STATISTICAL ANALYSIS PLAN

STUDY TITLE:

A DOUBLE BLIND, RANDOMIZED, PLACEBO CONTROLLED STUDY TO EVALUATE EFFICACY AND SAFETY OF "VIRACIDE" IN THE MANAGEMENT OF CORONA VIRUS DISEASE 2019 (COVID-19)

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Table of Contents

1 Definitions

2 Objectives

3 Analysis Sets

4 Data handling

5 Statistical methods

5.1 Descriptive methods

5.2 Primary analysis

5.3 Analysis of the secondary endpoints

5.4 Safety and/or further analyses

6 Listings, tables, figures

7 Graphs

8 Software

1 Definitions

The following abbreviations will be used in this statistical analysis plan.

ITT	Intention-to-treat
PP	Per protocol
IP	Investigational product
AE	Adverse Event
SAE	Serious adverse event
TTCI	Time to clinical Improvement
SPO2	Oxygen saturation
ICU	Incentive Care Unit

2 Objectives

Primary Efficacy Endpoint:

1. TTCI using NEWS Score [Time Frame: First treatment date up to when PCR is negative]

   The median time in days from the start of treatment with the study drug / placebo to the persistent achievement of all of the following criteria:

   - Stopping a fever (which is defined as a decrease in axillary temperature below 37 ° C without the use of antipyretic drugs);
   - Respiratory rate <22 / min;
   - Oxygen saturation (SPO2) > 95% when breathing in atmospheric air. Measured using pulse oximetry
   - Systolic blood pressure ≤200 mmHg
   - Pulse rate 51-90 beats/minute
   - Is conscious and alert

   [Note: Persistent achievement means the preservation of each of the criteria for at least 7 days.]
2. TTIC using 7-point ordinal scale
3. Rate of progression to severe/critical COVID-19 disease based on NEWS score [Time frame: First treatment date up to 28 days]
4. Rate of progression to severe/critical COVID-19 disease based on 7-point ordinal scale [Time frame: First treatment date up to 28 days]
5. Time to COVID-19 nucleic acid testing negativity in oropharyngeal/nasal swab) [Time Frame: First treatment date up to 28 days]

Secondary Efficacy Endpoints:

1. Incidence of ICU admissions [Time Frame: 28 days]
2. Subject survival rate [Time Frame: 28 days]
3. Incidence of mechanical ventilation [Time Frame: First treatment date up to 28 days]
4. Time to COVID-19 nucleic acid testing negativity in oropharyngeal/nasal swab) [Time Frame: Days 1, 7, 15]
5. Change in clinical or laboratory assessment of comorbid condition [Time Frame: First treatment date up to 28 days]
6. Percent of participants with worsening comorbid condition [Time Frame: First treatment date up to 28 days]

Safety Endpoints

1. Proportion of subjects in the treatment arm who had AE, SAE
2. Proportion of subjects in the placebo arm who had AE, SAE

3 Analysis sets

Per protocol subset (PP)

Subjects without any Major protocol violation would be included in the per-protocol population, including those subjects who have completed all the visits, who did not take any prohibited medications during the study period and whose CRF was completed as requested.

Modified Intention to treat subset (mITT)

The term "mITT" includes all randomized subjects who met all inclusion/exclusion criteria, administered at least one dose of assigned product with at least completed one visit will be included in the mITT population.

Safety analysis subset

The safety population will consist of all subjects enrolled in the study, who have received at least one dose of study products i.e. mITT population.

Methods of Analysis

Primary Efficacy and secondary endpoints will be analyzed using the PP & mITT population. And Safety variables as per mITT only.

4 Data Handling

Data entry into CRF must be performed as per general CRF data entry guidelines, summarized at the time of data entry feasibility training. Data entry will be made as per source document without interpretation or modification to maintain consistency and accuracy of the data. Study specific

data entry in CRF will be performed by the assigned study coordinator. Apart from visit specific data, which would primarily be captured in paper, SD, IP diary & Lab reports will also be captured in

CRF directly from the original source or from patients file.

Investigators will maintain the Site Master File, Source Documents, and the Participant Files according to the ICH-GCP guidelines at the site.

5.0 Statistical methods

Normality Assessment – Data will be checked for normal distribution using Shapiro Wilk test.

5.1 Descriptive methods

Participant Disposition

Demographic and Baseline Information

Continuous variables that are Age, weight, BMI, and other demographical characteristics will be summarized by overall using summary statistics i.e. the number of observations, mean and standard deviation with 95% CI (among normal distribution) or median with range (if non-normal distribution). Categorical values like gender and clinical Examination will also be summarized using frequencies and percentages.

The medical history and Physical examination will be presented using frequencies and percentages of subjects for the Safety population. For continuous data student analysis of variance test and for categorical data Chi square test will be estimated to compare the baseline demographical data between groups and changes during the follow up.

5.2 Efficacy Parameters:

Summary of efficacy parameters – the number of observations, mean and standard deviation with 95% CI (among normal distribution) or median with range (if non-normal distribution)

Analysis of Primary Efficacy Parameters

In this study median Time to Clinical Improvement (TTCI) using NEW Score [Time Frame: First treatment date up to when PCR is negative] TTIC using 7-point ordinal scale [Time Frame: First treatment date up to when PCR is negative] will be assessed for both Test and Placebo group and compare the mean time between two arms by using Mann Whitney U test.

Other variables that are Rate of progression to severe/critical COVID-19 disease based on NEWS score and 7 point ordinal scale [Time frame: First treatment date up to 28 days] will be compared by using Chi Square test.

Other parameter like Time to COVID-19 nucleic acid testing negativity in oropharyngeal/nasal swab) [Time Frame: First treatment date up to 28 days] will be estimated by Student t test or one way analysis of variance. If data is

not passing normality for continuous variable Mann Whitney test will be assessed instead of student t test.

5.3 Analysis of Secondary Efficacy Parameters

For Secondary efficacy variables that is Incidence of ICU admissions, subjects survival rate , incidence of mechanical ventilation , percentages of participants with worsening co morbid conditions and changes in clinical comorbid conditions will be analyzed using Chi square test variance (Kruskal Wallis test) for between Groups. If observed mean difference is significant Friedman's post hoc test will be applied to assess which group is significant. Average Time to COVID-19 nucleic acid testing negativity in oropharyngeal/nasal swab) will be assessed at each time points and data will be analyzed by using analysis of variance. If data is not normal, analysis of variance with kruskal wallies will be estimated.

5.4 Safety Analysis

Incidence and rate of adverse events.

AEs and SEs will be summaries counting both the number of separate events and the number of subjects experiencing events occurring during the study period will be provided overall, per system organ class and preferred term by presenting.

Furthermore, similar summaries will be provided stratified according to the seriousness, severity, and relationship to the study medication. The percentage of cases with an event will be analyzed and compared by the Chi-Square test. Mean changes in in vital signs and Laboratory variables, will be assessed by using student t-test for with in groups and analysis of variance for comparison between groups.

6. Listing of Tables

- Participant Disposition
- Demographical and baseline characteristics with comparison of demographical and baseline characteristics
- Profile of Medical History and clinical Examinations
- Changes in Vital Signs
- Comparison of Mean Time to Clinical Improvement (TTCI) using NEWS Score
- Comparison of Mean Time to Clinical Improvement (TTCI) using 7 point ordinal scale.
- Rate of progression to severe/critical COVID-19 disease based on NEWS score [Time frame: First treatment date up to 28 days
- Rate of progression to severe/critical COVID-19 disease based on 7point

  Ordinal scale [Time frame : First treatment date up to 28 days

- Mean Time to COVID-19 nucleic acid testing negativity in oropharyngeal/nasal swab) [Time Frame: First treatment date up to 28 days]
- Incidence of ICU
- Profile of subject survival rate
- Incidence of Mechanical ventilators
- Time to COVID-19 nucleic acid testing negativity in ropharyngeal/nasal swab) [Time Frame: Days 1, 7, 15]
- Percent of participants with worsening comorbid condition [Time Frame: First treatment date up to 28 days]
- Changes in clinical assessment of co morbid conditions
- Comparison of Changes Laboratory Variables
- Profile of adverse events in each group
- Profile of Serious adverse events in each group

7. Graphs

Individual Graphs for all Primary and secondary variables

8. Software

SPSS Version 10.0