



STATISTICAL ANALYSIS PLAN

Study Title: A Phase 2b, Randomized, Double-Blind, Placebo-Controlled Multi-Center Study Evaluating Antiviral Effects, Pharmacokinetics, Safety, and Tolerability of GS-5806 in Hematopoietic Cell Transplant (HCT) Recipients with Respiratory Syncytial Virus (RSV) Infection of the Lower Respiratory Tract

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CONFIDENTIAL AND PROPRIETARY INFORMATION

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LIST OF ABBREVIATIONS

AE	adverse event
ALT	alanine aminotransferase
ANCOVA	analysis of covariance
AST	aspartate aminotransferase
ATC	Anatomical Therapeutic Chemical (drug class)
BLQ	below the limit of quantification
BMI	body mass index
CI	confidence interval
CSR	clinical study report
DAVG	difference between time-weighted average post-baseline and baseline
DMC	Data Monitoring Committee
ECG	electrocardiogram
eCRF	electronic case report forms
EOT	end of treatment
FAS	Full Analysis Set
HCT	hematopoietic cell transplant
HLT	high level term
HLGT	high level group term
ICH	International Conference on Harmonisation
ICU	Intensive Care Unit
ID	identification
IMP	investigational medicinal product
IWRS	interactive web response system
LLT	lower level term
LOQ	limit of quantification
LRTI	lower respiratory tract infection
MedDRA	medical dictionary for regulatory activities
ml	milliliter
MMRM	mixed-effect model with repeated measures
PK	pharmacokinetics
PP	Per Protocol
PT	preferred term
Q1	first quartile
Q3	third quartile
RSV	respiratory syncytial virus
RT-qPCR	quantitative real time polymerase chain reaction
SAP	statistical analysis plan
SD	standard deviation

SE standard error
SOC system organ class
TEAE treatment-emergent adverse event
TFLs tables, figures, and listings
WHO World Health Organization

1. INTRODUCTION

This statistical analysis plan (SAP) describes the statistical analysis methods and data presentations to be used in tables, figures, and listings (TFLs) in the clinical study report (CSR) for Study GS-US-218-1502. This SAP is based on the study protocol Amendment 7 dated 28 March 2016 and the electronic case report forms (eCRF) for this study. The SAP will be finalized before the database finalization. Any changes made after the finalization of the SAP will be documented in the CSR.

1.1. Study Objectives

Primary Objective

- To evaluate the effect of presatovir on RSV viral load in autologous or allogeneic hematopoietic cell transplant (HCT) recipients with an acute RSV lower respiratory tract infection (LRTI)

Secondary Objectives

- To evaluate the effect of presatovir on being free of any supplemental oxygen, and rates of respiratory failure and all-cause mortality
- To evaluate the PK, safety, and tolerability of presatovir

1.2. Study Design

This is a randomized, double-blind, placebo-controlled study evaluating the effect of presatovir on efficacy, PK, safety, and tolerability in HCT recipients with RSV LRTI.

All subjects will be permitted to receive the standard of care therapy for RSV infection per their local medical practices, in addition to the investigational medicinal product (IMP).

Approximately 60 subjects will be enrolled from approximately 45 international HCT centers.

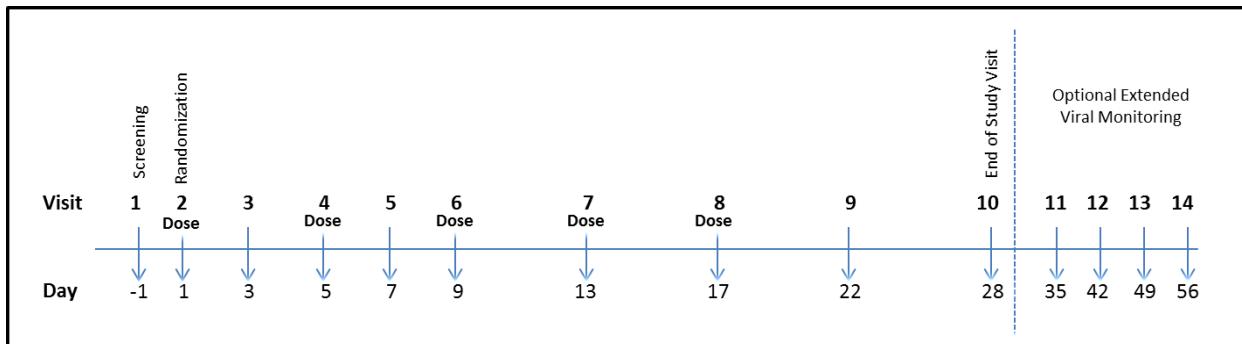
Subjects will be randomized in a 1:1 ratio to receive IMP (presatovir or placebo) and will be stratified by 2 factors:

- Supplemental O₂ requirement (≤ 2 L/min or > 2 L/min) at the time of randomization
- Treatment of current RSV infection (yes or no) with ribavirin (oral, intravenous, or aerosolized)

A single dose of 200 mg (four 50 mg tablets) of presatovir or placebo will be administered on Study Days 1, 5, 9, 13, and 17. The study will consist of the following visits: screening (Day -1), baseline/randomization/IMP administration (Day 1), optional Visit 3 (Day 3), Visit 4 (Day 5),

Visit 5 (Day 7), Visit 6 (Day 9), Visit 7 (Day 13), Visit 8 (Day 17), Visit 9 (Day 22), and end of study (Day 28). Four additional visits at Days 35, 42, 49, and 56 will only be completed for subjects who consent to the optional extended viral monitoring and test positive for RSV at Visit 9 (Day 22) (see Figure 1-1).

Figure 1-1. **Study Visits**

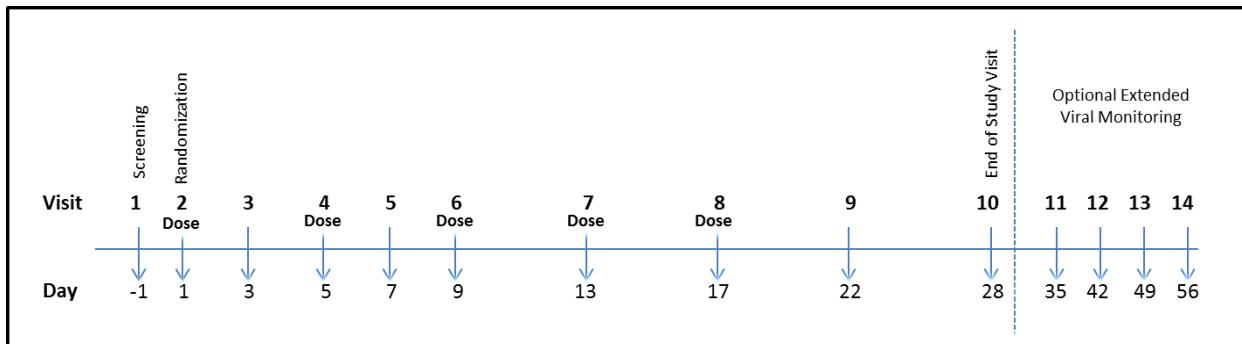


1.3. Sample Size and Power

Sample size calculations are based on results observed in a study that evaluated the efficacy of oral and aerosolized ribavirin treatment for preventing progression from upper to lower respiratory tract infection in hematopoietic cell transplant recipients with RSV infections (unpublished data from Dr. PPD). The sample size calculation assumes the time-weighted average change in RSV \log_{10} viral load from Day 1 to Day 9 in the placebo group will be $-1.5 \log_{10}$ copies/mL with a corresponding standard deviation (SD) of 1.75, and that 85% of the subjects will be evaluable. Based on these assumptions, with 25 subjects per group there is approximately 85% power to detect a 1.5 log difference in time-weighted average change in \log_{10} viral load between treatment groups using a 2-sided 0.05-level test. Given an evaluable rate of 85%, a total of 60 subjects will need to be randomized into the study.

Visit 5 (Day 7), Visit 6 (Day 9), Visit 7 (Day 13), Visit 8 (Day 17), Visit 9 (Day 22), and end of study (Day 28). Four additional visits at Days 35, 42, 49, and 56 will only be completed for subjects who consent to the optional extended viral monitoring and test positive for RSV at Visit 9 (Day 22) (see Figure 1-1).

Figure 1-1. Study Visits



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2. TYPE OF PLANNED ANALYSIS

2.1. Data Monitoring Committee Analyses

An external multidisciplinary Data Monitoring Committee (DMC) will review the progress of the study and perform interim reviews of safety data in order to protect subject welfare and preserve study integrity. To ensure the best interests of the participants, the DMC will recommend to the sponsor if the nature, frequency, and severity of adverse effects associated with study treatment warrant the early termination of the study, the continuation of the study, or the continuation of the study with modifications.

The DMC's role and responsibilities and the scope of analysis to be provided to the DMC are provided in a mutually agreed upon charter, which defines the DMC membership, meeting logistics, and meeting frequency.

The initial safety review occurred after approximately 25% of the planned 60 subjects were enrolled and completed Day 28 visit or discontinued the study. No additional meetings were scheduled due to the reasons specified in Section 7.7.

2.2. Final Analysis

After all subjects have completed the study, outstanding data queries have been resolved, and the data have been cleaned and finalized, the study blind will be broken and the final analysis of the data will be performed.

3. GENERAL CONSIDERATIONS FOR DATA ANALYSES

Analysis results will be presented using descriptive statistics. For categorical variables, the number and percentage of subjects in each category will be presented; for continuous variables, the number of subjects (n), mean, standard deviation (SD) or standard error (SE), median, first quartile (Q1), third quartile (Q3), minimum, and maximum will be presented.

By-subject listings will be presented for all subjects in the relevant analysis set, and sorted by subject ID number, visit date, and time (if applicable). Data collected on log forms, such as AEs, will be presented in chronological order within the subject. The treatment group to which subjects were randomized will be used in the listings. Age, sex at birth, race, and ethnicity will be included in the listings, as space permits.

3.1. Analysis Sets

Analysis sets define the subjects to be included in an analysis. Analysis sets and their definitions are provided in this section. Subjects included in each analysis set will be determined before the study blind is broken for analysis. The analysis set will be identified and included as a subtitle of each table, figure, and listing.

For each analysis set, the number and percentage of subjects eligible for inclusion, as well as the number and percentage of subjects who were excluded, will be summarized by treatment group.

A listing of reasons for exclusion from analysis sets will be provided by subject.

3.1.1. All Randomized Analysis Set

All Randomized Analysis Set includes all subjects who were randomized in the study.

3.1.2. Full Analysis Set

The Full Analysis Set (FAS) includes all randomized subjects who received at least 1 full dose of study drug, and have an RSV viral load greater than or equal to the lower limit of quantification of the RT-qPCR assay in the Day 1 nasal sample, as determined by RT-qPCR at the central lab.

This is the primary analysis set for efficacy analyses.

3.1.3. Per Protocol Analysis Set

The Per-Protocol (PP) Analysis Set includes subjects in the FAS who meet the following criteria:

- Did not violate the following major inclusion criteria (IC)
 - IC #2: Received an autologous or allogeneic HCT using any conditioning regimen
 - IC #3: Chest X-ray obtained < 48 hours prior to Screening
 - IC #4: Documented RSV in both the upper and lower respiratory tract as determined by local testing collected \leq 6 days prior to Day 1

- Did not administered invalid (eg, expired, damaged, quarantined, improperly stored) study drug
- Not be dispensed incorrect study drug (wrong bottle) or drug from another study
- Missed < 1 dose (200 mg) in the first 9 study days
- Missed < 3 nasal swab samples over the course of the study

The PP Analysis Set is the secondary analysis set for efficacy analyses.

3.1.4. Safety Analysis Set

The Safety Analysis Set includes subjects who took at least 1 full dose of study drug. This is the primary analysis set for safety analyses.

3.1.5. Pharmacokinetic Analysis Set

The Pharmacokinetic (PK) Analysis Set includes all subjects in the Safety Analysis Set who have evaluable on-study PK measurements. This is the primary analysis set for all PK analyses.

3.2. Subject Grouping

For analyses based on the FAS and PP Analysis Set, subjects will be grouped according to the treatment to which they were randomized. For analyses based on the Safety Analysis Set, subjects will be grouped according to the actual treatment received. The actual treatment received will differ from the randomized treatment only when their actual treatment differs from randomized treatment for the entire treatment duration.

For the PK Analysis Set, subjects will be grouped according to the actual treatment they received.

3.3. Strata and Covariates

Subjects will be randomly assigned to treatment groups via the interactive web response system (IWRS) in a 1:1 ratio using a stratified randomization schedule. Stratification will be based on the following parameters:

- Supplemental O₂ requirement (\leq 2 L/min or $>$ 2 L/min) at the time of randomization
- Treatment of current RSV infection (yes or no) with ribavirin (oral, intravenous, or aerosolized)

If there are discrepancies in stratification factor values between the IWRS and the clinical database, the values recorded in the clinical database will be used for analyses.

Efficacy endpoints will be evaluated using stratification factors as covariates for analyses, as specified in Section 6. In the event the number of subjects within a stratum of the stratification factor is small (eg. ≤ 4 subjects), the stratum will be collapsed with the adjacent stratum for the analysis.

For efficacy endpoints, the baseline value of the efficacy variables will be included as a covariate in the efficacy analysis model.

3.4. Examination of Subject Subgroups

The primary and secondary efficacy endpoints will be examined using the following subgroups:

- Actual ribavirin use at the first dosing date (Yes or No)
- Supplemental O₂ requirement (≤ 2 L/min or > 2 L/min) at the time of randomization

The primary efficacy endpoint will also be examined by RSV type (RSV A or RSV B).

The safety endpoints will be examined using the following subgroups:

- Age (< 65 years and ≥ 65 years)
- Sex (male and female)

3.5. Multiple Comparisons

In order to account for multiple hypothesis testing of endpoints, a sequential testing procedure will be used to control the Type 1 error rate of 0.05 across the primary and secondary endpoints. The primary endpoint analysis will serve as the gatekeeper for the secondary analyses, ie, the primary efficacy hypothesis must be rejected at the 2-sided 0.05 significance level before the efficacy hypotheses for the secondary efficacy endpoints can be evaluated.

If the primary null hypothesis is rejected, then the following secondary endpoints will be tested sequentially at 2-sided $\alpha = 0.05$ significance level in the order listed below based upon the closed testing procedure {Dmitrienko 2003}.

- Number of supplemental O₂ free days through Day 28
- Proportion of subjects developing respiratory failure (of any cause) requiring mechanical ventilation (invasive or noninvasive) through Day 28
- Proportion of all-cause mortality among all subjects through Day 28

3.6. Missing Data and Outliers

3.6.1. Missing Data

In general, missing data will not be imputed unless methods for handling missing data are specified. Exceptions are presented in this document.

For missing last dosing date of study drug, imputation rules are described in Section 4.2.1. The handling of missing or incomplete dates for AE onset is described in Section 7.1.5.2 and for prior and concomitant medications in Section 7.4. The handling of missing data in analyses of the efficacy endpoints is discussed in Section 6.

3.6.2. Outliers

Outliers will be identified during the data management and data analysis process, but no sensitivity analyses will be conducted. All data will be included in the data analyses.

3.7. Data Handling Conventions and Transformations

In general, age (in years) on the date of the first dose of study drug will be used for analyses and presentation in listings. If an enrolled subject was not dosed with any study drug, the randomization date will be used instead of the first dosing date of study drug. For screen failures, the date the informed consent was signed will be used for age calculation. If only the birth year is collected on the eCRF, “01 January” will be used for the unknown birth day and month for the purpose of age calculation. If only birth year and month are collected, “01” will be used for the unknown birth day.

Non-PK data that are continuous in nature but are less than the lower limit of quantitation (LOQ) or above the upper LOQ will be imputed as follows:

- A value that is 1 unit less than the LOQ will be used to calculate descriptive statistics if the datum is reported in the form of “ $< x$ ” (where x is considered the LOQ). For example, if the values are reported as < 50 and < 5.0 , values of 49 and 4.9, respectively, will be used to calculate summary statistics. An exception to this rule is any value reported as < 1 or < 0.1 , etc. For values reported as < 1 or < 0.1 , a value of 0.9 or 0.09, respectively, will be used to calculate summary statistics.
- A value that is 1 unit above the LOQ will be used to calculate descriptive statistics if the datum is reported in the form of “ $> x$ ” (where x is considered the LOQ). Values with decimal points will follow the same logic as above.
- The LOQ will be used to calculate descriptive statistics if the datum is reported in the form of “ $\leq x$ ” or “ $\geq x$ ” (where x is considered the LOQ).

If methods based on the assumption that the data are normally distributed are not adequate, analyses may be performed on transformed data (eg, log-transformed data) or nonparametric analysis methods may be used, as appropriate.

Plasma concentration values that are below the limit of quantitation (BLQ) will be presented as “BLQ” in the concentration data listing. Values that are BLQ will be treated as 0 at predose time points, and one-half the value of the LOQ at post-baseline time points.

The following conventions will be used for the presentation of summary and order statistics:

- If at least 1 subject has a concentration value of BLQ for the time point, the minimum value will be displayed as “BLQ.”
- If more than 25% of the subjects have a concentration data value of BLQ for a given time point, the minimum and Q1 values will be displayed as “BLQ.”
- If more than 50% of the subjects have a concentration data value of BLQ for a given time point, the minimum, Q1, and median values will be displayed as “BLQ.”
- If more than 75% of the subjects have a concentration data value of BLQ for a given time point, the minimum, Q1, median, and Q3 values will be displayed as “BLQ.”
- If all subjects have concentration data values of BLQ for a given time point, all order statistics (minimum, Q1, median, Q3, and maximum) will be displayed as “BLQ.”

3.8. Analysis Visit

3.8.1. Definition of Study Day

Study day will be calculated from the first dosing date of study drug and derived as follows:

- For post-dose study days: Assessment Date – First Dosing Date + 1
- For days prior to the first dose: Assessment Date – First Dosing Date

Therefore, study day 1 is the day of first dose of study drug administration.

3.8.2. Analysis Visit

The nominal visit as recorded on the eCRF will be used when data are summarized by visit. Any data relating to unscheduled visits will not be assigned to a particular visit or time point. However, the following exception will be made:

- An unscheduled visit prior to the first dosing of study drug may be included in the calculation of the baseline value, if applicable.
- Unscheduled visits after the first dose of study drug will be included in determining the maximum post-baseline toxicity grade.

- For subjects who prematurely discontinue from the study, early termination (ET) data will be assigned to the next scheduled visit where the respective data were scheduled to be collected.
- Data collected on an extended viral load monitoring visit will be summarized as a separate visit, and labeled as Day 35, 42, 49, or 56.

3.8.3. Selection of Data in the Event of Multiple Records

Depending on the statistical analysis method, single values may be required for each analysis visit. If multiple valid, nonmissing, continuous measurements exist in one visit, records will be chosen based on the following rules if a single value is needed:

- In general, the baseline value will be the last nonmissing value on or prior to the first dosing date of study drug, unless specified differently. If multiple measurements occur on the same day, the last nonmissing value prior to the time of first dosing of study drug will be considered as the baseline value. If these multiple measurements occur at the same time or the time is not available, the average of these measurements (for continuous data) will be considered the baseline value. For the efficacy endpoints, if no measurements occur prior to the time of first dosing of study drug, the first nonmissing value on the first dosing date of study drug will be considered as the baseline value.
- For postbaseline values:
 - The record closest to the nominal day for that visit will be selected.
 - If there are 2 records that are equidistant from the nominal day, the later record will be selected.
 - If there is more than 1 record on the selected day, the average will be taken, unless otherwise specified.

If multiple valid, non-missing, categorical measurements exist for one visit, records will be chosen based on the following rules if a single value is needed:

- For baseline, the last available record on or prior to the date of the first dose of study drug will be selected. If there are multiple records at the same time or no time recorded on the same day, the value with the lowest severity will be selected unless otherwise specified.
- For postbaseline values:
 - The record closest to the nominal day for that visit will be selected.
 - If there are 2 records that are equidistant from the nominal day, the later record will be selected.
 - If there is more than 1 record on the selected day, the value with the worst severity will be used.

4. SUBJECT DISPOSITION

4.1. Subject Enrollment and Disposition

A summary of subject enrollment will be provided by treatment group for each country, investigator within a country, and overall. The summary will present the number and percentage of subjects enrolled. For each column, the denominator for the percentage calculation will be the total number of subjects analyzed for that column.

A similar enrollment table will be provided by randomization stratum. The denominator for the percentage of subjects in the stratum will be the total number of randomized subjects. If there are discrepancies in the value used for stratification assignment between the IWRS and the clinical database or other source documents, the value collected in the clinical database will be used for the summary. A listing of subjects with discrepancies in the value used for stratification assignment between the IWRS and the clinical database at the time of data finalization will be provided.

The randomization schedule used for the study will be provided as an appendix to the CSR.

A summary of subject disposition will be provided by treatment group. This summary will present the number of subjects screened, the number of subjects who met all eligibility criteria but were not randomized with reasons subjects not randomized, the number of subjects randomized, and the number of subjects in each of the categories listed below:

- Full Analysis Set
- Safety Analysis Set
- Per-Protocol Analysis Set
- PK Analysis Set
- Completed study drug
- Did not complete study drug with reasons for premature discontinuation of study drug
- Completed study
- Did not complete the study with reasons for premature discontinuation of study
- Completed Extended Viral Load Monitoring Period
- Did not complete the Extended Viral Load Monitoring Period with reasons for premature discontinuation of Extended Viral Load Monitoring Period

For the status of study drug and study completion and reasons for premature discontinuation, the number and percentage of subjects in each category will be provided. The denominator for the percentage calculation will be the total number of subjects in the Safety Analysis Set corresponding to that column.

The following by-subject listings will be provided by subject identification (ID) number in ascending order to support the above summary tables:

- Reasons for premature study drug or study discontinuation
- Reasons for screen failure (will be provided by screening ID number in ascending order)

4.2. Extent of Study Drug Exposure and Adherence

Extent of exposure to study drug will be examined by assessing the total duration of exposure to study drug and the level of adherence to the study drug specified in the protocol.

4.2.1. Duration of Exposure to Study Drug

Total duration of exposure to study drug will be defined as last dosing date minus first dosing date plus 4, regardless of any temporary interruptions in study drug administration, and will be expressed in days using up to 1 decimal place (eg, 4.5 days). If the last study drug dosing date is missing, the latest date among the study drug end date, clinical visit date, laboratory sample collection date, and vital signs assessment date that occurred during the on-treatment period will be used.

The total duration of exposure to study drug will be summarized using descriptive statistics (n, mean, SD, median, Q1, Q3, minimum, and maximum), and using the number and percentage of subjects exposed through the following time periods: Day 1 (Baseline), Day 5, Day 9, Day 13, and Day 17. Summaries will be provided by treatment group for the Safety Analysis Set.

No formal statistical testing is planned.

4.2.2. Adherence to Study Drug

The total number of tablets administered will be summarized using descriptive statistics.

The presumed total number of tablets administered to a subject will be determined by the data collected on the drug accountability eCRF using the following formula:

$$\begin{aligned} & \text{Total Number of Tablets Administered} \\ &= \left(\sum \text{No. of Tablets Dispensed at Study Dosing Visits} \right) \end{aligned}$$

The level of prescribed adherence to the study drug regimen will be determined by the total amount of study drug administered relative to the total amount of study drug specified by the protocol for a subject who completes treatment in the study.

The level of prescribed adherence will be expressed as a percentage using the following formula:

$$\text{Prescribed Adherence (\%)} = \left(\frac{\text{Total Amount of Study Drug Administered}}{\text{Total Amount of Study Drug Specified by Protocol}} \right) \times 100$$

Descriptive statistics for adherence (sample size, mean, SD, median, Q1, Q3, minimum, and maximum) along with the number and percentage of subjects belonging to adherence categories (eg, < 80% and $\geq 80\%$) will be provided by treatment group for the Safety Analysis Set.

No formal statistical testing is planned.

A by-subject listing of study drug administration and drug accountability will be provided separately by subject ID number (in ascending order) and visit (in chronological order).

4.3. Protocol Deviations

Subjects who did not meet the eligibility criteria for study entry, but enrolled in the study will be summarized regardless of whether they were exempted by the sponsor or not. The summary will present the number and percentage of subjects who did not meet at least 1 eligibility criterion and the number of subjects who did not meet specific entry criteria by treatment group based on the All Randomized Analysis Set. A by-subject listing will be provided for those subjects who did not meet at least 1 eligibility (inclusion or exclusion) criterion. The listing will present the eligibility criterion (or criteria if more than 1 deviation) that subjects did not meet and related comments, if collected.

Protocol deviations occurring after subjects entered the study are documented during routine monitoring. The number and percentage of subjects with important protocol deviations by deviation reason (eg, nonadherence to study drug, violation of selected inclusion/exclusion criteria) will be summarized by treatment group for All Randomized Analysis Set. A by-subject listing will be provided for those subjects with any protocol deviation.

5. BASELINE CHARACTERISTICS

5.1. Demographics

Subject demographic variables (ie, age, sex, race, and ethnicity) will be summarized by treatment group and overall using descriptive statistics for age, and using number and percentage of subjects for sex, race, and ethnicity. The summary of demographic data will be provided for the Safety Analysis Set.

In addition, a similar summary table will be provided by the consent status of participation in the Extended Viral Load Monitoring (yes or no).

A by-subject demographic listing, including the informed consent date, will be provided by subject ID number in ascending order.

5.2. Other Baseline Characteristics

Other baseline characteristics include:

- Weight (kg)
- Height (cm)
- Body mass index (BMI; in kg/m²)
- RSV types (RSV A or RSV B)
- Vital signs (pulse rate, systolic and diastolic blood pressure, body temperature, and respiratory rate)
- Smoking history
- Viral load
- Detectable RSV in nasal swab samples
- Co-pathogen types
- Duration of respiratory symptoms prior to the first dosing date
- Stratification factors
- Hospitalization (including hospitalization on the date of the first study drug administration Yes/No, hospitalized types, duration of hospitalization prior to the date of the first study drug administration, hospitalization reasons, hospitalization related to RSV infection)

These baseline characteristics will be summarized by treatment groups and overall using descriptive statistics (n, mean, SD, median, Q1, Q3, minimum, and maximum) for continuous variables and using number and percentage of subjects for categorical variables. In addition, baseline characteristics will be summarized by the consent status of participation in the Extended Viral Load Monitoring (yes or no) in a separate table. The summary of baseline characteristics will be provided for the Safety Analysis Set. No formal statistical testing is planned.

A by-subject listing of the baseline characteristics will be provided by subject ID number in ascending order.

5.3. Medical History

Medical history will be collected at screening for disease-specific and general conditions (ie, conditions not specific to the disease being studied).

HCT-specific medical history (eg, transplant type, graft versus host disease [GVHD], cell source, cytomegalovirus [CMV] status, and time from transplant to the first dosing date) will be summarized by treatment group and overall using descriptive statistics (n, mean, SD, median, Q1, Q3, minimum, and maximum) for continuous variables and using the numbers and percentages of subjects for categorical variables. A summary of HCT-specific medical history will be provided for the Safety Analysis Set. No formal statistical testing is planned.

General medical history will not be coded, but will be listed only.

6. EFFICACY ANALYSES

6.1. Primary Efficacy Endpoint

6.1.1. Definition of the Primary Efficacy Endpoint

The primary efficacy endpoint for this study is the time-weighted average change in \log_{10} RSV viral load from Baseline (Day 1) to Day 9, defined as:

$$\frac{\sum_{i=a}^{b-1} \{0.5 \times (Y_i + Y_{i+1}) \times (t_{i+1} - t_i)\}}{(t_b - t_a)}$$

where Y_i is the change from Baseline in RSV \log_{10} viral load at Visit i , t is the time at the specified timepoint (the actual study day), a is the baseline assessment at Day 1, and b is the last assessment at or prior to Day 9.

The time-weighted average change, often referred to as the DAVG, provides the average viral burden change from baseline.

6.1.2. Analysis for the Primary Efficacy Endpoint

The primary analysis will test for the superiority of the presatovir group compared to the placebo group based on the time-weighted average change in \log_{10} RSV viral load from Day 1 to Day 9 in the Full Analysis Set at the 2-sided 0.05 level. The null and alternative hypotheses for the superiority test on the primary efficacy endpoint are as follows:

- H_0 : There is no difference between presatovir and placebo in the time-weighted average change in RSV \log_{10} viral load from Day 1 to Day 9
- H_1 : There is difference between presatovir and placebo in the time-weighted average change in RSV \log_{10} viral load from Day 1 to Day 9

To test the null hypothesis above, a parametric analysis of covariance (ANCOVA) model with corresponding baseline viral load and stratification factors (supplemental O₂ use and treatment of current RSV infection) as covariates will be used, at a 2-sided 0.05 level. Adjusted means and 95% confidence intervals (CIs) will be provided. The stratified Wilcoxon rank sum test will be implemented as a sensitivity analysis.

Viral load values below the limit of detection (LOD) will be assigned as 0 if it is reported in the form of ‘not detected’. A value of 1 unit less than the LOQ will be used for analysis if the viral load is reported in the form of “ $< x$ ” (where x is considered the LOQ). Viral load data will be transformed using the base 10 logarithm for the analyses and summaries. To account for 0 values, 1 will be added to each viral load measurement before being transformed.

6.1.3. Sensitivity Analysis for Primary Efficacy Endpoint

Sensitivity analyses of the primary efficacy endpoint will be performed in the PP analysis set.

6.1.4. Imputation of Missing Data

Missing viral load data due to premature discontinuation of the study will not be imputed as all available data will be included in the time-weighted average calculations. Intermediate missing viral load data will be imputed using the trapezoidal rule for the time-weighted average calculations.

6.2. Secondary Efficacy Endpoints

6.2.1. Definition of Secondary Efficacy Endpoints

Secondary efficacy endpoints include:

- Number of supplemental O₂ free days through Day 28
- Proportion of subjects developing respiratory failure (of any cause) requiring mechanical ventilation (invasive or noninvasive) through Day 28
- Proportion of all-cause mortality among subjects through Day 28

6.2.2. Analysis Methods for Secondary Efficacy Endpoints

In order to account for multiple hypothesis testing of endpoints, a sequential testing procedure described in Section 3.5 will be used to control the overall Type 1 error rate of 0.05 across the primary and secondary endpoints.

The FAS will be used for all summaries and analyses of secondary endpoints. All secondary endpoints will be analyzed using 2-sided tests to compare treatment differences.

The number of supplemental O₂-free days through Day 28 will be analyzed using a negative binomial model with stratification factors as covariates and an offset parameter to account for the on-study duration. Subjects who die prior to Day 28 (inclusive) or are receiving supplemental O₂ on all days of the study period are assigned 0 supplemental O₂-free days. All survivors accrue 1 supplemental O₂-free day for each day that they are both alive and on the use of supplemental O₂ less than 12 hours per 24 hours (0:00 to 23:59) when they are on study.

The proportion of subjects who develop respiratory failure requiring mechanical ventilation and the proportion of subjects with all-cause mortality will be analyzed using Cochran-Mantel-Haenszel (CMH) test adjusting for the stratification factors at the 2-sided 0.05-level. The 2-sided 95% exact CI of the respiratory failure rate or mortality rate based on the Clopper-Pearson method will be provided for each treatment group. In the case of a small number of events, the exact method will be used.

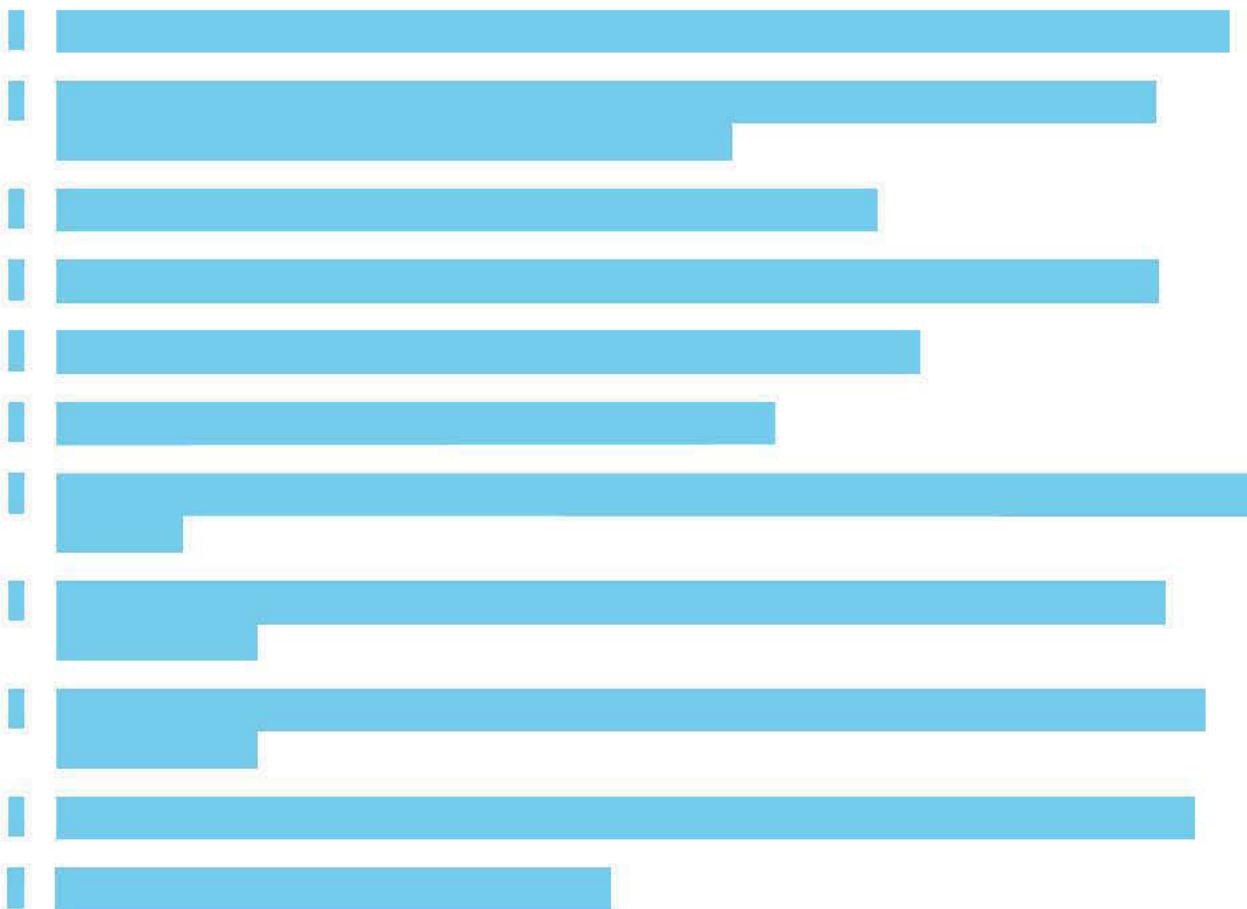
6.2.3. Sensitivity Analysis for Secondary Efficacy Endpoints

Sensitivity analyses of the secondary efficacy endpoints, the number of supplemental O₂-free days through Day 28, the proportion of subjects who develop respiratory failure requiring mechanical ventilation through Day 28, and the proportion of subjects with all-cause mortality through Day 28, will be performed in the PP analysis set.

6.3. Exploratory Efficacy Endpoints

6.3.1. Definition of Exploratory Efficacy Endpoints

PPD

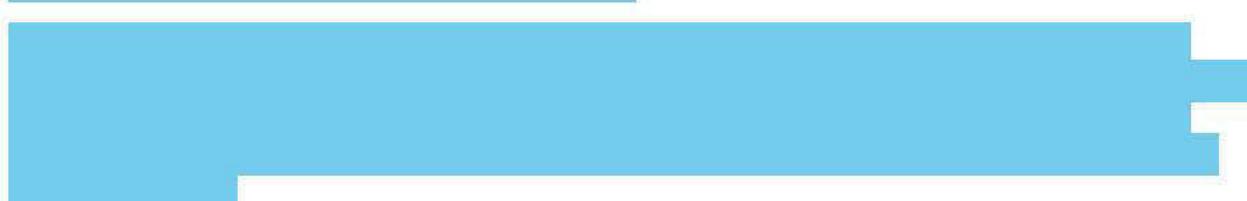


6.3.2. Analysis Methods for Exploratory Efficacy Endpoints

PPD

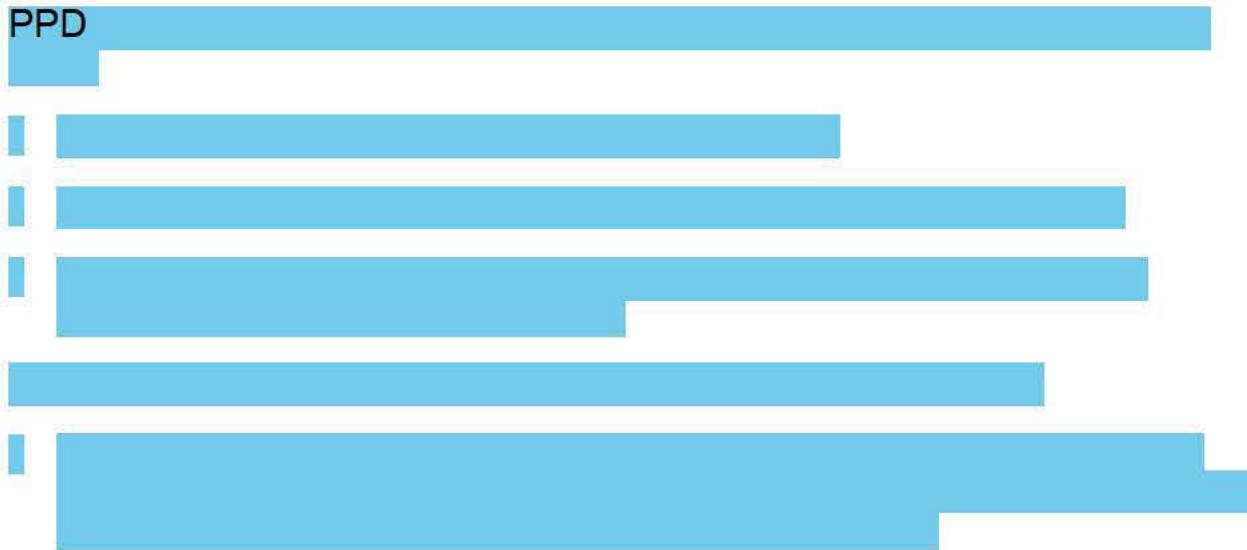


PPD



PPD

6.4. Changes From Protocol-Specified Efficacy Analyses



- The number of supplemental O₂-free days through Day 28 will be analyzed using a negative binomial model with stratification factors as covariates. An offset parameter will be included to account for differential study durations.

7. SAFETY ANALYSES

7.1. Adverse Events and Deaths

7.1.1. Adverse Event Dictionary

Clinical and laboratory AEs will be coded using the current version of the Medical Dictionary for Regulatory Activities (MedDRA). System organ class (SOC), high level group term (HLGT), high level term (HLT), preferred term (PT), and lower level term (LLT) will be provided in the AE dataset.

7.1.2. Adverse Event Severity

Severity of adverse events will be determined by the investigator as Grade 1 (mild), Grade 2 (moderate), Grade 3 (severe), or Grade 4 (life-threatening). The severity of events for which the investigator did not record severity will be categorized as “missing” for tabular summaries and data listings. The missing category will be listed last in summary presentation.

7.1.3. Relationship of Adverse Events to Study Drug

Related AEs are those for which the investigator selected “Related” on the AE eCRF to the question of “Related to Study Treatment.” Relatedness will always default to the investigator’s choice, not that of the medical monitor. Events for which the investigator did not record relationships to study drug will be considered related to study drug for summary purposes. However, by-subject data listings will show the relationship as missing.

7.1.4. Serious Adverse Events

Serious adverse events will be identified and captured as SAEs if AEs met the definitions of SAEs that were specified in the study protocol. SAEs captured and stored in the clinical database will be reconciled with the SAE database from the Gilead Drug Safety and Public Health Department before database finalization.

7.1.5. Treatment-Emergent Adverse Events

7.1.5.1. Definition of Treatment-Emergent Adverse Events

Treatment-emergent adverse events (TEAE) are defined as 1 or both of the following:

- Any AEs with an onset date on or after the study drug start date up to the Day 28, or up to 28 days if a subject withdraws early (prior to Day 28) from the study
- Any AEs leading to premature discontinuation of study drug

7.1.5.2. Incomplete Dates

If the onset date of the AE is incomplete and the AE stop date is not prior to the first dosing date of study drug, then the month and year (or year alone if month is not recorded) of onset determine whether an AE is treatment emergent. The event is considered treatment emergent if both of the following 2 criteria are met:

- The AE onset is the same as or after the month and year (or year) of the first dosing date of study drug, and
- The AE onset date is the same as or before the month and year (or year) of the Day 28

An AE with completely missing onset and stop dates, or with the onset date missing and a stop date later than the first dosing date of study drug, will be considered to be treatment emergent. In addition, an AE with the onset date missing and incomplete stop date with the same or later month and year (or year alone if month is not recorded) as the first dosing date of study drug will be considered treatment emergent.

7.1.6. Summaries of Adverse Events and Deaths

Treatment-emergent (TE) AEs will be summarized based on the Safety Analysis Set.

The number and percentage of subjects who experienced at least 1 TEAE will be provided and summarized by SOC and PT, and treatment group. For other AEs described below, summaries will be provided by SOC, PT, and treatment group:

- TEAE by maximum severity
- TEAEs of Grade 3 or higher (by maximum severity)
- TEAEs of Grade 2 or higher
- All TE treatment-related AEs
- All TE treatment-related AEs by maximum severity
- TE treatment-related AEs of Grade 3 or higher (by maximum severity)
- TE treatment-related AEs of Grade 2 or higher
- All TE SAEs
- All TE treatment-related SAEs
- All TEAEs leading to premature discontinuation of study drug

- All TEAEs leading to premature discontinuation of study
- All AEs leading to death (ie, outcome of death)

A brief, high-level summary of AEs described above will be provided by treatment group and by the number and percentage of subjects who experienced the above AEs. All deaths observed in the study will be also included in this summary.

Multiple events will be counted only once per subject in each summary. Adverse events will be summarized and listed first in alphabetic order of SOC and HLT within each SOC (if applicable), and then by PT in descending order of total frequency within each SOC. For summaries by severity grade, the most severe grade will be used for those AEs that occurred more than once in an individual subject during the study.

In addition to the above summary tables, all TEAEs, TE treatment-related AEs, and TE SAE will be summarized by PT only, in descending order of total frequency.

In addition, data listings will be provided for the following:

- All AEs, indicating whether the event is treatment emergent
- All AEs of Grade 3 or higher
- All AEs of Grade 2 or higher
- SAEs
- Deaths
- All AEs leading to death (ie, outcome of death)
- AEs leading to premature discontinuation of study drug
- AEs leading to premature discontinuation of study

7.1.7. Additional Analysis of Adverse Events

Summaries (number and percentage) of subjects who experienced any cardiac related events will be provided for each treatment group using the Safety Analysis Set by AE of interest categories and the associated PTs (see Appendix 2).

7.2. Laboratory Evaluations

Laboratory data collected during the study will be analyzed and summarized using both quantitative and qualitative methods. Summaries of laboratory data will be provided for the Safety Analysis Set and will include data collected up to Day 28. The analysis will be based on values reported in conventional units. When values are below the LOQ, they will be listed as

such, and the closest imputed value will be used for the purpose of calculating summary statistics as specified in Section 3.7. Hemolized test results will not be included in the analysis, but they will be listed in by-subject laboratory listings.

A by-subject listing for laboratory test results will be provided by subject ID number and visit in chronological order for hematology and serum chemistry separately. Values falling outside of the relevant reference range and/or having a severity grade of 1 or higher on the Gilead Grading Scale for Severity of Adverse Events and Laboratory Abnormalities will be flagged in the data listings, as appropriate.

No formal testing will be generated.

7.2.1. Summaries of Numeric Laboratory Results

Descriptive statistics will be provided by treatment group for each laboratory test specified in the study protocol as follows:

- Baseline values
- Values at each postbaseline visit
- Change from baseline at each postbaseline visit

A baseline laboratory value will be defined as the last measurement obtained on or prior to the date/time of first dose of study drug. Change from baseline to a postbaseline visit will be defined as the visit value minus the baseline value. The mean, median, Q1, Q3, minimum, and maximum will be displayed to the reported number of digits; SD values will be displayed to the reported number of digits plus 1.

Median (Q1, Q3) of the observed values for the laboratory tests will be plotted using a line plot by treatment group and visit.

In the case of multiple values in an analysis visit, data will be selected for analysis as described in Section 3.8.3.

7.2.2. Graded Laboratory Values

The Gilead Grading Scale for Severity of Adverse Events and Laboratory Abnormalities will be used for assigning toxicity grades (0 to 4) to laboratory results for analysis. Grade 0 includes all values that do not meet the criteria for an abnormality of at least Grade 1. For laboratory tests with criteria for both increased and decreased levels, analyses for each direction (ie, increased, decreased) will be presented separately.

7.2.2.1. Treatment-Emergent Laboratory Abnormalities

Treatment-emergent laboratory abnormalities are defined as values that increase at least 1 toxicity grade from baseline at any postbaseline time point, up to and including Day 28. If the relevant baseline laboratory value is missing, any abnormality of at least Grade 1 observed within the time frame specified above will be considered treatment emergent.

7.2.2.2. Treatment-Emergent Marked Laboratory Abnormalities

Treatment-emergent marked laboratory abnormalities are defined as values that increase from baseline by at least 3 toxicity grades at any postbaseline time point, up to and including Day 28. If the relevant baseline laboratory value is missing, then any Grade 3 or 4 values observed within the timeframe specified above will be considered treatment-emergent marked abnormalities.

7.2.2.3. Summaries of Laboratory Abnormalities

Laboratory data that are categorical will be summarized using the number and percentage of subjects in the study with the given response at baseline and each scheduled postbaseline visit.

The following summaries (number and percentage of subjects) for treatment-emergent laboratory abnormalities will be provided by treatment group; subjects will be categorized according to the most severe postbaseline abnormality grade for a given lab test:

- Graded laboratory abnormalities
- Grade 3 or 4 laboratory abnormalities
- Marked laboratory abnormalities

For all summaries of laboratory abnormalities, the denominator is the number of subjects with nonmissing postbaseline values up to and including Day 28.

A by-subject listing of treatment-emergent Grade 3 or 4 laboratory abnormalities and marked laboratory abnormalities will be provided by subject ID number and visit in chronological order. This listing will include all test results that were collected throughout the study for the lab test of interest, with all applicable severity grades displayed.

7.2.3. Liver-related Laboratory Evaluations

Liver-related abnormalities after initial study drug dosing will be examined and summarized using the number and percentage of subjects who were reported to have the following laboratory test values for post-baseline measurements:

- Aspartate aminotransferase (AST): (a) > 3 times of the upper limit of reference range (ULN); (b) $> 5 \times$ ULN; (c) $> 10 \times$ ULN; (d) $> 20 \times$ ULN
- Alanine aminotransferase (ALT): (a) $> 3 \times$ ULN; (b) $> 5 \times$ ULN; (c) $> 10 \times$ ULN; (d) $> 20 \times$ ULN

- AST or ALT: (a) $> 3 \times \text{ULN}$; (b) $> 5 \times \text{ULN}$; (c) $> 10 \times \text{ULN}$; (d) $> 20 \times \text{ULN}$
- Total bilirubin: (a) $> 1 \times \text{ULN}$; (b) $> 2 \times \text{ULN}$
- Alkaline phosphatase (ALP) $> 1.5 \times \text{ULN}$
- AST or ALT $> 3 \times \text{ULN}$ and total bilirubin: (a) $> 1.5 \times \text{ULN}$; (b) $> 2 \times \text{ULN}$
- AST or ALT $> 3 \times \text{ULN}$, total bilirubin $> 2 \times \text{ULN}$ and ALP $< 2 \times \text{ULN}$

The summary will include data from all post-baseline visits up to and including Day 28. For individual laboratory tests, subjects will be counted once based on the most severe post-baseline values. For both the composite endpoint of AST or ALT and total bilirubin, subjects will be counted once when the criteria are met at the same post-baseline visit date. The denominator is the number of subjects in the Safety Analysis Set who have nonmissing post-baseline values of all relevant tests at the same post-baseline visit date. A listing of subjects who met at least 1 of the above criteria will be provided.

7.3. Body Weight and Vital Signs

Descriptive statistics will be provided by treatment group for body weight and vital signs as follows:

- Baseline value
- Values at each postbaseline time point
- Change from baseline at each postbaseline time point

Median (Q1, Q3) of the observed values for vital signs will be plotted by treatment group and visit.

A baseline value will be defined as the last available value collected on or prior to the date/time of first dose of study drug. Change from baseline to a post-baseline visit will be defined as the post-baseline value minus the baseline value.

In the case of multiple values at a visit assessment, data will be selected for analysis as described in Section 3.8.3. No inferential statistics will be generated.

A by-subject listing of vital signs will be provided by subject ID number and visit in chronological order. Body weight will be included in the vital signs listing, if space permits. If not, they will be provided separately.

7.4. Prior and Concomitant Medications

Medications collected at screening and during the study will be coded using the current version of the World Health Organization (WHO) Drug dictionary.

7.4.1. Prior Medications

Prior medications are defined as any medications taken before a subject took the first study drug.

Prior medications will be summarized by Anatomical Therapeutic Chemical (ATC) drug class Level 2 and preferred name using the number and percentage of subjects for each treatment group and overall. A subject reporting the same medication more than once will be counted only once when calculating the number and percentage of subjects who received that medication. The summary will be ordered alphabetically by ATC classes and then by preferred term in order of descending overall frequency within each ATC medical class. For drugs with the same frequency, sorting will be done alphabetically.

For the purposes of analysis, any medication with a start date prior to the first dosing date of study drug will be included in the prior medication summary regardless of when the stop date is. If a partial start date is entered the medication will be considered prior unless the month and year (if day is missing) or year (if day and month are missing) of the start date are after the first dosing date. Medications with a completely missing start date will be included in the prior medication summary, unless otherwise specified. Summaries will be based on the Safety Analysis Set. No formal statistical testing is planned.

Prior ribavirin use will be summarized separately from other prior general medications.

7.4.2. Concomitant Medications

Concomitant medications are defined as medications taken while a subject took study drug. Use of concomitant medications will be summarized by Anatomical Therapeutic Chemical (ATC) drug class Level 2 and preferred name using the number and percentage of subjects for each treatment group. A subject reporting the same medication more than once will be counted only once when calculating the number and percentage of subjects who received that medication. The summary will be ordered alphabetically by ATC medical class and then by preferred term in descending overall frequency within each ATC medical class. For drugs with the same frequency, sorting will be done alphabetically.

For the purposes of analysis, any medication with a start date prior to or on the first dosing date of study drug and continued to take after the first dosing date, or started after the first dosing date but prior to or on the last dosing date of study drug will be considered concomitant medications. Medications started and stopped on the same day as the first dosing date or the last dosing date of study drug will also be considered concomitant. Medications with a stop date prior to the date of first dosing date of study drug or a start date after the last dosing date of study drug will be excluded from the concomitant medication summary. If a partial stop date is entered, any medication with the month and year (if day is missing) or year (if day and month are missing) prior to the date of first study drug administration will be excluded from the concomitant medication summary. If a partial start date is entered, any medication with the month and year (if day is missing) or year (if day and month are missing) after the study drug stop date will be excluded from the concomitant medication summary. Medications with completely missing start

and stop dates will be included in the concomitant medication summary, unless otherwise specified. Summaries will be based on the Safety Analysis Set. No formal statistical testing is planned.

Concomitant ribavirin use will be summarized separately from other concomitant general medications.

All prior and concomitant medications (other than per-protocol study drugs) will be provided in a by-subject listing sorted by subject ID number and administration date in chronological order.

7.5. Electrocardiogram Assessment

Number and percent of subjects with new ECG abnormalities at postbaseline visits including those assessments obtained for the purpose of standard of care will be summarize by treatments. Only subjects with baseline ECG assessments will be included in this analysis.

A shift table of the central assessment of ECG results at postbaseline visit including those assessments obtained for the purpose of standard of care compared with baseline values will be presented by treatment group using the following categories: normal, no new abnormality, new abnormality, or missing. The number and percentage of subjects in each cross-classification group of the shift table will be presented. Subjects with a missing value at baseline or postbaseline will not be included in the denominator for percentage calculation. No formal statistical testing is planned.

A by-subject listing for ECG central assessment and ECG abnormalities, including those not required by the protocol (ie. standard of care), will be provided by subject ID number and time point in chronological order.

7.6. Other Safety Measures

A shift table of troponin results at postbaseline visit including those obtained for the purposes of standard of care compared with baseline values will be presented by treatment group using the following categories: normal, abnormal, or missing. The number and percentage of subjects in each cross-classification group of the shift table will be presented. Subjects with a missing value at baseline or postbaseline will not be included in the denominator for percentage calculation. No formal statistical testing is planned.

If multiple troponin results exist for one visit due to multiple troponin assay tests performed, the results obtained from Troponin I test will be used for the analysis.

A by-subject listing for all troponin results, including those not required by the protocol (ie, standard of care), will be provided by subject ID number and visit in chronological order.

A data listing will be provided for subjects experiencing pregnancy during the study.

7.7. Changes From Protocol-Specified Safety Analyses

In accordance with the DMC Charter, the additional safety DMC meetings were scheduled to occur after approximately 50% and 75% of the subjects were enrolled. The winter 2016/2017 RSV season resulted in higher rates of enrollment for this study compared to previous RSV seasons. The enrollment was completed in this study on 20 March 2017 with 60 subjects enrolled. Due to quicker than expected enrollment and the time required to prepare for a DMC meeting, it would not have been possible to hold the planned DMC meeting prior to all subjects completing treatment with presatovir. Since the findings of the DMC would not have been actionable upon subjects in the study, the DMC Chairperson agreed to forgo the meeting

8. PHARMACOKINETIC (PK) ANALYSES

Individual subject concentration data for presatovir will be listed and summarized using descriptive statistics. Summary statistics (n, mean, SD, coefficient of variation [%CV], median, min, max, Q1, and Q3) will be calculated for individual subject concentration data by time point.

Individual concentration data listings and summaries will include all subjects with concentration data. The sample size for each time point will be based on the number of subjects with nonmissing concentration data at that time point. The number of subjects with concentration BLQ will be presented for each time point. For summary statistics, BLQ values will be treated as 0 at pre-dose and one-half of the lower LOQ for post-dose time points.

The following table will be provided for presatovir:

- Individual subject concentration data and summary statistics

The following figures will be provided for presatovir:

- Mean (\pm SD) concentration data versus time (on linear and semilogarithmic scales)

Individual, mean, and median post-dose concentration values that are \leq lower LOQ will not be displayed in the figures and remaining points connected.

PK sampling details by subject, including procedures, differences in scheduled and actual draw times, and sample age will be provided in listings.

9. REFERENCES

Dmitrienko A, Offen WW, Westfall PH. Gatekeeping strategies for clinical trials that do not require all primary effects to be significant. *Statist Med* 2003;22 (15):2387-400.

10. SOFTWARE

SAS® Software Version 9.4. SAS Institute Inc., Cary, NC, USA.

11. SAP REVISION

Revision Date (dd month, yyyy)	Section	Summary of Revision	Reason for Revision

12. PROPOSED TABLES, FIGURES AND LISTINGS

12.1. Tables

Table Number	Title	Analysis Set
15.8.1.1	Enrollment by Country and Investigator	All Randomized Analysis Set
15.8.1.2	Enrollment by Randomization Stratum	All Randomized Analysis Set
15.8.1.3	Subject Disposition	All Screened Subjects
15.8.2.1	Eligibility Criteria Deviations	All Randomized Analysis Set
15.8.2.2	Important Protocol Deviations	All Randomized Analysis Set
15.8.3.1.1	Demographics	Safety Analysis Set
15.8.3.1.2	Demographics by Consent for Participating in the Extended Viral Load Monitoring	Safety Analysis Set
15.8.3.2.1	Baseline Characteristics	Safety Analysis Set
15.8.3.2.2	Baseline Characteristics by Consent for Participating in the Extended Viral Load Monitoring	Safety Analysis Set
15.8.3.3	Hematopoietic Cell Transplant Medical History	Safety Analysis Set
15.8.4	Adherence to Study Drug	Safety Analysis Set
15.8.5	Analysis Sets	All Randomized Analysis Set
15.9.1.1	Time-Weighted Average Change in Nasal RSV Viral Load (\log_{10} copies/ml) from Baseline to Day 9	Full Analysis Set
15.9.1.2	Time-Weighted Average Change in Nasal RSV Viral Load (\log_{10} copies/ml) from Baseline to Day 9	Per Protocol Analysis Set
15.9.1.3	Time-Weighted Average Change in Nasal RSV Viral Load (\log_{10} copies/ml) from Baseline to Day 9 by Actual Ribavirin Use at Date of First Study Drug Administration	Full Analysis Set
15.9.1.4	Time-Weighted Average Change in Nasal RSV Viral Load (\log_{10} copies/ml) from Baseline to Day 9 by Supplemental O ₂ Use at Randomization	Full Analysis Set
15.9.1.5	Time-Weighted Average Change in Nasal RSV Viral Load (\log_{10} copies/ml) from Baseline to Day 9 by RSV Type	Full Analysis Set
15.9.2.1.1	Number of Supplemental O ₂ Free Days through Day 28	Full Analysis Set
15.9.2.1.2	Number of Supplemental O ₂ Free Days through Day 28	Per Protocol Analysis Set
15.9.2.1.3	Number of Supplemental O ₂ Free Days through Day 28 by Actual Ribavirin Use at Date of First Study Drug Administration	Full Analysis Set
15.9.2.1.4	Number of Supplemental O ₂ Free Days through Day 28 by Supplemental O ₂ Use at Randomization	Full Analysis Set

Table Number	Title	Analysis Set
15.9.2.2.1	Proportion of Subjects Developing Respiratory Failure Requiring Mechanical Ventilation Through Day 28	Full Analysis Set
15.9.2.2.2	Proportion of Subjects Developing Respiratory Failure Requiring Mechanical Ventilation Through Day 28	Per Protocol Analysis Set
15.9.2.2.3	Proportion of Subjects Developing Respiratory Failure Requiring Mechanical Ventilation Through Day 28 by Actual Ribavirin Use at Date of First Study Drug Administration	Full Analysis Set
15.9.2.2.4	Proportion of Subjects Developing Respiratory Failure Requiring Mechanical Ventilation Through Day 28 by Supplemental O ₂ Use at Randomization	Full Analysis Set
15.9.2.3.1	Proportion of All-cause Mortality Among Subjects Through Day 28	Full Analysis Set
15.9.2.3.2	Proportion of All-cause Mortality Among Subjects Through Day 28	Per Protocol Analysis Set
15.9.2.3.3	Proportion of All-cause Mortality Among Subjects Through Day 28 by Actual Ribavirin Use at Date of First Study Drug Administration	Full Analysis Set
15.9.2.3.4	Proportion of All-cause Mortality Among Subjects Through Day 28 by Supplemental O ₂ Use at Randomization	Full Analysis Set
15.9.3.1.1	RSV Viral Load (log ₁₀ copies/ml) and Change from Baseline in Nasal Samples	Full Analysis Set
15.9.3.1.2	RSV Viral Load (log ₁₀ copies/ml) and Change from Baseline in Nasal Samples for the Extended Viral Load Monitoring	Full Analysis Set
15.9.3.1.3	RSV Viral Load (log ₁₀ copies/ml) and Change from Baseline in the Nasal Samples by Consent for Participating in the Extended Viral Load Monitoring	Full Analysis Set
15.9.3.2	Time-weighted Average and Time-weighted Average Change from Baseline in Nasal RSV Viral Load (log ₁₀ copies/ml)	Full Analysis Set
15.9.3.3.1	Proportion of Subjects with Detectable RSV in Nasal Samples by Visit	Full Analysis Set
15.9.3.3.2	Proportion of Subjects with Detectable RSV in Nasal Samples by Consent for Participating in the Extended Viral Load Monitoring	Full Analysis Set
15.9.3.4	Proportion of Subjects on Supplemental O ₂ (\geq 2 L/min for > 24 hours) through Day 28	Full Analysis Set
15.9.3.5	Proportion of Subjects whose O ₂ Saturation Drops \leq 88% by Day 28	Full Analysis Set
15.9.3.6	O ₂ Saturation and Change from Baseline in O ₂	Full Analysis Set

Table Number	Title	Analysis Set
	Saturation	
15.9.3.7	Time-weighted Average O ₂ Saturation and Time-weighted Average Change from Baseline in O ₂ Saturation	Full Analysis Set
15.9.3.8	Proportion of Subjects Requiring ICU Admission or Equivalent of ICU Care (due to Any Cause) through Day 28	Full Analysis Set
15.9.3.9	Number of ICU Free Days through Day 28	Full Analysis Set
15.9.3.10	Number of Mechanical Ventilation (Invasive or Non-invasive) Free Days through Day 28	Full Analysis Set
15.9.3.11	Number of Hospital Free Days through Day 28	Full Analysis Set
15.10.1.1	Individual Data and Summary Statistics of Plasma Concentration (ng/mL) at Protocol Specified Sampling Time	PK Analysis Set
15.11.1.1	Extent of Exposure to Study Drug	Safety Analysis Set
15.11.2.1.1.1	Treatment Emergent Adverse Events: Overall Summary	Safety Analysis Set
15.11.2.1.1.2	Treatment Emergent Adverse Events by Age Group (<65 Years or ≥65 Years): Overall Summary	Safety Analysis Set
15.11.2.1.1.3	Treatment Emergent Adverse Events by Sex (Male or Female): Overall Summary	Safety Analysis Set
15.11.2.1.2.1	Treatment Emergent Adverse Events by System Organ Class and Preferred Term	Safety Analysis Set
15.11.2.1.2.2	Treatment Emergent Adverse Events by System Organ Class and Preferred Term by Age Group (<65 Years or ≥65 Years)	Safety Analysis Set
15.11.2.1.2.3	Treatment Emergent Adverse Events by System Organ Class and Preferred Term by Sex (Male or Female)	Safety Analysis Set
15.11.2.1.3	Treatment Emergent Adverse Events by Preferred Term	Safety Analysis Set
15.11.2.2.1	Treatment Emergent Adverse Events by System Organ Class, Preferred Term, and Severity	Safety Analysis Set
15.11.2.2.2.1	Treatment-Emergent Adverse Events with Severity of Grade 3 or Above by System Organ Class and Preferred Term	Safety Analysis Set
15.11.2.2.2.2	Treatment-Emergent Adverse Events with Severity of Grade 2 or Above by System Organ Class and Preferred Term	Safety Analysis Set
15.11.2.2.2.3	Treatment-Emergent Adverse Events with Severity of Grade 3 or Above by Preferred Term	Safety Analysis Set
15.11.2.2.2.4	Treatment-Emergent Adverse Events with Severity of Grade 2 or Above by Preferred Term	Safety Analysis Set

Table Number	Title	Analysis Set
15.11.2.3.1.1	Treatment-Emergent Treatment-Related Adverse Events by System Organ Class and Preferred Term	Safety Analysis Set
15.11.2.3.1.2	Treatment-Emergent Treatment-Related Adverse Events by Preferred Term	Safety Analysis Set
15.11.2.3.2	Treatment-Emergent Treatment-Related Adverse Events, Preferred Term, and Severity	Safety Analysis Set
15.11.2.3.3.1	Treatment-Emergent Treatment-Related Adverse Events with Severity of Grade 3 or Above by System Organ Class and Preferred Term	Safety Analysis Set
15.11.2.3.3.2	Treatment-Emergent Treatment-Related Adverse Events with Severity of Grade 2 or Above by System Organ Class and Preferred Term	Safety Analysis Set
15.11.2.3.3.3	Treatment-Emergent Treatment-Related Adverse Events with Severity of Grade 3 or Above by Preferred Term	Safety Analysis Set
15.11.2.3.3.4	Treatment-Emergent Treatment-Related Adverse Events with Severity of Grade 2 or Above by Preferred Term	Safety Analysis Set
15.11.2.4	Treatment-Emergent Adverse Events of Interest (Cardiac Adverse Event) by System Organ Class and Preferred Term	Safety Analysis Set
15.11.3	Treatment-Emergent Adverse Events Leading to Death by System Organ Class and Preferred Term	Safety Analysis Set
15.11.4.1	Treatment Emergent Serious Adverse Event by System Organ Class and Preferred Term	Safety Analysis Set
15.11.4.2	Treatment Emergent Serious Adverse Event by Preferred Term	Safety Analysis Set
15.11.4.3.1	Treatment Emergent Treatment-Related Serious Adverse Events by System Organ Class and Preferred Term	Safety Analysis Set
15.11.4.3.2	Treatment Emergent Treatment-Related Serious Adverse Events by Preferred Term	Safety Analysis Set
15.11.4.4	Treatment-Emergent Serious Adverse Events of Interest (Cardiac Adverse Event) by System Organ Class and Preferred Term	Safety Analysis Set
15.11.5.1	Treatment-Emergent Adverse Events Leading to Premature Discontinuation of Study Drug by System Organ Class and Preferred Term	Safety Analysis Set
15.11.5.2	Treatment-Emergent Adverse Events Leading to Premature Discontinuation of Study by System Organ Class and Preferred Term	Safety Analysis Set
15.11.6.1.1	Hematology Test: Hemoglobin (g/dL) and Change from Baseline	Safety Analysis Set
15.11.6.1.2	Hematology Test: Lymphocytes ($\times 10^3/\mu\text{L}$) and Change from Baseline	Safety Analysis Set

Table Number	Title	Analysis Set
15.11.6.1.3	Hematology Test: Lymphocytes (%) and Change from Baseline	Safety Analysis Set
15.11.6.1.4	Hematology Test: Monocytes ($\times 10^3/\mu\text{L}$) and Change from Baseline	Safety Analysis Set
15.11.6.1.5	Hematology Test: Monocytes (%) and Change from Baseline	Safety Analysis Set
15.11.6.1.6	Hematology Test: Neutrophils ($\times 10^3/\mu\text{L}$) and Change from Baseline	Safety Analysis Set
15.11.6.1.7	Hematology Test: Neutrophils (%) and Change from Baseline	Safety Analysis Set
15.11.6.1.8	Hematology Test: Platelets ($\times 10^3/\mu\text{L}$) and Change from Baseline	Safety Analysis Set
15.11.6.1.9	Hematology Test: Leukocytes ($\times 10^3/\mu\text{L}$) and Change from Baseline	Safety Analysis Set
15.11.6.2.1	Chemistry Test: ALT (U/L) and Change from Baseline	Safety Analysis Set
15.11.6.2.2	Chemistry Test: AST (U/L) and Change from Baseline	Safety Analysis Set
15.11.6.2.3	Chemistry Test: ALP (SGPT) (U/L) and Change from Baseline	Safety Analysis Set
15.11.6.2.4	Chemistry Test: Total Bilirubin (mg/dL) and Change from Baseline	Safety Analysis Set
15.11.6.2.5	Chemistry Test: Blood Urea Nitrogen (mg/dL) and Change from Baseline	Safety Analysis Set
15.11.6.2.6	Chemistry Test: Creatinine (mg/dL) and Change from Baseline	Safety Analysis Set
15.11.6.2.7	Chemistry Test: Creatinine Clearance (mL/min) and Change from Baseline	Safety Analysis Set
15.11.6.2.8	Chemistry Test: Albumin (g/dL) and Change from Baseline	Safety Analysis Set
15.11.6.2.9	Chemistry: Creatinine (mg/dL) and Change from Baseline by Hourly Timepoint for Hospitalized Subjects	Safety Analysis Set
15.11.6.4.1.1	Treatment Emergent Laboratory Abnormalities	Safety Analysis Set
15.11.6.4.1.2	Treatment Emergent Laboratory Abnormalities by Age Group (<65 Years or ≥ 65 Years)	Safety Analysis Set
15.11.6.4.1.3	Treatment Emergent Laboratory Abnormalities by Sex (Male or Female)	Safety Analysis Set
15.11.6.4.2	Treatment Emergent Grade 3 or Above Laboratory Abnormalities	Safety Analysis Set
15.11.6.4.3	Treatment Emergent Marked Laboratory Abnormalities	Safety Analysis Set
15.11.6.5	Liver-Related Laboratory Abnormalities	Safety Analysis Set

Table Number	Title	Analysis Set
15.11.6.6	Shift in Troponin Results	Safety Analysis Set
15.11.7.1.1	Vital Signs: Diastolic Blood Pressure (mmHg) and Change from Baseline	Safety Analysis Set
15.11.7.1.2	Vital Signs: Systolic Blood Pressure (mmHg) and Change from Baseline	Safety Analysis Set
15.11.7.1.3	Vital Signs: Pulse (beats per minute) and Change from Baseline	Safety Analysis Set
15.11.7.1.4	Vital Signs: Respiratory Rate (breaths per minute) and Change from Baseline	Safety Analysis Set
15.11.7.1.5	Vital Signs: Temperature (Celsius) and Change from Baseline	Safety Analysis Set
15.11.7.2.1	Body Weight (kg) and Change from Baseline	Safety Analysis Set
15.11.7.3.1	Prior Medications by Drug Class and Preferred Drug Name	Safety Analysis Set
15.11.7.3.2	Concomitant Medications by Drug Class and Preferred Drug Name	Safety Analysis Set
15.11.7.3.3	Prior Ribavirin	Safety Analysis Set
15.11.7.3.4	Concomitant Ribavirin	Safety Analysis Set
15.11.9.1	Shift in Electrocardiogram Results	Safety Analysis Set
15.11.9.2	Subject with New Abnormalities ECG at Postbaseline	Safety Analysis Set

12.2. Figures

Figure	Title	Analysis Set
15.8.1	Histogram of Number of Subjects Enrolled by Site	All Randomized Analysis Set
15.8.2	Histogram of Number of Subjects Enrolled by Country	All Randomized Analysis Set
15.9.1.1	Mean (SD) Viral Load (\log_{10} copies/ml) at Each Visit	Full Analysis Set
15.9.1.2	Mean (SD) Change from Baseline in Viral Load (\log_{10} copies/ml) at Each Visit	Full Analysis Set
15.9.2.1	Mean (SD) O ₂ Saturation at Each Visit	Full Analysis Set
15.9.2.2	Mean (SD) Change from Baseline in O ₂ Saturation at Each Visit	Full Analysis Set
15.10.1.1	Mean (SD) Plasma Concentrations vs. Time	PK Analysis Set
15.11.6.1.1	Median (Q1, Q3) Hematology Test: Hemoglobin (g/dL) by Visit	Safety Analysis Set
15.11.6.1.2	Median (Q1, Q3) Hematology Test: Lymphocytes ($\times 10^3/\mu\text{L}$) by Visit	Safety Analysis Set
15.11.6.1.3	Median (Q1, Q3) Hematology Test: Lymphocytes (%) by Visit	Safety Analysis Set
15.11.6.1.4	Median (Q1, Q3) Hematology Test: Monocytes ($\times 10^3/\mu\text{L}$) by Visit	Safety Analysis Set
15.11.6.1.5	Median (Q1, Q3) Hematology Test: Monocytes (%) by Visit	Safety Analysis Set
15.11.6.1.6	Median (Q1, Q3) Hematology Test: Neutrophils ($\times 10^3/\mu\text{L}$) by Visit	Safety Analysis Set
15.11.6.1.7	Median (Q1, Q3) Hematology Test: Neutrophils (%) by Visit	Safety Analysis Set
15.11.6.1.8	Median (Q1, Q3) Hematology Test: Leukocytes ($\times 10^3/\mu\text{L}$) by Visit	Safety Analysis Set
15.11.6.1.9	Median (Q1, Q3) Hematology Test: Platelet Count ($\times 10^3/\mu\text{L}$) by Visit	Safety Analysis Set
15.11.6.2.1	Median (Q1, Q3) Chemistry Test: ALT (U/L) by Visit	Safety Analysis Set
15.11.6.2.2	Median (Q1, Q3) Chemistry Test: AST (U/L) by Visit	Safety Analysis Set
15.11.6.2.3	Median (Q1, Q3) Chemistry Test: Alkaline Phosphatase (U/L) by Visit	Safety Analysis Set
15.11.6.2.4	Median (Q1, Q3) Chemistry Test: Total Bilirubin (mg/dL) by Visit	Safety Analysis Set
15.11.6.2.5	Median (Q1, Q3) Chemistry Test: Blood Urea Nitrogen (mg/dL) by Visit	Safety Analysis Set
15.11.6.2.6	Median (Q1, Q3) Chemistry Test: Creatinine (mg/dL) by Visit	Safety Analysis Set
15.11.6.2.7	Median (Q1, Q3) Chemistry Test: Creatinine Clearance (mL/min) by Visit	Safety Analysis Set
15.11.6.2.8	Median (Q1, Q3) Chemistry Test: Albumin (g/dL) by Visit	Safety Analysis Set

Figure	Title	Analysis Set
15.11.7.1.1	Median (Q1, Q3) Vital Signs: Diastolic Blood Pressure (mmHg) by Visit	Safety Analysis Set
15.11.7.1.2	Median (Q1, Q3) Vital Signs: Systolic Blood Pressure (mmHg) by Visit	Safety Analysis Set
15.11.7.1.3	Median (Q1, Q3) Vital Signs: Pulse Rate (beats per minute) by Visit	Safety Analysis Set
15.11.7.1.4	Median (Q1, Q3) Vital Signs: Respiratory Rate (breaths per minute) by Visit	Safety Analysis Set
15.11.7.1.5	Median (Q1, Q3) Vital Signs: Temperature (Celsius) by Visit	Safety Analysis Set

12.3. Listings

Listing	Title	Analysis Set
16.1.6	Subjects Who Received Study Drug from Specific Batches	Safety Analysis Set
16.1.7	Randomization Schema and Codes	All Randomized Analysis Set
16.2.1.1	Subject Profiles	All Randomized Analysis Set
16.2.1.2	Enrollment	All Randomized Analysis Set
16.2.1.3	Subject Disposition	All Randomized Analysis Set
16.2.1.4	Reasons for Screen Failure	Subjects Screened but Not Enrolled
16.2.2.1	Eligibility Criteria Deviations	All Randomized Analysis Set
16.2.2.2	Important Protocol Deviations	All Randomized Analysis Set
16.2.2.3	Randomization Stratification Discrepancies Between IWRS and Clinical Database	All Randomized Analysis Set
16.2.2.4	Subjects who Received Incorrect Study Drug	All Randomized Analysis Set
16.2.3.1	Subjects Excluded from Any Analysis Set	All Randomized Analysis Set
16.2.3.2	Subjects Who were in the Full Analysis Set but Excluded from the Per Protocol Analysis Set	Full Analysis Set
16.2.4.1	Demographics	All Randomized Analysis Set
16.2.4.2	Baseline Characteristics	All Randomized Analysis Set
16.2.4.3.1	Hematopoietic Cell Transplant Medical History	All Randomized Analysis Set
16.2.4.3.2	Medical History	All Randomized Analysis Set
16.2.4.4.1	Prior and Concomitant Medications	All Randomized Analysis Set
16.2.4.4.2	Prior and Concomitant Ribavirin	All Randomized Analysis Set
16.2.5.1	Study Drug Administration	All Randomized Analysis Set
16.2.5.2	Subjects Who Prematurely Discontinued Study Drug	All Randomized Analysis Set
16.2.5.3	Study Drug Accountability	All Randomized Analysis Set
16.2.5.4	Plasma Pharmacokinetic Sampling Details and Concentrations	PK Analysis Set
16.2.6.1	Viral Load Measurements	Full Analysis Set
16.2.6.2	Hospitalizations and ICU	Full Analysis Set
16.2.6.3	Oxygen Saturation	Full Analysis Set
16.2.6.4	Supplemental Oxygen	Full Analysis Set
16.2.6.5	Supplemental Oxygen Use Prior to RSV Infection	Full Analysis Set
16.2.6.6	Mechanical Ventilation	Full Analysis Set
16.2.6.7	Healthcare Related Efficacy Endpoints	Full Analysis Set
16.2.7.1	All Adverse Events	Safety Analysis Set

Listing	Title	Analysis Set
16.2.7.2.1	Deaths	All Randomized Analysis Set
16.2.7.2.2	Adverse Events Leading to Death	Safety Analysis Set
16.2.7.3	Serious Adverse Events	Safety Analysis Set
16.2.7.4.1	Adverse Events with Severity of Grade 3 or Higher	Safety Analysis Set
16.2.7.4.2	Adverse Events with Severity of Grade 2 or Higher	Safety Analysis Set
16.2.7.5.1	Adverse Events Leading to Premature Discontinuation of Study Drug	Safety Analysis Set
16.2.7.5.2	Adverse Events Leading to Premature Discontinuation of Study	Safety Analysis Set
16.2.8.1.1.1	Hematology Results: Part 1	Safety Analysis Set
16.2.8.1.1.2	Hematology Results: Part 2	Safety Analysis Set
16.2.8.1.2.1	Chemistry Results: Part 1	Safety Analysis Set
16.2.8.1.2.2	Chemistry Results: Part 2	Safety Analysis Set
16.2.8.1.2.3	Creatinine Results for Hospitalized Subjects	Safety Analysis Set
16.2.8.1.4	Treatment Emergent Marked Laboratory Abnormalities	Safety Analysis Set
16.2.8.1.5	Treatment Emergent Grade 3 or Above Laboratory Abnormalities	Safety Analysis Set
16.2.8.1.6	Liver-Related Laboratory Abnormalities	Safety Analysis Set
16.2.8.1.7	Laboratory Tests Reference Ranges	
16.2.8.1.8	Laboratory Test Troponin Results	Safety Analysis Set
16.2.8.2.1	Vital Signs	Safety Analysis Set
16.2.8.2.2	Body Weight, Height and BMI	Safety Analysis Set
16.2.8.3	Overall ECG Assessment	Safety Analysis Set
16.2.8.4	Pregnancy Report	Safety Analysis Set
16.2.8.5	General Comments	All Randomized Analysis Set

13. APPENDICES

Appendix 1. Study Procedures Table

	Visit 1: Screening (Day -2 to -1)	Visit 2: Baseline Assessments, Randomization, and Treatment Assessments (Day 1)	Visit 3: Day 3 ^p (±24 hours)	Visit 4: Day 5 (±24 hours)	Visit 5: Day 7 (±24 hours)	Visit 6: Day 9 (±24 hours)	Visit 7: Day 13 (±24 hours)	Visit 8: Day 17 (±24 hours)	Visit 9: Day 22 (±24 hours)	Visit 10: End of study/Day 28 (+3 days)	Optional Extended Viral Monitoring ^k			
											Visit 11: Day 35 (±48 hours)	Visit 12: Day 42 (±48 hours)	Visit 13: Day 49 (±48 hours)	Visit 14: Day 56 (±48 hours)
Must complete visit in the hospital or clinic	X	X		X		X	X	X	X	X				
Written Informed Consent	X													
Medical History and Demographics	X													
Chest X-ray	X ^a													
Screening Labs	X ^b													
Urine or Serum Pregnancy Test ^c	X	X		X		X	X	X						
Vital Signs (inc. O ₂ Saturation ^d)	X	X	X ^m	X	X ^m	X	X	X	X	X				
Height	X													
Weight	X	X		X		X	X	X	X	X				
12-lead ECG		X						X		X				

	Visit 1: Screening (Day -2 to -1)	Visit 2: Baseline Assessments, Randomization, and Treatment Assessments (Day 1)	Visit 3: Day 3 ^b (±24 hours)	Visit 4: Day 5 (±24 hours)	Visit 5: Day 7 (±24 hours)	Visit 6: Day 9 (±24 hours)	Visit 7: Day 13 (±24 hours)	Visit 8: Day 17 (±24 hours)	Visit 9: Day 22 (±24 hours)	Visit 10: End of study/Day 28 (+3 days)	Optional Extended Viral Monitoring ^k	Visit 11: Day 35 (±48 hours)	Visit 12: Day 42 (±48 hours)	Visit 13: Day 49 (±48 hours)	Visit 14: Day 56 (±48 hours)
											Visit 11: Day 35 (±48 hours)	Visit 12: Day 42 (±48 hours)	Visit 13: Day 49 (±48 hours)	Visit 14: Day 56 (±48 hours)	
Local Troponin Test ⁿ		X							X		X				
Safety Labs ^e		X		X		X	X	X	X	X					
RSV antibody titer		X									X				
RSV Viremia		X		X		X	X	X	X	X					
Nasal Samples ^f	X ^o	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Local RSV Testing	X ^o									X ^j					
Randomization		X													
IMP Administration		X		X		X	X	X							
PK Sample		X ^g	X ⁱ	X ^g		X ^g	X ^g	X ^g	X ^g						
Serum creatinine		X ^h	X ^h												
Adverse Events	X	X	X ^l	X	X ^l	X	X	X	X	X	X ^l	X ^l	X ^l	X ^l	
Review ICU admissions, hospitalizations, standard of care test results, mechanical ventilation, and supplemental O ₂		X	X ^m	X	X ^m	X	X	X	X	X					

	Visit 1: Screening (Day -2 to -1)	Visit 2: Baseline Assessments, Randomization, and Treatment Assessments (Day 1)	Visit 3: Day 3 ^p (±24 hours)	Visit 4: Day 5 (±24 hours)	Visit 5: Day 7 (±24 hours)	Visit 6: Day 9 (±24 hours)	Visit 7: Day 13 (±24 hours)	Visit 8: Day 17 (±24 hours)	Visit 9: Day 22 (±24 hours)	Visit 10: End of study/Day 28 (+3 days)		Optional Extended Viral Monitoring ^k			
												Visit 11: Day 35 (±48 hours)	Visit 12: Day 42 (±48 hours)	Visit 13: Day 49 (±48 hours)	Visit 14: Day 56 (±48 hours)
Concomitant Medications	X	X	X ^m	X	X ^m	X	X	X	X	X					

- a Chest X-ray obtained < 48 hours prior to Screening may be used
- b Existing values collected \leq 6 days prior to Screening may be used
- c Required for women unable to confirm menopause, hysterectomy and/or bilateral oophorectomy
- d On room air
- e Central laboratory testing: hematology and serum chemistry to include WBC with differential, Hgb, platelets, BUN, creatinine, serum albumin, AST, ALT, ALP, and total bilirubin
- f 2 samples total, 1 from each nostril – collected prior to dosing on dosing days
- g PK samples collected for all subjects 4 hours (\pm 30 mins) post-dose Day 1; pre-dose on Days 5, 9, 13, and 17; and anytime on Day 22
- h For hospitalized subjects only: blood will be drawn for serum creatinine at 4 hours (\pm 30 mins) post-dose at Visit 2 (Day 1) and at any time on Days 2, 3 and 4 (approximately 24, 48 and 72 hours post-first presatovir dose if they remain hospitalized at those times).
- i For hospitalized subjects only: PK sample collected at Visit 3 (48 hours [\pm 3 hours] post-first presatovir dose)
- j Only for subjects who agree to the Optional Extended Viral Monitoring at the time of consent
- k Only for subjects who agree to the Optional Extended Viral Monitoring at the time of consent and test positive (or inconclusive) for RSV at Visit 9 (Day 22)
- l Assessment of procedure-related AEs only, if home visit.
- m Not required if home visit.
- n Local troponin testing will be done pre-dose in accordance with the standard assay available and used at the site. Point-of-care “rapid” troponin tests are not acceptable for protocol-mandated troponin testing.
- o If only the upper or lower respiratory tract was assessed prior to consent, a separate local RSV test in the tract not previously assessed must be performed. Subjects who were not tested for RSV as standard of care may consent to the study and be tested for RSV during the Screening visit.
- p Visit 3 Day 3 is an optional study visit for subjects who are not hospitalized.

Appendix 2. Cardiac Adverse Events of Interest

The following search criteria are used to identify cardiac adverse events:

- All PTs from Cardiac disorders SOC
- Narrow scope PTs from the below SMQs, and associated sub-SMQs:
 - Cardiac arrhythmias (SMQ)
 - Cardiac failure (SMQ)
 - Cardiomyopathy (SMQ)
 - Ischaemic heart disease (SMQ)
 - Torsade de pointes/QT prolongation (SMQ)
- Select PTs from HLTs:
 - Cardiac histopathology procedures,
 - Skeletal and cardiac muscle analyses,
 - Arterial therapeutic procedures (excl aortic),
 - ECG investigations, Cardiac function diagnostic procedures,
 - Heart rate and pulse investigations

Duplicate PTs were removed where necessary.

Appendix 3. Sample SAS Code for MMRM Model

The following model statement may be used for the analyses of viral load and FLU-PRO as described in Sections 6.3.2:

```
proc mixed data=change;
  class trt visit subjid strata;
  model change = baseline strata trt visit trt*visit / s ddfm=kr;
  repeated visit / type=un subject=subjid(trt);
  lsmeans trt*visit / cl;
run;
```

Note that since the response variable is change from baseline, the Visit 2 (baseline) value will always be 0 and should not be included in the above model.

An unstructured covariance will be assumed (type=un); if there are convergence or model fitting issues, then the alternative covariance structure of Toeplitz will be assumed (type=toep).

Appendix 4. Sample SAS Code for Negative Binomial Model

The following model statement may be used for the analyses of number of hospital-free day, ICU-free day, and ventilator-free day described in Section 6.3.2:

```
proc genmod data=dataset;
  class trt strata;
  model count = trt strata / offset=logt dist=NB;
run;
```

where logt is the offset parameter defined as the natural logarithm of study duration for each subject to account for potential differential study durations due to early discontinuations.

In the event that the negative binomial model fails to converge, a zero-inflated negative binomial model may be fit (dist=ZINB).