAE, v4.03 or higher) (see Section 8.2.1 of the study Protocol):
 - Is a Grade 3 or Grade 4 clinical event, except grade 3 nausea, vomiting, or diarrhea lasting <48 hrs in patients who have received suboptimal medical management.
 - Is a confirmed Grade 3 or Grade 4 laboratory event with the following exceptions:
 - Grade 3 electrolyte abnormalities that persist <72 hrs and do not require hospitalization.

- $\circ~$ Grade 3 AST/ALT increases that persist <5 days and with total bilirubin ${\leq}1.5x$ ULN.
- Is one of the following, which are designated as critical TLT events:
 - AST/ALT increased >3x ULN (Grade 2) with total bilirubin increased >2x ULN in the absence of cholestasis.
 - Retinopathy confirmed treatment-emergent retinopathy.
 - Platelets <50,000/mm³ (Grade 3) with bleeding or <25,000/mm³ (Grade 4).

A summary of TLTs will be provided by SOC and PT and presented by dose level.

9.2. Clinical Laboratory Evaluations

Laboratory safety tests will be performed by central (CRL and Cerba Research) and local lab facilities. Descriptive summaries of actual (absolute) values and changes from baseline values will be provided for hematology and chemistry by dose level and visit.

For tests with categorical results, the number and percentage of patients in each category will be provided by dose level. In the event of repeat test results, the last non-missing value per study day/time will be used.

A shift table presenting the number and percentage of patients with clinical laboratory values classified as below, within, or above the normal range at post baseline visit and in relation to baseline will be provided for each clinical laboratory analyte (i.e., hematology and chemistry).

A listing for the laboratory test results will be provided and all values that are outside the normal range will be flagged.

As central labs changed from CRL to Cerba Research during the study a correction factor needs to be applied to the test results from Cerba Research as specified in the table below to standardise the results and align them with the original central lab data. The correction will not need to be applied to the normal ranges.

For the local lab values, no conversion will be performed.

		USA pati	ients	AUS patients					
Test	Testing lab at CRL	Testing lab at Cerba Research	Correction factor	Testing lab at CRL	Testing lab at Cerba Research	Correction factor			
Rubella IgG	LabCorp	Cerba (France) Paris	N A	Sydpath	Cerba (France) Paris	N A			
Rubeola IgG	CRL USA	Cerba (France) Paris	N A	Sydpath	Cerba (France) Paris	N A			
IgG1	LabCorp	Cerba (France) Paris	LabCorp (g/L) = 1.310804 + 0.791798 * CerbaCR FRA (g/L)	Sydpath	Cerba (France) Paris	Sydpath (g/L) = 1.411672+ 1.037855 * CerbaCR FRA (g/L)			
IgG2	LabCorp	Cerba (France) Paris	LabCorp (g/L) = 0.746442 + 0.817308 * CerbaCR FRA (g/L)	Sydpath	Cerba (France) Paris	N A			
IgG3	LabCorp	Cerba (France) Paris	LabCorp (g/L) = 0.08375 + 0.875 * CerbaCR FRA (g/L)	Sydpath	Cerba (France) Paris	Sydpath (g/L) = 0.0304221 - 0.466234 * CerbaCR FRA (g/L)			
IgG4	LabCorp	Cerba (France) Paris	LabCorp (g/L) = 0.0590315 + 0.788288 * CR FRA (g/L)	Sydpath	Cerba (France) Paris	Sydpath (g/L) = 0.0226538 - 1.230769 * CR FRA (g/L)			
IgG	LabCorp	NWHL	LabCorp (mg/dL) = 17.410089 + 1.074362 * CR USA (mg/dL)	Sydpath	SDS Laverty	N A			
IgA	LabCorp	NWHL	LabCorp (mg/dL) = -8.2 + 1.085714 * CR USA (mg/dL)	Sydpath	SDS Laverty	N A			
IgE	CRL USA	NWHL	CRL USA (IU/mL) =-0.858757 + 0.817047 * CR USA (IU/mL)	Sydpath	SDS Laverty	Sydpath (IU/mL) = 11.903864 + 1.005829 * CF AUS (IU/mL)			
IgM	CRL USA	NWHL	N A	Sydpath	SDS Laverty	N A			

Table 3: Overview of Conversion Factors

9.3. Vital Signs

Descriptive summaries of actual (absolute) values and changes from baseline values will be provided for vital signs including weight (kg), heart rate (bpm), systolic blood pressure (mmHg), diastolic blood pressure (mmHg), and temperature (°C) by dose level.

A listing of the vital sign measurements will also be provided. Results outside the normal range will be flagged.

9.4. Electrocardiograms

The following ECG parameters will be recorded: HR, RR, PR interval, QRS, QT, QTc interval (the correction method QTcF will be calculated).

Descriptive summaries of actual values and changes from baseline to each visit will be presented for ECG measures of HR (bpm), RR interval (ms), PR interval (ms), QRS (ms), QT (ms), and QTc interval (ms). These summaries will be presented by treatment group as appropriate.

Shift tables comparing baseline ECG investigator interpretation (normal, abnormal, not clinically significant or abnormal, clinically significant) to each study visit will be summarized by dose level.

9.5. Concomitant Medication

Prior medications as well as prior WHIM treatment, and concomitant medications will be summarized descriptively using counts and percentages of patients taking each medication, classified using World Health Organization Drug Dictionary (WHO-DD) Anatomical Therapeutic Chemical (ATC) classes and PT. Prior WHIM medications, prior medications and concomitant medications will be presented separately. The use of antibiotics, G-CSF, Immunoglobulins, and imiquamod will be tabulated separately.

- A prior medication is any medication that is started or ended prior to the first dose of the study medication.
- A concomitant medication is any medication taken or ongoing on or after the first dose of the study medication.
- A medication is both prior and concomitant if it started prior to and is ongoing on or after the first dose of the study medication.

9.6. Exposure and Compliance

The study drug will be dispensed in bottles and using a web-based treatment diary, each patient will record the number of capsules taken. The bottles will be examined visually at each clinic visit for the purpose of assessing study drug compliance. Percent compliance will be calculated as follows: $[1 - (Total number of capsules returned/Total number of capsules dispensed)] \times 100$. Patient compliance with study drug will be summarized by patient, treatment duration overall, dose, treatment duration by dose and capsule strength. All study drug administration data will be displayed in a listing.

10. Changes from Planned Analysis

The following analyses were not described in the protocol but will be presented in the TLFs:

- A separate table for AUC for ANC by dose level will be presented where the threshold of $AUC_{ANC} \ge 500/\mu L$.

11. Other Planned Analysis

11.1. Pharmacokinetic and Pharmacodynamic (PK/PD) Analysis

Pharmacokinetic Analysis

The PK parameters (AUC, T_{max} and C_{max}), will be determined for each patient following each specified visit, using a non-compartmental analysis based on the plasma concentration versus time dataset. Additional parameters may be estimated if warranted and if data permit.

Plasma X4P-001 concentration and PK parameters (AUC, C_{max} , T_{max}) will be summarized at each timepoint using descriptive statistics, including number of patients, arithmetic mean, geometric mean, SD, median, maximum, minimum, and coefficient of variation (%CV). These summaries will be presented by dose level. All figures will be presented using both linear and semi-logarithmic scales. All plasma concentration data and PK parameters will be displayed in data listings.

Plasma concentration of X4P-001 below the limit of quantification (BLQ) occurring before T_{max} will be set to 0. BLQ plasma concentrations occurring after T_{max} will be set to missing. If sufficient data are missing for a given patient, that patient may be considered non-evaluable for PK analysis. All plasma concentration data and PK parameters will be displayed in data listings. The above descriptive summary will be performed using the PK population.

Pharmacodynamic Analysis

AUC of ANC and ALC will be determined for each patient and each dose level. Individual ANC/ALC values vs time will be plotted. Mean ANC/ALC values vs time will be plotted by dose level. X4P-001 concentration vs ANC/ALC by timepoint will be presented in scatter plots by dose.

The PK and PD data collected in this study may be combined with data from other studies in a population pharmacokinetic (pop PK) analysis to assess covariate effects on the PK of X4P-001 and the PKPD correlation between exposure and ANC/ALC to support dose selection. A separate PK analysis plan will be developed.

11.2. Biomarker Analysis

Biomarker data will be summarized descriptively, including actual value and change from baseline. Summaries will be presented overall. All biomarker data will be displayed in data listings with the cell subset name such as naïve T cells, memory T cells, B cells, transitional B cells, NK cells, and monocytes mentioned in the protocol. The above descriptive summary will be performed using the safety population

12. References

- 1. Study protocol X4P-001-MKKA version 5.0 dated 21 December 2020
- 2. Study eCRF version 12.0 dated 17 February 2021
- 3. ASA. (1999) Ethical Guidelines for Statistical Practice. Prepared by the Committee on Professional Ethics, August 7, 1999. http://www.amstat.org/about/ethicalguidelines.cfm
- 4. US Federal Register. (1998) International Conference on Harmonization; Guidance on Statistical Principles for Clinical Trials. Department of Health and Human Services: Food and Drug Administration [Docket No. 97D-0174]. Federal Register Volume 63, Number 179, pages 49583-49598. September 16, 1998.
- 5. McDermott DH, Liu Q, Velez D, et al. A phase 1 clinical trial of long-term, low-dose treatment of WHIM syndrome with the CXCR4 antagonist plerixafor. Blood. 2014;123 (15):2308-16.

13. Tables, Listings, and Figures

13.1. Planned Table Descriptions

The following are planned summary tables for protocol X4P-001-MKKA. Tables will be numbered according to the nomenclature used to support the CSR when the Premier Research CSR template is used. However, the table numbering structure can be modified per the sponsor's request to meet compatibility with the sponsor's CSR template.

13.2. Demographic Data

Table 1: Demographic Data Summary Tables

Table Number	Population	Table Title/Summary
14.1 Display	s of Demographics an	d Disposition Data
14.1.1	Informed Consent Signed	Subject Disposition
14.1.2	Safety Population	Summary of Protocol Deviations
14.1.3	Safety Population	Demographics and Baseline Characteristics
14.1.4	Safety Population	Summary of Study Drug Exposure
14.1.5	Safety Population	Summary of Medical History

13.3. Efficacy Data

Table 2: Efficacy Data Summary Tables

Table Number	Population	Table Title/Summary	
14.2 Display	s of Exploratory Sum	maries	
14.2.1.1	Safety Population	Summary of AUCs and Mean of AUCs for ANC by Dose Level - $AUC_{ANC} \ge 600/\mu L$ Threshold	
14.2.1.1.1	Safety Population	Summary of AUCs and Mean of AUCs for ANC by Dose Level - $AUC_{ANC} \ge 500/\mu L$ Threshold	
14.2.1.2	Safety Population	Summary of AUCs and Mean of AUCs for ALC by Dose Level	
14.2.2.1	Safety Population	Summary of Infection Rates	
14.2.2.2	Safety Population	Summary of Infections by Severity	
14.2.2.3	Safety Population	Summary of Highest Grade Infections	
14.2.2.4	Safety Population	Summary of Infection Scores	
14.2.3.1	Safety Population	Summary of Non-Genital Warts	
14.2.3.2	Safety Population	Summary of Non-Genital Warts by location	
14.2.4.1	Safety Population	Summary of Genital Warts	
14.2.5	Safety Population	Summary of Antibody levels Following Revaccination	
14.2.6	Safety Population	Summary of Rescue Medications	
14.2.7	Safety Population	Summary of Hospitalizations	
14.2.8	Safety Population	Summary of Ig and Specified Antibodies	
14.2.9	Safety Population	Time above Threshold for ANC by Dose Level	
14.2.9.1	Safety Population	Time above Threshold for ANC by Dose Level – Sensitivity Analysis	
14.2.10	Safety Population	Time above Threshold for ALC by Dose Level	
14.2.10.1	Safety Population	Time above Threshold for ALC by Dose Level – Sensitivity Analysis	
14.2.11	Safety Population	Time above Threshold for Monocytes by Dose Level	

14.2.11.1	Safety Population	Time above Threshold for Monocytes by Dose Level – Sensitivity Analysis
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13.4. Safety Data

Table 3: Safety Data Summary Tables

Table Number	Population	Table Title/Summary
		ergent Adverse Events
14.3.1.1	Safety Population	Overall Summary of Treatment-Emergent Adverse Events
14.3.1.2	Safety Population	Summary of Treatment-Emergent Adverse Events by System
		Organ Class and Preferred Term
14.3.1.3	Safety Population	Summary of Treatment-Emergent Adverse Events Related to
		Study Treatment by System Organ Class and Preferred Term
		Serious and Significant Adverse Events
14.3.2.1	Safety Population	Summary of Serious Adverse Events by System Organ Class and Preferred Term
14.3.2.2	Safety Population	Summary of Serious Adverse Events Related to Study Treatment by System Organ Class and Preferred Term
14.3.2.3	Safety Population	Summary of treatment-limiting toxicities by System Organ Class and Preferred Term
14.3.2.4	Safety Population	Summary of Grade 3 or Higher Treatment-Emergent Adverse Events by System Organ Class and Preferred Term
14.3.2.5	Safety Population	Rate of Treatment Emergent Adverse Events by System Organ Class and Preferred Term
14.3.2.6.1	Safety Population	Summary of Yearly Infection Rate for Subjects on 300mg and 400mg Dose Levels by 6 Month Intervals
14.3.2.6.2	Safety Population	Summary of Yearly Infection Score for Subjects on 300mg and 400mg Dose Levels by 6 Month Intervals
14.3.2.7.1	Safety Population	Summary of Yearly Infection Rate by Dose Level – Method 1
14.3.2.7.2	Safety Population	Summary of Yearly Infection Rate by Dose Level – Method 2
		Serious and Certain Other Significant Adverse Events
14.3.3.1	Safety Population	Listing of Serious Adverse Events
14.3.3.2	Safety Population	Listing of Treatment Emergent Adverse Events Leading to Discontinuation
14.3.4 Abno	rmal Laboratory Valu	
14.3.4.1	Safety Population	Listing of Out of Reference Range Laboratory Values
	atory Data Summary	
14.3.5.1.1	Safety Population	Summary of actual and Change from Baseline in Hematology Results
14.3.5.1.2	Safety Population	Shift from Baseline in Hematology Results
14.3.5.2.1	Safety Population	Summary of actual and Change from Baseline in Serum Chemistry Results
14.3.5.2.2	Safety Population	Shift from Baseline in Serum Chemistry Results
14.3.5.3.1	Safety Population	Summary of actual and Change from Baseline in Coagulation Results
14.3.5.3.2	Safety Population	Shift from Baseline in Coagulation Results
14.3.5.4.1	Safety Population	Summary of actual and Change from Baseline in Cytometry Results
14.3.6 Other	Safety Data Summar	
14.3.6.1.1	Safety Population	Summary of actual and Change from Baseline in Vital Signs
14.3.6.2.1	Safety Population	Summary of actual and Change from Baseline of 12-Lead Electrocardiogram (ECG) Parameters
L		

14.3.6.3.1	Safety Population	Summary of Ophthalmologic Examination Results (Local Reader)	
14.3.6.3.2	Safety Population	Summary of Ophthalmologic Examination Results (Central	
		Retinal Findings)	
14.3.6.4	Safety Population	Summary of Concomitant Medications	
14.3.6.5.1	Safety Population	Summary of Use of Antibiotics, G-CSF, Immunoglobulins, and	
		imiquamod – Concomitant Medications	
14.3.6.5.2	Safety Population	Summary of Use of Antibiotics, G-CSF, Immunoglobulins, and	
		imiquamod – Prior Medications	
14.3.6.6	Safety Population	Summary of SF-36 QOL	
14.3.6.7	Safety Population	Summary of HPV Impact Profile (HIP) Questionnaire	

13.5. Pharmacokinetic Data

Table 4: Pharmacokinetic Data Summary Tables

Table Number	Population	Table Title/Summary
14.4 Pharmacok	inetic Data Summary Ta	ibles
14.4.1	Safety Population	Summary of Plasma X4P-001 Concentrations by Dose Level
14.4.2	Safety Population	Summary of Plasma X4P-001 Pharmacokinetic Parameters by Dose Level

13.6. Planned Listing Descriptions

The following are planned patient data listings for protocol X4P-001-MKKA. Data listings will be numbered according to the nomenclature used to support the CSR when the Premier Research CSR template is used. However, the listing numbering structure can be modified per the sponsor's request to meet compatibility with the sponsor's CSR template.

Table	5:	Planned	Listings

Data Listing Number	Population	Data Listing Title / Summary
16.2.1 Patient D	iscontinuations/Completi	ions
16.2.1	All Enrolled Patients	Subject Disposition
16.2.2 Protocol	Deviations	
16.2.2.1	All Enrolled Patients	Eligibility Criteria Not Met
16.2.2.2	Safety Population	Protocol Deviations
16.2.3 Analyses	Populations	
16.2.3	All Enrolled Patients	Analysis Populations
16.2.4 Demogra	phic Data and Other Bas	eline Characteristics
16.2.4.1	Safety Population	Demographics and Baseline Characteristics
16.2.4.2	Safety Population	Medical History
16.2.4.3.1	Safety Population	History of WHIM Syndrome - Hospitalizations
16.2.4.3.2	Safety Population	History of WHIM Syndrome - Infections Managed as Out-
		Patient
16.2.4.3.3	Safety Population	History of WHIM Syndrome - Prior Treatments of WHIM
		Syndrome
16.2.4.3.4	Safety Population	WHIM Syndrome Genotyping
16.2.4.4.1	Safety Population	Study Drug Administration
16.2.4.4.2	Safety Population	Study Drug Exposure
16.2.4.5	Safety Population	Assessment of Warts
16.2.4.6	Safety Population	Revaccination
16.2.4.7	Safety Population	Bone Marrow Aspirate

16.2.5 Drug Co	ncentration Data	
16.2.5.1	Safety Population	Pharmacokinetic Blood Collection and Concentrations
16.2.5.2	Safety Population	Calculated Pharmacokinetic Parameters
16.2.5.3	Safety Population	PK Sample Collection
16.2.6 Individu	al Efficacy Response Dat	ta
16.2.6.1	Safety Population	ANC/ALC Sample Collection
16.2.6.2.1	Safety Population	Threshold Adjusted AUC values for ANC
16.2.6.2.2	Safety Population	Threshold Adjusted AUC values for ALC
16.2.6.2.3	Safety Population	Time Above Threshold by Dose Level - Assessment of
		ANC/ALC/AMC
16.2.6.2.4	Safety Population	Time Above Threshold - Pharmacodynamic Assessment of
		ANC/ALC/AMC with Time Crossed
16.2.7 Adverse	Event Listings (by Patie	nt)
16.2.7.1	Safety Population	Treatment Emergent Adverse Events
16.2.7.2	Safety Population	Adverse Events that occur during Screening and ended
		before Exposure to study Drug
16.2.7.3	Safety Population	Infections Reported as Adverse Events
16.2.7.4	Safety Population	Deaths
16.2.7.5	Safety Population	Treatment Limiting Toxicities
16.2.7.6	Safety Population	Infections in Subjects Treated on 300mg or 400mg Dose by
		Time Period
16.2.7.7	Safety Population	Infections by Dose Level
16.2.7.8	Safety Population	Infections by Subject
	ory Values by Patient	
16.2.8.1	Safety Population	Clinical Laboratory Data: Serum Chemistry
16.2.8.2	Safety Population	Clinical Laboratory Data: Hematology
16.2.8.3	Safety Population	Serology and Other Laboratory Test Results
16.2.8.4	Safety Population	Serum Ig and Specific Antibody Laboratory Test Results
16.2.8.5	Safety Population	Pregnancy Test Results
16.2.8.6	Safety Population	Coagulation Laboratory Test Results
16.2.8.7	Safety Population	Urinalysis Laboratory Test Results
16.2.8.8	Safety Population	Cytometry Test Results
		Measurements (by Patient)
16.2.9.1	Safety Population	Prior or Concomitant Medications
16.2.9.2	Safety Population	Vital Signs Measurements
16.2.9.3	Safety Population	12-Lead Electrocardiograms
16.2.9.4	Safety Population	Physical Examinations
16.2.9.5	Safety Population	Ophthalmologic Examination (Site Assessment)
16.2.9.6	Safety Population	Ophthalmologic Examination (Central Readings)
16.2.9.7	Safety Population	Rescue Medications
16.2.9.8	Safety Population	SF-36 QOL
16.2.9.9.1	Safety Population	HPV Impact Profile (HIP) Questionnaire
16.2.9.9.1	Safety Population	HPV Impact Profile (HIP) Questionnaire - Domain Scores

13.7. Planned Figure Descriptions

The following are planned summary figures for protocol X4P-001-MKKA. They will be numbered according to the nomenclature used to support the CSR when the Premier Research CSR template is used. However, the figure numbering structure can be modified per the sponsor's request to meet compatibility with the sponsor's CSR template.

Table 6: Planned Figures

X4 Pharmaceuticals, Inc. Statistical Analysis Plan (SAP) X4P-001-MKKA

Figure Number	Population	Figure Title/Summary
Figure 14.4.1.1	Safety Population	WBC Over Time by Patient
Figure 14.4.1.2a	Safety Population	ANC Over Time by Patient
Figure 14.4.1.2b	Safety Population	ANC Over Time by Dose Level
Figure 14.4.1.3a	Safety Population	ALC Over Time by Patient
Figure 14.4.1.3b	Safety Population	ALC Over Time by Dose Level
Figure 14.4.1.4a	Safety Population	Monocytes Over Time by Patient
Figure 14.4.1.4b	Safety Population	Monocytes Over Time by Dose Level
Figure 14.4.1.5	Safety Population	Mean (+/- SE) Plasma Concentration - Time Profile of
		X4P-001 by Dose Level
Figure 14.4.1.6	Safety Population	Mean Dose Response of ANC-Time Profile
Figure 14.4.1.7	Safety Population	Mean Dose Response of ALC-Time Profile
Figure 14.4.1.8	Safety Population	Mean Dose Response of Monocytes-Time Profile
Figure 14.4.1.9	Safety Population	Box plots of WBC change from baseline ratio at 300mg
		and 400mg by Dose Level
Figure 14.4.1.10	Safety Population	Box plots of AUC for ANC by Dose Level
Figure 14.4.1.11	Safety Population	Scatter Plot of Time above Threshold values for ANC
		versus AUC for ANC
Figure 14.4.1.12	Safety Population	Scatter Plot of Time above Threshold values for ALC
		versus AUC for ALC
Figure 14.4.1.13.1	Safety Population	Plot of Yearly Infection Rate by Dose Level
Figure 14.4.1.13.2	Safety Population	Plot of Yearly Infection Score by Dose Level
Figure 14.4.1.14.1	Safety Population	Plot of Yearly Infection Rate for Subjects on 300mg and
		400mg Dose Levels by 6 Month Intervals
Figure 14.4.1.14.2	Safety Population	Plot of Yearly Infection Score for Subjects on 300mg
		and 400mg Dose Levels by 6 Month Intervals
Figure 14.4.2.1	Safety Population	Scatter Plot of Plasma Drug Level and ANC
Figure 14.4.2.2	Safety Population	Scatter Plot of Plasma Drug Level and ALC
Figure 14.4.3.1	Safety Population	Mean Plasma Concentrations of X4P-001 vs Nominal
		Time (Dense Sampling Visits) by Dose Level - Linear
		Scale
Figure 14.4.3.2	Safety Population	Mean Plasma Concentrations of X4P-001 vs Nominal
		Time (Dense Sampling Visits) by Dose Level -
$\Gamma' = 14.4.4.1$	$\mathbf{C} = \mathbf{C} + \mathbf{c} + \mathbf{D} = \mathbf{c} + \mathbf{c}^{\dagger}$	Semi-logarithmic Scale
Figure 14.4.4.1	Safety Population	Subject Plasma Concentrations of X4P-001 vs Nominal
		Time (Dense Sampling Visits) by Dose Level - Linear Scale
Figure 14.4.4.2	Safety Population	Scale Subject Plasma Concentrations of X4P-001 vs Nominal
1'iguie 14.4.4.2	Salety ropulation	Time (Dense Sampling Visits) by Dose Level -
		Semi-logarithmic Scale
		Somi-iogaritimite Scale

14. Tables, Listings, and Figure Shells

14.1. Standard Layout for all Tables, Listings, and Figures

The following standard layout will be applied to all Tables, Listings, and Figures in support of this study. Note that programming notes may be added if appropriate after each TLF shell.

14.2. Planned Table Shells

Table 14.1.1 Subject Disposition Informed Consent Signed

Disposition	Overall (N=XX)
Study Populations [1]	
All Enrolled Patients	X (XX.X%)
ITT Population	X (XX.X%)
Safety Population	X (XX.X%)
Per Protocol Population	X (XX.X%)
Completion Status [2]	
Completed Initial Treatment Period	X (XX.X%)
Prematurely Discontinued from Study	X (XX.X%)
< <ongoing>></ongoing>	X (XX.X%)
In the Extension Phase	X (XX.X%)
Reasons for discontinuation	
Lost to Follow-up	X (XX.X%)
Protocol Violation	X (XX.X%)
Adverse Event	X (XX.X%)
Death	X (XX.X%)
Patient Withdrew Consent	X (XX.X%)
Principal Investigator Decision	X (XX.X%)
Study Terminated by Sponsor	X (XX.X%)
Treatment Limiting Toxicity (TLT) Event	X (XX.X%)
Pregnancy	X (XX.X%)
Other	X (XX.X%)
Reason for discontinuation from Extension Phase	
Reason1	X (XX.X%)
Reason2	X (XX.X%)

[1] Percentages are based on the number of all patients who signed the Informed Consent form.
 [2] Percentages are based on the number of patients in the Safety Population.
 SOURCE: Listing 16.2.1

Programming note: only present 'Ongoing' in Completion Status section if patient is still in active treatment phase.

Table 14.1.2 Summary of Protocol Deviations Safety Population

/iolation Level COVID-19 Relatedness Deviation Category	Overall (N=X) [1]	Number of Protocol Deviations n (%)
otal number of protocol deviations reported	< <leave blank="">></leave>	XXX (100.0%)
mportant [2]	XXX	XX (XX.X%)
Non COVID-19 Deviations	XX	XX (XX.X%)
Study Drug Compliance	Х	XX (XX.X%)
< <list all="" categories="" major="" relevant="">></list>	Х	XX (XX.X%)
nportant (CS)	XXX	XX (XX.X%)
Non COVID-19 Deviations	XX	XX (XX.X%)
Study Drug Compliance	X	XX (XX.X%)
Procedure/Assessment Not Done/Done Incorrectly	X	XX (XX.X%)
< <list all="" categories="" cs="" major="" relevant="">></list>	X	XX (XX.X%)
COVID-19 Deviations	XX	XX (XX.X%)
Study Drug Compliance	Х	XX (XX.X%)
Visit Window	X	XX (XX.X%)
Procedure/Assessment Not Done/Done Incorrectly	X	XX (XX.X%)
< <list all="" categories="" cs="" major="" relevant="">></list>	x	XX (XX.X%)
mportant (NCS)	XXX	XX (XX.X%)
Non COVID-19 Deviations	XX	XX (XX.X%)
Informed consent	X	XX (XX.X%)
Procedure/Assessment Not Done/Done Incorrectly	X	XX (XX.X%)
< <list all="" categories="" major="" ncs="" relevant="">></list>	X	XX (XX.X%)
COVID-19 Deviation	XX	XX (XX.X%)
Study Drug Compliance	X	XX (XX.X%)
Visit Window	X	XX (XX.X%)
Procedure/Assessment Not Done/Done Incorrectly	X	XX (XX.X%)
< <list all="" categories="" major="" ncs="" relevant="">></list>	Х	XX (XX.X%)
Ion-Important	XXX	XX (XX.X%)
Non COVID-19 Deviations	XX	XX (XX.X%)
Informed consent	X	XX (XX.X%)
Procedure/Assessment Not Done/Done Incorrectly	X	XX (XX.X%)
< <list all="" categories="" minor="" relevant="">></list>	X	XX (XX.X%)
COVID-19 Deviations	XX	XX (XX.X%)
Study Drug Compliance	Х	XX (XX.X%)
Visit Window	X	XX (XX.X%)
< <list all="" categories="" minor="" relevant="">></list>	X	XX (XX.X%)

Abbreviations: CS = Clinically significant, NCS = Not clinically significant.

Note: Percentage are based on the total number of protocol deviations (n) reported in the Safety Population.

Note: N is the number of patient in the Safety Population.

[1] Each patient is counted once per Violation Level and once per COVID-19 Relatedness, with patient being counted once within the Deviation Category, e.g., if patient had a procedure done incorrectly due to COVID-19 and also had a compliance issue due to COVID-19 both of which were classed as Important (CS) events, then the patient would have the following records: 1=Important (CS); 1=COVID-19 Deviations; 1=Study Drug Compliance and 1=Procedure... as patient's entries.

[2] Protocol deviation was not classified as CS or NCS at the time of the datacut.

SOURCE: Listing 16.2.2.2

Programming note: <<Leave blank>> cell in the shells should not be populated. Total number of 'Deviation Categories' present for one subject will not add up to the 'COVID-19 Relatedness', it should be higher as accounts for each individual PD category while relatedness counts the patient once irrespective of now many individual PDs have occurred. If category is not present in the data, skip outputting to the table (mostly will refer to Important [2] once data is corrected).

Identify COVID deviations using COVID19 variable. Present in descending count order of PDs, if ties present, sort alphabetically.

Table 14.1.3
Demographics and Baseline Characteristics
Safety Population

Variable Statistic or Category	Overall (N=XX)
Age (years) n Mean (SD) Median Min, Max	XX XX.X (XX.XX) XX.X XX, XX
Gender Male Female	X (XX.X%) X (XX.X%)
Ethnicity Hispanic or Latino Not Hispanic or Latino	X (XX.X%) X (XX.X%)
Race American-Indian or Alaska Native Asian Black or African-American Native Hawaiian or Other Pacific Islander White Other	X (XX.X%) X (XX.X%) X (XX.X%) X (XX.X%) X (XX.X%) X (XX.X%) X (XX.X%)
Height (cm) n Mean (SD) Median Min, Max	XX XX.X (XX.XX) XX.X XX, XX
Weight (kg) n Mean (SD) Median Min, Max	XX XX.X(XX.XX) XX.X XX.X XX, XX

Abbreviations: BMI = Body mass index; SD= Standard deviation. Note: Percentage are based on the number of patients in the Safety Population SOURCE: Listing 16.2.4.1

Table 14.1.3
Demographics and Baseline Characteristics
Safety Population

Variable	Overall
Statistic or Category	(N=XX)
BMI (kg/m2)	XX
n	XX.X (XX.XX)
Mean (SD)	XX.X
Median	XX.X
Min, Max	XX, XX
Capsule Strength Received 25 mg 100 mg	X (XX.X%) X (XX.X%)

Abbreviations: BMI = Body mass index; SD= Standard deviation. Note: Percentage are based on the number of patients in the Safety Population. SOURCE: Listing 16.2.4.1

Table 14.1.4
Summary of Study Drug Exposure
Safety Population

_Drug Exposure	Overall (N=XX)
Number of Doses Taken	
n	XX
Mean (SD)	XX.X (XX.XX)
Median	XX.X
Min, Max	XX, XX
ואוווו, ואומא	~~, ~~
Treatment Duration (Days) [1]	
n	XX
Mean (SD)	XX.X (XX.XX)
Median	XX.X
Min, Max	XX, XX
ואווו, ואמג	^^, ^^
Total Study Drug Administerd (mg)	
n	XX
Mean (SD)	XX.X (XX.XX)
Median	XX.X
Min, Max	XX, XX
	70,70
Intra Dose Escalation	
50 mg to 100 mg	X (XX.X%)
100 mg to 150 mg	X (XX.X%)
150 mg to 200 mg	X (XX.X%)
200 mg to 300 mg	X (XX.X%)
300 mg to 400 mg	X (XX.X%)
	× (×××××)

Note: The data cut off date is used if study medication is ongoing (i.e., missing study medication end date in CRFs). A cut off date of XXMMMYYYY is used to calculate dose duration. [1] Duration = Date of last dose administered – Date of first dose administered + 1. SOURCE: Listing 16.2.4.4.1

Table 14.1.5 Summary of Medical History Safety Population

System Organ Class	Overall (N=XX)
Preferred Term	
Patients with at least one Medical History	X (XX.X%)
System Organ Class 1	
Preferred Term 1	X (XX.X%)
Preferred Term 2	X (XX.X%)
Preferred Term 3	X (XX.X%)
	X (XX.X%)
System Organ Class 2	
Preferred Term 1	X (XX.X%)
Preferred Term 2	X (XX.X%)
Preferred Term 3	X (XX.X%)

Note: Percentages are based on the number of patients in the Safety Population.

Medications coded using WHO-DD B2E version March 2017.

Medications are displayed by descending frequency of System Organ Class (SOC), by Preferred Term (PT) within SOC and then alphabetically. Patients were counted only once for each SOC and PT. SOURCE: Listing 16.2.4.2

	Dose Levels									
Visit/ Statistics	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	300/400 mg (N=XX)			
Week 5										
n Mean (SD) Median Min, Max P-value 95% Cl	XX XX.X (XX.XX) XX.X XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X X.XXX [XX.X; XX.X]			
Week 13										
n Mean (SD) Median Min, Max P-value 95% Cl	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X X.XXX [XX.X; XX.X]			
Week 21 n Mean (SD) Median Min, Max P-value 95% Cl	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X X.XXX [XX.X; XX.X]			

Table 14.2.1.1 Summary of AUCs and Mean of AUCs for ANC by Dose Level - $AUC_{ANC} \ge 600/\mu$ L Threshold Safety Population

Abbreviations: AUC = Area under the plasma concentration; CI = Confidence interval; NE = Not estimable; SD = Standard deviation.

Note: AUC is calculated using the trapezoidal rule with area above the threshold being positive and the area below the threshold being negative. The threshold is defined as 600 /ul for ANC. P-value is obtained from two-sided one sample t-test.

[*] The summary is based on the mean of AUCs that is, the per-patient average of the AUC_{ANC} where patient was treated with at least 300/400mg dose. Missing AUCs are not imputed. For a given patient, if all 3 AUCs are missing then per-patient average is missing.

[#] Extension Visits occur every 6 months from the EOS until the drug becomes commercially available.

SOURCE: Listing 16.2.6.1

Programming Note: P-value and 95% CI are computed only for 300/400mg dose, NOT for each dose level.

For dose 300/400mg : "Mean AUC (cell.hr/uL) for ALC (cell/uL) - Weeks 5, 13, 21 - Dose 300 or 400" and "Mean AUC (cell.hr/uL) for ALC (cell/uL) - Extension Visits - Dose 300 or 400". The first parameter will then be used for "All Visits" section and the 2nd parameter will be used for "Extension Visits" section.

				Dose Levels			
Visit/ Statistics	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	300/400 mg (N=XX)
All Visits[*] n Mean (SD) Median Min, Max P-value 95% Cl							XX XX.X (XX.XX) XX.X XX.X, XX.X X.XXX [XX.X; XX.X]
Extension Visits [#] n Mean (SD) Median Min, Max P-value 95% Cl							XX XX.X (XX.XX) XX.X XX.X, XX.X X.XXX [XX.X; XX.X]

Table 14.2.1.1 Summary of AUCs and Mean of AUCs for ANC by Dose Level Safety Population

Abbreviations: AUC = Area under the plasma concentration; CI = Confidence interval; NE = Not estimable; SD = Standard deviation.

Note: AUC is calculated using the trapezoidal rule with area above the threshold being positive and the area below the threshold being negative. The threshold is defined as 500 /ul for ANC. P-value is obtained from two-sided one sample t-test.

[*] The summary is based on the mean of AUCs that is, the per-patient average of the AUC_{ANC} where patient was treated with at least 300/400mg dose. Missing AUCs are not imputed. For a given patient, if all 3 AUCs are missing then per-patient average is missing.

[#] Extension Visits occur every 6 months from the EOS until the drug becomes commercially available.

Patient , Extension Phase - Residence Visit 1 Post EOS and Extension Phase - Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis.

Patient **Patient**, Week 21 occurred during an episode of infection. These values were excluded from the analysis. SOURCE: Listing 16.2.6.1

Programming Note: P-value and 95% CI are computed only for 300/400mg dose, NOT for each dose level.

Table 14.2.1.1.1 Summary of AUCs and Mean of AUCs for ANC by Dose Level - AUC_{ANC} \ge 500/µL Threshold Safety Population

(Same shell as Table 14.2.1.1. Update footnote to: The threshold is defined as 600 /ul for ANC.)

	Dose Levels								
Visit/ Statistics	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	300/400 mg (N=XX)		
Week 5									
n Mean (SD) Median Min, Max P-value 95% Cl	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X X.XXX [XX.X; XX.X]		
Week 13 n Mean (SD) Median Min, Max P-value 95% Cl	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X X.XXX [XX.X; XX.X]		
Week 21 n Mean (SD) Median Min, Max P-value 95% Cl	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X XX.X, XX.X	XX XX.X (XX.XX) XX.X XX.X, XX.X X.XXX [XX.X; XX.X]		

Table 14.2.1.2 Summary of AUCs and Mean of AUCs for ALC by Dose Level Safety Population

Abbreviations: AUC = Area under the plasma concentration; CI = Confidence interval; NE = Not estimable; SD = Standard deviation.

Note: AUC is calculated using the trapezoidal rule with area above the threshold being positive and the area below the threshold being negative. The threshold is defined as 1000 /ul for ALC. P-value is obtained from two-sided one sample t-test.

[*] The summary is based on the mean of AUCs that is, the per-patient average of the AUC_{ALC} where patient was treated with at least 300/400mg dose. Missing AUCs are not imputed. For a given patient, if all 3 AUCs are missing then per-patient average is missing.

[#] Extension Visits occur every 6 months from the EOS until the drug becomes commercially available.

Patient **Patient**, Extension Phase - Residence Visit 1 Post EOS and Extension Phase - Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis.

Patient , Week 21 occurred during an episode of infection. These values were excluded from the analysis.

SOURCE: Listing 16.2.6.1

Programming Note: P-value and 95% CI are computed only for 300/400mg dose, NOT for each dose level.

				Dose Levels			
Visit/ Statistics	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	300/400 mg (N=XX)
All Visits[*] n Mean (SD) Median Min, Max P-value 95% Cl Extension Visits							XX XX.X (XX.XX) XX.X XX.X, XX.X X.XXX [XX.X; XX.X]
[#] n Mean (SD) Median Min, Max P-value 95% Cl							XX XX.X (XX.XX) XX.X XX.X, XX.X X.XXX [XX.X; XX.X]

 Table 14.2.1.2

 Summary of AUCs and Mean of AUCs for ALC by Dose Level

 Safety Population

Abbreviations: AUC = Area under the plasma concentration; CI = Confidence interval; SD = Standard deviation.

Note: AUC is calculated using the trapezoidal rule with area above the threshold being positive and the area below the threshold being negative. The threshold is defined as 1000 /ul for ALC. P-value is obtained from two-sided one sample t-test.

[*] The summary is based on the mean of AUCs that is, the per-patient average of the AUC_{ALC} where patient was treated with at least 300/400mg dose. Missing AUCs are not imputed. For a given patient, if all 3 AUCs are missing then per-patient average is missing.

[#] Extension Visits occur every 6 months from the EOS until the drug becomes commercially available.

Patient , Extension Phase - Residence Visit 1 Post EOS and Extension Phase - Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis.

Patient **Patient**, Week 21 occurred during an episode of infection. These values were excluded from the analysis. SOURCE: Listing 16.2.6.1

Programming Note: P-value and 95% CI are computed only for 300/400mg dose, NOT for each dose level.

	Dose Levels						
	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
Rate of Infection by type [1]							
Number of events (Rate of	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)
Infection) by type 1 / [95% CI]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]
Number of events (Rate of Infection)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)
type 2 / [95% CI]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]
Number of events (Rate of Infection)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)
by type k / [95% CI]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]
Number of events (Rate of All types of	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)	XX (X.XX)
Infections) / [95% CI]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]	[X.XX; X.XX]

Table 14.2.2.1 Summary of Infection Rates Safety Population

Note: XX (X.XX) [X.XX; X.XX] syntax refers to the number of infections – XX, followed by the infection rate (X.XX) and 95% CI [X.XX; X.XX].

Note: Percentages are based on number of patients in the Safety Population. Two-sided 95% Cl is computed using the Normal approximation of the Negative Binomial Distribution. [1] Rate of infection, per year, is defined as the total number of infections divided by the total number of person-years.

SOURCE: Listing 16.2.7.3

Table 14.2.2.2 Summary of Infections by Severity Safety Population

			Dose	Levels			
Infections/ Grade [1]	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
Patients with at least one Infection							
Grade 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 4	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 5	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Infection 1							
Grade 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 4	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 5	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Infection 2							
Grade 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 4	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Grade 5	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)

Note: XX (X.XX) syntax refers to the number of infections – XX, followed by the infection rate (X.XX).

Note: Percentages are based on number of patients in the Safety Population. Two-sided 95% CI is computed using the Normal approximation of the Negative Binomial Distribution. [1] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03). SOURCE: Listing 16.2.7.3

Table 14.2.2.3 Summary of Highest Grade Infections Safety Population								
			Dose	Levels				
Infections/ Grade [1]	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)		
Patients with at least one Infection	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
nfection 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Infection 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		

Note: Percentages are based on number of patients in the Safety Population.

Note: This table summarizes only infections which meet the highest severity grade criteria at the given dose level for each patient. An infection is considered to have met the criteria if the severity of infection is same as the maximum severity grade experienced by the patient at the given dose level. [1] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03).

SOURCE: Listing 16.2.7.3

Table 14.2.2.4 Summary of Infection Scores Safety Population									
Statistics	X4P-001 50/100/150 mg (N=XX)	X4P-001 200 mg (N=XX)	X4P-001 300 mg (N=XX)	X4P-001 400 mg (N=XX)	X4P-001 300/400 mg (N=XX)				
Overall Infection Score [1]									
Number of Infection Events	XX	XX	XX	XX	XX				
Mean (SD)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)				
Standard Error	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX				
Median	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX				
Min, Max	XX.X,XX.X	XX.X,XX.X	XX.X,XX.X	XX.X,XX.X	XX.X,XX.X				
95% CI	(XX.XX,XX.XX)	(XX.XX,XX.XX)	(XX.XX,XX.XX)	(XX.XX,XX.XX)	(XX.XX,XX.XX)				

Note: Percentages are based on number of patients in the Safety Population. Two-sided 95% CI is computed using the Normal Distribution.

Note: n is the number of patients who had an infection whilst on the reported dose of the study drug.

[1] Infection Score = (# of infection events × severity) / duration of exposure in years. SOURCE: Listings 16.2.7.1 and 16.2.7.3

Programming note: use OINFSC from ADIR dataset. n is the number of patients who had an event while on IMP dose at the time.

		S	ummary of Non-Geni Safety Populatio	tal Warts				
	Dose Levels							
Study Week/ Statistic	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)	
Baseline [1]								
n	XX	XX	XX	XX	XX	XX	XX	
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	
Week 5								
n	XX	XX	XX	XX	XX	XX	XX	
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	
CFB to Week 5								
n	XX	XX	XX	XX	XX	XX	XX	
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	
Week 13								
n	XX	XX	XX	XX	XX	XX	XX	
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	
Median	xx.x ´	XX.X	XX.X ′	XX.X ′	XX.X ´	XX.X [′]	XX.X [′]	
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	
CFB to Week 13								
n	XX	XX	XX	XX	XX	XX	XX	
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	

Table 14 2 3 1

Abbreviations: CFB = Change from Baseline; NE = Not estimable; SD = Standard deviation. [1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

Note: An out of schedule assessment of warts was done at end of study visit for subject SOURCE: Listing 16.2.4.5.

		5	ummary of Non-Genit Safety Populatio				
			Dose L	evels			
Study Week/ Statistic	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
Week 21							
n Mean (SD) Median Min, Max	XX XX.X (XX.XX) XX.X XX.X, XX.X						
CFB to Week 21							
n Mean (SD) Median Min, Max	XX XX.X (XX.XX) XX.X XX.X, XX.X						
Extension Visits n Mean (SD) Median Min, Max							XX XX.X (XX.XX) XX.X XX.X, XX.X
CFB to Extension visits n Mean (SD) Median Min, Max							XX XX.X (XX.XX) XX.X XX.X, XX.X

Table 14.2.3.1 Summary of Non-Genital Warts Safety Population

Abbreviations: CFB = Change from Baseline; NE = Not estimable; SD = Standard deviation.

[1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

Note: An out of schedule assessment of warts was done at end of study visit for subject SOURCE: Listing 16.2.4.5

Table 14.2.3.2
Summary of Non-Genital Warts by location
Safety Population

Location: XXXXXX

			Dose	evels			
Study Week/	50 mg	100 mg	150 mg	200 mg	300 mg	400 mg	Overall
Statistic	(N=XX)						
Baseline [1]							
n	XX						
Mean (SD)	XX.X (XX.XX)						
Median	XX.X						
Min, Max	XX.X, XX.X						
Week 5							
n	XX						
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX					
Median	XX.X						
Min, Max	XX.X, XX.X						
CFB to Week 5							
n	XX						
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX					
Median	XX.X						
Min, Max	XX.X, XX.X						
Week 13							
n	XX						
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX					
Median	XX.X						
Min, Max	XX.X, XX.X						
CFB to Week 13							
n	XX						
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX					
Median	xx.x ′	XX.X					
Min, Max	XX.X, XX.X						

Abbreviations: CFB = Change from Baseline; NE = Not estimable; SD = Standard deviation.

[1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

Note: An out of schedule assessment of warts was done at end of study visit for subject SOURCE: Listing 16.2.4.5.

		Summa	ry of Non-Genital Wa Safety Populatio				
ocation: XXXXXX			· ·				
			Dose L	evels.			
Study Week/ Statistic	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
Week 21							
n Mean (SD) Median Min, Max	XX XX.X (XX.XX) XX.X XX.X, XX.X						
CFB to Week 21							
n Mean (SD) Median Min, Max	XX XX.X (XX.XX) XX.X XX.X, XX.X						
Extension Visits n Mean (SD) Median Min, Max							XX XX.X (XX.XX) XX.X XX.X, XX.X
CFB to Extension visits n Mean (SD) Median Min, Max							XX XX.X (XX.XX) XX.X XX.X, XX.X

Table 14.2.3.2 Summary of Non-Genital Warts by location Safety Population

Abbreviations: CFB = Change from Baseline; NE = Not estimable; SD = Standard deviation.

[1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

Note: An out of schedule assessment of warts was done at end of study visit for subject SOURCE: Listing 16.2.4.5

Table 14.2.4.1 Summary of Genital Warts Safety Population

(Same shell as Table 14.2.3: SOURCE: Listing 16.2.4.5)

Table 14.2.5
Summary of Antibody Levels following Revaccination
Safety Population

Antibodies: Haemophilus Influenzae B Polysaccharide (mg/L)

	Dose Levels								
Study Week / Statistics	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)		
Baseline [1]									
n	XX	XX	XX	XX	XX	XX	XX		
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.X)		
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X		
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X		
Week 9									
n	XX	XX	XX	XX	XX	XX	XX		
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.X)		
Median	xx.x	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X		
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X		
CFB to Week 9									
n	XX	XX	XX	XX	XX	XX	XX		
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.X)		
Median	xx.x	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X		
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X		
Week 17									
n	XX	XX	XX	XX	XX	XX	XX		
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.X)		
Median	xx.x ´	XX.X ′	XX.X [′]	XX.X ′	XX.X ′	xx.x ′	xx.x		
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X		
CFB to Week 17									
n	XX	XX	XX	XX	XX	XX	XX		
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.X)		
Median	xx.x ´	XX.X	XX.X	XX.X	XX.X	XX.X [′]	XX.X		
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X		
Week 25									
n	XX	XX	XX	XX	XX	XX	XX		
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.X		
Median	XX.X ′	XX.X ′	XX.X ′	XX.X ′	XX.X ′	XX.X ′	xx.x		
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X		

Abbreviations: CFB = Change from Baseline; NE = Not estimable; SD = Standard deviation. [1] Baseline is the last non-missing observation recorded on or before treatment start date. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

SOURCE: Listing 16.2.4.6.

			Dose L	evels			
Study Week / Statistics	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
CFB to Week 25							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
Extension Visits							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
CFB to Extension Visits	3						
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X ´	XX.X	XX.X	XX.X	XX.X ´	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X

Table 14.2.5 Summary of Antibody Levels following Revaccination

Abbreviations: CFB = Change from Baseline; NE = Not estimable; SD = Standard deviation.

[1] Baseline is the last non-missing observation recorded on or before treatment start date. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline. SOURCE: Listing 16.2.4.6

Summary of Rescue Medications Safety Population									
			Dose	Levels					
ATC Class Level 4 Preferred Term (ATC Class Level 5)	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)		
Patients with at least one Rescue Medication	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
ATC Class 1									
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
ATC Class 2	· · · ·	()	(/	()	· · · ·	(<i>'</i>	(,		
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 2	x (xx.x%)	X (XX.X%)	X (XX.X%)	x (xx.x%)	X (XX.X%)	X (XX.X%)	x (xx.x%)		
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		

Table 14.2.6

Note: Percentages are based on the number of patients in the Safety Population.

Medications coded using WHO-DD B2E version March 2017.

Medications are displayed by descending frequency of Anatomic Therapeutic Chemical (ATC) Level 4 classification, by Preferred Term (PT) within ATC and then alphabetically. Patients were counted only once for each ATC and PT.

SOURCE: Listing 16.2.9.1

		· · · · ·					
Hospitalization	Dose Levels						
	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
Hospitalized							
Yes	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
No	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Hospitalized WHIM Related							
Yes	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
No	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Hospitalized AE Related							
Yes	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
No	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Total Number of hospitalizations							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X [′]	XX.X ´	XX.X	XX.X [′]	XX.X ′	XX.X ´	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
Duration of hospitalization (in Days)							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X ′	XX.X ′	XX.X ´	XX.X ´	XX.X ′	XX.X ´	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X

Table 14.2.7 Summary of Hospitalizations Safety Population

Abbreviations: AE = Adverse event; NE = Not estimable; SD = Standard deviation. Note: Percentages are based on the number of patients in the Safety Population. SOURCE: Listing 16.2.7.1, 16.2.7.3

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Safety Population								
		Dose Levels						
Study Week/ Statistics	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)	
Baseline								
n	XX	XX	XX	XX	XX	XX	XX	
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	
Week 2								
n	XX	XX	XX	XX	XX	XX	XX	
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	
Median	xx.x ´	XX.X [′]	XX.X [′]	XX.X Í	XX.X Í	XX.X [′]	XX.X [′]	
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	
CFB to Week 2								
n	XX	XX	XX	XX	XX	XX	XX	
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	
Week 3								
n	XX	XX	XX	XX	XX	XX	XX	
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	
Median	xx.x ´	XX.X [′]	XX.X [′]	XX.X Í	XX.X Í	XX.X [′]	XX.X [′]	
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	
CFB to Week 3								
n	XX	XX	XX	XX	XX	XX	XX	
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	
							,	
Week 25								
n	XX	XX	XX	XX	XX	XX	XX	
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	
Median	XX.X ′	XX.X ′	XX.X ′	xx.x ′	XX.X ′	XX.X ′	XX.X [′]	
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	

Table 14.2.8 Summary of Ig and Specified Antibodies Safety Population

Abbreviations: CFB Change from Baseline; NE = Not estimable; SD = Standard deviation.

Note: Change is calculated as post baseline - baseline.

[1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

SOURCE: Listing 16.2.8.4

Table 14.2.8 Summary of Ig and Specified Antibodies Safety Population

Antibody: XXXXXXX

		Dose Levels					
Study Week/ Statistics	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
CFB to Week 25							
n Mean (SD) Median Min, Max	XX XX.X (XX.XX) XX.X XX.X, XX.X						
Extension Visits							
n	XX						
Mean (SD)	XX.X (XX.XX)						
Median	XX.X						
Min, Max	XX.X, XX.X						
CFB to Extension Visits							
n	XX						
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX					
Median	XX.X						
Min, Max	XX.X, XX.X						

Abbreviations: CFB Change from Baseline; NE = Not estimable; SD = Standard deviation.

Note: Change is calculated as post baseline - baseline.

[1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

SOURCE: Listing 16.2.8.4

Table 14.2.9 Time above Threshold (Hours) for ANC by Dose Level Safety Population								
	X4P-001 50/100/150 mg	X4P-001 200 mg	X4P-001 300 mg	X4P-001 400 mg	X4P-001 300/400 mg			
Statistics	(N=XX)	(N=XX)	(N=XX)	(N=XX)	(N=XX)			
Number of Subjects	XX	XX	XX	XX	XX			
Mean (SD)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)			
Standard Error	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX			
Median	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX			
Min, Max	XX.X,XX.X	XX.X,XX.X	XX.X,XX.X	XX.X,XX.X	XX.X,XX.X			

Abbreviation: SD = Standard deviation.

Note: Time above threshold is defined as total time a subjects ANC result was above 500/uL. If time above threshold was >24 hours, it was rounded off to 24. Baseline observation carried forward (BOCF) imputation was used if a subjects 24 hour assessment was missing. Imputation is not used for intermediate missing assessments.

Patient Extension Phase - Residence Visit 1 Post EOS and Extension Phase - Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis.

Patient , Week 21 occurred during an episode of infection. These values were excluded from the analysis.

Dense sample data for subject will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening. SOURCE: Listing 16.2.6.2.3

Table 14.2.9.1 Time above Threshold (Hours) for ANC by Dose Level – Sensitivity Analysis Safety Population

(Same shell as Table 14.2.9: SOURCE: Listing 16.2.6.2.3. Do not display the footnote 'Dense sample data for subject will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening.')

Table 14.2.10 Time above Threshold (Hours) for ALC by Dose Level Safety Population

(Same shell as Table 14.2.9: SOURCE: Listing 16.2.6.2.3)

Programming Note: Use ALC instead of ANC in the footnote and use threshold as 1000/uL.

Table 14.2.10.1 Time above Threshold (Hours) for ALC by Dose Level – Sensitivity Analysis Safety Population

(Same shell as Table 14.2.9: SOURCE: Listing 16.2.6.2.3 Do not display the footnote. 'Dense sample data for subject will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening.')

Table 14.2.11 Time above Threshold (Hours) for AMC by Dose Level Safety Population

(Same shell as Table 14.2.9: SOURCE: Listing 16.2.6.2.3)

Programming Note: Use AMC instead of ANC in the footnote and use threshold and categorize by age ranges; 12-18yrs and >=18yrs, and gender; Male and Female as follows:

Age (year)	Gender	Threshold (/uL)
12-18	F	190
	М	180
>=18	F	250
	Μ	290

Add footnote:

Note: Time above threshold is defined as total time a subject's AMC result was above 190/uL for females aged 12 to 18, above 180/uL for males aged

12 to 18, above 250/uL for females aged>=18 and above 290/uL for males aged >=18. If time above threshold was >24 hours, it was rounded off to 24. Baseline observation carried fo rward (BOCF) imputation was used if a subject's 24 hour assessment was missing. Imputation is not used for intermediate missing assessments.

Patient , Extension Phase - Residence Visit 1 Post EOS and Extension Phase - Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis.

Patient Week 21 occurred during an episode of infection. These values were excluded from the analysis.

Dense sample data for subject will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening. SOURCE: Listing 16.2.6.2.3

Table 14.2.11.1 Time above Threshold (Hours) for AMC by Dose Level – Sensitivity Analysis Safety Population

(Same shell as Table 14.2.11: SOURCE: Listing 16.2.6.2.3. Do not display the footnote 'Dense sample data for subject will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening.')

Treatment-Emergent Adverse	Dose Levels								
	50 mg (N=XX)		100 mg (N=XX)		150 mg (N=XX)		200 mg (N=XX)		
	All Grades[1]	≥ Grade 3[1]							
Patients with at least one TEAE	X (XX.X%)								
Total Number of Events	XX								
TEAE by Relationship [2] Unrelated Related	X (XX.X%) X (XX.X%)								
AE leading to Discontinuation from study	X (XX.X%)								
SAE	X (XX.X%)								
AE leading to Death	X (XX.X%)								

 Table 14.3.1.1

 Overall Summary of Treatment-Emergent Adverse Events

 Safety Population

Abbreviations: AE = Adverse event; SAE = Serious AE; TEAE = Treatment emergent adverse event.

Note: Percentages are based on the number of patients in the Safety Population. TEAEs were coded using MedDRA version 23.1.

A TEAE is defined as any AE that begins or worsens in severity or frequency on or after the start of study drug through 10 days after the last dose of the study drug.

[1] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03). "All Grades" includes all TEAEs with CTCAE Grade 1 to 5, "≥ Grade 3" is a subset of "All Grades" reported.

[2] Unrelated TEAEs are those marked as not related on the case report form (CRF); Related TEAEs are those marked as possibly related or related on the CRF. SOURCE: Listing 16.2.7.1

Table 14.3.1.1
Overall Summary of Treatment-Emergent Adverse Events
Safety Population

	Dose Levels								
Treatment-Emergent Adverse Events	300 mg (N=XX)) mg :XX)	Overall (N=XX)				
	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]			
Patients with at least one TEAE	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Total Number of Events	XX	XX	XX	XX	XX	XX			
TEAE by Relationship [2]									
Unrelated	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Related	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
AE leading to Discontinuation from study	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
SAE	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
AE leading to Death	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			

Abbreviations: AE = Adverse event; SAE = Serious AE; TEAE = Treatment emergent adverse event.

Note: Percentages are based on the number of patients in the Safety Population. TEAEs were coded using MedDRA version 23.1.

A TEAE is defined as any AE that begins or worsens in severity or frequency on or after the start of study drug through 10 days after the last dose of the study drug.

[1] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03). "All Grades" includes all TEAEs with CTCAE Grade 1 to 5, "> Grade 3" is a subset of "All Grades" reported.

[2] Unrelated TEAEs are those marked as not related on the case report form (CRF); Related TEAEs are those marked as possibly related or related on the CRF. SOURCE: Listing 16.2.7.1

	Dose Levels									
System Organ Class Preferred Term	50 mg (N=XX)		100 mg (N=XX)		150 mg (N=XX)		200 mg (N=XX)			
	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]		
Patients with at least One TEAE	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
System Organ Class 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
System Organ Class 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		

Table 14.3.1.2 Summary of Treatment-Emergent Adverse Events by System Organ Class and Preferred Term Safety Population

Abbreviations: AE = Adverse event; TEAE = Treatment emergent adverse event.

Note: Percentages are based on the number of patients in the Safety Population. TEAEs were coded using MedDRA version 23.1.

A TEAE is defined as any AE that begins or worsens in severity or frequency on or after the start of study drug through 10 days after the last dose of the study drug. [1] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03).

Table 14.3.1.2
Summary of Treatment-Emergent Adverse Events by System Organ Class and Preferred Term
Safety Population

	Dose Levels								
System Organ Class Preferred Term) mg =XX)		mg XX)	Overall (N=XX)				
	All Grades[1]	- <u>∧∧)</u> ≥ Grade 3[1]	All Grades[1]	AA) ≥ Grade 3[1]	All Grades[1]	<u>∧∧)</u> ≥ Grade 3[1]			
Patients with at least One TEAE	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
System Organ Class 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
System Organ Class 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			

Abbreviations: AE = Adverse event; TEAE = Treatment emergent adverse event.

Note: Percentages are based on the number of patients in the Safety Population. TEAEs were coded using MedDRA version 23.1. A TEAE is defined as any AE that begins or worsens in severity or frequency on or after the start of study drug though 10 days after the last dose of the study drug. [1] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03).

Table 14.3.1.3
Summary of Treatment-Emergent Adverse Events Related to Study Treatment by System Organ Class and Preferred Term
Safety Population

TEAEs Related to Study Drug**	Dose Levels								
System Organ Class	50	mg	100	mg	150	mg	200 mg		
Preferred Term	(N=	XX)	(N=XX)		(N=	XX)	(N=XX)		
	All Grades[1]	≥ Grade 3[1]							
Patients with at least One TEAE	X (XX.X%)	X (XX.X%)							
System Organ Class 1	X (XX.X%)	X (XX.X%)							
Preferred Term 1	X (XX.X%)	X (XX.X%)							
Preferred Term 2	X (XX.X%)	X (XX.X%)							
Preferred Term 3	X (XX.X%)	X (XX.X%)							
System Organ Class 2	X (XX.X%)	X (XX.X%)							
Preferred Term 1	X (XX.X%)	X (XX.X%)							
Preferred Term 2	X (XX.X%)	X (XX.X%)							
Preferred Term 3	X (XX.X%)	X (XX.X%)							

Abbreviations: AE = Adverse event; TEAE = Treatment emergent adverse event.

Note: Percentages are based on the number of patients in the Safety Population. TEAEs were coded using MedDRA version 23.1. A TEAE is defined as any AE that begins or worsens in severity or frequency on or after the start of study drug through 10 days after the last dose of the study drug. [1] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03). *** A related TEAE is one that is marked as possibly related, probably related, or definitely related as assessed by the Investigator.

Table 14.3.1.3
Summary of Treatment-Emergent Adverse Events Related to Study Treatment by System Organ Class and Preferred Term
Safety Population

TEAEs Related to Study Drug**	Dose Levels								
System Organ Class	300) mg	400) mg	Ove	rall			
Preferred Term	(N=	=XX)	(N=	XX)	(N=)	XX)			
	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]			
Patients with at least One TEAE Related to	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Study Drug		, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,		, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,			
System Organ Class 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
System Organ Class 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			

Abbreviations: AE = Adverse event; TEAE = Treatment emergent adverse event.

Note: Percentages are based on the number of patients in the Safety Population. TEAEs were coded using MedDRA version 23.1.

A TEAE is defined as any AE that begins or worsens in severity or frequency on or after the start of study drug though 10 days after the last dose of the study drug.

[1] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03).

** A related TEAE is one that is marked as possibly related, probably related, or definitely related as assessed by the Investigator.

	Dose Levels								
System Organ Class Preferred Term	50 mg (N=XX)		100 mg (N=XX)		150 mg (N=XX)		200 mg (N=XX)		
	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]	
Patients with at least One SAE	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
System Organ Class 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
System Organ Class 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	

Table 14.3.2.1 Summary of Serious Adverse Events by System Organ Class and Preferred Term Safety Population

Abbreviations: SAE = Serious adverse event.

Note: Percentages are based on the number of patients in the Safety Population. SAEs were coded using MedDRA version 23.1. [1] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03). SOURCE: Listing 16.2.7.1

	Dose Levels								
System Organ Class Preferred Term) mg =XX)		mg XX)	Overall (N=XX)				
	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]			
Patients with at least One SAE	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
System Organ Class 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
System Organ Class 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			

Table 14.3.2.1 Summary of Serious Adverse Events by System Organ Class and Preferred Term Safety Population

Abbreviations: SAE = Serious adverse event.

Note: Percentages are based on the number of patients in the Safety Population. SAEs were coded using MedDRA version 23.1. [1] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03). SOURCE: Listing 16.2.7.1

			Salety Popula								
SAEs Related to Study Drug**		Dose Levels									
System Organ Class	50	mg	100	mg	150	mg	200 mg				
Preferred Term	(N=	XX)	(N=	XX)	(N=	XX)	(N=	XX)			
	All Grades[1]	≥ Grade 3[1]									
Patients with at least One SAE	X (XX.X%)	X (XX.X%)									
System Organ Class 1	X (XX.X%)	X (XX.X%)									
Preferred Term 1 Preferred Term 2	X (XX.X%)	X (XX.X%)									
Preferred Term 3	X (XX.X%)	X (XX.X%)									
System Organ Class 2 Preferred Term 1	X (XX.X%)	X (XX.X%)									
Preferred Term 2 Preferred Term 3	X (XX.X%)	X (XX.X%)									

Table 14.3.2.2 Summary of Serious Adverse Events Related to Study Treatment by System Organ Class and Preferred Term Safety Population

Abbreviation: SAE = Serious adverse event.

Note: Percentages are based on the number of patients in the Safety Population. SAEs were coded using MedDRA version 23.1.

The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03).
 ** A related SAE is one that is possibly related, probably related, or definitely related as assessed by the Investigator.

Table 14.3.2.2 Summary of Serious Adverse Events Related to Study Treatment by System Organ Class and Preferred Term Safety Population

SAEs Related to Study Drug**	Dose Levels							
System Organ Class Preferred Term	300 mg (N=XX)		400 (N=	mg XX)	Overall (N=XX)			
	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]	All Grades[1]	≥ Grade 3[1]		
Patients with at least One SAE	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
System Organ Class 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
System Organ Class 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)		

Abbreviation: SAE = Serious adverse event.

Note: Percentages are based on the number of patients in the Safety Population.

SAEs were coded using MedDRA version 23.1.

[1] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03).

** A related SAE is one that is possibly related, probably related, or definitely related as assessed by the Investigator.

			Dose	Levels				
System Organ Class Preferred Term	50 mg (N=XX)	100 mg (N=XX)	5 5		300 mg (N=XX)	400 mg (N=XX)	- Overall (N=XX)	
Patients with at least One TLT TEAE	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
System Organ Class 1								
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
System Organ Class 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	

Table 14.3.2.3 Summary of Treatment-Limiting Toxicities by System Organ Class and Preferred Term Safety Population

Abbreviations: TLT = Treatment-limiting toxicity; TEAE = Treatment emergent adverse event. Note: Percentages are based on the number of patients in the Safety Population.TEAEs were coded using MedDRA version 23.1. A TEAE is defined as any AE that begins or worsens in severity or frequency on or after the start of study drug through 10 days after the last dose of the study drug. SOURCE: Listing 16.2.7.5

			Dose	Levels			
System Organ Class Preferred Term	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
Patients with at least One Grade 3 or Higher TEAE	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
System Organ Class 1							
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
System Organ Class 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)

Table 14.3.2.4 Summary of Grade 3 or Higher Treatment-Emergent Adverse Events by System Organ Class and Preferred Term Safety Population

Abbreviation: TEAE = Treatment emergent adverse event.

Note: Percentages are based on the number of patients in the Safety Population. N under each dose level represents patients who got drug at that dose level. TEAEs were coded using MedDRA version 23.1.

A TEAE is defined as any AE that begins or worsens in severity or frequency on or after the start of study drug through 10 days after the last dose of study drug. SOURCE: Listing 16.2.7.1

	Dose Levels								
System Organ Class	50 mg	100 mg	150 mg	200 mg	300 mg	400 mg	Overall		
Preferred Term	(N=XX)								
Patients with at least One TEAE	X (XX.X%)								
System Organ Class 1									
Preferred Term 1	X (XX.X)								
	[X.XX, X.XX]								
Preferred Term 2	X (XX.X)								
	[X.XX, X.XX]								
Preferred Term 3	X (XX.X)								
	[X.XX, X.XX]								
System Organ Class 2	X (XX.X)								
	[X.XX, X.XX]								
Preferred Term 1	X (XX.X)								
	[X.XX, X.XX]								
Preferred Term 2	X (XX.X)								
	[X.XX, X.XX]								
Preferred Term 3	X (XX.X)								
	[X.XX, X.XX]								

Table 14.3.2.5 Rate of Treatment Emergent Adverse Events by System Organ Class and Preferred Term Safety Population

Abbreviation: AE = Adverse event; CI = Confidence interval; TEAE = Treatment emergent adverse event.

Note: XX (X.XX) [X.XX; X.XX] syntax refers to the number of TEAEs - XX, followed by the TEAE rate (X.XX) and 95% CI [X.XX; X.XX].

Percentages are based on the number of patients in the Safety Population. TEAEs were coded using MedDRA version 23.1.

A TEAE is defined as any AE that begins or worsens in severity or frequency on or after the start of study drug through 10 days after the last dose of study drug.

TEAE rate is the total number of TEAEs at that dose, divided by the total time (in years) all patients were treated at that dose. Two-sided 95% CI is computed using the Negative Binomial Distribution.

	X4P-001
Period	300/400 mg
Rate Statistics	(N=XX)
Pre-Study (12 months prior to first dose)	
Number of Infection Events	XX
Mean (SD)	XX.XX (XX.XXX)
Standard Error	XX.XX
Median	XX.XX
Min, Max	XX.X, XX.X
95% CI	(XX.XX, XX.XX)
0-6 Months	
Number of Infection Events	XX
Mean (SD)	XX.XX (XX.XXX)
Standard Érror	xx.xx
Median	XX.XX
Min, Max	XX.X, XX.X
95% CI	(XX.XX, XX.XX)

Table 14.3.2.6.1
Summary of Yearly Infection Rate for Subjects on 300mg and 400mg Dose Levels by 6 Month Intervals
Safety Population

Abbreviation: CI = Confidence interval; NE = Not estimable; SD = Standard deviation.

Notes: Infections are identified as follows: for Prior 12 months, events are identified from the Medical History CRF under History of WHIM infections. While on study, infections are identified as all events with a MedDRA System Organ Class of "Infections and infestations". The reporting period starts on the 300 mg dose date. Rate is defined as number of infection events in a given period/duration of period in years. 95% Cl is based on normal approximation. Only events with start date occurring within start and end dates of 300/400 mg dose for each subject are included. Time period assignment is based on the start date of the event. SOURCE: Listing 16.2.7.6

Programming Note: Complete table until maximum duration in 6 month intervals For Pre-study infection rate use ADIR.PARAMCD=PINFRATE For 0-6 months, ADIR.PARAMCD=OINFRTBP and DOSEA in (300,400) and ETINFG1=0 – 6 Months. For 6-12 months, ADIR.PARAMCD=OINFRTBP and DOSEA in (300,400) and ETINFG1=6 – 12 Months Continue for all available data.... For 0-6 months, for Number of infection events- ADIR.NOINFBP and DOSEA in (300,400) and ETINFG1=0 – 6 Months. For 6-12 months, for Number of infection events- ADIR.NOINFBP and DOSEA in (300,400) and ETINFG1=6 – 12 Months Continue for all available data

Period	X4P-001
Infection Score Statistics [1]	300/400 mg
	(N=XX)
0-6 Months	
Number of Infection Events	XX
Mean (SD)	XX.XX (XX.XXX)
Standard Error	XX.XX
Median	XX.XX
Min, Max	XX.X, XX.X
95% CI	(XX.XX, XX.XX)
6-12 Months	
Number of Infection Events	XX
Mean (SD)	XX.XX (XX.XXX)
Standard Error	XX.XX
Median	XX.XX
Min, Max	XX.X, XX.X
95% CI	(XX.XX, XX.XX)

 Table 14.3.2.6.2

 Summary of Yearly Infection Score for Subjects on 300mg and 400mg Dose Levels by 6 Month Intervals

 Safety Population

Abbreviation: CI = Confidence interval; NE = Not estimable; SD = Standard deviation.

Notes: Infections are identified as follows: On study infections are identified as all events with a MedDRA System Organ Class of "Infections and infestations". The reporting period starts on the 300 mg dose date. Only events with start date occurring within start and end dates of 300/400 mg dose for each patient are included. Time period assignment is based on the start date of the event.

[1] Infection Score = (# of infection events × severity) / duration of period in years. SOURCE: Listing 16.2.7.6

Programming Note: Exposure in years is constant in this table, at 6 month intervals, so exposure is always 0.5. For number of infection events, use PARAMCD=NOINFBP Complete table until maximum duration in 6 month intervals up to last available interval For 0-6 months Infection Score, ADIR.PARAMCD=OINFSCBP and DOSEA in (300,400) and ETINFG1=0–6 Months. For 6-12 months Infection Score, ADIR.PARAMCD= OINFSCBP and DOSEA in (300,400) and ETINFG1=6–12 Months Continue for all available data

			Summary o	of Yearly Infection	I4.3.2.7.1 Rate by Dose Leve Population	el – Method 1			
Rate Statistics	12 Months Prior to First Dose (N=XX)	X4P-001 50 mg (N=XX)	X4P-001 100 mg (N=XX)	X4P-001 150 mg (N=XX)	X4P-001 50/100/150 mg (N=XX)	X4P-001 200 mg (N=XX)	X4P-001 300 mg (N=XX)	X4P-001 400 mg (N=XX)	X4P-001 300/400 mg (N=XX)
Number of Infection Events	XX	XX	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)
Standard Error	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Median Min, Max 95% Cl	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)

Abbreviations: CI = Confidence interval; NE = Not estimable; SD = Standard deviation.

Notes: On study infections are identified as all events with a MedDRA System Organ Class of "Infections and infestations". Infection rate is calculated as the total number of infection events for all patients within each dose level + total duration of exposure (in years) for all patient within each dose level. 95% CI and Standard Error are based on Poisson approximation for each dose level. Events at dose level are assigned based on the start date of the event occurring within start and end dates of that dose for each subject. SOURCE: Listing 16.2.7.7

Programming Note: For Rate use ADIR.PARAMCD=OINFRAT1.

			Summary o	of Yearly Infection	4.3.2.7.2 Rate by Dose Leve Population	el – Method 2			
Rate Statistics	12 Months Prior to First Dose (N=XX)	X4P-001 50 mg (N=XX)	X4P-001 100 mg (N=XX)	X4P-001 150 mg (N=XX)	X4P-001 50/100/150 mg (N=XX)	X4P-001 200 mg (N=XX)	X4P-001 300 mg (N=XX)	X4P-001 400 mg (N=XX)	X4P-001 300/400 mg (N=XX)
Number of Infection Events	XX	XX	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)	XX.XX (XX.XXX)
Standard Error	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX	XX.XX
Median Min, Max 95% Cl	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)	XX.XX XX.X,XX.X (XX.XX,XX.XX)

Abbreviations: CI = Confidence interval; NE = Not estimable; SD = Standard deviation.

Notes: On study infections are identified as all events with a MedDRA System Organ Class of "Infections and infestations". Infection rate is calculated as: for each patient calculate the infection rate for each dose level, then calculate the average for all patients for each dose level. 95% Cl is based on normal approximation. Events at dose level are assigned based on the start date of the event occurring within start and end dates of that dose for each subject.

SOURCE: Listing 16.2.7.7

Programming Note: For Rate use ADIR.PARAMCD=OINFRAT2.

Table 14.3.3.1
Listing of Serious Adverse Events
Safety Population

Subject Number	Dose Level (mg)	Gender	Age	System Organ Class/ Preferred Term/ Verbatim Term	Start Date/Time (Day)/ End Date/Time (Day)[1]	Severity/ Causality [2]	Outcome/ Action Taken
	200	Male	хх	xxxx/ xxxx/ xxxx	DDMMMYYYY/HH:MM (XX)/ DDMMMYYYY/HH:MM (XX)	Grade 4/ Related	XXX/ XXX
	400	Female	xx	xxxx/ xxxx/ xxxx	DDMMMYYYY/HH:MM (XX)/ DDMMMYYYY/HH:MM (XX)	Grade 3/ Related	XXX/ XXX
	200	Female	хх	xxxx/ xxxx/ xxxx	DDMMMYYYY/HH:MM (XX)/ DDMMMYYYY/HH:MM (XX)	Grade 2/ Not Related	XXX/ XXX

Note: Adverse events were coded using MedDRA version 23.1. [1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of

administration of first study drug) if prior to the administration of first study drug. [2] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03). SOURCE: Listing 16.2.7.1

Table 14.3.3.2
Listing of Treatment Emergent Adverse Events Leading to Discontinuation
Safety Population

			System Organ Class/			
Dose			Preferred Term/	Start Date/Time (Day)/	Severity/	Outcome/
Level (mg)	Gender	Age	Verbatim Term	End Date/Time (Day) [1]	Causality [2]	Action Taken
200	Male	XX	xxxx/ xxxx/ xxxx	DDMMMYYYY/HH:MM (XX)/	Grade 4/	XXX/
				DDMMMYYYY/HH:MM (XX)	Related	XXX
400	Female	xx	xxxx/ xxxx/ xxxx	DDMMMYYYY/HH:MM (XX)/	Grade 3/	XXX/
				DDMMMYYYY/HH:MM (XX)	Related	XXX
200	Female	xx	xxxx/ xxxx/ xxxx	DDMMMYYYY/HH:MM (XX)/ DDMMMYYYY/HH:MM (XX)	Grade 2/ Not Related	XXX/ XXX
	Level (mg) 200 400	Level (mg)Gender200Male400Female	Level (mg)GenderAge200Malexx400Femalexx	Dose Preferred Term/ Level (mg) Gender Age Verbatim Term 200 Male xx xxxx/ xxxx/ xxxx 400 Female xx xxxx/ xxxx/ xxxx	Dose Preferred Term/ Start Date/Time (Day)/ Level (mg) Gender Age Verbatim Term End Date/Time (Day)[1] 200 Male xx xxxx/ xxxx/ xxxx DDMMMYYYY/HH:MM (XX)/ 400 Female xx xxxx/ xxxx/ xxxx DDMMMYYYY/HH:MM (XX)/ 200 Female xx xxxx/ xxxx/ xxxx DDMMMYYYY/HH:MM (XX)/ 200 Female xx xxxx/ xxxx/ xxxx DDMMMYYYY/HH:MM (XX)/	Dose Preferred Term/ Start Date/Time (Day)/ Severity/ Level (mg) Gender Age Verbatim Term End Date/Time (Day)[1] Causality [2] 200 Male xx xxxx/xxxx/xxxx DDMMMYYYY/HH:MM (XX)/ Grade 4/ 400 Female xx xxxx/xxxx/xxxx DDMMMYYYY/HH:MM (XX)/ Grade 3/ 200 Female xx xxxx/xxxx/xxxx DDMMMYYYY/HH:MM (XX)/ Grade 3/ 200 Female xx xxxx/xxxx/xxxx DDMMMYYYY/HH:MM (XX)/ Grade 2/

Note: Adverse events were coded using MedDRA version 23.1. [1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of

administration of first study drug) if prior to the administration of first study drug. [2] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03). SOURCE: 16.2.7.1

	Listing of Out of Reference Range Laboratory Values Safety Population												
Subject				Reference	Dose Level		Date/Time of Collection	Parameter	Test Result				
Number	Age	Gender	Lab Parameter	Range	(mg)	Visit	(Day) [1]	Value	Assessment				
	_	Male	Hemoglobin	XX-XX	200	XXXX	DDMMMYYYY:HH:MM (XX)	XX	LOW				
		Female	Hemoglobin	XX-XX	400	XXXX	DDMMMYYYY:HH:MM (XX)	XX	HIGH				
		Female	Haematocrit	XX-XX	200	XXXX	DDMMMYYYY:HH:MM (XX)	XX					

Table 14.3.4.1

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

SOURCE: Listings 16.2.8.1, 16.2.8.2, 16.2.8.3, 16.2.8.6, 16.2.8.7

Parameter: XXXXXXX			Salety Popula				
			Dose	Levels			
Study Week/ Statistics	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
Baseline [1]							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
Week 2							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
						·	
CFB to Week 2						207	201
n Maria (SD)	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
Week 3							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	xx.x ´	XX.X [′]	XX.X	XX.X [′]	XX.X [′]	XX.X Í	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
	,	,	,	,	,	,	,
CFB to Week 3							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
Week 25							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X

Table 14.3.5.1.1 Summary of Actual and Change from Baseline in Hematology Results Safety Population

Abbreviation: CFB = Change from Baseline; NE = Not estimable; SD = Standard deviation.

[1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

			Dose	Levels			
Study Week/ Statistics	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
		Y			Y		//
CFB to Week 25				207			
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
Extension Visits							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X ´	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
CFB to Extension Visits	6						
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X

Table 14.3.5.1.1 Summary of Actual and Change from Baseline in Hematology Results Safety Population

Parameter: XXXXXXX

Abbreviation: CFB = Change from Baseline; NE = Not estimable; SD = Standard deviation.

[1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

SOURCE: Listing 16.2.8.2

Programming Note: Repeat for ALL hematology parameters

Table 14.3.5.1.2 Shift from Baseline in Hematology Results Safety Population

Parameter: XXXXXX; Dose level: XXX mg

Study Week/		Base	eline		
Categories	Low	Normal	High	Missing	Total
Week 2					
Low	X (XX.X%)				
Normal	X (XX.X%)				
High	X (XX.X%)				
Total	X (XX.X%)				
Week 3					
Low	X (XX.X%)				
Normal	X (XX.X%)				
High	X (XX.X%)				
Total	X (XX.X%)				
	()		()		()
Week 25					
Low	X (XX.X%)				
Normal	X (XX.X%)				
High	X (XX.X%)				
Total	X (XX.X%)				
Extension Visits					
Low	X (XX.X%)				
Normal	X (XX.X%)				
High	X (XX.X%)				
Total	X (XX.X%)				

Note: Data are presented by parameter and dose. SOURCE: Listing 16.2.8.2

Programming Note: Repeat table for **ALL** hematology parameters. Repeat table for 100 mg, 150 mg, 200 mg, 300 mg, 400 mg and Overall.

Table 14.3.5.2.1 Summary of Actual and Change from Baseline in Serum Chemistry Results Safety Population

(Same shell as Table 14.3.5.1.1: SOURCE: Listing 16.2.8.1)

Table 14.3.5.2.2 Shift from Baseline in Serum Chemistry Results Safety Population

(Same shell as Table 14.3.5.1.2: SOURCE: Listing 16.2.8.1)

Table 14.3.5.3.1 Summary of Actual and Change from Baseline in Coagulation Results Safety Population

(Same shell as Table 14.3.5.1.1: SOURCE: Listing 16.2.8.6)

Table 14.3.5.3.2 Shift from Baseline in Coagulation Results Safety Population

(Same shell as Table 14.3.5.1.2: SOURCE: Listing 16.2.8.6)

Table 14.3.5.4.1 Summary of Actual and Change from Baseline in Cytometry Results Safety Population

(Same shell as Table 14.3.5.1.1: SOURCE: Listing 16.2.8.8, add footnote: Note: Each sample was run 3 times producing triplicate results A, B, C for each laboratory test.

Table 14.3.6.1.1 Summary of Actual and Change from Baseline in Vital Signs Safety Population

(Same shell as Table 14.3.5.1.1: SOURCE: Listing 16.2.9.2)

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ECG Parameter: XXXXX			Galety I O				
			Dose	e Levels			_
Study Week / Statistics	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
Baseline [1]							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
Week 5							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
CFB to Week 5							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
Week 13							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X ´	XX.X	XX.X	XX.X	XX.X	XX.X ´	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
CFB to Week 13							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	XX.X ´	XX.X	XX.X	XX.X ´	XX.X	XX.X ´	XX.X
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X
Week 21							
n	XX	XX	XX	XX	XX	XX	XX
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX
Median	xx.x ′	XX.X ′	XX.X ′	XX.X ′	XX.X ′	XX.X ′	xx.x
Min, Max	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X	XX.X, XX.X

Table 14.3.6.2.1 Summary of Actual and Change from Baseline of 12-Lead Electrocardiogram (ECG) Parameters Safety Population

Abbreviations: CFB = Change from Baseline; NE = Not estimable; SD = Standard deviation.

[1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

SOURCE: Listing 16.2.9.3.

Table 14.3.6.2.1 Summary of actual and Change from Baseline of 12-Lead Electrocardiogram (ECG) Parameters Safety Population

ECG Parameter: XXXXX

		Dose Levels								
Study Week /	50 mg	100 mg	150 mg	200 mg	300 mg	400 mg	Overall			
Statistics	(N=XX)									
CFB to Week 21										
n	XX									
Mean (SD)	XX.X (XX.XX)									
Median	XX.X ´	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
Min, Max	XX.X, XX.X									
Extension Visits										
n	XX									
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX								
Median	XX.X									
Min, Max	XX.X, XX.X									
CFB to Extension Visits										
n	XX									
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX								
Median	xx.x ´	XX.X	XX.X ′	XX.X ′	XX.X ′	XX.X	XX.X			
Min, Max	XX.X, XX.X									

Abbreviations: CFB = Change from Baseline; NE = Not estimable, SD = Standard deviation.

[1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

	Summary of C	Ophthalmologic Exa	4.3.6.3.1 amination Results (²opulaion	Local Reader)			
			Dose	Levels			
Study Week Category	50 mg (N=X)	100 mg (N=X)	150 mg (N=X)	200 mg (N=X)	300 mg (N=X)	400 mg (N=X)	Overall (N=X)
Baseline [1] Normal	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - CS Abnormal - NCS	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Week 13							
Normal	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - CS	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - NCS	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Week 25 EOT							
Normal	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - CS	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - NCS	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)

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Abbreviations: CS = Clinically significant; NCS = Not clinically significant. [1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

	, ,	Safety F	Populaion	0	,		
			Dose	Levels			
Study Week/ Categories	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
Calogonoo		(11) 0 ()	(,0.)	(,0.1)	(11) 0 ()	(11 701)	(11) 0 ()
Baseline [1]							
Normal	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - New Finding - NCS	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - New Finding - CS	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Central Retinal Exam Review Not Performed	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Due to Inadequacy of Retinal Photographs	. ,			. ,	. ,	. ,	. ,
Week 13							
Normal	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - Unchanged from Baseline	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - New Finding - NCS	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - New Finding - CS	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Central Retinal Exam Review Not Performed	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Due to Inadequacy of Retinal Photographs							
Week 25 EOT							
Normal	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - Unchanged from Baseline	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - New Finding - NCS	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Abnormal - New Finding - CS	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Central Retinal Exam Review Not Performed	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Central Retinal Exam Review Not Performed Due to Inadequacy of Retinal Photographs	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	Х (XX.)

Table 14.3.6.3.2 Summary of Ophthalmologic Examination Results (Central Retinal Findings)

Abbreviations: CS = Clinically significant; NCS = Not clinically significant. [1] Baseline is the last non-missing observation recorded before the first dose on Day 1. Baseline visit is displayed for all dose levels irrespective of whether they were receiving that dose level at baseline.

SOURCE: Listing 16.2.9.6

Programming Note: Repeat for other body systems

Table 14.3.6.4 Summary of Concomitant Medications Safety Population										
	Dose Levels									
ATC Class Level 4 Preferred Term (ATC Class Level 5)	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)			
Patients with at least one Prior Medication	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
ATC Class 1										
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
ATC Class 2	· · · · ·	· · · ·	· · · ·	· · · ·	· · · · ·	· · · · ·	,			
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)			

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Note: Percentages are based on the number of patients in the Safety Population.

Medications coded using WHO-DD B3 version September 2020. Concomitant medications are medications taken or ongoing after the date of the first dose of study drug.

Medications are displayed by descending frequency of Anatomic Therapeutic Chemical (ATC) Level 4 classification, by Preferred Term (PT) within ATC and then alphabetically. Patients were counted only once for each ATC and PT,

Table 14.3.6.5.1
Summary of Use of Antibiotics, G-CSF, Immunoglobulins, and Imiquamod – Concomitant Medications
Safety Population

	Dose Levels						
ATC Class Level 4 Preferred Term	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)	Overall (N=XX)
Patients with at least one Infection Medication	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
ATC Class 1							
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
ATC Class 2		(, , , , , , , , , , , , , , , , , , ,	· · · · ·	(, , , , , , , , , , , , , , , , , , ,	· · · · ·	(, ,	· · · ·
Preferred Term 1	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Preferred Term 2	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)
Preferred Term 3	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)	X (XX.X%)

Note: Percentages are based on the number of patients in the Safety Population.

Medications coded using WHO-DD B3 version September 2020.

Concomitant medications are medications taken or ongoing after the date of the first dose of study drug.

Medications are displayed by descending frequency of Anatomic Therapeutic Chemical (ATC) Level 4 classification, by Preferred Term (PT) within ATC and then alphabetically. Patients were counted only once for each ATC and PT.

SOURCE: Listing 16.2.9.1

 Table 14.3.6.5.2

 Summary of Use of Antibiotics, G-CSF, Immunoglobulins, and Imiquamod – Prior Medications Safety Population

(Same shell as Table 14.3.6.5.1: SOURCE: Listing 16.2.9.1. Update footnote to reference prior medications instead of concomitant medications: Prior medication is any medication that is started or ended prior to the first dose of the study medication)

Table 14.3.6.6 Summary of Actual and Change from Baseline in SF-36 QOL Scores Safety Population

(Same shell as Table 14.3.5.1.1: SOURCE: Listing 16.2.9.8)

 Table 14.3.6.6

 Summary of Actual and Change from Baseline in HPV Impact Profile (HIP) Questionnaire - Domain Scores

 Safety Population

(Same shell as Table 14.3.5.1.1: SOURCE: Listing 16.2.9.9.2)

Time Point Statistic	Dose Levels								
	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)			
Predose									
n	XX	XX	XX	XX	XX	XX			
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)			
Geometric Mean	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
Min, Max	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX			
%CV	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
30 mins post dose									
n	XX	XX	XX	XX	XX	XX			
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)			
Geometric Mean	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
Min, Max	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX			
%CV	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
24 hrs post dose									
n	XX	XX	XX	XX	XX	XX			
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)			
Geometric Mean	XX.X	XX.X	xx.x ´	XX.X	XX.X ´	XX.X			
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
Min, Max	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX			
%CV	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			

Table 14.4.1 Summary of Plasma X4P-001 Concentrations by Dose Level Safety Population

Abbreviations: CV = Coefficient of variation; NE = Not estimable; SD = Standard deviation. Note: measurements were made predose and at 30, 60, 90 mins and 2, 3, 4, 8, 12, 16 and 24 hrs post-dose. Unit of plasma X4P-001 concentrations is ng/mL.

SOURCE: Listing 16.2.5.1

Programming Note: Repeat table for all relevant visits.

Table 14.4.2
Summary of Plasma X4P-001 Pharmacokinetic Parameters by Dose Level
Safety Population

Study Week: Week 5

	Dose Levels								
Parameter Statistic	50 mg (N=XX)	100 mg (N=XX)	150 mg (N=XX)	200 mg (N=XX)	300 mg (N=XX)	400 mg (N=XX)			
AUC Over Dosing Interval (h*ng/mL)									
n	XX	XX	XX	XX	XX	XX			
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)			
Geometric Mean [95%CI]	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]			
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
Min, Max	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX			
%CV	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
CMax (ng/mL)		201							
n	XX	XX	XX	XX	XX	XX			
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)			
Geometric Mean [95%CI]	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]			
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
Min, Max	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX			
%CV	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
Time of CMax (h)									
n	XX	XX	XX	XX	XX	XX			
Mean (SD)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)	XX.X (XX.XX)			
Geometric Mean [95%CI]	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]	[XX.X; XX.X]			
Median	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			
Min, Max	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX	XX, XX			
%CV	XX.X	XX.X	XX.X	XX.X	XX.X	XX.X			

Note: As some subjects provided multiple values for the same dose level, median values were taken at the same dose level for each subject, the median values were then used in the analysis.

Abbreviations: AUC = Area under the plasma concentration; CV = Coefficient of variation; NE = Not estimable; SD = Standard deviayion. SOURCE: Listings 16.2.5.1, 16.2.5.2

Programming Note: Repeat table for all applicable visits.

14.3. Planned Figure Shells

Figure 14.4.1.1 WBC over Time by Patient Safety Population

Y-axis: Leukocytes (10[^]9/L) X-axis: Weeks Since First Study Treatment *Value obtained during infection and considered to be confounded. SOURCE: Listing 16.2.8.2

Programming Note: If a patient has multiple values at a particular time point, use mean.

Figure 14.4.1.2a ANC over Time by Patient Safety Population

Header: Patient ID = XXX-XXX Y-axis: ANC Value (10^9/L) X-axis: Hours Since Study Treatment Footnote:

Note: The imputation of baseline observation carried forward (BOCF) is used for missing 24 hour assessment. Patients and accept took the Week 5 dose at home instead of the clinic resulting in the site not getting dense PK samples for the first few hours. Therefore, samples were taken the next day and the timepoints that were missed the day before were replaced with these samples. Patient assessments on 21 and 22 February 2018 were analyzed and presented as Week 21 assessments. For patient the assessment on 20FEB2018 at 9:25 was used as time 0.

Patient **Patient**, Extension Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient **Patient**, Week <u>21 occ</u>urred during an episode of infection. These values were excluded from the analysis.

Dense sample data for subject will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy.

*Value obtained during infection and considered to be confounded. SOURCE: Listing 16.2.6.1 *Programming Note:* If a patient has multiple values at a particular time point, use mean.

> Figure 14.4.1.2b ANC over Time by Dose Level Safety Population

Header: Treatment Level (mg) = XXX Y-axis: ANC Value (10^9/L) X-axis: Hours Since Study Treatment Footnote:

Note: The imputation of baseline observation carried forward (BOCF) is used for missing 24 hour assessment. Patients **and the second** and **baseline** took the Week 5 dose at home instead of the clinic resulting in the site not getting dense PK samples for the first few hours. Therefore, samples were taken the next day and the timepoints that were missed the day before were replaced with these samples. Patient **assessments**, assessments on 21 and 22 February 2018 were analyzed and presented as Week 21 assessments. For patient **bases** the assessment on 20FEB2018 at 9:25 was used as time 0.

took the Week 5 dose at home instead of the clinic resulting in the site not

Patient **Extension** Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient **Extension**, Week 21 occurred during an episode of infection. These values were excluded from the analysis. Dense sample data for subject **Extension** will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy. SOURCE: Listing 16.2.6.1

Programming Note: If a patient has multiple values at a particular time point, use mean.

Figure 14.4.1.3a ALC over Time by Patient Safety Population

Header: Patient ID = XXX-XXX Y-axis: ALC Value (10^9/L) X-axis: Hours Since Study Treatment Footnote:

Note: The imputation of BOCF is used for missing 24 hour assessment. Patients getting dense PK samples for the first few hours. Therefore, samples were taken to be the first few hours.

getting dense PK samples for the first few hours. Therefore, samples were taken the next day and the timepoints that were missed the day before were replaced with these samples. Patient the assessments on 21 and 22 February 2018 were analyzed and presented as Week 21 assessments. For patient the assessment on 20FEB2018 at 9:25 was used as time 0. Patient the analysis. Patient the assessment on 20FEB2018 at 9:25 was used as time 0. Patient the analysis. Patient the assessment on 20FEB2018 at 9:25 was used as time 0. Patient the analysis. Patient the assessment on 20FEB2018 at 9:25 was used as time 0. Patient the analysis. Patient the assessment on 20FEB2018 at 9:25 was used as time 0. Patient the analysis. Patient the analysis of infection. These values were excluded from the analysis. Patient the analysis and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy.

and

SOURCE: Listing 16.2.6.1

Programming Note: If a patient has multiple values at a particular time point, use mean.

Figure 14.4.1.3b ALC over Time by Dose Level Safety Population

Header: Treatment Level (mg) = XXX Y-axis: ALC Value (10^9/L) X-axis: Hours Since Study Treatment Footnote:

Note: The imputation of BOCF is used for missing 24 hour assessment. Patients and a took the Week 5 dose at home instead of the clinic resulting in the site not getting dense PK samples for the first few hours. Therefore, samples were taken the next day and the timepoints that were missed the day before were replaced with these samples. Patient assessments on 21 and 22 February 2018 were analyzed and presented as Week 21 assessments. For patient the assessment on 20FEB2018 at 9:25 was used as time 0. Patient assessment on the samples - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient assessment on the transmission of transmission o

Programming Note: If a patient has multiple values at a particular time point, use mean.

Figure 14.4.1.4a Monocytes over Time by Patient Safety Population Header: Patient ID = XXX-XXX Y-axis: AMC Value (10^9/L) X-axis: Hours Since Study Treatment Footnote:

Note: The imputation of BOCF is used for missing 24 hour assessment. Patients **and access** took the Week 5 dose at home instead of the clinic resulting in the site not getting dense PK samples for the first few hours. Therefore, samples were taken the next day and the timepoints that were missed the day before were replaced with these samples. Patient **access**, assessments on 21 and 22 February 2018 were analyzed and presented as Week 21 assessments. For patient **access**, the assessment on 20FEB2018 at 9:25 was used as time 0. Patient **access**, Extension Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient **access**, Week 21 occurred during an episode of infection. These values were excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy. *Value obtained during infection and considered to be confounded.

SOURCE: Listing 16.2.6.2.4

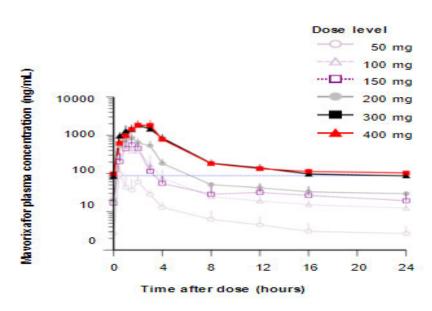
Programming Note: If a patient has multiple values at a particular time point, use mean.

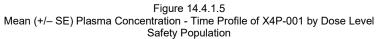
Figure 14.4.1.4b Monocytes over Time by Dose Level Safety Population

Header: Treatment Level (mg) = XXX Y-axis: AMC Value (10^9/L) X-axis: Hours Since Study Treatment Footnote:

Note: The imputation of BOCF is used for missing 24 hour assessment. Patients and a stream and a stream took the Week 5 dose at home instead of the clinic resulting in the site not getting dense PK samples for the first few hours. Therefore, samples were taken the next day and the timepoints that were missed the day before were replaced with these samples. Patient assessments on 21 and 22 February 2018 were analyzed and presented as Week 21 assessments. For patient at the assessment on 20FEB2018 at 9:25 was used as time 0. Patient assessment, Extension Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient assessment on 20FEB2018 at 9:25 was were excluded from the analysis. Patient assessment on the transmustry tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy. SOURCE: Listing 16.2.6.2.4

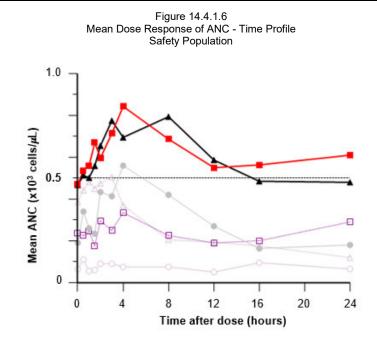
Programming Note: If a patient has multiple values at a particular time point, use mean.





Header: Treatment Level (mg) = XXX Y-axis: Mean X4P-001 plasma concentrations (ng/mL) X-axis: Time Point (hours postdose) SOURCE: Table 14.4.1

Programming Note: All visits will be presented on the same figure. If a patient has multiple values at a particular time point, use median.



Y-axis: Mean Neutrophils (10^9/L)

X-axis: Time Point (hours postdose)

Patient **Sector**, Extension Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient **Sector**, Week 21 occurred during an episode of infection. These values were excluded from the analysis. Dense sample data for subject will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy. The ANC threshold (500 neutrophils per microliter) is indicated by the blue line. SOURCE: Listing 16.2.8.2

Programming Note: All visits will be presented on the same figure. If a patient has multiple values at a particular time point, use mean. No reference line required. All relevant visits should be used for derivation, and not limited to Weeks 5, 13 and 21.

Figure 14.4.1.7 Mean Dose Response of ALC - Time Profile Safety Population

(Same shell as Table 14.4.1.6)

Y-axis: Mean Lymphocytes (10^9/L)
X-axis: Time Point (hours postdose)
Patient (Lymphocytes)

Programming Note: All visits will be presented on the same figure, If a patient has multiple values at a particular time point, use mean. Reference line at y=1 required. All relevant visits should be used for derivation, and not limited to Weeks 5, 13 and 21

Figure 14.4.1.8 Mean Dose Response of Monocytes - Time Profile Safety Population

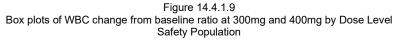
(Same shell as Table 14.4.1.6)

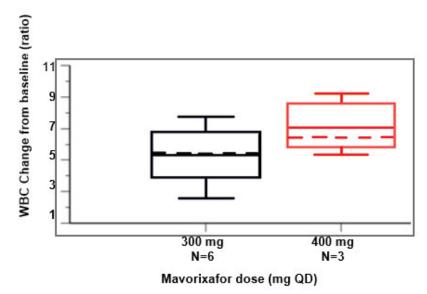
Y-axis: Mean Monocytes (10^9/L)

X-axis: Time Point (hours postdose)

Patient Extension Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient **Extension**, Week 21 occurred during an episode of infection. These values were excluded from the analysis. Dense sample data for subject will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy. SOURCE: Listing 16.2.8.2

Programming Note: All visits will be presented on the same figure. If a patient has multiple values at a particular time point, use mean. No reference line required. All relevant visits should be used for derivation, and not limited to Weeks 5, 13 and 21



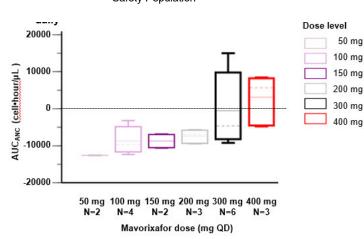


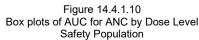
Y-axis: WBC Change from baseline (ratio)

X-axis: X4P-001 dose (mg QD)

Patient **Extension** Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient **Extension**, Week 21 occurred during an episode of infection. These values were excluded from the analysis. Dense sample data for subject **Extension** will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy. SOURCE: Listing 16.2.8.2

Programming Note: All visits will be presented on the same figure. Use mean value across visits. The ratio is to be calculated as visit value / baseline value, same as fold-change.



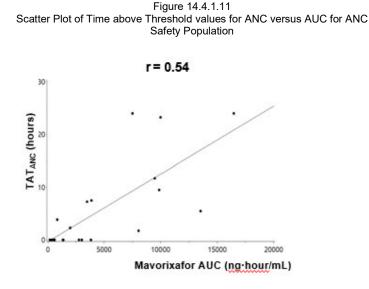


Y-axis: AUC_{ANC} (10^9/L)

X-axis: X4P-001 dose (mg QD)

Patient **Patient**, Extension Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient **Patient**, Week 21 occurred during an episode of infection. These values were excluded from the analysis. Dense sample data for subject **Patient** will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy. SOURCE: Table 14.2.6.2.1

Programming Note: All visits will be presented on the same figure. If a patient has multiple values at a particular time point, use mean.



Y-axis: Time Above Threshold for ANC (hours)

X-axis: X4P-001 AUC (ng*hr/mL)

Patient , Extension Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient week 21 occurred during an episode of infection. These values were excluded from the analysis. Dense sample data for subject will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy.

SOURCE: Table 14.2.9, Listing 16.2.6.2.3

Programming Note: display Pearson correlation coefficient (r) in the plot

Figure 14.4.1.12 Scatter Plot of Time above Threshold values for ALC versus AUC for ALC Safety Population

(Same shell as Table 14.4.1.11)

Y-axis: Time Above Threshold for ALC (hours)

X-axis: X4P-001 AUC (ng*hr/mL)

Patient **Patient**, Extension Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient **Patient**, Week 21 occurred during an episode of infection. These values were excluded from the analysis. Dense sample data for subject **Patient** will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy. SOURCE: Table 14.2.10, Listing 16.2.6.2.3

Programming Note: display Pearson correlation coefficient (r) in the plot

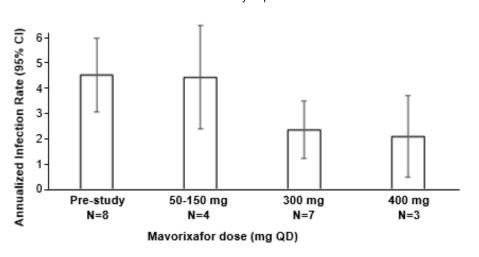


Figure 14.4.1.13.1 Plot of Yearly Infection Rate by Dose Level Safety Population

Y-axis: Annualized Infection Rate (95% CI) **X-axis:** X4P-001 dose (mg QD) SOURCE: Table 14.3.2.7.1

Programming Note: For Rate use ADIR.PARAMCD=OINFRATE. For number of infection events use NOINF along with appropriate DOSEA. Table 14.3.2.7 doesn't have a pre-study column.

Add footnote:

Notes: Infections are identified as follows: for Prior 12 months, events are identified from the Medical History CRF under History of WHIM infections. While on study, infections are identified as all events with a MedDRA System Organ Class of "Infections and infestations". Rate is defined as number of infection events in a given dose level /duration of exposure on a dose level in years. 95% CI is based on normal approximation. Events at dose level are assigned based on the start date of the event occurring within start and end dates of that dose for each patient. Confidence limits below 0 are not shown.

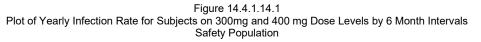
Figure 14.4.1.13.2 Plot of Yearly Infection Score by Dose Level Safety Population

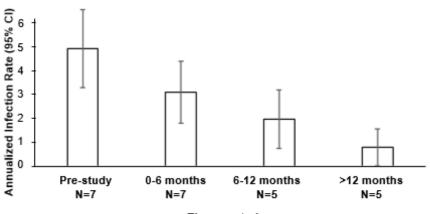
Y-axis: Infection Score (95% CI) X-axis: X4P-001 dose (mg QD) SOURCE: Table 14.2.2.3

Programming Note: For Rate use ADIR.PARAMCD=OINFSC along with appropriate DOSEA. Pre-study infection score is not calculated. Table 14.3.2.7 doesn't have a pre-study column.

Add footnote:

Notes: Infections are identified as follows: for Prior 12 months, events are identified from the Medical History CRF under History of WHIM infections. While on study, infections are identified as all events with a MedDRA System Organ Class of "Infections and infestations". Infection Score is defined as number of infection events in a given dose level divided by duration of exposure on a dose level, in years. 95% CI is based on normal approximation. Events at dose level are assigned based on the start date of the event occurring within start and end dates of that dose for each patient.





Time on study

Y-axis: Annualized Infection Rate (95% CI) X-axis: Time on Study SOURCE: Table 14.3.2.6.1

Programming Note:

For Pre-study infection rate use ADIR.PARAMCD=PINFRATE

For 0-6 months, ADIR.PARAMCD=OINFRTBP and DOSEA in (300,400) and ETINFG1=0 – 6 Months. For 6-12 months, ADIR.PARAMCD=OINFRTBP and DOSEA in (300,400) and ETINFG1=6 – 12 Months. And so on... For 0-6 months, for Number of infection events- ADIR.NOINFBP and DOSEA in (300,400) and ETINFG1=0 – 6 Months.

For 6-12 months, for Number of infection events- ADIR.NOINFBP and DOSEA in (300,400) and ETINFG1=6 – 10 Months. For 6-12 months, for Number of infection events- ADIR.NOINFBP and DOSEA in (300,400) and ETINFG1=6 – 12 Months. And so on...

Add footnote:

Notes: Infections are identified as follows: for Prior 12 months, events are identified from the Medical History CRF under History of WHIM infections. While on study, infections are identified as all events with a MedDRA System Organ Class of "Infections and infestations". The reporting period starts on the 300 mg dose date. Rate is defined as number of infection events in a given period /duration of period in years. 95% Cl is based on normal approximation. Only events with start date occurring within start and end dates of 300/400 mg dose for each patient are included. Time period assignment is based on the start date of the event. Confidence limits below 0 are not shown.

Figure 14.4.1.14.2 Plot of Yearly Infection Score for Subjects on 300 mg and 400 mg Dose Levels by 6 Month Intervals Safety Population

Y-axis: Infection Score (95% CI) X-axis: Time on Study SOURCE: Table 14.3.2.6.2

Programming Note:

For Pre-study infection rate use ADIR.PARAMCD=NPINF and DOSEA in (300,400). For 0-6 months, ADIR.PARAMCD=OINFSCBP and DOSEA in (300,400) and ETINFG1=0-6 Months. For 6-12 months, ADIR.PARAMCD=OINFSCBP and DOSEA in (300,400) and ETINFG1=6-12 Months.

For 0-6 months, for Number of infection events- ADIR.OINFSCBP and DOSEA in (300,400) and ETINFG1=0-6 Months. For 6-12 months, for Number of infection events- ADIR.OINFSCBP and DOSEA in (300,400) and ETINFG1=6-12 Months.

Pre-study infection score is not calculated.

Add footnote:

Notes: Infections are identified as follows: for Prior 12 months, events are identified from the Medical History CRF under History of WHIM infections. While on study, infections are identified as all events with a MedDRA System Organ Class of "Infections and infestations". The reporting period starts on the 300 mg dose date. Rate is defined as number of infection events in a given period /duration of period in years. 95% CI is based on normal approximation. Only events with start date occurring within start and end dates of 300/400 mg dose for each patient are included. Time period assignment is based on the start date of the event.

Figure 14.4.2.1 Scatter Plot of Plasma Drug Level and ANC Safety Population

Y-axis: Neutrophils (10^9/L) X-axis: X4P-001 plasma concentration (ng/mL)

Patient , Extension Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient **Week** 21 occurred during an episode of infection. These values were excluded from the analysis. Dense sample data for subject **Week** will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy. SOURCE: Table 14.4.1, Listing 16.2.6.1

Programming Note: All visits will be presented on the same figure, If a patient has multiple values at a particular time point, use mean.

Figure 14.4.2.2 Scatter Plot of Plasma Drug Level and ALC Safety Population

Y-axis: Lymphocytes (10^9/L)

X-axis: X4P-001 plasma concentration (ng/mL)

Patient **Patient**, Extension Phase - Residence Visit 1 Post EOS and Extension Phase – Residence Visit 3 occurred during episodes of infection. These values were excluded from the analysis. Patient **Patient**, Week 21 occurred during an episode of infection. These values were excluded from the analysis. Dense sample data for subject will be excluded from the TAT summary tables and figures since the WBC, ANC, ALC, and AMC levels were normal at screening due to splenectomy. SOURCE: Table 14.4.1, Listing 16.2.6.1

Programming Note: All visits will be presented on the same figure, If a patient has multiple values at a particular time point, use mean.

Figure 14.4.3.1 Mean Plasma Concentrations of X4P-001 vs Nominal Time (Dense Sampling Visits) by Dose Level - Linear Scale Safety Population

Header: Treatment Level (mg) = XXX Y-axis: Mean X4P-001 plasma concentration (ng/mL) X-axis: Time Point (hours postdose) SOURCE: Table 14.4.1

Programming Note: All visits will be presented on the same figure, If a patient has multiple values at a particular time point, use median.

Figure 14.4.3.2 Mean Plasma Concentrations of X4P-001 vs Nominal Time (Dense Sampling Visits) by Dose Level - Semi-Logarithmic Scale Safety Population

Header: Treatment Level (mg) = XXX Y-axis: Mean X4P-001 plasma concentration (ng/mL) X-axis: Time Point (hours postdose) SOURCE: Table 14.4.1

Programming Note: All visits will be presented on the same figure, If a patient has multiple values at a particular time point, use median.

Figure 14.4.4.1 Subject Plasma Concentrations of X4P-001 vs Nominal Time (Dense Sampling Visits) by Dose Level - Linear Scale Safety Population

Header: Patient ID = XXX, Treatment Level (mg) = XXX Y-axis: X4P-001 plasma concentration (ng/mL) X-axis: Time Point (hours postdose) SOURCE: Listing 16.2.5.1

Programming Note: All visits will be presented on the same figure, If a patient has multiple values at a particular time point, use median.

Figure 14.4.42 Subject Plasma Concentrations of X4P-001 vs Nominal Time (Dense Sampling Visits) by Dose Level - Semi-Logarithmic Scale Safety Population

Header: Patient ID = XXX, Treatment Level (mg) = XXX Y-axis: X4P-001 plasma concentration (ng/mL) X-axis: Time Point (hours postdose) SOURCE: Listing 16.2.5.1

Programming Note: All visits will be presented on the same figure, If a patient has multiple values at a particular time point, use median.

14.4. Planned Listing Shells

Global programming note: for all listings, sort by subject number. Further sorting instructions will be provided if needed.

Listing 16.2.1 Subject Disposition All Enrolled Patients

				Phase II Treat	tment Period	Extension Phase	End of Stu	ıdv
Subject Number	Gender	Date of Last Dose (Day) [1]	Status	Date of Completion/ Discontinuation (Day) [1]	Reason for Discontinuation	Status	Date Extension Phase Discontinued	Reason for Discontinuatio
xxxxxx	Male	DDMMMYYYY (X)	Off	DDMMMYYYY (XX)		Ongoing		
xxxxxx	Female	DDMMMYYYY (X)	Off	DDMMMYYYY (XX)		N/A		
XXXXXX		DDMMMYYYY (X)	Off	DDMMMYYYY (XX)				
XXXXXX		DDMMMYYYY (X)	Off	DDMMMYYYY (X)	XXXXXXXXXX: XXXXXXXXX			
XXXXXX		DDMMMYYYY (X)	Off	DDMMMYYYY (XX)	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug. If patient is still taking study drug, then data extraction date is used. A subject that is no longer in the Phase II Treatment Period has a status of 'Off'.

Programming Note: If reason for early termination is other, concatenate the specify text as follows: "Other: XXXXXXXX". If reason for early termination is lost to follow-up, concatenate with date of last contact as follows: "Lost to follow-up; date of last contact: DDMMMYYYY". If reason for discontinuation is a PI decision, concatenate PI decision reason as follows: "PI Decision: XXXXXXXXX".

Listing 16.2.2.1 Eligibility Criteria Not Met All Enrolled Patients

			Date		
Subject Number	Gender	Screening (Day)[1]	Informed Consent (Day)[1]	All Inclusion Criteria Met?	Any Exclusion Criteria Met?
XXXXXX	XXXX	DDMMMYYYY (-X)	DDMMMYYYY (-X)	Yes	No
XXXXXX	XXXXXX	DDMMMYYYY (-X)	DDMMMYYYY (-X)	No: 02, 09	No
XXXXXX	XXXXXX	DDMMMYYYY (-X)	DDMMMYYYY (-X)	No: 06	No
XXXXXX	XXXX	DDMMMYYYY (-X)	DDMMMYYYY (-X)	Yes	Yes: 06
XXXXXX	XXXXXX	DDMMMYYYY (-X)	DDMMMYYYY (-X)	Yes	No
XXXXXX	XXXX	DDMMMYYYY (-X)	DDMMMYYYY (-X)	Yes	No

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

Programming note: If more than 1 inclusion or exclusion criterion number exists, concatenate with a comma. Decode any relevant criteria in the footnotes.

				Listing 16.2.2.2 Protocol Deviations Safety Population		
Subject Number	Gender	Deviation Date	Deviation Category	Violation Level	Description	
XXXXXX	XXXXXX	DDMMMYYYY	XXXXXXXXXXX XXXXXXXXXXXXXXXX	Important (NCS) Non-Important	XXXXXXX XXXXXXXXXXXXXXXXX	
XXXXXX	XXXXXX	DDMMMYYYY	xxxxxxxxxxxx xxxxxxxxxxxxxxx	Non-Important Non-Important	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
XXXXXX	XXXXXX	DDMMMYYYY	xxxxxxxxxxx	Important (CS)	*****	

Abbreviations: CS = Clinically significant; NCS = Not clinically significant.

	Listing 16.2.3 Analysis Populations All Enrolled Patients		
)		ITT	
		101	

Subject Number	Gender	SP [1]	ITT [2]
XXXXXX	XXXXXX	Yes	Νο
XXXXXX	XXXXXX	Yes	Yes
XXXXXX	XXXXXX	No	Νο

 Abbreviations: ITT = Intent to Treat Population; SP= Safety Population.

 [1] The Safety Population includes all patients who receive any amount of study medication.

 [2] The ITT Population is the same as the Safety Population and includes all patients who receive any amount of study medication.

Subject Number	Gender	Age (years)	Ethnicity	Race	Weight (kg)	Height (cm)	BMI (kg/m2)	
XXXXXX	XXXXXX	XX	Not Hispanic or Latino	XXXXXXX	XX.X	XX.X	XX.XX	
XXXXXX	XXXXXX	XX	Hispanic or Latino	XXXXXX	XX.X	XX.X	XX.XX	
XXXXXX	XXXXXX	XX		XXXXXX	XX.X	XX.X	XX.XX	
XXXXXX	XXXX	XX		XXXXX	XX.X	XX.X	XX.XX	
XXXXXX	XXXXXX	XX		XXXXXX	XX.X	XX.X	XX.XX	
xxxxxx	XXX	XX		XXXXXX	XX.X	XX.X	XX.XX	

16011 1.1.41.

Abbreviation: BMI = Body mass index

Programming Note: If race is other, concatenate "Other:" with specify text. If patient has multiple races, concatenate them

Listing 16.2.4.2	
Medical History	
Safety Population	

Subject	System Organ Class /	Start date(Day) / Currently Active?
Number	Preferred Term /	End Date(Day)[1]
	Verbatim Term	
	XXXX/	DDMMMYYYY(XX) /
	XXX/	DDMMMYYYY(XX)
	XXX	
	XXXX/	DDMMMYYYY(XX) /
	XXX/	DDMMMYYYY(XX)
	XXX	
	XXXX/	DDMMMYYYY(XX) /
	XXX/	DDMMMYYYY(XX)
	XXX	

[1] Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

Listing 16.2.4.3.1 History of WHIM Syndrome - Hospitalizations Safety Population

Subject Number	Prior Hospitalization for Infection?	Start Date (Day) / End Date (Day) [1]	Reason for Hospitalization	Duration [2]	
	Yes	DDMMMYYYY (XX) / DDMMMYYYY (XX)			
	No				
	No				

[1] Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.
 [2] Duration = End Date - Start Date + 1

Listing 16.2.4.3.2 History of WHIM Syndrome - Infections Managed as Out-Patient Safety Population

Subject Number	Any Prior Infections Managed as Out-Patient?	Start Date (Day)/ End Date (Day) [1]	Antibiotic Used?	Type of Infection	Duration [2]
	Yes	DDMMMYYYY (XX)/ DDMMMYYYY (XX)	Yes		
			No		

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

[2] Duration = End Date – Start Date + 1

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Subject Number	Any Prior Treatments of WHIM?	Agent	Start Date (Day)/ End Date (Day) [1]	Route	AE Related to Treatment	Best Clinical Response (Specify)	Reason for discontinuation (Specify)
			DDMMMYYYY(XX)/ DDMMMYYYY(XX)				

[1] Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

		Listing 16.2.4.3.4 WHIM Syndrome Genot Safety Population	typina	
Dubie et Numeh en	Was Genotyping	Dete Celle stad (Dev.) [4]		WHIM Diagnosis
Subject Number	Sample Collected?	Date Collected (Day) [1]	CXCR4 Genotyping Variant	Date
	Yes	DDMMMYYYY(XX) DDMMMYYYY (XX)	Other: XXXXXX	DDMMMYYYY
		DDMMMYYYY (XX)		

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				St	Listing 16.2.4.4.1 tudy Drug Administr	ation					
					Safety Population	ר					
Subject Number	Capsule Strength (mg)	Dose Level (mg)	Did Subject Receive Treatment?	Start Date (Day)/ Stop Date (Day) [1]	Number of Days on Dose Level [2]	Ongoing?	Route	Frequency	Any Doses Not Taken?	Reason Not Taken	Number Of Doses Not Taken
	25	100	Yes	DDMMMYYYY (XX)/ DDMMMYYYY (XX)		Yes	Oral	QD			
	25	100 200 300		(
	100	100 100 100 200 200									
		200 300 400									

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.
 [2] Number of days on Dose Level = Last Date on Dose Level - Start Date on Dose Level + 1.

Listing 16.2.4.4.2 Study Drug Exposure Safety Population

Subject Number	Capsule Strength (mg)	Dose Level (mg)	Total number of Capsules Dispensed	Date Dispensed (Day) [1]	Total number of Capsules Returned	Date Returned (Day) [1]	Percent compliance	Treatment Duration	Number of Doses Missed or skipped
	25 25	100 100 200 300		DDMMMYYYY (XX)		DDMMMYYYY (XX)			
	100	100 100 200 200 200 300							

Percent compliance = [1-(Total number of capsules returned/Total number of capsules dispensed)] x 100. [1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

					Assessm	g 16.2.4.5 nent of Warts Population			
Subject Number	Visit	Capsule Strength (mg)	Dose Level (mg)	Was Assessment of Warts Done?	Date Performed (Day) [1]	Area of Assessment	Were any warts in area of assessment?	Number of warts in the area of assessment	Change from baseline in the number of warts
	Screening			Yes	DDMMMYYYY (X)	BOTTOM LEFT FOOT BOTTOM LEFT HAND BOTTOM RIGHT FOOT BOTTOM RIGHT HAND TOP LEFT FOOT TOP LEFT HAND TOP RIGHT FOOT TOP RIGHT HAND TOTAL NUMBER OF WARTS ACROSS	No No Yes No No No No < <if above="Yes</td" any="" of=""><td>2 XX</td><td></td></if>	2 XX	
	Day 1	25	50	Yes	DDMMMYYYY (X)	ALL AREAS OF ASSESSMENT BOTTOM LEFT FOOT BOTTOM LEFT HAND BOTTOM RIGHT FOOT BOTTOM RIGHT HAND TOP LEFT FOOT TOP LEFT HAND TOP RIGHT FOOT	then populate cell to the right>> No No Yes No No No No	xx	
	Week 5	25	50	Yes	DDMMMYYYY (X)	TOP RIGHT HAND TOTAL NUMBER OF WARTS ACROSS ALL AREAS OF ASSESSMENT BOTTOM LEFT FOOT BOTTOM LEFT HAND BOTTOM RIGHT FOOT	No < <if above="Yes<br" any="" of="">then populate cell to the right>> No No Yes</if>	xx xx	XX

Note: Baseline is the number of warts at Day 1.

An out of schedule assessment of warts was done at end of study visit for subject

Patient was re-enrolled into the study on DDMMMYYYY.

Patient was re-enrolled into the study on DDMMMYYYY.

Programming Note: present all data including data after re-enrollment for the 2 re-enrolled patients

	Listing 16.2.4.6 Revaccination Safety Population									
Subject	Date of Dose	Capsule	Dose	Was Patient Revaccinated?	Type Of Revaccination	Date Of Revaccination (Day) [1]				
Number	(Day) [1]	strength (mg)	Level (mg)							
	DDMMMYYYY (XX)	25	100	Yes	Tetanus toxoid	DDMMMYYYY (XX)				
	DDMMMYYYY (XX)		100							
	DDMMMYYYY (XX)		200							
	DDMMMYYYY (XX)		300							
	DDMMMYYYY (XX)		100							
	DDMMMYYYY (XX)		100							
	DDMMMYYYY (XX)		100							
	DDMMMYYYY (XX)		200							
	DDMMMYYYY (XX)		200							
	DDMMMYYYY (XX)		200							
	DDMMMYYYY (XX)		300							

Listing 16.2.4.7
Bone Marrow Aspirate
Safety Population

Subject Number	Visit	Date Performed (Day) [1]	Was Bone Marrow aspirate Performed?	
	Screening		Yes	
	Week 25			
	Day 1			
	Week 5			
	Week 13			
	Week 21			
	Day 1			
	Week 5			
	Week 13			
	Week 21			

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Subject Number	Visit	Capsule strength (mg)	Dose Level (mg)	Was the Sample collected?	Reason Sample Not Collected	Date/Time Collected (Day) [1]	Time Point	X4P-001 Concentration (ng/mL)
	Day 1	25	100	Yes	XXXXX	DDMMMYYYY (X)	Predose	XXXX
						()	30 mins postdose	XXXX
							60 mins postdose	XXXX
							90 mins postdose	XXXX
							2 hours postdose	XXXX
							3 hours postdose	XXXX
							4 hours postdose	XXXX
							8 hours postdose	XXXX
							12 hours postdose	XXXX
							16 hours postdose	XXXX
							24 hours postdose	XXXX

Listing 16 2 5 1

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

Patients and took the Week 5 dose at home instead of the clinic resulting in the site not getting dense PK samples for the first few hours. Therefore, samples were taken the next day and the timepoints that were missed the day before were replaced with these samples. Patient , assessments on 21 and 22 February 2018 were analyzed and presented as Week 21 assessments.

Subject	Visit	Actual dose	AUC Over Dosing	Tmax	Cmax	
lumber	VISIC	of X4P-001 (mg)	Interval (h*ng/mL)	(h)	(ng/mL)	
	Week 5	100	Yes		Yes	
	Week 13	100				
	Week 21	200				
	Week 5	100				
	Week 13	200				
	Week 21	100				
	Week 5	200				
	Week 13	200				
	Week 21	300				

Listing 16.2.5.2 Calculated Pharmacokinetic Parameters Safety Population

Note: Imputed concentrations at 24 hours with predose values were used for PK parameter calculation. Abbreviation: AUC = Area under the plasma concentration; Cmax = Maximum plasma concetration; Tmax = Time to Cmax.

Programming note: please use AUCtau to report match with tables

Subject Number	Visit	Capsule Strength (mg)	Dose Level (mg)	Test	Threshold Adjusted AUC (cell.hr/uL) [1]	Time Point	Collection Date/Time	Hours from Previous Sample	Result (cell/uL) [2]	Comments
	Week 5	25	100	ALC		Time 0	DDMMMYYYY/ HH:MM	X.XXXX	XX	
						30 Minutes	DDMMMYYYY/ HH:MM	X.XXXX	XX	
						60 Minutes	DDMMMYYYY/ HH:MM	X.XXXX	XX	
						90 Minutes	DDMMMYYYY/ HH:MM	X.XXXX	XX	
					2 Hours	DDMMMYYYY/ HH:MM	X.XXXX	XXX		
						3 Hours	DDMMMYYYY/ HH:MM	X.XXXX	XXX	
						4 Hours	DDMMMYYYY/ HH:MM	X.XXXX	XXX	
						8 Hours	DDMMMYYYY/ HH:MM	X.XXXX	XXX	
						12 Hours	DDMMMYYYY/ HH:MM	X.XXXX	XXX	
						16 Hours	DDMMMYYYY/ HH:MM	X.XXXX	XXX	
						24 Hours	DDMMMYYYY/ HH:MM	X.XXXX	XXX (BOCF)	
	Week 13	25	100	ALC		Time 0	DDMMMYYYY/ HH:MM	X.XXXX	XX	
						30 Minutes	DDMMMYYYY/ HH:MM	X.XXXX	XX	
						60 Minutes	DDMMMYYYY/ HH:MM	X.XXXX	XX	
						90 Minutes	DDMMMYYYY/ HH:MM	X.XXXX	XX	
						2 Hours	DDMMMYYYY/ HH:MM	X.XXXX	XXX	

Listing 16.2.6.1 ANC/ALC Sample Collection Safety Population

Abbreviations: AUC = Threshold adjusted area under the plasma concentration curve, BOCF = baseline observation carried forward.

[1] Threshold adjusted AUC is calculated using the trapezoidal method with area above threshold being positive, and area below threshold negative. The threshold is defined as 600/uL for ANC and as 1000/uL for ALC.

[2] The imputation of BOCF is used for missing 24 hour assessment. Imputation is not used for intermediate missing assessments. Repeat assessments are not used in AUC calculation. Patients and took the Week 5 dose at home instead of the clinic resulting in the site not getting dense PK samples for the first few hours. Therefore, samples were taken the next day and the timepoints that were missed the day before were replaced with these samples. Patient assessments on 21 and 22 February 2018 were analyzed and presented as Week 21 assessments. For patient the assessment on 20FEB2018 at 9:25 was used as time 0.

	Threshold Adjusted AUC values for ANC Safety Population									
Subject Number	Visit	Capsule Strength (mg)	Dose Level (mg)	Threshold Adjusted AUC (cell.hr/uL) [1]						
_	Week 5 Week 13 Week 21 Week 5 Week 13	25 25 25 100 100	50 100 200	XXXX.XXXX						
	Week 21 Week 5 Week 13 Week 21	100								

Listing 16.2.6.2.1

Abbreviation: AUC = Threshold adjusted area under the plasma concentration curve.

*Value obtained during infection and considered to be confounded, value has not been used in the analysis.

**Patient had normal value at Screening, therefore values have not been used in the analysis. [1] Threshold adjusted AUC is calculated using the trapezoidal method with area above threshold being positive, and area below threshold negative. The threshold is defined as 600/uL for ANC.

Listing 16.2.6.2.2 Threshold Adjusted AUC values for ALC Safety Population

(Same shell as Listing 16.2.6.2.1)

Footnote:

Abbreviation: AUC = Threshold adjusted area under the plasma concentration curve. *Value obtained during infection and considered to be confounded, value has not been used in the analysis.

**Value was normal at Screening, therefore values have not been used in the analysis.

[1] Threshold adjusted AUC is calculated using the trapezoidal method with area above threshold being positive, and area below threshold negative. The threshold is defined as 1000/uL for ALC.

X4 Pharmaceuticals, Inc. Statistical Analysis Plan (SAP) X4P-001-MKKA

ubject Number	Test	Dose Level (mg)	Time above Threshold (Hours) [1]	
	Test	Dose Level (mg)		
	ALC	50	XX.XX	
		100	XX.XX	
		150	XX.XX	
		300	XX.XX	
		400	XX.XX	
		50/100/150	XX.XX	
		300/400	XX.XX	
	AMC	50	XX.XX	
		100	XX.XX	
		150	XX.XX	
		300	XX.XX	
		400	XX.XX	
		50/100/150	XX.XX	
		300/400	XX.XX	
	ANC	50	XX.XX	
		100	XX.XX	
		150	XX.XX	
		300	XX.XX	
		400	XX.XX	
		50/100/150	XX.XX	
		300/400	XX.XX	
	ALC	50	XX.XX	
		100	XX.XX	
		150	XX.XX	
		300	XX.XX	
		400	XX.XX	
		50/100/150	XX.XX	
		300/400	XX.XX	

Listing 16.2.6.2.3 Time Above Threshold by Dose Level - Assessment of ANC/ALC/AMC Safety Population

Subject Number

Test

Dose Level (mg) Time above Threshold (Hours) [1]

Note: If time above threshold was >24 hours, it was rounded off to 24.

*Value obtained during infection and considered to be confounded, value has not been used in the analysis.

**Value was normal at Screening, therefore values have not been used in the analysis.

[1] The threshold is defined as 500/uL for ANC, as 1000/uL for ALC, as 190/uL for females aged 12 to 18, 180/uL for males aged 12 to 18, 250/uL for females aged >=18 and 290/UI for males aged >=18 for AMC.

X4 Pharmaceuticals, Inc. Statistical Analysis Plan (SAP) X4P-001-MKKA

Subject Number	Visit	Capsule Strength (mg)	Dose Level (mg)	Test	Time Point	Collection Date/Time	Result (cell/uL)	Comments	Time Crossed	Time above Threshold (Hours) [1]
	Week 5	25	50	ALC	Time 0	DDMMMYYYY/ HH:MM	XXXX		HH:MM	0
					30 Minutes	DDMMMYYYY/ HH:MM	XXXX		HH:MM	XX.XX
					60 Minutes	DDMMMYYYY/ HH:MM	XXXX		HH:MM	XX.XX
					90 Minutes	DDMMMYYYY/ HH:MM	XXXX		HH:MM	XX.XX
					2 Hours	DDMMMYYYY/ HH:MM	XXXX		HH:MM	XX.XX
					3 Hours	DDMMMYYYY/ HH:MM	XXXX		HH:MM	XX.XX
					4 Hours	DDMMMYYYY/ HH:MM	XXXX		HH:MM	XX.XX
					8 Hours	DDMMMYYYY/ HH:MM	XXXX		HH:MM	XX.XX
					12 Hours	DDMMMYYYY/ HH:MM	XXXX		HH:MM	XX.XX
					16 Hours	DDMMMYYYY/ HH:MM	XXXX		HH:MM	XX.XX
					24 Hours	DDMMMYYYY/ HH:MM	XXXX	SNS: SAMPLE NOT SUBMITTED		XX.XX
				AMC	Time 0	DDMMMYYYY/ HH:MM	XXXX		HH:MM	0
				ANC						

Listing 16.2.6.2.4 Time Above Threshold - Assessment of ANC/ALC/AMC with Time Crossed Safety Population

Abbreviations: BOCF = baseline observation carried forward.

Note: The imputation of BOCF is used for missing 24 hour assessment. Imputation is not used for intermediate missing assessments. Repeat assessments are not used in AUC calculation. Patients and the set of the

assessments on 21 and 22 February 2018 were analyzed and presented as Week 21

assessments. For patient **the assessment on 20FEB2018** at 9:25 was used as time 0. Time crossed contains the time at which the AUC value crossed the threshold in either direction. *Value obtained during infection and considered to be confounded, value has not been used in the analysis

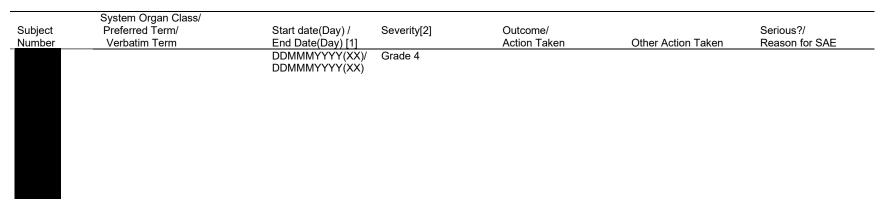
[1] The threshold is defined as 500/uL for ANC, as 1000/uL for ALC, as 190/uL for females aged 12 to 18, 180/uL for males aged 12 to 18, 250/uL for females aged >=18 and 290/uL for males aged >=18 for AMC.

Capsule strength (mg)	Dose Level (mg)	System Organ Class/ Preferred Term/ Verbatim Term	Start Date (Day) / End Date (Day) [1]	Severity [2]/ Relationship	Outcome/ Action Taken	Other Action Taken	Serious?
25	100	XXXXXXXXXXXXX/ XXXXXXXXXXX/ XXXXXXXXXX	DDMMMYYYY (X)/ DDMMMYYYY (X)	Grade X/ Unrelated	RECOVERED/RESOLVED/ DOSE NOT CHANGED		No
25	100	XXXXXXXXXXXXXX/ XXXXXXXXXXX/ XXXXXXXXXX	DDMMMYYYY (X)/ DDMMMYYYY (X)	Grade X/ Unrelated	RECOVERED/RESOLVED/ DOSE NOT CHANGED		No
100	200	XXXXXXXXXXXXXX/ XXXXXXXXXXX/ XXXXXXXXXX	DDMMMYYYY (X)/ DDMMMYYYY (X)	Grade X/ Unrelated	RECOVERED/RESOLVED/ DOSE NOT CHANGED		No
100	300	XXXXXXXXXXXXX/ XXXXXXXXXX/ XXXXXXXXXXX	DDMMMYYYY (X)/ DDMMMYYYY (X)	Grade X/ Unrelated	RECOVERED/RESOLVED/ DOSE NOT CHANGED		No
	strength (mg) 25 25 100	strength (mg) Level (mg) 25 100 25 100 100 200	strength (mg)Level (mg)Preferred Term/ Verbatim Term25100XXXXXXXXXXXX/ XXXXXXXXXX/ XXXXXXXXXXXX25100XXXXXXXXXXX/ XXXXXXXXXXX/ XXXXXXXXXXXX/ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Capsule strength (mg) Dose Level System Organ Class/ Preferred Term/ Start Date (Day) / End Date (Day) [1] 25 100 XXXXXXXXXXX/ XXXXXXXXXXXXXXXXX DDMMMYYYY (X)/ DDMMMYYYY (X)/ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Treatment Emergent Adverse Events Safety Population Capsule strength (mg) Dose Level (mg) System Organ Class/ Preferred Term/ Verbatim Term Start Date (Day) / End Date (Day) [1] Severity [2]/ Relationship 25 100 XXXXXXXXXXXX/ XXXXXXXXXXXXX DDMMMYYYY (X)/ DDMMMYYYY (X) Grade X/ Unrelated 25 100 XXXXXXXXXXXXXXXX DDMMMYYYY (X)/ XXXXXXXXXXXXXXXX Grade X/ Unrelated 25 100 XXXXXXXXXXXXXXXXX DDMMMYYYY (X)/ DDMMMYYYY (X) Grade X/ Unrelated 100 200 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Treatment Emergent Adverse Events Safety Population Capsule strength (mg) Dose Level (mg) System Organ Class/ Preferred Term/ Start Date (Day) / End Date (Day) [1] Severity [2]/ Relationship Outcome/ Action Taken 25 100 XXXXXXXXXXXX/ XXXXXXXXXXXX DDMMMYYYY (X) / DDMMMYYYY (X) / Unrelated Grade X/ DOSE NOT CHANGED RECOVERED/RESOLVED/ DOSE NOT CHANGED 25 100 XXXXXXXXXXXXXX DDMMMYYYY (X) / DDMMMYYYY (X) / Unrelated Grade X/ DOSE NOT CHANGED RECOVERED/RESOLVED/ DOSE NOT CHANGED 25 100 XXXXXXXXXXXXXX DDMMMYYYY (X) / DDMMMYYYY (X) / Unrelated RECOVERED/RESOLVED/ DOSE NOT CHANGED 100 200 XXXXXXXXXXXXX DDMMMYYYY (X) / DDMMMYYYY (X) / Unrelated RECOVERED/RESOLVED/ DOSE NOT CHANGED 100 300 XXXXXXXXXXXXX DDMMMYYYY (X) / DDMMMYYYY (X) / Unrelated RECOVERED/RESOLVED/ DOSE NOT CHANGED	Treatment Emergent Adverse Events Safety Population Capsule strength (mg) Dose Level (mg) System Organ Class/ Preferred Term/ Verbatim Term Start Date (Day) / End Date (Day) [1] Severity [2]/ Relationship Outcome/ Action Taken Other Action Taken 25 100 XXXXXXXXXXXXX/ XXXXXXXXXXXXXXX DDMMMYYYY (X)/ DDMMMYYYY (X) Grade X/ Unrelated RECOVERED/RESOLVED/ DOSE NOT CHANGED 25 100 XXXXXXXXXXXXXXXXXXXXXXXXX DDMMMYYYY (X)/ DDMMMYYYY (X) Grade X/ Unrelated RECOVERED/RESOLVED/ DOSE NOT CHANGED 25 100 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug. [2] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03).

Programming Note: Sort Adverse Events by Patient, Start Date, System Organ Class and Preferred Term

Listing 16.2.7.2 Adverse Events that occur during Screening and ended before Exposure to study Drug Safety Population



Abbreviation: SAE = Serious adverse event.

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

[2] The severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03).

Programming Note: Sort Adverse Events by Patient, Start Date, System Organ Class and Preferred Term

						Reported as Adv Safety Population					
Subject Number	Capsule Strength (mg)	Dose Level (mg)	AE #	Infection	Infection cause	Culture identified organisms	Was an antibiotic used to treat the infection?	Was G-CSF used to treat the infection?	Was Ig used to treat the infection?	Area of Infection	Did the infection require a visit to a doctor's office?
	100	100									
	25	100 200									
	20	300									
		100									
		100									
		100									
		200									
		200									
		200									
		300									
		400									

Listing 16 2 7 3

Abbreviations: AE = Adverse event; ER = Emergency Room.

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

Programming Note: Sort Adverse Events by Patient, Start Date, System Organ Class and Preferred Term Only include infections where SOC = Infections and infestations

				Infections Repo	ting 16.2.7.3 orted as Adve ety Population				
Subject Number	AE #	Number of doctor's office visits due to infection	Did the infection require hospital admission?	Number of days in hospital due to infection	Did the infection require a visit to the ER?	Did the infection require admission to an intensive care unit?	Number of Days of work/school missed	Were there fevers associated with the infection? (if Y, Peak Fever Temperature (C)	Fever Start Date(Day)/ End Date(Day) [1]
									DDMMMYYYY(XX)/ DDMMMYYYY(XX)

Abbreviation: ER = Emergency Room. [1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

Programming Note: Sort Adverse Events by Patient, Start Date, System Organ Class and Preferred Term Only include infections where SOC = Infections and infestations

Listing 16.2.7.4
Deaths
All Enrolled Patients

Subject Number	Capsule Strength (mg)	Dose Level (mg)	Date of Death (Day) [1]
	25	100	
	100	300	
		200	

Listing 16.2.7.5 Treatment Limiting Toxicities Safety Population

Subject Number	Capsule Strength (mg)	Dose Level (mg)	Gender	Age	System Organ Class/ Preferred Term/ Verbatim Term	Start Date(Day)/ End Date(Day) [1]	Severity [2]/ Relationship [3]	Outcome/ Action Taken
	25	100	Μ	56		DDMMMYYYY(XX)/ DDMMMYYYY(XX)		
		100	F					
		200						

Note: A TLT event for X4P-001 is defined as an AE that meets both of the following criteria:

- 1. Is assessed by the Investigator as possibly or probably related to X4P-001.
- 2. Represents one of the following events (grading as defined by the NCI CTCAE, v4.03 or higher):
- Is a Grade 3 or Grade 4 clinical event, except grade 3 nausea, vomiting, or diarrhea lasting <48 hrs in patients who have received suboptimal medical management.
- Is a confirmed Grade 3 or Grade 4 laboratory event with the following exceptions: Grade 3 electrolyte abnormalities that persist <72 hrs and do not require hospitalization. Grade 3 AST/ALT increases that persist <5 days and with total bilirubin <1.5x ULN.

- Is one of the following, which are designated as critical TLT events: AST/ALT increased >3x ULN (Grade 2) with total bilirubin increased >2x ULN in the absence of cholestasis. Retinopathy – confirmed treatment-emergent retinopathy. Platelets <50,000/mm3 (Grade 3) with bleeding or <25,000/mm3 (Grade 4).

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

[2] Severity is assessed using the National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) (v4.03).

[3] Related = definitely related, probably related and possibly related; Unrelated = Unlikely related, not related

Programming Note: Sort Adverse Events by System Organ Class and Preferred Term; Footne the criteria for identifying the TLT

Subject Number	Time Period	Number of Infections	
	Pre-Study (12 months prior to first dose)	XX	
	0-6 Months	хх	
	6-12 Months	хх	

Listing 16.2.7.6 Infections in Subjects Treated on 300mg or 400 mg Dose by Time Period Safety Population

Notes: Infections are identified as follows: for Prior 12 months, events are identified from the Medical History CRF under History of WHIM infections. While on study, infections are identified as all events with a MedDRA System Organ Class of "Infections and infestations"... The reporting period starts on the 300 mg dose date. Only events with start date occurring within start and end dates of 300/400 mg dose for each patient are included. Time period assignment is based on the start date of the event.

Patient was re-enrolled into the study on DDMMMYYYY.

Patient was re-enrolled into the study on DDMMMYYYY.

Programming Note: Complete table until maximum duration in 6 month intervals; For the two patients re-enrolled, we need add "drop out period", "6 Months after re-enrollment",

present all data including data after re-enrollment for the 2 re-enrolled patients

Listing 16.2.7.7	
Infections by Dose Level	
Safety Population	

Subject Number	Dose Level	Number of Infections	Yearly Rate	
	50/100/150 mg	xx	xx	
	200 mg	XX	XX	
	300 mg	XX	XX	
	300 mg	XX	XX	
	400 mg	XX	XX	
	300/400 mg	XX	XX	

Notes: Infections are identified as follows: for Prior 12 months, events are identified from the Medical History CRF. While on study, infections are identified as all events with a MedDRA System Organ Class of "Infections and infestations". Events at dose level are assigned based on the start date of the event occurring within start and end dates of that dose. Rate is <u>defined</u> as number of infection events in a given dose level / duration of exposure on a dose level in years.

Patient was re-enrolled into the study on DDMMMYYYY.

Patient was re-enrolled into the study on DDMMMYYYY.

Programming Note: present all data including data after re-enrollment for the 2 re-enrolled patients

Listing 16.2.7.8 Infections by Subject Safety Population

Infection Details [1]

Subject Number	Date of Consent	(3)	Treatment Start Date	Treatment End Date	Duration (Days) at Dose Level	Number of Infections		AE End Date	AE Term	Infection Severity
	DDMMMYYY					5	DDMMMYYYY	′//	/Cellulitis	Grade X
		months								
								DDMMMYYYY		Grade X
										Grade X
										Grade X
		50	DDMMMYYYY		/ 27	4				Grade X
		50			r 37	4			Ear infection/ear inflammation causing discomfort	Grade X
							DDMMMYYYY	DDMMMYYYY	Sinusitis/sinus inflammation causing discomfort	Grade X
							DDMMMYYYY	DDMMMYYYY	Ear infection/Ear infection	Grade X
							DDMMMYYYY	DDMMMYYYY	Sinusitis/sinus infection	Grade X
			DDMMMYYYY			0				
		150	DDMMMYYYY			0				
		300	DDMMMYYYY	DDMMMYYYY	Y126	2				Grade X
										Grade X
		400	DDMMMYYYY	DDMMMYYY	Y513	4				Grade X
							DDMMMYYYY	' DDMMMYYYY	Otitis media acute/Acute suppurative otitis media	Grade X
							DDMMMYYYY	DDMMMYYYY	Sinusitis/Sinusitis	Grade X
							DDMMMYYYY	/	Cellulitis/Cellulitis (left forearm)	Grade X
		400 (after re- enrollment)	DDMMMYYYY	DDMMMYYY	YXX	XX	DDMMMYYYY	ODMMMYYYY	****	
_	DDMMMYYY	YPrior 12				5	DDMMMYYYY		/Abscess, left leg/thigh	Grade X
		months								
							DDMMMYYYY	DDMMMYYYY	/Cellulitis at skin biopsy site - left side of neck	Grade X
							DDMMMYYYY		/Cellulitis at skin biopsy site - right arm	Grade X
									,, , ,	Grade X
									/Cellulitis, left forearm	Grade X

									Infection Details [1]	
Subject	Date of	Dose	Treatment	Treatment	Duration (Days)	Number of	AE Start	AE End	Preferred Term/	Infection
Number	Consent	Level (ma)	Start Date	End Date	at Dose Level			Date	AE Term	Severity

[1] Infections identified as follows: for Prior 12 months, events are identified from the Medical History CRF under History of WHIM infections. While on study, infections are identified as all events with a MedDRA System Organ Class of 'Infections and infestations'; dose level is assigned based on the start date of the event occurring within start and end dates of that dose for each subject.

Patient was re-enrolled into the study on DDMMMYYYY. Patient was re-enrolled into the study on DDMMMYYYY.

Programming note: Present all dose levels with start and end dates available. If patient didn't have any infection events, then the number of infections is 0.

Listing 16.2.8.1
Clinical Laboratory Data: Serum Chemistry
Safety Population

Test Name: XXXXX (units)

Subject Number	Visit	Dose Level (mg)	Date/Time of Assessment (Day) [1]	Standard Results	Reference Range	Abnormal?/ High/Low [2]	Change from Baseline [3]	Calculated CTC Grade	Comments/ Reason not Done
lumber	Day 1	100	DDMMMYYYY/	XX	XX - XX	No	Daseline [0]	CTC Glade	Reason not Done
			HH:MM (XX)						
	Week 5	100							
	Week 13	200							
	Week 21	300							
	Day 1	100							
	Week 5	100							
	Week 13	100							
	Week 21	200							
	Day 1	200							
	Week 5	200							
	Week 13	300							
	Week 21	400							

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

[2] L = Low, H = High.

[3] Change from baseline = value - Baseline value. Baseline is defined as the last assessment prior to the first study drug.

Listing 16.2.8.2 Clinical Laboratory Data: Hematology Safety Population

(Same shell as Listing 16.2.8.1)

Listing 16.2.8.3 Serology and Other Laboratory Test Results Safety Population

(Same shell as Listing 16.2.8.1)

Subject Number	Visit	Capsule strength (mg)	Dose Level (mg)	Date/Time Collected (Day) [1]	Test Name	Standard Results	Reference Range	CFB [2]	Fold- Change	Flag [3]
	Day 1	25	100	DDMMMYYYY/HH:MM (XX)	Haemophilus Influenzae B Polysaccharide (mg/L) Immunoglobulin A (g/L) Immunoglobulin G (g/L) Immunoglobulin G Subclass 1 (g/L) Immunoglobulin G Subclass 2 (g/L) Immunoglobulin G Subclass 3 (g/L) Immunoglobulin M (g/L) Rubeola IgG (Measles) Rubella IgG Antibody Index (INDEX) Tetanus Toxoid (IU/L)	Positive/Negative				

Listing 16.2.8.4

Abbreviation: CFB = Change from Baseline.

Fold-Change = Value/Baseline

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

[2] Change from Baseline = value - baseline value. Baseline is defined as the last assessment prior to the first study drug.

[3] L = Low, H = High, N = Normal.

Listing 16.2.8.5 Pregnancy Test Safety Population

Subject Number	Visit	Dose Level (mg)	Was Pregnancy Test Performed?	Date Performed (Day) [1]	Time of Assessment	Specimen Type	Result of Pregnancy Test
	Screening	100	Yes	DDMMMYYYY(XX)	HH:MM	Serum Urine	<5 (IU/L)/Negative Negative
	Week X/ 	100	Yes	DDMMMYYYY(XX)	HH:MM	Serum Urine	<5 (IU/L)/Negative Negative
	Screening	100	Yes	DDMMMYYYY(XX)	HH:MM	Serum Urine	<5 (IU/L)/Negative Negative
	Screening	200	Yes	DDMMMYYYY(XX)	HH:MM	Serum Urine	<5 (IU/L)/Negative Negative

	XXXXXXX (units)	Dose					Change from	Fold-
Subject		Level	Date/Time of		Reference	Abnormal?	Baseline	Change
Number	Visit	(mg)	Assessment (Day) [1]	Test Result	Range	High/Low [2]	[3]	[4]
	Week 9	xxx	DDMMMYYYY/HH:MM (XX)	XX.X	XX - XX	Yes / H		
	Week 13	XXX		XX.X	XX - XX	No		
	Week 17	XXX		XX.X	XX - XX	Yes / H		
	Week 21	XXX		XX.X	XX - XX	No		
	Week 9	XXX		XX.X	XX - XX	No		
	Week 13	XXX		XX.X	XX - XX	No		
	Week 17	XXX		XX.X	XX - XX	No		
	Week 21	XXX		XX.X	XX - XX	No		
	Screening							
	Day 1			XX.X	XX - XX	No		
	Week 2	XXX		XX.X				
	Week 3	XXX		XX.X	XX - XX	No	XX.X	XX.X
	Week 4	XXX		XX.X	XX - XX	No	XX.X	XX.X
	Week 5	XXX		XX.X	XX - XX	No	XX.X	XX.X

Listing 16 2 8 6

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

[2] L = Low, H = High.
[3] Change from Baseline = value - Baseline value. Baseline is defined as the last assessment prior to the first study drug.
[4] Fold-Change = Value/Baseline.

Tost Nama:	Listing 16.2.8.7 Urinalysis Laboratory Test Results Safety Population Test Name: XXXXXX									
Subject Number	Visit	Dose Level (mg)	Date/Time of Assessment (Day) [1]	Test Result	Reference Range	Abnormal? High/Low [2]	Change from Baseline [3]	Fold-Change [4]		
	Screening		DDMMMYYYY/HH:MM (XX)	XXXXXX		No				
	Day 1		DDMMMYYYY/HH:MM (XX)	XXXXXX		No				
	Week 13	XXX	DDMMMYYYY/HH:MM (XX)	XXXXXX		No				
	Week 21	XXX	DDMMMYYYY/HH:MM (XX)	XXXXXX		No				
	Screening			XXXXXX		No				
	Day 1			XXXXXX		No				
	Week 13	XXX		XXXXXX		No				
	Week 21	XXX		XXXXXX		No				
	Screening			XXXXXX		No				
	Day 1			XXXXXX		No				
	Week 5	XXX		XXXXXX		No				
	Screening			XXXXXX		No				
	Day 1			XXXXXX		No				
	Week 5	XXX		XXXXXX		No				

Linkin 40.0.0.7

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

[2] L = Low, H = High.

[3] Change from Baseline = value - Baseline value. Baseline is defined as the last assessment prior to the first study drug.
 [4] Fold-Change = Value/Baseline.

			Listing 16.2.8.8 CytometryTest Results Safety Population			
Test Name:	XXXXXX		oulory ropulation			
Subject		Dose Leve	el Date/Time of			Change from
Number	Visit	(mg)	Assessment (Day) [1]	Replicate	Test Result	Baseline [2]
	Screening		DDMMMYYYY/HH:MM (XX)	А	XXXXXX	XXXXXX
	5		DDMMMYYYY/HH:MM (XX)	В	XXXXXX	XXXXXX
			DDMMMYYYY/HH:MM (XX)	С	XXXXXX	XXXXXX
	Day 1		DDMMMYYYY/HH:MM (XX)	Х	XXXXXX	XXXXXX
	Week 13	XXX	DDMMMYYYY/HH:MM (XX)	Х	XXXXXX	XXXXXX
	Week 21	XXX	DDMMMYYYY/HH:MM (XX)	Х	XXXXXX	XXXXXX
	Screening			Х	XXXXXX	XXXXXX
	Day 1			Х	XXXXXX	XXXXXX
	Week 13	XXX		Х	XXXXXX	XXXXXX
	Week 21	XXX		Х	XXXXXX	XXXXXX
	Screening			Х	XXXXXX	XXXXXX
	Day 1			Х	XXXXXX	XXXXXX
	Week 5	XXX		Х	XXXXXX	XXXXXX
	Screening			х	XXXXXX	XXXXXX
	Day 1			х	XXXXXX	XXXXXX
	Week 5	XXX		х	XXXXXX	XXXXXX

Note: Each sample was run 3 times producing triplicate results A, B, C for each laboratory test.

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

[2] Change from Baseline = value - Baseline value. Baseline is defined as the last assessment prior to the first study drug.

	Listing 16.2.9.1 Prior or Concomitant Medications Safety Population										
Subject Number	Prior, Concomitant or Both?	ATC Class (Level 5)/ PT (ATC Level 4)/ VT	Start Date (Day)/ End Date (Day) [1]	Dose (Unit)	Route	Frequency	Reason for Use				
	Both	XXXXXXXXXXXXXXX/ XXXXXXXXXXXXX/ XXXXXXXX	Ongoing	XX (mg)	ORAL	OTHER (QD, PRN)	Seasonal allergies				
	Concomitant	XXXXXXXXXXXXXXX/ XXXXXXXXXXXXX/ XXXXXXXX	DDMMMYYYY (XX)/ DDMMMYYYY (XX)		ORAL	QD	Seasonal allergies				
	Prior	XXXXXXXXXXXXXXX/ XXXXXXXXXXXXX/ XXXXXXXX	DDMMMYYYY (XX)/ DDMMMYYYY (XX)		ORAL	QD	body aches and pains				

Abbreviations: ATC = Anatomic Therapeutic Chemical; PT = Preferred Term; VT = Verbatim Term.

[1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug. Prior medication is any medication that is started or ended prior to the first dose of the study medication.

Concomitant medication is any medication taken or ongoing on or after the first dose of the study medication.

Programming Note: Sort Concomitant Medications by ATC Class and Preferred Term

				Listing 16. Vital Signs Mea Safety Popu	surements						
Subject		Capsule strength	Dose Level	Date of	Body Temp	Pulse Rate		Pressure mHg) Diastolic	Height	Weight	BMI
number	Visit	(mg)	(mg)	Assessment(Day)[1]	(C)	(bpm)	Oystolic	Diastolic	(cm)	(kg)	(kg/m2) [2]
	Day 1	25	100	DDMMMYYYY (XX)	XX.X	XX	XX	XX	XX	XX	XX
	Week 5		100		XX.X	XX	XX	XX	XX	XX	XX
	Week 13		200		XX.X	XX	XX	XX	XX	XX	XX
	Week 21		300		XX.X	XX	XX	XX	XX	XX	XX

Abbreviation: BMI = Body Mass Index. [1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug. [2] BMI = Weight/(Height)²x10⁴.

	Listing 16.2.9.3 12-Lead Electrocardiograms Safety Population							
Subject Number	Visit	Date of Assessment (Day) [1]	Assessment	Investigator Interpretation/Results				
	Day 1	DDMMMYYYY (XX)	Summary (Mean) Heart Rate Summary (Mean) PR Duration Summary (Mean) QRS Duration Summary (Mean) QT Duration QTc Interval Interpretation QTc Method	XX beats/min XXX ms XXX ms XXX ms XXX ms N Bazett's formula				
	Week 5	DDMMMYYYY (XX)	 					

Abbreviations: CS = Clinically significant; NCS = Not clinically significant; N = Normal. [1] Day is calculated as (exam date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (exam date - date of administration of first study drug) if prior to the administration of first study drug.

Listing 16.2.9.4 Physical Examinations Safety Population Capsule Dose Strength Level Date/Time of Clinically Significant? Subject Number Performed? Examination (Day) [1] Body System Visit (mg) (mg) Result Abnormal Findings Day 1 100 DDMMMYYYY (XX) Cardiovascular NORMAL Week 5 100 Respiratory 25 Week 13 200 Gastrointestinal ABNORMAL Yes/No 300 Week 21 Neurological Day 1 Musculoskeletal NOT DONE 100 mg Week 5 100 mg HEENT Week 13 Thyroid 100 mg Skin Week 21 200 mg Day 1 200 mg Extremities Week 5 200 mg Genitourinary 300 mg Other: XXXXXX Week 13 Week 21 400 mg

									Ce	ntered On			
Subject Number	Visit	Capsule Strength (mg)		Performed?	Date/Time of Examination (Day) [1]	Photos Collected During the Retinal Exam?	Results	Optic Nerve	Macula	Superior Arcade	Inferior Arcade	Temporal Retina (2 photos)	Nasal Retina
	Part A - Screening			Yes	DDMMMYYYY/ HH:MM (XX)	Yes	Abnormal - NCS	Bilateral	Bilateral	Bilateral	Bilateral	Bilateral	Bilateral
	Part A - Week 13	25	100	Yes	DDMMMYYYY/ HH:MM (XX)	Yes	Abnormal - NCS	Bilateral	Bilateral	Bilateral	Bilateral	Bilateral	Bilateral
	Part A - Week 25 EOT	25	150	Yes	DDMMMYYYY/ HH:MM (XX)	Yes	Abnormal - NCS	Bilateral	Bilateral	Bilateral	Bilateral	Bilateral	Bilateral
				No									

Listing 16.2.9.5 Ophthalmologic Examination (Site Assessment) Safety Population

Abbreviations: CS = Clinically significant; NCS = Not clinically significant.

Subject Number	Visit	Date of examination (Day) [1]	Photographs Reviewed?	Retinal Findings	Agree with Local Results?	Disagreement Description	Any Photograph Deficiencies?	Retinal Photograph Deficiencies	Other Findings or Concerns?	Non- Retinal Finding
	Day 1 Week 5	DDMMYYYY (XX)	Yes	Abnormal - new finding NCS	No		No		No	
	Week 13 Week 21			Ū						
	Day 1 Week 5									
	Week 13 Week 21									
	Day 1 Week 5									
	Week 13 Week 21									

Listing 16.2.9.6 Ophthalmologic Examination (Central Readings) Safety Population

Listing 16.2.9.7 Rescue Medications Safety Population

Subject Number	Did subject receive rescue therapy for acute, severe bacterial infection while on study?	Medication Record Number	Start date/Time (Day)/ End Date/Time (Day)[1]	Ongoing?
	Yes			

	Listing 16.2.9.8 SF-36 QOL Safety Population									
Subject Number	Visit	Capsule Strength (mg)	Dose Level (mg)	Was the SF-36 QOL Questionnaire Completed?	Date of Questionnaire completion (Day) [1]	Physical Functioning (PF) Domain Score	Role-Physical (RP) Domain Score	Bodily Pain (BD) Domain Score	General Health (GH) Domain Score	Vitality (VT) Domain Score
	Day 1 Week 3 Week 5 Week 9 Week 13 Week 17 Week 21 Week 25 EOT Extension Phase - Residence Visit 1 Post EOS Extension Phase - Residence Visit 1 Extension Phase - Residence Visit 1	25 25 25 25 25 25 100 100	50 50 100 150 150 300 300	No Yes Yes Yes Yes Yes Yes Yes	DDMMMYYYY (XX) DDMMMYYYY (XX) DDMMMYYYY (XX) DDMMMYYYY (XX) DDMMMYYYY (XX) DDMMMYYYY (XX) DDMMMYYYY (XX) DDMMMYYYY (XX)	90 90 95 90 90 90 100 100	75 81.25 75 93.75 100 100 100 100	74 74 62 84 84 84 84 100	25 30 35 35 30 30 45 30 37 37	43.75 37.5 37.5 50 62.5 68.75 62.5 62.5 62.5

Abbreviation: QOL = Quality of Life. [1] Day is calculated as (collection date - date of administration of first study drug) + 1 if on or after the administration of first study drug. Day is calculated as (collection date - date of administration of first study drug) if prior to the administration of first study drug.

Listing 16.2.9.8
SF-36 QOL
Safety Population

Subject Number	Visit	Capsule Strength (mg)	Dose Level (mg)	Was the SF-36 QOL Questionnaire Completed?	Date of Questionnaire completion (Day) [1]	Social Functioning (SF) Domain Score	Role- Emotional (RE) Domain Score	Mental Health (MH) Domain Score	Reported Health Transition (HT) Item Score	Physical Component Summary (PSC) Score	Mental Component Summary (MCS) Score
	Day 1			No							
	Week 3	25	50	Yes	DDMMMYYYY (XX)	90	75	74	25	43.75	
	Week 5	25	50	Yes	DDMMMYYYY (XX)	90	81.25	74	30	37.5	
	Week 9	25	100	Yes	DDMMMYYYY (XX)	95	75	62	35	37.5	
	Week 13	25	100	Yes	DDMMMYYYY (XX)	90	93.75	84	35	37.5	
	Week 17	25	150	Yes	DDMMMYYYY (XX)	90	100	84	30	50	
	Week 21	25	150	Yes	DDMMMYYYY (XX)	90	100	84	30	62.5	
	Week 25 EOT	25	150	Yes	DDMMMYYYY (XX)	90	100	84	45	68.75	
	Extension Phase - Residence Visit 1 Post EOS	100	300	Yes	DDMMMYYYY (XX)	100	100	84	30	62.5	
	Extension Phase - Residence Visit 1	100	300	Yes	DDMMMYYYY (XX)	100	100	100	37	62.5	
	Extension Phase - Residence Visit 2	100	400	Yes	DDMMMYYYY (XX)	100	100	62	30	56.26	

Listing 16.2.9.9.1 HPV Impact Profile (HIP) Questionnaire Safety Population									
Subject Number	Visit	Capsule Strength (mg)	Dose Level (mg)	Collection Date (Day) [1]	Does the Subject have Genital Warts?	HIP Questi- onnaire Colle- cted?	Question	Subject Response	Subject Response Description
	XXXXXXXXXX	ХХ	XXX	DDMMMYYYY (XX)	Yes	Yes	1. When I think about my recent gynecology exam or test results, I feel good about myself.	х	XXXXXX
							 When I think about my recent gynecology exam or test results, I feel anxious. 	х	XXXXXX
							3. I feel my recent gynecology test results were unexpected.	Х	XXXXXX
							 When I think about my recent gynecology exam or test results, I feel in control of my health. 	х	XXXXXX
							 When I think about my recent gynecology exam or test results, I feel depressed. 	х	XXXXXX
							 After my recent gynecology exam or test results, I feel I can concentrate as well as usual on everyday matters. 	х	XXXXXX
							7. When I think about my recent gynecology exam or test results, I feel something is seriously wrong with me.	х	XXXXXX
							8. When I think about my recent gynecology exam or test results, I feel angry.	Х	XXXXXX

Subject Number	Visit	Capsule Strength (mg)	Dose Level (mg)	Collection Date (Day) [1]	Does the Subject have Genital Warts?	HIP Questi- onnaire Colle- cted?	Domain	Mean Transform Score	Overall Mean ned Transformed Score
-	XXXXXXXX			XXXXXXX	Yes	Yes	Self Image Emotional Impact Control/Life Impact Worries and Concerns Partner and Transmission Sexual Impact Interactions with Doctors	XX.X XX.X XX.X XX.X XX.X XX.X XX.X XX.	XX.X
	Part A - Day 1				Yes	No			
	Part A - Week 3	XX	XXX	XXXXXXX	Yes	Yes	Self Image Emotional Impact Control/Life Impact Worries and Concerns Partner and Transmission Sexual Impact Interactions with Doctors	XX.X XX.X XX.X XX.X XX.X XX.X XX.X XX.	XX.X

Listing 16.2.9.9.2 HPV Impact Profile (HIP) Questionnaire - Domain Scores Safety Population