


TRIAL STATISTICAL ANALYSIS PLAN

Document No.:	c42364957-01
BI Trial No.:	1346-0048
Title:	Pharmacokinetics, safety and tolerability of BI 425809 (iclepertin) following oral administration in male and female participants with different degrees of hepatic impairment (Child-Pugh classification A and B) compared with matched male and female participants with normal hepatic function (an open-label, non-randomised, single-dose, parallel, individual matched design trial) Revised Protocol #03 [c40079671-03]
Investigational Product:	BI 425809 (iclepertin)
Responsible trial statistician:	<div style="background-color: black; width: 300px; height: 50px; margin-bottom: 5px;"></div> <div>Phone: <div style="background-color: black; width: 150px; height: 15px; display: inline-block;"></div></div> <div>Fax: <div style="background-color: black; width: 150px; height: 15px; display: inline-block;"></div></div>
Date of statistical analysis plan:	22 Jan 2024
Version:	1.0
Page 1 of 27	
Proprietary confidential information	
© 2024 Boehringer Ingelheim International GmbH or one or more of its affiliated companies. All rights reserved. This document may not - in full or in part - be passed on, reproduced, published or otherwise used without prior written permission.	

1. TABLE OF CONTENTS

TITLE PAGE	1
1. TABLE OF CONTENTS.....	2
LIST OF TABLES	4
2. LIST OF ABBREVIATIONS	5
3. INTRODUCTION.....	7
4. CHANGES IN THE PLANNED ANALYSIS OF THE STUDY	8
5. ENDPOINTS	9
5.1 PRIMARY ENDPOINTS	9
5.2 SECONDARY ENDPOINT	9
5.2.1 Key secondary endpoint	9
5.2.2 Secondary endpoint.....	9
5.3.2 Safety parameters	9
5.4 OTHER VARIABLES.....	10
5.4.1 Demographic and other baseline characteristics	10
5.4.2 Treatment compliance and treatment exposure	10
6. GENERAL ANALYSIS DEFINITIONS	11
6.1 TREATMENT	11
6.2 IMPORTANT PROTOCOL DEVIATIONS.....	12
6.3 INTERCURRENT EVENTS	13
6.4 SUBJECT SETS ANALYSED.....	13
6.6 HANDLING OF MISSING DATA AND OUTLIERS	14
6.7 BASELINE, TIME WINDOWS AND CALCULATED VISITS	14
7. PLANNED ANALYSIS	15
7.1 DEMOGRAPHIC AND OTHER BASELINE CHARACTERISTICS	16
7.2 CONCOMITANT DISEASES AND MEDICATION	16
7.3 TREATMENT COMPLIANCE	16
7.4 PRIMARY OBJECTIVE ANALYSIS	16
7.4.1 Main analysis	17
7.4.4 Supplementary analysis.....	18
7.5 SECONDARY OBJECTIVE ANALYSIS	19
7.5.1 Key secondary objective analysis.....	19
7.5.2 Secondary objective analysis.....	19
7.6.2 Safety parameters	19
7.7 EXTENT OF EXPOSURE.....	19

7.8	SAFETY ANALYSIS.....	19
7.8.1	Adverse Events	19
7.8.2	Laboratory data	21
7.8.3	Vital signs.....	21
7.8.4	ECG	22
7.8.5	Others	22
7.8.5.1	Physical examination	22
7.8.5.2	Body weight	22
7.8.5.3	Assessment of suicidal ideation and behavior (SIB) based on C-SSRS	23
7.8.5.4	Matching pairs.....	23
7.9	OTHER ANALYSIS	23
8.	TIMEPOINT OF RELEASE OF TREATMENT INFORMATION	24
9.	REFERENCES.....	25
		
11.	HISTORY TABLE.....	27

LIST OF TABLES

Table 6.1: 1	Group labels used in analysis	11
Table 6.1: 2	Analysis phases for statistical analysis of AEs, and actual treatment for analysis of laboratory data, vital signs and C-SSRS	12
Table 6.4: 1	Subject sets analysed	13
Table 11: 1	History table	27

2. LIST OF ABBREVIATIONS

Term	Definition / description
AE	Adverse Event
AESI	Adverse event of special interest
ALT	Alanine aminotransferase
ANOVA	Analysis of variance
AST	Aspartate aminotransferase
AUC _{0-tz}	Area under the concentration-time curve of the analyte in plasma over the time interval from 0 to the last quantifiable data point
AUC _{0-∞}	Area under the concentration-time curve of the analyte in plasma over the time interval from 0 extrapolated to infinity
BI	Boehringer Ingelheim
BLQ	Below Limit of Quantification
CI	Confidence interval
C _{max}	Maximum measured concentration of the analyte in plasma
COVID	Coronavirus disease
CRF	Case Report Form, paper or electronic (sometimes referred to as 'eCRF')
C-SSRS	Columbia-Suicidal Severity Rating Scale
CTP	Clinical trial protocol
CTR	Clinical trial report
CV	Arithmetic coefficient of variation
ECG	Electrocardiogram
EudraCT	European Clinical Trials Database
gCV	geometric coefficient of variation
gMean	Geometric mean
HR	Heart rate
ICH	International Conference On Harmonisation
IPD	Important protocol deviations
LLOQ	Lower limit of quantification
MedDRA	Medical Dictionary For Regulatory Activities
PK	Pharmacokinetics

Term	Definition / description
PKS	Pharmacokinetic parameter analysis set
PR	Pulse rate
RAGe	Report appendix generator
RPM	Report Planning Meeting
SAE	Serious adverse event
SD	Standard Deviation
SDL	Subject Data Listing
SIB	Suicidal Ideation and Behaviour
SOC	System Organ Class
TS	Treated set
TSAP	Trial Statistical Analysis Plan
ULN	Upper limit of normal range

3. INTRODUCTION

As per ICH E9 (1) the purpose of this document is to provide a more technical and detailed elaboration of the principal features of the analysis described in the revised Clinical Trial Protocol (CTP), and to include detailed procedures for executing the statistical analysis of the primary and secondary variables and other data.

This TSAP assumes familiarity with the CTP and its amendments. In particular, the TSAP is based on the planned analysis specification as written in CTP Section 7 "Statistical Methods and Determination of Sample Size". Therefore, TSAP readers may consult the revised CTP for more background information on the study, e.g., on study objectives, study design and population, treatments, definition of measurements and variables, planning of sample size, randomisation.

Study data as collected in the eCRF will be stored in a trial database within the RAVE EDC system. All study data also including external data will then be uploaded to the CDR data warehouse.

The statistical analyses will be performed within the validated working environment CARE, including SASTM (current Version 9.4, by [REDACTED]), and a number of SASTM-based tools (e.g., macros for the analyses of AE data or laboratory data; Report Appendix Generator system (RAGe) for compilation/formatting of the CTR appendices).

PK parameters will be calculated using Phoenix WinNonlinTM software (version Phoenix 8.1 or higher, [REDACTED]).

4. CHANGES IN THE PLANNED ANALYSIS OF THE STUDY

All analyses described in this TSAP are in accordance with the statistical methods described in the CTP.

In addition to the statistical analysis of the primary and secondary endpoints described Section 7.2.2 and 7.2.3 of the CTP, a sensitivity analysis which considers ‘matched pair’ as a fixed effect will be included.

5. ENDPOINTS

5.1 PRIMARY ENDPOINTS

Primary endpoints are PK endpoints of iclepertin (BI 425809), as defined in Section 2.1.2 of the CTP:

- AUC_{0-t_z} (area under the concentration-time curve of iclepertin in plasma over the time interval from 0 to the last quantifiable data point)
- C_{max} (maximum measured concentration of iclepertin in plasma)

5.2 SECONDARY ENDPOINT

5.2.1 Key secondary endpoint

Not applicable.

5.2.2 Secondary endpoint

The secondary endpoint is a PK endpoint of iclepertin, as defined in Section 2.1.3 of the CTP:

- $AUC_{0-\infty}$ (area under the concentration-time curve of iclepertin in plasma over the time interval from 0 extrapolated to infinity)

5.3.2 Safety parameters

Safety and tolerability of iclepertin will be assessed based on further safety parameters defined in Section 2.2.2.3 of the CTP:

- Adverse events (including clinically relevant findings from the physical examination)
- Safety laboratory tests
- Assessment of suicidal ideation and behaviour (C-SSRS)
- 12-lead ECG
- Vital signs (blood pressure, pulse rate)

5.4 OTHER VARIABLES

5.4.1 Demographic and other baseline characteristics

CTP Section 5.2.1: *At screening, the medical examination will include demographics, height and body weight, smoking and alcohol history (alcohol history not mandatory to be entered into CRF or to be reported), relevant medical history and concomitant therapy, C-SSRS, review of inclusion and exclusion criteria, review of vital signs (BP, PR), 12-lead ECG, laboratory tests, and a physical examination..*

Body mass index will be calculated as $\text{weight [kg]} / (0.01 * \text{height [cm]})^2$.

5.4.2 Treatment compliance and treatment exposure

Treatment compliance and exposure will not be analysed as a specific endpoint, cf. **Section 4.3** of the CTP.

Since only a single dose will be administered, the date and time of administration will be sufficient to give account of treatment exposure and will therefore only be listed.

6. GENERAL ANALYSIS DEFINITIONS

6.1 TREATMENT

For basic study information on treatment to be administered and assignment of impairment groups, cf. Section 4 of the CTP.

All participants will receive one single dose of 10 mg iclepertin.

The participants with hepatic impairment will be assigned to one of two groups based on their Child-Pugh classification (mild or moderate). Participants with normal hepatic function will be matched individually to a participant* with impaired hepatic function by gender, age (within ± 10 years) and weight (within $\pm 15\%$) and assigned to control groups as described in CTP Sections 3.1 and 4.1.3.

Table 6.1: 1 Group labels used in analysis

Group	Details	Label
1	participants with mild hepatic impairment (Child-Pugh A, score 5-6)	C-P A
2	participants with moderate hepatic impairment (Child-Pugh B, score 7-9)	C-P B
3	participants with normal hepatic function individually matched to participants of Group 1	Control C-P A
4	participants with normal hepatic function individually matched to participants of Group 2	Control C-P B

*One participant with normal hepatic function may be matched to one participant in one or both groups of participants with hepatic impairment.

For statistical analysis of AEs, the following analysis phases are defined for each participant.

Table 6.1: 2 Analysis phases for statistical analysis of AEs, and actual treatment for analysis of laboratory data, vital signs and C-SSRS

Study analysis phase	Label	Start (inclusive)	End (exclusive)
Screening ¹	Screening	Date of informed consent	Date/time of administration of study drug
On treatment	Control C-P A, C-P A, Control C-P B or C-P B	Date/time of administration of study drug	Date/time of administration of study drug + residual effect period (11 days)
Follow up	F/U Control C-P A, F/U C-P A, F/U Control C-P B or F/U C-P B	Date/time of administration of study drug + residual effect period (11 days)	12:00 a.m. on day after last contact date

¹ See [Section 6.7](#) for definition of baseline, which will be used in the statistical analyses of safety laboratory data, vital signs and C-SSRS.

AE summary tables will present results for the on-treatment phase only. All AEs will be listed.

In AE tables in CTR Section 15.3 (but not for EudraCT and CT.gov AE tables), the following totals will be provided in addition:

- **"Total Impaired"**, defined as the total over all on-treatment phases for hepatic impaired participants (mild and moderate)
- **"Total Control"**, defined as the total over all on-treatment phases for participants with normal hepatic function
- **"Total"**, defined as the total over all on-treatment phases for all participants

Safety laboratory data and vital signs will be analysed based on impairment groups with clear differentiation between baseline (cf. Section 6.7) and on-treatment measurements.

Measurements will be considered on-treatment, if they were taken within the on-treatment phases as defined in Table 6.1: 2.

6.2 IMPORTANT PROTOCOL DEVIATIONS

Consistency check listings (for identification of deviations from time windows) and a list of protocol deviations (e.g. deviations in drug administration, in blood sampling times, etc.) will be provided to be discussed at the Report Planning Meeting (RPM). At this meeting, it will be decided whether a discrepant data value can be used in analyses or whether it must be corrected in the clinical database. Each protocol deviation must be assessed to determine

whether it is an important PD (iPD). For definition of iPDs, and for the process of identification of these, refer to the BI reference document "Identify and Manage Important Protocol Deviations (iPD)" (2) and the DV domain template.

If any iPDs are identified, they are to be summarised into categories and will be captured in the decision log. Categories which are considered to be iPDs in this trial are defined in the DV domain specification. If the data show other iPDs, the definition in the DV domain specification will be supplemented accordingly by the time of the RPM.

IPDs will be summarized and listed. Which kind of iPDs could potentially lead to exclusion from which analysis set is specified in the DV domain specification. The decision on exclusion of participants from analysis sets will be made at the latest at the RPM, after discussion of exceptional cases and implications for analyses. If the data show other iPDs, this table will be supplemented accordingly by the time of the RPM.

Non-important COVID-19 related PDs will only be listed.

6.3 INTERCURRENT EVENTS

Section is not applicable since no intercurrent events were defined in the CTP.

6.4 SUBJECT SETS ANALYSED

The treated set (TS) and pharmacokinetic parameter analysis set (PKS) will be used as defined in the CTP, Section 7.2.1.1.

Table 6.4: 1 Subject sets analysed

Class of endpoint	Subject set	
	TS	PKS
Disposition	X	
iPDs	X	
Demographic/baseline characteristics	X	
Treatment exposure	X	
Primary PK endpoints		X
Secondary PK endpoint		X
Further PK endpoints		X
Safety parameters	X	

6.6 HANDLING OF MISSING DATA AND OUTLIERS

CTP Section 3.3.4: *“If a participant is removed from or withdraws from the trial prior to the administration of trial medication, the data of this participant will not be entered in the case report form (CRF) and will not be reported in the clinical trial report (CTR). If a participant is removed from or withdraws from the trial after the administration of trial medication, this will be documented and the reason for discontinuation must be recorded in the CRF; in addition, trial data will be included in the CRF and will be reported in the CTR.”*

CTP Section 7.3.1: *“It is not planned to impute missing values for safety parameters.”*

One exception where imputation might be necessary for safety evaluation is AE dates. Missing or incomplete AE dates are imputed according to BI standards (3).

Missing data and outliers of PK data are handled according to BI standards (4) and (5).

CTP Section 7.3.2: *“PK parameters that cannot be reasonably calculated based on the available drug concentration-time data will not be imputed.”*

6.7 BASELINE, TIME WINDOWS AND CALCULATED VISITS

In all analyses, baseline is defined as the last non-missing value prior to administration of study drug.

Time windows are defined in Section 6.1 of the CTP. Adherence to time windows will be checked at the Report Planning Meeting.

7. PLANNED ANALYSIS

The format of the listings and tables will follow the BI guideline "Reporting of clinical trials and project summaries" (6).

The term 'impairment group' will be used to denote the 4 groups of interest: Control C-P A, C-P A, Control C-P B, C-P B, as specified in [Section 6.1](#).

The individual values of all participants will be listed. Listings will be sorted by impairment group, participant number and visit (if visit is applicable in the respective listing). AE listings will be sorted by assigned impairment group (see [Section 7.8.1](#) below for details). The listings will be contained in Appendix 16.2 (SDL) of the CTR.

The following standard descriptive statistical parameters will be displayed in summary tables of continuous variables:

N	number of non-missing observations
Mean	arithmetic mean
SD	standard deviation
Min	minimum
Median	median
Max	maximum

For plasma and urine concentrations as well as for all PK parameters the following descriptive statistics will additionally be calculated:

CV	arithmetic coefficient of variation
gMean	geometric mean
gCV	geometric coefficient of variation

For PK parameters the following descriptive statistics will additionally be calculated:

P10	10th percentile
Q1	1st quartile
Q3	3rd quartile
P90	90th percentile

The data format for descriptive statistics of plasma and urine concentrations will be identical with the data format of the respective concentrations. The descriptive statistics of PK parameters will be calculated using the individual values with the number of decimal places as provided by the evaluation program. Then the individual values as well as the descriptive statistics will be reported with three significant digits in the CTR.

Tabulations of frequencies for categorical data will include all possible categories and will display the number of observations in a category as well as the percentage (%) relative to the respective impairment group. Percentages will be rounded to integer numbers. The category missing will be displayed only if there are actually missing values. Percentages will be based on all participants in the respective subject set whether they have non-missing values or not.

7.1 DEMOGRAPHIC AND OTHER BASELINE CHARACTERISTICS

Only descriptive statistics are planned for this section of the CTR. These will be based on the TS.

7.2 CONCOMITANT DISEASES AND MEDICATION

Concomitant diseases and non-drug therapies will be coded according to the most recent version of MedDRA. Concomitant medication and drug therapies will be coded according to the most recent version of the World Health Organisation – Drug Dictionary.

Only descriptive statistics are planned for this section of the CTR. These will be based on the TS.

CTP Section 7.2.5: *Previous and concomitant therapies will be presented per [impairment] group without consideration of time intervals and treatment periods.*

A medication or drug or non-drug therapy will be considered concomitant to an impairment group, if it

- is ongoing at the time of study drug administration, or
- starts within the analysis phase of the respective treatment (see [Section 6.1](#) for a definition of treatments and analysis phases).

The relevance of the concomitant therapies to the evaluation of PK will be decided no later than at the RPM.

7.3 TREATMENT COMPLIANCE

Treatment compliance will not be analysed as a specific endpoint. Any deviations from complete intake will be addressed in the Report Planning Meeting (cf. [Section 6.2](#)) and described in the CTR.

7.4 PRIMARY OBJECTIVE ANALYSIS

The analysis of primary and secondary endpoints will be based on the PKS. Participants in the PKS may not contribute to every statistical analysis of PK endpoints, in case a specific PK endpoint of this participant is excluded for the following reasons or missing.

Exclusion of PK parameters

The ADS ADPP contains column variables APEX and APEXCO indicating inclusion/exclusion (APEX) of a PK parameter and an analysis flag comment (APEXCO). All analyses based on the PKS are based on PK parameter values which are not flagged for exclusion, i.e. with APEX equal to "Included".

CTP Section 7.2.1.2: *“Plasma/urine concentration data and parameters of a participant which are flagged for exclusion will be reported with its individual values but will not be included in the statistical analyses.”*

Exclusion of PK concentrations

The ADS ADPC (PK concentrations per time-point or per time-interval) contains column variables ACEX or ACEXCO indicating inclusion/exclusion (ACEX) of a concentration and an analysis flag comment (ACEXCO). Exclusion of a concentration depends on the analysis flag comment ACEXCO. For example, if ACEXCO is set to "ALL CALC", the value will be excluded for all types of analyses based on concentrations. If ACEXCO is set to "DESC STATS" the value will be excluded from descriptive evaluations per planned time point/time interval. If ACEXCO contains the addition "TIME VIOLATION" or "TIME DEVIATION", the value can be used for further analyses based on actual times. If ACEXCO is set to "HALF LIFE", the value will be excluded from half-life calculation only; the value is included for all other analyses. Excluded concentration itself will be listed in the CTR associated with an appropriate flag.

Further details are given in "Noncompartmental Pharmacokinetic / Pharmacodynamic Analyses of Clinical Studies"[\(4\)](#) and "Description of Analytical Transfer Files and PK/PD Data Files" [\(5\)](#).

7.4.1 Main analysis

Relative bioavailability of iclepertin will be evaluated for the primary and secondary endpoints specified in [Section 5.1](#) and [Section 5.2.2](#) as defined in the **CTP Section 7.2.2** and **Section 7.2.3**.

CTP Section 7.2.2: *The statistical model used for the analysis of the primary endpoints will be an analysis of variance (ANOVA) model on the logarithmic scale. That is, the PK endpoints will be log-transformed (natural logarithm) prior to fitting the ANOVA model. This model will include the effects accounting for ‘degree of hepatic impairment’ as a fixed effect as well as ‘matched pair’ as a random effect. The model is described by the following equation:*

$$y_{ik} = \mu + \tau_k + s_m + e_{km}, \text{ where}$$

y_{km} = logarithm of response measured for the degree of hepatic impairment k ,
matched pair m ,

μ = the overall mean,

τ_k = the effect of the k^{th} degree of impairment, $k = 1$ for no impairment (control) and $k = 2, 3$ for Child-Pugh class A and B, respectively,

s_m = the effect of the m^{th} matched pair, $m = 1, \dots, 8$,

e_{km} = the random error associated with the k^{th} degree of hepatic impairment for matched pair m

where $s_m \sim N(0, \sigma_B^2)$ i.i.d., $e_{km} \sim N(0, \sigma_W^2)$ i.i.d. and s_m, e_{km} are independent random variables (note that the indices 'B' and 'W' correspond to 'between' and 'within' matched pair variability, respectively).

The model described above will be fitted separately for the two hepatic impaired groups, i.e., one model for the participants with moderate hepatic impairment and their matched controls, and one model for the participants with mild hepatic impairment and their matched controls.

For evaluation of each primary endpoint, the difference between the expected mean for log response of hepatic impaired group k – log response of the respective control group will be estimated by the difference in the corresponding adjusted means (Least Squares Means). Additionally, their two-sided 90% CIs will be calculated based on the residual error from the ANOVA and quantiles from the t -distribution. These quantities will then be back-transformed to the original scale to provide the point estimate and 90% CIs for each endpoint.

The SAS code is presented in Additional [Section 10.1](#).

CTP 7.2.3: The secondary endpoints (refer to CTP Section 2.1.3) will be calculated according to the relevant BI internal procedures and will be assessed statistically using the same methods as described for the primary endpoints.

All primary and secondary endpoints will also be analysed descriptively. The analysis of standard PK parameters is performed according to BI standards (4). Results of inferential statistical analysis will be used for decision making.

7.4.4 Supplementary analysis

Not applicable.

7.5 SECONDARY OBJECTIVE ANALYSIS

7.5.1 Key secondary objective analysis

This section is not applicable as no key secondary objective has been specified in the CTP.

7.5.2 Secondary objective analysis

This section is not applicable as no secondary objective has been specified in the CTP.

7.6.2 Safety parameters

Safety and tolerability will be analysed as described in Section 7.8 of this TSAP.

7.7 EXTENT OF EXPOSURE

Since only single doses will be administered, the date and time of drug administration will be listed and together with the observed plasma and urine concentrations this is considered sufficient to report treatment exposure.

7.8 SAFETY ANALYSIS

All safety analyses will be performed on the TS.

7.8.1 Adverse Events

AEs will be coded with the most recent version of MedDRA.

The analyses of AEs will be descriptive in nature. All analyses of AEs will be based on the number of participants with AEs and not on the number of AEs.

For further details on summarization of AE data, please refer to "Analysis and Presentation of Adverse Event Data from Clinical Trials" (7) and "Handling of missing and incomplete AE dates" (3).

The analysis of AEs will be based on the concept of treatment emergent AEs. That means that all AEs will be assigned to screening, on-treatment or follow-up phases as defined in [Section 6.1](#). AEs will be analysed based on actual treatments, as defined in [Table 6.1: 2](#).

An overall summary of AEs will be presented. This overall summary will include summary statistics for the class of adverse events of special interest (AESIs).

CTP Section 5.2.6.1.4: *The following are considered as AESIs:*

- Potential severe DILI
A potential severe Drug Induced Liver Injury (DILI) that requires follow-up is defined by the following alterations of hepatic laboratory parameters:
 - *An elevation of AST (aspartate aminotransferase) and/or ALT (alanine aminotransferase) ≥ 3 -fold ULN combined with an elevation of total bilirubin ≥ 2 -fold ULN measured in the same blood sample, or in samples drawn within 30 days of each other, or*
 - *Aminotransferase (ALT, and/or AST) elevations ≥ 10 -fold ULN*
These lab findings constitute a hepatic injury alert and the participants showing these lab abnormalities need to be followed up according to the 'DILI checklist' provided in the ISF. In case of clinical symptoms of hepatic injury (icterus, unexplained encephalopathy, unexplained coagulopathy, right upper quadrant abdominal pain, etc.) without lab results (ALT, AST, total bilirubin) available, the Investigator should make sure that these parameters are analysed, if necessary in an unscheduled blood test. Should the results meet the criteria of hepatic injury alert, the procedures described in the DILI checklist should be followed.

The investigator had to classify on the eCRF whether an observed AE was an AESI or not.

According to ICH E3 (8), in addition to Deaths and serious adverse events, 'other significant' AEs need to be listed in the clinical trial report. These will be any non-serious adverse event that led to an action taken with study drug (e.g. discontinuation or dose reduced or interrupted). Since in this trial only one single tablet is administered, no action taken with study drug due to an AE is possible and therefore no other significant AE is to be expected.

The frequency of participants with AEs will be summarised by impairment group, primary SOC and preferred term. Separate tables will be provided for participants with

- AEs, which were considered by the investigator to be drug related
- SAEs
- AESIs
- AEs summarized by worst intensity.

The SOC and preferred terms within SOC will be sorted by descending frequency over all impairment groups.

For disclosure of AE data on ClinicalTrials.gov, the frequency of participants with non-serious AEs occurring with an incidence of greater than 5 % (in preferred terms) will be summarised by impairment group, primary SOC and preferred term. The frequency of participants with SAEs will also be summarised.

For disclosure of AE data in the EudraCT register, the frequency of AEs, the frequency of non-serious AEs with an incidence of greater than 5 % (in preferred terms) and the frequency of SAEs will be summarized.

For support of lay summaries, the frequency of participants with drug-related SAEs will be summarized by impairment group, primary SOC and preferred term.

7.8.2 Laboratory data

The analyses of laboratory data will be descriptive in nature and will be based on BI standards "Handling, Display and Analysis of Laboratory Data" (9).

Analyses will be based on normalised values, which means transforming to a standard unit and a standard reference range. The original values will be analysed if the transformation into standard unit is not possible for a parameter.

Descriptive statistics of laboratory values over time and for the difference from baseline (see [Section 6.7](#)) will be provided. Frequency tables of changes between baseline and last value on treatment with respect to the reference range will be presented.

Unscheduled measurements of laboratory data will be assumed to be repeat measurements of the most recent scheduled measurement (e.g. for follow-up or confirmation of a particular value). Therefore, unscheduled measurements will be assigned to the planned time point of the previous scheduled measurement. Descriptive statistics will be calculated by planned time point based on the worst value of the participant at that planned time point (or assigned to that planned time point).

Clinically significant abnormal laboratory values are only those identified either in the Investigator's comments or at the Report Planning Meeting at the latest. It is the Investigator's responsibility to decide whether a lab value is clinically significantly abnormal or not. Laboratory data will be compared to their reference ranges. Values outside the reference range will be highlighted in the listings.

Clinically relevant findings in laboratory data will be reported as baseline conditions (prior to first administration of study treatment) or as AEs (after first administration of study treatment) if judged clinically relevant by the investigator, and will be analysed as such.

7.8.3 Vital signs

The analyses of vital signs (blood pressure, pulse rate) will be descriptive in nature. Descriptive statistics of vital signs over time and for the difference from baseline (see [Section 6.7](#)) will be provided.

Clinically relevant findings in vital signs data will be reported as baseline conditions (at screening) or as AEs (during the trial) if judged clinically relevant by the investigator, and will be analysed as such.

Unscheduled measurements of vital signs will be assigned to planned time points in the same way as described above for laboratory data. However, for vital signs, descriptive statistics will be calculated by planned post-baseline time point based on the last value of the participant at that planned time point (or assigned to that planned time point). An unscheduled measurement more than 20 minutes after the time of the scheduled measurement of that planned time point will be listed, but will not be used in calculation of descriptive statistics. These measurements are interpreted as off-schedule vital signs measurements, taken for other reasons. If the time of measurement is missing for a scheduled post-baseline measurement, e.g. for follow-up visits, the scheduled measurement will be used in calculation of descriptive statistics (as time difference between scheduled and unscheduled cannot be assessed). If the time of measurement is missing for an unscheduled post-baseline measurement, this measurement will be listed but will be ignored for the calculation of descriptive statistics.

In descriptive statistic of the Screening visit the planned time points will be used. However, if an unscheduled measurement on the same day as the screening visit exists then the unscheduled assessment will be used in descriptive statistics of Screening visit.

7.8.4 ECG

Abnormal findings in ECG will be reported as baseline conditions (at screening) or as AEs (during the trial) if judged clinically relevant by the investigator, and will be analysed as such. No separate listing or analysis of ECG data will be prepared.

7.8.5 Others

7.8.5.1 Physical examination

Physical examination findings will be reported as relevant medical history/baseline condition (if a condition already exists before administration of study treatment) or as AE (if condition emerges after administration of study treatment) and will be summarized as such. No separate listing or analysis of physical examination findings will be prepared.

7.8.5.2 Body weight

Since body weight is only assessed at screening and end of trial, it will only be listed.

7.8.5.3 Assessment of suicidal ideation and behavior (SIB) based on C-SSRS

Suicidality monitoring will be performed as described in Section 5.2.5.1 of the CTP.

Results will be listed and findings will also be reported as AEs as described in the CTP Section 5.2.5.1.

7.8.5.4 Matching pairs

Matching pairs for participants included in the mild and moderate hepatic function group will be listed with their matching criteria.

7.9 OTHER ANALYSIS

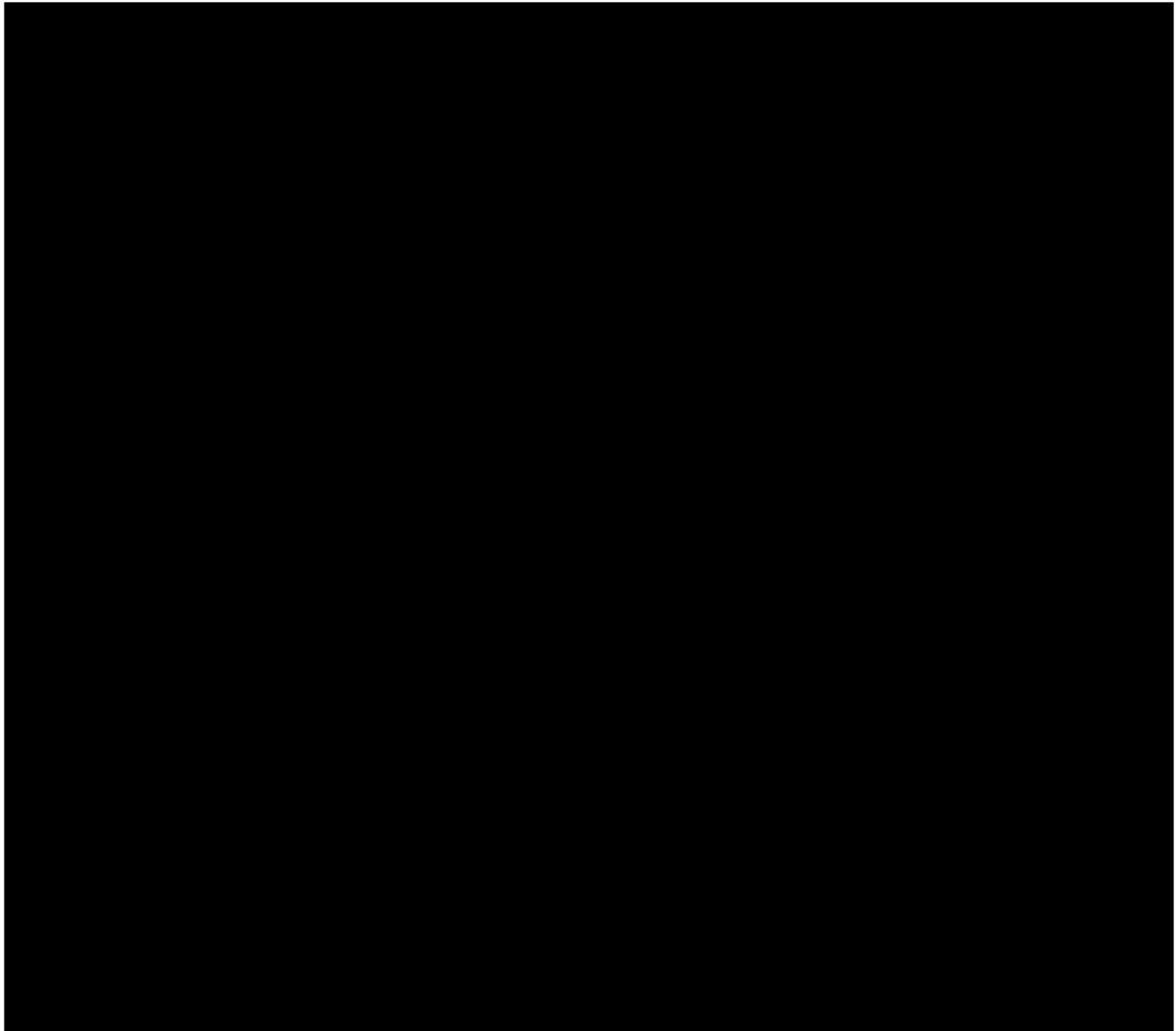
Not applicable.

8. TIMEPOINT OF RELEASE OF TREATMENT INFORMATION

The treatment information will be loaded into the trial database at trial initiation.

9. REFERENCES

1	<i>CPMP/ICH/363/96</i> : "Statistical Principles for Clinical Trials", ICH Guideline Topic E9; Note For Guidance on Design, Conduct, Analysis and Evaluation of Clinical Trials, current version
2	<i>BI-VQD-12045_40-413</i> : "Identify and Manage Important Protocol Deviations (iPD)", current version; DMS for controlled documents
3	<i>KM Asset BI-KMED-BDS-HTG-0035</i> : "Handling of missing and incomplete AE dates", current version; DMS for controlled documents
4	<i>KM Asset BI-KMED-TMCP-MAN -0014</i> : "Noncompartmental PK/PD Analyses of Clinical Studies", current version; DMS for controlled documents
5	<i>KM Asset BI-KMED-TCMP-MAN-0010</i> : "Description of Analytical Transfer Files, PK/PD Data Files and ADA files", current version; DMS for controlled documents
6	<i>KM Asset BI-KMED-BDS-HTG-0045</i> : "Standards for Reporting of Clinical Trials and Project Summaries", current version; DMS for controlled documents
7	<i>KM Asset BI-KMED-BDS-HTG-0066</i> : "Analysis and Presentation of Adverse Event Data from Clinical Trials", current version; DMS for controlled documents
8	<i>CPMP/ICH/137/95</i> : "Structure and Content of Clinical Study Reports", ICH Guideline Topic E3; Note For Guidance on Structure and Content of Clinical Study Reports, current version
9	<i>KM Asset BI-KMED-BDS-HTG-0042</i> : "Handling, Display and Analysis of Laboratory Data", current version; DMS for controlled documents



11. HISTORY TABLE

Table 11: 1 History table

Version	Date (DD-MMM-YY)	Author	Sections changed	Brief description of change
1.0	22-Jan-24		None	This is the final TSAP.