

Study CRO-09-101 - Sponsor code KGR03-P03

Pilot study to evaluate the efficacy, safety and tolerability of ammonium chloride in terms of protection from hepatotoxic effect of Hep C infection and normalisation of altered liver parameters, in a 3-month treatment, during the standard of care combination therapy of relapsed chronic hepatitis C patients

Double-blind, randomised, placebo-controlled, parallel-group, pilot study

EudraCT Number: 2009-017740-13

Test treatment:	Combination of: <ul style="list-style-type: none">➤ ammonium chloride 500 mg tablets➤ peginterferon α-2a 180 μg/0.5 mL injectable solution➤ ribavirin tablets
Control treatment:	Combination of: <ul style="list-style-type: none">➤ ammonium chloride matching placebo tablets➤ peginterferon α-2a 180 μg/0.5 mL injectable solution➤ ribavirin tablets
Sponsor:	PHF S.A. - Via Castagnola 21, CH-6900 - Lugano, Switzerland Phone: +41.91.973.6700 Fax: +41.91.973.6710
Principal Investigator and study coordinator:	Paraskevi Aggelopoulou-Tigka, MD Director of Pathology Clinic, Western Attica General Hospital Hagia Barbara, Dodekannisou 1, GR-12351, Hagia Barbara, Greece
Development phase:	Phase II
First subject first visit:	04APR11
Last subject last visit:	11SEP12
Version and date:	Final version 1.0, 04APR13

The Sponsor warrants that this study was conducted in accordance with Good Clinical Practice (GCP), ICH topic E6

Property of the Sponsor

May not be used, divulged, published or otherwise disclosed without the consent of the Sponsor

This document contains 302 pages plus appendices

REPORT APPROVAL

SPONSOR

PHF S.A.

Business Development Director

Alessandro Gagnoni

Date

Signature

Sponsor's Scientific Advisor

Department of Clinical Surgery, University of Athens, Greece
Diamantis Kiassos, MD, Univ. Prof.

Date

Signature

INVESTIGATORS

Pathology Clinic, Western Attica General Hospital Hagia Barbara, Greece

Principal Investigator

Paraskevi Aggelopoulou-Tigka, MD

Date

Signature

CRO for co-ordination, data management and reporting

CROSS S.A., Switzerland, and its affiliated companies CROSS Research S.A. and CROSS Metrics S.A.

Coordination

Angelo Vaccani, Clinical Project Leader

Date

Signature

Medical Writing

Andrea Di Stefano, Senior Medical Writer

Date

Signature

Statistical Analysis

Andrea Vele, Biostatistician and Data Manager

Date

Signature

2 SYNOPSIS

Name of Company: PHF S.A., Switzerland	TABULAR FORMAT		(For National Authority Use only)
Name of Finished Product: Ammonium chloride 500 mg tablets	REFERRING TO PART OF THE DOSSIER	5.3	
Name of active substance(s): Ammonium chloride	Volume:		
	Page:		
Title of the study: Pilot study to evaluate the efficacy, safety and tolerability of ammonium chloride in terms of protection from hepatotoxic effect of Hep C infection and normalisation of altered liver parameters, in a 3-month treatment, during the standard of care combination therapy of relapsed chronic hepatitis C patients			
Investigator: <i>Principal Investigator and study coordinator:</i> Paraskevi Aggelopoulou-Tigka, MD			
Study centre: Pathology Clinic, Western Attica General Hospital Hagia Barbara, Dodekannisou 1, GR-12351, Hagia Barbara, Greece			
Publication (reference): --			
Studied period (years): 2011-2012	Date of first enrolment: 04APR11 Date last vol. completed: 11SEP12		Phase of development: II
Objectives: <ul style="list-style-type: none"> ➤ To collect preliminary data concerning the efficacy of ammonium chloride 500 mg tablets, in comparison with placebo, in terms of liver protection in patients with hepatitis C, who relapsed after the previous first course of standard of care therapy, during the second cycle of the standard of care therapy of hepatitis C (peginterferon and ribavirin); ➤ to collect preliminary data concerning the liver functionality of patients with hepatitis C, who relapsed after the previous first course of standard of care therapy, treated with ammonium chloride 500 mg tablets in comparison with placebo during the second cycle of the standard of care therapy of hepatitis C (peginterferon and ribavirin); ➤ to evaluate the safety and tolerability of the addition of ammonium chloride 500 mg tablets to the hepatitis C standard of care therapy with peginterferon and ribavirin. 			
Primary end-point: <ul style="list-style-type: none"> ➤ Evaluation of the liver protection after treatment with ammonium chloride as compared with placebo in terms of proportion of subjects achieving alanine aminotransferase normalisation after 12 weeks of treatment. 			
Secondary end-points: <ul style="list-style-type: none"> ➤ Comparison of the proportion of subjects achieving normalisation of the value of alanine aminotransferase, tumour necrosis factor-α, aspartate aminotransferase, aspartate aminotransferase to platelets ratio index, serum hyaluronic acid and interleukin-6 between treatments after 4, 8 and 12 weeks of treatment; ➤ comparison between treatments of the change versus baseline (visit 2, day 1) of alanine aminotransferase, tumour necrosis factor-α, aspartate aminotransferase, aspartate aminotransferase to platelets ratio index, serum hyaluronic acid and interleukin-6; ➤ comparison between treatments of the proportion of subjects achieving a rapid virological response (RVR), defined as the absence of detectable hepatitis C virus ribonucleic acid after 4 weeks of treatment; ➤ comparison between treatments of the proportion of subjects achieving an early virological response (EVR), defined as a hepatitis C virus ribonucleic acid level decrease by at least 2 logarithmic units of IU/mL after 12 weeks of treatment; ➤ comparison between treatments of the change versus the screening assessment (visit 1) of the fibrosis stage by transient elastography (FibroScan[®]); ➤ evaluation of the safety and tolerability of the study treatments. 			
Methodology: Double-blind, randomised, placebo-controlled, parallel-group, pilot study			

SYNOPSIS (cont.)

Name of Company: PHF S.A., Switzerland	TABULAR FORMAT		(For National Authority Use only)
Name of Finished Product: Ammonium chloride 500 mg tablets	REFERRING TO PART OF THE DOSSIER	5.3	
Name of active substance(s): Ammonium chloride	Volume:		
	Page:		
Number of subjects (planned and analysed): <p>The sample size for this study was not based on any formal power calculation. Seventy (70) patients were planned as sufficient in order to obtain reliable results for the preliminary exploratory purposes of the study. A maximum of 15% of subjects was expected to drop out. Therefore, 60 patients were expected to complete the trial as per protocol.</p> <p>During the study, 30 subjects received at least one dose of treatment and were included in the safety and intention to treat (ITT) populations. Twenty-seven (27) received at least one dose of treatment and had at least one post-baseline alanine aminotransferase measurement: these subjects were included in the full analysis set (FAS). The enrolment was interrupted after Sponsor's decision.</p>			
Diagnosis and criteria for inclusion: Inclusion criteria: <ol style="list-style-type: none"> 1. Male and female hepatitis C virus infected patients aged 18-65 years inclusive; 2. hepatitis C virus infected patients relapsed after a previous 3 month standard of care therapy (peginterferon and ribavirin); 3. hepatitis C virus ribonucleic acid >600 IU/mL; 4. alanine aminotransferase >1.3 x upper limit of normality range; 5. absence of advanced hepatic fibrosis: i.e. aspartate aminotransferase to platelets ratio index <2.2; 6. liver stiffness <14 KPa by FibroScan®; 7. absence of detectable hepatitis B surface antigen and of human immunodeficiency virus 1/2 antibodies. Absence of ongoing hepatitis A symptoms and abnormalities; 8. ability to comprehend the full nature and purpose of the study, including possible risks and side effects; ability to co-operate with the investigator and to comply with the requirements of the entire study; 9. signed written informed consent prior to inclusion in the study; 10. females of child-bearing potential following highly effective contraceptive methods according to the definition of Note 3 of ICH M3 Guideline (implants, injectables, combined oral contraceptives, some intrauterine devices, sexual abstinence or vasectomised partner) or females of not child-bearing potential permanently sterilised or in post-menopausal status since at least 2 years. Exclusion criteria: <ol style="list-style-type: none"> 1. Ascertained or presumptive hypersensitivity to the active principle and/or formulations ingredients; 2. history of anaphylaxis to drugs or allergic reactions in general; 3. prolonged treatment with any severely hepatotoxic drug product during the 4 weeks preceding the study; 4. concomitant underlying disease that the investigator deemed might interfere with the aims of the study: e.g. autoimmune chronic hepatitis, haemochromatosis, Wilson's disease and α-1 anti-trypsin deficiency, signs of decompensated liver failure, presence of either respiratory or metabolic alkalosis, liver cirrhosis defined by a Child-Pugh value >5, haemoglobinopathies like thalassaemia and sickle cell anaemia; 5. any abnormality in physical examination, ECG or diagnostic tests, any data of medical history that the investigator deemed might interfere with the aims of the study; 6. neutropenia (<1200 neutrophils/mm³); 7. thrombocytopenia (\leq70000 platelets/mm³); 8. abnormal value of albumin; 9. creatinine <50 mL/min; 10. abnormal glucose (with the exception of underlying diabetes to mild intensity: i.e. no glycaemia \geq150 mg/dL); 11. subjects likely to be non-compliant or unco-operative during the study according to the investigator or designee's judgement; 12. illiterate subjects; 13. pregnant or lactating females. 			

SYNOPSIS (cont.)

Name of Company: PHF S.A., Switzerland	TABULAR FORMAT		(For National Authority Use only)
Name of Finished Product: Ammonium chloride 500 mg tablets	REFERRING TO PART OF THE DOSSIER	5.3	
Name of active substance(s): Ammonium chloride	Volume:		
	Page:		
<p>Test product, dose, mode of administration, batch N°: Combination of:</p> <ul style="list-style-type: none"> ➤ ammonium chloride 500 mg tablets ➤ peginterferon α-2a 180 μg/0.5 mL solution for injection ➤ ribavirin tablets <p>Ammonium chloride 500 mg tablets, Laboratorio Farmacologico Milanese S.r.l., Italy. Batch: 01/02/09; expiry date: FEB13</p> <p>Ammonium chloride or matching placebo tablets were orally administered at the dose of 1.5 g b.i.d. (for a total daily dose of 3 g) for 3 consecutive days a week for 12 weeks according to a randomised parallel group study design.</p> <p>Patients were randomised to receive either the test treatment, i.e. 3 g/day of ammonium chloride (as 500 mg tablets) for 3 days/week followed by 4 days of wash-out, added to the standard of care combination therapy, peginterferon α-2a (180 μg/week) + ribavirin (body weight based dose of 1000-1200 mg/day) or the control treatment, i.e. ammonium chloride matching placebo tablets according to the same dose regimen (3 days/week followed by 4 days of wash-out), added to the standard of care combination therapy. Both the test and the control treatment had a total duration of 12 weeks.</p> <p>Ammonium chloride 500 mg or matching placebo tablets were self-administered at home (except for the morning of the day of each study visit) at the dose of 1500 mg (corresponding to 3 tablets) in the morning, at least 15 min before breakfast, and 1500 mg in the evening, at least 15 min before dinner, for 3 consecutive days, followed by 4 days of wash-out. The administration of ammonium chloride was performed on the same week days for the whole duration of the treatment, e.g. if in the 1st treatment week ammonium chloride was administered on Monday, Tuesday and Wednesday, in the following weeks ammonium chloride administrations were maintained on the same week days.</p> <p>Peginterferon α-2a was injected as a once-weekly sub-cutaneous injection of 180 μg. The injections of peginterferon were performed once weekly. Ribavirin tablets were self-administered in fed conditions at a dose of 500 mg b.i.d. to subjects with body weight <75 kg and at a dose of 600 mg b.i.d. to subjects with a body weight \geq75 kg. When the subjects weekly returned to the study site, test and reference investigational products were dispensed from the hospital pharmacy in an amount sufficient for each treatment week.</p>			
<p>Reference therapy, dose, mode of administration, batch N°: Combination of:</p> <ul style="list-style-type: none"> ➤ ammonium chloride matching placebo tablets ➤ peginterferon α-2a 180 μg/0.5 mL injectable solution ➤ ribavirin tablets <p>Ammonium chloride matching placebo tablets, Laboratorio Farmacologico Milanese S.r.l., Italy. Batch: 01/03/09; expiry date: FEB13</p> <p>Refer to the previous section for details on dose regimen and mode of administration.</p>			
<p>Criteria for evaluation (efficacy): Primary variable:</p> <ul style="list-style-type: none"> ➤ Proportion of patients achieving alanine aminotransferase normalisation after 12 weeks of treatment. 			

SYNOPSIS (cont.)

Name of Company: PHF S.A., Switzerland	TABULAR FORMAT		(For National Authority Use only)
Name of Finished Product: Ammonium chloride 500 mg tablets	REFERRING TO PART OF THE DOSSIER	5.3	
Name of active substance(s): Ammonium chloride	Volume:		
	Page:		
Criteria for evaluation (efficacy) continued:			
Secondary variables: <ul style="list-style-type: none"> ➤ Proportion of subjects achieving normalisation of alanine aminotransferase, tumour necrosis factor-α, aspartate aminotransferase, aspartate aminotransferase to platelets ratio index, serum hyaluronic acid and interleukin-6 values after 4, 8 and 12 weeks of treatment; ➤ change versus baseline (visit 2, day 1) of alanine aminotransferase, tumour necrosis factor-α, aspartate aminotransferase, aspartate aminotransferase to platelets ratio index, serum hyaluronic acid and interleukin-6 after 4, 8 and 12 weeks of treatment; ➤ proportion of subjects achieving a rapid virological response (RVR); ➤ proportion of subjects achieving an early virological response (EVR); 			
Criteria for evaluation (safety):			
Treatment emergent adverse events (TEAEs), vital signs (blood pressure, heart rate), electrocardiogram, physical examinations, laboratory parameters; liver stiffness by transient elastography (FibroScan®).			
Analytics:			
<p>Alanine aminotransferase, tumour necrosis factor-α, aspartate aminotransferase, interleukin-6 and platelets were detected in plasma while hyaluronic acid was detected in serum at BARC Europe NV, Belgium, using validated methods. Hepatitis C virus ribonucleic acid was determined in serum samples by a PCR validated method with a lower limit of detection of 15 IU/mL. The aspartate aminotransferase to platelets ratio index was calculated as described by Wai <i>et al.</i>: $APRI = [(aspartate\ aminotransferase / upper\ limit\ of\ normality\ range) / platelet\ count\ (10^9/L)] \times 100$. Adopted upper limit of normality for aspartate aminotransferase was 40 UI/L for women and 45 UI/L for men</p> <p>Blood samples were collected at the study site and delivered by authorised carriers to the central laboratory. At screening, the principal investigator could use the analysis performed <i>in loco</i> for the evaluation of inclusion and exclusion criteria, if it was performed not more than 2 weeks before the screening visit. All other clinical assays were performed at BARC Europe NV.</p> <p>The transient elastometry test was performed by a FibroScan® equipment at Diagnostic & Therapeutic Centre of Athens, Hygeia S.A., Greece.</p>			
Statistical methods:			
<p>The statistical analysis was performed using SAS® version 9.1.3 service pack 4 for Windows®.</p> <p>Analysis of the primary end point was planned in the ITT population, the FAS and the per-protocol (PP) population.</p> <ul style="list-style-type: none"> ➤ The ITT population was defined as the set of all randomised patients. Patients were analysed according to their randomisation code and patients without any post-randomisation data were included in the analysis as treatment failures. ➤ The FAS was defined as the set of all randomised patients who took at least one dose of the study drug and had at least one post-baseline alanine aminotransferase measure. Patients were analysed according to the treatment received and patients without any post-randomisation data were not included in the analysis. ➤ The PP population was defined as the set of all randomised subjects, who fulfilled the study protocol requirements in terms of study drug intake and alanine aminotransferase measures, without major deviations that might affect the primary analysis. ➤ The safety population was defined as the set of all randomised subjects, who received at least one dose of the study drug. <p>Proportion of subjects was compared between treatments with a two group χ^2 test with a 0.05 two-sided significance level. Changes versus baseline were compared between treatments with a two-group t-test or a Wilcoxon sum-rank test in case of lack of normality.</p>			

SYNOPSIS (cont.)

Name of Company: PHF S.A., Switzerland	TABULAR FORMAT			(For National Authority Use only)		
Name of Finished Product: Ammonium chloride 500 mg tablets	REFERRING TO PART OF THE DOSSIER		5.3			
Name of active substance(s): Ammonium chloride	Volume:					
	Page:					
Statistical methods continued: Safety data were analysed descriptively for each treatment group in the safety population. The data documented in this trial and the clinical parameters measured were described using classic descriptive statistics for quantitative variables and frequencies for qualitative variables. Summaries include numerosity, mean, standard deviation, coefficient of variation, median, minimum and maximum as appropriate. The statistical analysis was performed on the ITT population and the FAS. No subject was included in the PP population, because at least one major protocol violation was reported for all the 27 completers.						
Results (efficacy): The proportion of subjects achieving normalisation of alanine aminotransferase after 4, 8 and 12 weeks of treatment is summarised in the table below.						
	ITT population			FAS population		
	T	R	χ^2	T	R	χ^2
	N=14	N=16	p-value	N=12	N=15	p-value
After 4 weeks	6 (42.9)	10 (62.5)	0.2820	6 (50.0)	10 (66.7)	0.3811
After 8 weeks	8 (57.1)	9 (56.3)	0.9607	8 (66.7)	9 (60.0)	0.7215
After 12 weeks	7 (50.0)	9 (56.3)	0.7321	7 (58.3)	9 (60.0)	0.9302
<p>➤ The improvement of the liver conditions observed by adding ammonium chloride 500 mg tablets to the standard of care therapy of hepatitis C virus in terms of proportion of subjects achieving alanine aminotransferase normalisation after 12 weeks of treatment was not better than that with the matching placebo in either the ITT population (50% vs. 56.3%) or the FAS (58.3% vs. 60%).</p> <p>The effect of the addition of ammonium chloride to the standard of care therapy was not significantly different from the addition of the matching placebo in terms of alanine aminotransferase normalisation for the whole duration of the treatment.</p> <p>➤ The improvement of the liver conditions observed in terms of proportion of subjects with alanine aminotransferase normalisation after 8 weeks of treatment was similar to that with the matching placebo in the ITT population (57.1% vs. 56.3%) and better than that with the matching placebo in the FAS (66.7% vs. 60%). On average, the change from baseline in alanine aminotransferase showed a stronger improvement after 8 weeks than after 12 weeks in both treatment groups.</p> <p>However, no significant difference between ammonium chloride and matching placebo was detected.</p> <p>➤ After 4 weeks of treatment, the proportion of subjects with alanine aminotransferase normalisation was not better with ammonium chloride than with the matching placebo in either the ITT population (42.9% vs. 62.5%) or the FAS (50% vs. 66.7%).</p> <p>No significant difference between treatments was detected.</p> <p>➤ An improvement of hepatitis C in terms of normalisation of tumour necrosis factor α was similar with ammonium chloride and with the matching placebo after 4 weeks of treatment in both the ITT population (14.3% vs. 12.5%) and the FAS (16.7% vs. 13.3%).</p> <p>After 8 and 12 weeks, the improvement of hepatitis C in terms of normalisation of tumour necrosis factor α in the subjects receiving ammonium chloride was not better than that with the matching placebo in either the ITT population (21.4% vs. 31.3% after 8 weeks and 7.1% vs. 37.5% after 12 weeks) or the FAS (25% vs. 33.3% after 8 weeks and 8.3% vs. 40% after 12 weeks). The change from baseline showed on average an increase in tumour necrosis factor α with both treatments.</p> <p>The observed normalisation of tumour necrosis factor α was not significantly different between treatments up to 8 weeks of treatment. After 12 weeks of treatment, the proportion of subjects with normalised tumour necrosis factor α after ammonium chloride was significantly lower than with the matching placebo. No significant difference in change from baseline was detected between treatments.</p>						

SYNOPSIS (cont.)

Name of Company: PHF S.A., Switzerland	TABULAR FORMAT		(For National Authority Use only)
Name of Finished Product: Ammonium chloride 500 mg tablets	REFERRING TO PART OF THE DOSSIER	5.3	
Name of active substance(s): Ammonium chloride	Volume:		
	Page:		
Results (efficacy) continued: <ul style="list-style-type: none"> ➤ An improvement of the liver conditions in terms of normalisation of aspartate aminotransferase was better with ammonium chloride than that with the matching placebo after 8 weeks. After 4 and 12 weeks, the improvement of the liver conditions in terms of normalisation of aspartate aminotransferase in the subjects receiving ammonium chloride was not better than that with the matching placebo. No significant difference between treatments was detected. ➤ The proportion of subjects achieving a RVR after 4 weeks and an EVR after 12 weeks was similar after test and placebo. No significant difference between treatments was detected. 			
Results (safety): <p>Overall 18 TEAEs were reported for 6 (20%) subjects during the study, 8 for 4 (28.6%) subjects receiving ammonium chloride and 10 for 2 (12.5%) placebo recipients. Nine (9) related TEAEs were reported during the study for 2 (6.7%) subjects, who were placebo recipients. No related TEAE was reported for subjects receiving ammonium chloride. The most frequent TEAE was headache, reported at a frequency of 21.4% (3 subjects) with the test treatment and of 6.3% (1 subject) with the reference treatment. No SAEs occurred during the study. No TEAE leading any subject to discontinuation due to safety reasons occurred. No relevant effects of either treatment on blood pressure, heart rate or body weight were observed.</p> <p>Clinical laboratory parameters showed an improvement of hepatitis C during the treatment, in particular up to day 57. General decreases in haematology parameters observed during the study are known side effects of the cotreatment with peginterferon and ribavirin. No significant unwanted effect of ammonium chloride on the clinical laboratory parameters was observed.</p> <p>No clinically relevant abnormality in ECGs was found by the investigator. However, many extremely high values of ECG parameters were recorded for 17 subjects during the study including the screening visit.</p> <p>A decrease in the liver stiffness was found on average in subjects receiving ammonium chloride at week 13 from the screening visit, whereas no relevant change could be observed among the placebo recipients.</p> <p>No subject showed any sign of decompensated liver failure during the treatment.</p>			
Conclusions: <p>Ammonium chloride 500 mg tablets, developed by PHF S.A., Switzerland, were administered to patients with hepatitis C virus (HCV), who relapsed after a previous first course of standard of care therapy and undergoing a second cycle of the standard of care therapy of hepatitis C with peginterferon and ribavirin. Ammonium chloride 500 mg tablets or matching placebo were added to the second course of standard of care antiviral therapy. The ammonium chloride or matching placebo dose regimen was 1.5 g b.i.d. for 3 days of administration/week followed by a wash-out of 4 days/week, for a total duration of 12 weeks of treatment. Generally, the addition of ammonium chloride 500 mg tablets to the standard of care therapy did not improve the efficacy of the treatment as compared to the addition of the matching placebo. The investigated efficacy parameters alanine aminotransferase, tumour necrosis factor α, aspartate aminotransferase, APRI, hyaluronic acid and viral load did not show significant differences between treatments, with only few exceptions. However, a decrease in the liver stiffness was found on average in subjects receiving ammonium chloride from the screening visit after 12 weeks, whereas no relevant change could be observed among the placebo recipients. In percentage, the occurrence of TEAEs was slightly higher with ammonium chloride than with placebo (28.6% vs. 12.5%), but no treatment related TEAE occurred to patients receiving ammonium chloride. No relevant effects of either treatment on blood pressure, heart rate or body weight were observed. No significant unwanted effect of ammonium chloride on the clinical laboratory parameters was observed.</p>			
Date of the report: Final version 1.0, 04APR13			

3 TABLE OF CONTENTS

		Page
1	TITLE PAGE	1
2	SYNOPSIS	6
3	TABLE OF CONTENTS	12
4	LIST OF ABBREVIATIONS AND DEFINITION OF TERMS	19
5	ETHICS	21
5.1	Independent Ethics Committee (IEC)	21
5.2	Ethical conduct of the study	21
5.3	Subject information and consent	21
6	INVESTIGATORS AND STUDY ADMINISTRATIVE STRUCTURE	22
6.1	Study site	22
6.2	Sponsor	22
6.3	Centralised clinical laboratories (routine analysis)	22
6.3.1	Clinical laboratory assays	22
6.3.2	Center for Fibroscan® examination	22
6.4	Study co-ordination, data analysis & reporting	23
6.4.1	Clinical co-ordination and monitoring	23
6.4.2	Co-ordination, data management and reporting	23
7	INTRODUCTION	24
7.1.1	Chronic hepatitis C	24
7.2	Physiological properties of ammonium chloride	25
7.3	Toxicity of ammonium chloride	26
7.4	Clinical experience	26
7.5	Therapeutic use of ammonium chloride in humans	27
7.6	Other uses of ammonium chloride in humans	28
7.7	Rationale	28
7.7.1	Preliminary observations	28
7.7.2	Preclinical study	29
7.7.3	Rationale for the pilot study in relapsed hepatitis C patients	29
7.7.4	Rationale for the trial design and endpoints	30
8	STUDY OBJECTIVES	31
8.1	Primary end-points	31
8.2	Secondary end-points	31
9	INVESTIGATIONAL PLAN	32
9.1	Overall study design and plan	32
9.1.1	Screening; Visit 1: day -14/-7	32
9.1.2	Treatment phase; Visit 2, day 1, baseline, treatment week 1	32
9.1.3	Visits 3-5, weeks 2-4	32
9.1.4	Visit 6, week 5	33
9.1.5	Visits 7-9, weeks 6-8	33
9.1.6	Visit 10, week 9	33
9.1.7	Visits 11-13, weeks 10-12	33
9.1.8	Visit 14, week 13 (final visit)	33
9.2	Discussion of study design, including the choice of control groups	33
9.3	Selection of study population	35
9.3.1	Inclusion criteria	35
9.3.2	Exclusion criteria	35
9.3.3	Removal of subjects from therapy or assessment	36
9.4	Treatments	36
9.4.1	Treatments administered	36
9.4.2	Identity of investigational product(s)	37

9.4.3	Method of assigning patients to treatment groups	37
9.4.4	Selection of doses in the study	37
9.4.5	Selection and timing of dose for each patient	38
9.4.5.1	Dose regimen	38
9.4.5.2	Route and method of administration	39
9.4.6	Blinding	39
9.4.7	Prior and concomitant medication and other constraints	39
9.4.8	Treatment compliance	40
9.5	Efficacy and safety variables	40
9.5.1	Efficacy and safety measurements assessed and flow chart	40
9.5.1.1	ALT, TNF- α , IL-6, AST, HA, platelets and HCV ribonucleic acid	40
9.5.1.2	Assessment of decompensated liver failure	41
9.5.1.3	Evaluation of liver fibrosis by abdominal echography	41
9.5.1.4	Evaluation of liver fibrosis by APRI	41
9.5.1.5	Safety variables	41
9.5.1.6	Flow chart	43
9.5.2	Appropriateness of measurements	44
9.5.3	Primary variables	44
9.5.3.1	Secondary variables	44
9.5.4	Drug concentration measurements	44
9.6	Data quality assurance	44
9.7	Statistical methods planned in the protocol and determination of sample size	44
9.7.1	Statistical and analytical plans	44
9.7.1.1	Study populations	45
9.7.1.2	Analysis on demographic, baseline and background characteristics	46
9.7.1.3	Analysis of the compliance	46
9.7.1.4	Efficacy analysis	46
9.7.1.5	Primary efficacy analysis	47
9.7.1.6	Statistical analysis of secondary efficacy parameters	47
9.7.1.7	Analysis of safety parameters	47
9.7.2	Determination of sample size	48
9.8	Changes in the conduct of the study or planned analyses	48
10	STUDY SUBJECTS	51
10.1	Disposition of subjects	51
10.2	Protocol deviations	52
11	EFFICACY EVALUATION	54
11.1	Data set analysed	54
11.2	Demographic and other baseline characteristics	54
11.3	Measurement of treatment compliance	56
11.4	Efficacy results and tabulation of individual subject data	56
11.4.1	Analysis of efficacy data: ALT, TNF- α , IL-6, AST, HA, APRI and HCV ribonucleic acid	56
11.4.1.1	Normalisation of ALT	56
11.4.1.2	Normalisation of TNF- α	57
11.4.1.3	Normalisation of AST	58
11.4.1.4	Normalisation of APRI	59
11.4.1.5	Normalisation of HA	60
11.4.1.6	Normalisation of IL-6	61
11.4.1.7	RVR and EVR	62
11.4.2	Statistical/analytical Issues	62
11.4.3	Tabulation of individual response data	62
11.4.4	Drug dose, drug concentration, and relationships to response	63
11.4.5	Drug-drug and drug-disease interactions	63
11.4.6	By-subject displays	63
11.4.7	Efficacy conclusions	63
11.4.7.1	Primary end-point	63
11.4.7.2	Secondary end-points	63
12	SAFETY EVALUATION	66

12.1	Extent of exposure	66
12.2	Adverse events (AEs)	66
12.2.1	Brief summary of adverse events	66
12.2.2	Display of adverse events	67
12.2.2.1	Treatment-related adverse events	68
12.2.3	Analysis of adverse events	68
12.2.4	Listing of adverse events by subject	68
12.3	Deaths, other serious adverse events, and other significant adverse events	69
12.4	Clinical laboratory evaluation	69
12.4.1	Listing of individual laboratory measurements by subject and each abnormal laboratory value	69
12.4.2	Evaluation of each laboratory parameter	69
12.5	Vital signs, physical findings, and other observations related to safety	70
12.5.1	Body weight	70
12.5.2	Vital signs	70
12.5.3	Electrocardiograms	70
12.5.4	Evaluation of liver stiffness	71
12.5.5	Assessment of decompensated liver failure	71
12.6	Safety conclusions	71
13	DISCUSSION AND OVERALL CONCLUSIONS	73
13.1	Discussion	73
13.2	Conclusions	74
14	TABLES AND FIGURES REFERRED TO BUT NOT INCLUDED IN THE TEXT	75
14.1	Demographic data and other baseline characteristics	75
14.1.1	Demography and other baseline characteristics	75
14.2	Efficacy data	84
14.2.1	ALT normalisation	84
14.2.2	Normalisation of TNF- α	88
14.2.3	Normalisation of AST	92
14.2.4	Normalisation of APRI	96
14.2.5	Normalisation of HA	100
14.2.6	Normalisation of IL-6	104
14.2.7	RVR and EVR	106
14.3	Safety data	110
14.3.1	Displays of adverse events	110
14.3.2	Listing of deaths, other serious and significant adverse events	114
14.3.3	Narrative of deaths, other serious and significant adverse events	114
14.3.4	Abnormal laboratory value listing (each subject)	115
14.3.5	Vital signs, electrocardiograms and other safety results	283
15	REFERENCE LIST	301

TABLES

Table 5.1.1	Dates of approval given at the first and at the following protocol submissions	21
Table 7.2.1	Basic information about ammonium chloride	25
Table 10.1.1	Listing of subjects who discontinued the study	51
Table 10.2.1	Listing of subjects with protocol deviations other than those listed in Appendix 16.2.2, Listing 16.2.2.1	53
Table 11.1.1	Number of subjects in the analysis data sets	54
Table 11.2.1	Summary of sex distribution and mean±SD age, height and BW	54
Table 11.2.2	Summary of HCV genotype and reactivity to other viruses antibodies/antigenes (number of subjects)	55
Table 11.4.1.1	Proportion of subjects achieving normalisation of ALT after 4, 8 and 12 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)	57
Table 11.4.1.2	ALT (U/L) change from baseline after 4, 8 and 12 weeks of treatment (mean±SD). Outcome of the statistical comparisons between treatments (t test p-value)	57
Table 11.4.1.3	Proportion of subjects achieving normalisation of TNF- α after 4, 8 and 12 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)	57
Table 11.4.1.4	TNF- α (pg/mL) change from baseline after 4, 8 and 12 weeks of treatment (mean±SD). Outcome of the statistical comparisons between treatments (t test p-value)	58
Table 11.4.1.5	Proportion of subjects achieving normalisation of AST after 4, 8 and 12 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)	58
Table 11.4.1.6	AST (U/L) change from baseline after 4, 8 and 12 weeks of treatment (mean±SD). Outcome of the statistical comparisons between treatments (t test p-value)	59
Table 11.4.1.7	Proportion of subjects achieving normalisation of APRI after 4, 8 and 12 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)	59
Table 11.4.1.8	APRI change from baseline after 4, 8 and 12 weeks of treatment (mean±SD). Outcome of the statistical comparisons between treatments (t test p-value)	60
Table 11.4.1.9	Proportion of subjects achieving normalisation of HA after 4, 8 and 12 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)	60
Table 11.4.1.10	HA (μ g/L) change from baseline after 4, 8 and 12 weeks of treatment (mean±SD). Outcome of the statistical comparisons between treatments (t test p-value)	61
Table 11.4.1.11	Proportion of subjects achieving normalisation of IL-6 after 4, 8 and 12 weeks of treatment (number and percentage of subjects)	61
Table 11.4.1.12	Proportion of subjects achieving RVR after 4 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)	62
Table 11.4.1.13	Proportion of subjects achieving EVR after 12 weeks of treatment (Number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)	62
Table 12.2.1.1	Summary of subjects with TEAEs; number and percentage of subjects with TEAEs and number of TEAEs are reported	66
Table 12.2.1.2	Overview of TEAEs by intensity; number and percentage of subjects with TEAEs and number of TEAEs are reported	66
Table 12.2.2.1	Number of subjects reporting and number of reported TEAEs by SOC and PT	67
Table 12.2.2.2	Number of subjects reporting and number of reported TEAEs by SOC and PT	68
Table 12.5.4.1	Mean liver stiffness measured at screening and final visit (week 13) (kPa). Mean±SD, median and range are presented	71
Table 14.1.1.1	Subjects' disposition	75
Table 14.1.1.2	Populations	76
Table 14.1.1.3	Demography	77
Table 14.1.1.4	Lifestyle summary	79
Table 14.1.1.5	Not met IE criteria summary	81
Table 14.1.1.6	Protocol deviations	81

Table 14.1.1.7	Previous and concomitant medications by ATC term and standardised medication name	82
Table 14.1.1.8	Other therapies by ATC term and standardised medication name	83
Table 14.2.1.1	Proportion of subjects with ALT (U/L) normalisation	84
Table 14.2.1.2	ALT (U/L) normalisation – Outcome of the statistical comparison	85
Table 14.2.1.3	ALT (U/L) change from baseline (Visit 2)	86
Table 14.2.1.4	ALT (U/L) change from baseline (Visit 2) - Statistical comparison between treatment groups	87
Table 14.2.2.1	Proportion of subjects with TNF-alpha (pg/mL) normalisation	88
Table 14.2.2.2	TNF- α (pg/mL) normalisation - Statistical comparison between treatment groups	89
Table 14.2.2.3	TNF- α (pg/mL) change from baseline (Visit 2)	90
Table 14.2.2.4	TNF- α (pg/mL) change from baseline (Visit 2) - Statistical comparison between treatment groups	91
Table 14.2.3.1	Proportion of subjects with AST (U/L) normalisation	92
Table 14.2.3.2	AST (U/L) normalisation - Statistical comparison between treatment groups	93
Table 14.2.3.3	AST (U/L) change from baseline (Visit 2)	94
Table 14.2.3.4	AST (U/L) change from baseline (Visit 2) - Statistical comparison between treatment groups	95
Table 14.2.4.1	Proportion of subjects with APRI normalisation	96
Table 14.2.4.2	APRI normalisation - Statistical comparison between treatment groups	97
Table 14.2.4.3	APRI change from baseline (Visit 2)	98
Table 14.2.4.4	APRI change from baseline (Visit 2) - Statistical comparison between treatment groups	99
Table 14.2.5.1	Proportion of subjects with HA (μ g/L) normalisation	100
Table 14.2.5.2	HA (μ g/L) normalisation - Statistical comparison between treatment groups	101
Table 14.2.5.3	HA (μ g/L) change from baseline (Visit 2)	102
Table 14.2.5.4	HA (μ g/L) change from baseline (Visit 2) - Statistical comparison between treatment groups	103
Table 14.2.6.1	Proportion of subjects with IL-6 (pg/mL) normalisation	104
Table 14.2.6.2	IL-6 (pg/mL) normalisation - Statistical comparison between treatment groups	105
Table 14.2.6.3	IL-6 (pg/mL) change from baseline (Visit 2)	105
Table 14.2.6.4	IL-6 (pg/mL) change from baseline (Visit 2) - Statistical comparison between treatment groups	105
Table 14.2.7.1	Proportion of subjects achieving RVR	106
Table 14.2.7.2	Summary of subjects achieving RVR - Statistical comparison between treatment groups	107
Table 14.2.7.3	Proportion of subjects achieving EVR	108
Table 14.2.7.4	Summary of subjects achieving EVR - Statistical comparison between treatment groups	109
Table 14.3.1.1	Global incidence of treatment emergent adverse events - Safety population	110
Table 14.3.1.2	Subjects with treatment emergent adverse events by system organ class and preferred term - Safety population	111
Table 14.3.1.3	Subjects with treatment emergent adverse events by system organ class, preferred term and severity - Safety population	112
Table 14.3.1.4	Subjects with treatment emergent adverse events by system organ class, preferred term and relationship to study treatment - Safety population	113
Table 14.3.2.1	Deaths and Other Serious or Significant Adverse Events	114
Table 14.3.4.1	Abnormal laboratory values - Safety population	115
Table 14.3.4.2	Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population	224
Table 14.3.4.3	Shift tables of laboratory values (qualitative tests) - Visit 6 - Safety population	241
Table 14.3.4.4	Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population	244
Table 14.3.4.5	Shift tables of laboratory values (qualitative tests) - Visit 10 - Safety population	260
Table 14.3.4.6	Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population	263
Table 14.3.4.7	Shift tables of laboratory values (qualitative tests) - Visit 14 - Safety population	279
Table 14.3.5.1	Body weight summary - Safety population	283
Table 14.3.5.2	Vital signs summary - Safety population	286
Table 14.3.5.3	Overall ECG interpretations summary - Safety population	294
Table 14.3.5.4	ECG parameters – Safety population	295
Table 14.3.5.5	Abdominal echography interpretations summary - Safety population	299
Table 14.3.5.6	Abdominal echography by Fibroscan® (kPa) - Safety population	299
Table 14.3.5.7	Extent of exposure to Ammonium chloride - Safety population	300

FIGURES

Figure 7.2.1	Ammonium chloride chemical formula	25
Figure 10.1.1	Subject disposition	51

APPENDICES

- 16.1 Study information
 - 16.1.1 Protocol and protocol amendments
 - 16.1.2 Sample case report form (unique pages only)
 - 16.1.3 List of IEC's or IRB's (plus the name of the committee chair if required by the regulatory authority) and representative written information for volunteer/patient and sample consent forms
 - 16.1.4 List and description of Investigators and other important participants in the study, including brief CV's or equivalent summaries of training and experience relevant to the performance of the clinical study
 - 16.1.5 Signatures of principal or coordinating Investigator(s) or sponsor's responsible medical officer, depending on the regulatory authority's requirement
 - 16.1.6 Listing of subjects receiving test drug(s)(investigational product(s) from specific batches, when more than one batch was used
 - 16.1.7 Randomisation scheme and codes (subject identification and treatment assigned)
 - 16.1.8 Audit certificates (if available)
 - 16.1.9 Documentation of statistical and pharmacokinetic methods
 - 16.1.10 Documentation of inter-laboratory standardisation methods and quality assurance procedures if used
- 16.2 Subject data listing
 - 16.2.1 Discontinued subjects
 - 16.2.2 Protocol deviations
 - 16.2.3 Subjects excluded from the efficacy analysis
 - 16.2.4 Demographic data
 - 16.2.5 Compliance and/or concentration data
 - 16.2.6 Individual efficacy response data
 - 16.2.7 Adverse event listings (each subject)
 - 16.2.8 Listing of individual laboratory measurements by subject, when required by regulatory authorities
 - 16.2.9 Individual safety measurements
 - 16.2.10 Other listings
- 16.3 Case Report Forms (CRF's)
 - 16.3.1 CRFs for deaths, other serious adverse events and withdrawals for AE
 - 16.3.2 Other CRFs submitted
- 16.4 Individual subject data listings

4 LIST OF ABBREVIATIONS AND DEFINITION OF TERMS

Ab	Antibody
AE	Adverse Event
Ag	Antigen
AIDS	Acquired Immune Deficiency Syndrome
ALT	Alanine aminotransferase
APRI	Aspartate Aminotransferase to Platelet Ratio Index
AST	Aspartate aminotransferase
b.i.d.	Bis In Die (twice a day)
BP	Blood Pressure
bpm	Beats Per Minute
BW	Body Weight
CHC	Chronic Hepatitis C
CHE	Cholinesterase
Cl ⁻	Chloride Ion
CPK	Creatine Phospho Kinase
CR	Clinically Relevant
CRF	Case Report Form
CRO	Contract Research Organisation
CV	Coefficient of Variation
DAA	Direct Acting Antiviral Agent
DBP	Diastolic Blood Pressure
EASL	European Association for the Study of the Liver
EC	Ethics Committee
ECG	Electrocardiogram
ECG	Computerized Electrocardiogram
ED ₅₀	Effective dose for 50% of treated animals
EMA	European Medicines Agency
EVR	Early Virological Response
FAS	Full Analysis Set
FDA	Food and Drug Administration
γ-GT	γ-Glutamyl transpeptidase
g	Gram
GCP	Good Clinical Practices
GLP	Good Laboratory Practices
GMP	Good Manufacturing Practices
GRAS	Generally Recognized as Safe
HA	Hyaluronic acid
HAV	Hepatitis A Virus
H ⁺	Hydrogen Ion
HBs Ag	Hepatitis B virus surface antigen
HCO ₃ ⁻	Bicarbonate Ion
HCV	Hepatitis C Virus
HCV Ab	Hepatitis C virus antibodies
Hep C	Hepatitis C
HIV	Human Immunodeficiency Virus
HR	Heart Rate
ICF	Informed Consent Form
ICH	International Conference on Harmonisation
IEC	Independent Ethics Committee
IL-6	Interleukin-6
ITT	Intention-To-Treat
IU	International Units
IUPAC	International Union of Pure and Applied Chemistry
kg	Kilogram
L	Litre
LC-MS/MS	Liquid Chromatography-with tandem Mass Spectrometry
LD ₅₀	Dose producing death of 50% of treated animals
LDH	Lactate DeHydrogenase
LLOQ	Lower Limit Of Quantification

µg	Microgram
M	Molar
mg	Milligram
mL	Millilitre
MCH	Mean Cell Haemoglobin
MCHC	Mean Cell Haemoglobin Concentration
MCV	Mean Cell Volume
MedDRA	Medical Dictionary for Regulatory Activities
MW	Molecular Weight
Na ⁺	Sodium Ion
NaHCO ₃	Sodium Bicarbonate
NCR	Not Clinically Relevant
NH ₄ ⁺	Ammonium Ion
NH ₄ Cl	Ammonium Chloride
NOAEL	No Observed Adverse Event Level
NOEL	No Observed Effect Level
OTC	Over-The-Counter
PCR	Polymerase Chain Reaction
pH	Measure of the acidity or the basicity of a solution
pKa	Logarithmic measure of the acid dissociation constant
PK	Pharmacokinetics
po	Per Os (oral)
PP	Per Protocol population
ppm	Parts per million
PT	Preferred Term
QA	Quality Assurance
RBC	Red Blood Cells
RNA	Ribonucleic Acid
RVR	Rapid Virological Response
SAE	Serious Adverse Event
SBP	Systolic Blood Pressure
SCS	Spinal Cord Stimulation
SD	Standard Deviation
SDV	Source Data Verification
SIV	Study Initiation Visit
SOC	System Organ Class
SOP	Standard Operating Procedure
SR	Safety Ratio
SVR	Sustained Virological Response
T	absolute temperature in Kelvin degrees
TD ₅₀	Toxic dose causing impairment of 50% of the animals
TEAE	Treatment Emergent Adverse Event
TAA	Thioacetamide
TI	Therapeutic Index
TNF-α	Tumour Necrosis Factor-α
TSS	Total Symptom Score
US	United States
USA	United States of America
USDA	United States Department of Agriculture
VAS	Visual Analogue Scale
WBC	White Blood Cells
WHO	World Health Organisation
WHODDE	World Health Organisation Drug Dictionary Enhanced

5 ETHICS

5.1 Independent Ethics Committee (IEC)

The study protocol, the Investigator's brochure and all other relevant documentation were reviewed and approved at the first and the following submissions by an independent local Ethics Committee (Scientific Committee of the Western Attica General Hospital Hagia Barbara; [Appendix 16.1.3](#)), by the National Ethics Committee affiliated to the Greek Ministry of Health and Social Solidarity and by the Greek health authority (National Drug Organisation affiliated to the Greek Ministry of Health and Social Solidarity). Dates of approval by the 3 mentioned institutions are summarised in the table below

Table 5.1.1 Dates of approval given at the first and at the following protocol submissions

	Approval dates		
	Local IEC	National IEC (NEC)	Central Authority (EOF)
First submission	20JAN10	19OCT10	25FEB10
Submission of protocol amendment 1 with final version 2.0 of the amended protocol	08FEB11	09FEB11	21JAN11
Submission of protocol amendment 2 and of the final version 3.0 of the amended protocol	29DEC11	29DEC11	05JAN12

5.2 Ethical conduct of the study

The Sponsor warrants that the present study was performed in accordance with the relevant guidelines and the Declaration of Helsinki and according to the general principles of: "ICH Harmonised Tripartite Guidelines for Good Clinical Practice" ICH Topic E6, CPMP/ICH/135/95, July 1996 including post Step 4 errata, status September 1997 and post Step errata (linguistic corrections), July 2002.

5.3 Subject information and consent

Before being admitted to the clinical study, subjects expressed their consent to participate. The investigator explained the nature, scope and possible consequences of the clinical study in an understandable form. Information was provided to the subjects in both oral and written form.

Each patient received a copy of the written informed consent form, signed by them and the investigator.

A blank copy of the patients' consent forms and written information sheets used during the study is presented in [Appendix 16.1.3](#).

6 INVESTIGATORS AND STUDY ADMINISTRATIVE STRUCTURE

6.1 Study site

Pathology Clinic, Western Attica General Hospital Hagia Barbara, Dodekannisou 1, GR-12351, Hagia Barbara, Greece

Paraskevi Aggelopoulou-Tigka, MD (Principal Investigator)
Director of Pathology Clinic
Phone: +30.210.5301.309
Email: aggtigapar@yahoo.gr

6.2 Sponsor

PHF S.A. - Via Castagnola 21, CH-6900 – Lugano, Switzerland
Phone: +41.91.973.6700
Fax: +41.91.973.6710
Email: alessandro.gagnoni@phfsa.com

Sponsor representative

Alessandro Gagnoni, Business Development Director

Sponsor Scientific Advisor

Prof. Diamantis Kiassos

6.3 Centralised clinical laboratories (routine analysis)

6.3.1 Clinical laboratory assays

BARC Europe NV - 3b, Industriepark Zwijnaarde, B-9052 - Ghent, Belgium
Phone: +32.9.329.2.329
Fax: +32.9.329.2.330
Email: elise.boelens@barclab.com

Laboratory representative

Elise Boelens

6.3.2 Center for Fibroscan® examination

Diagnostic & Therapeutic Centre of Athens, Hygea S.A. - Erythrou Stavrou Street 4 & Kifissias Avenue, GR-15123 – Marousi, Greece
Phone: +30.210-6867559 or 210-6867564 or +30.210-6502947
Mobile: +30.6979-417309

Diagnosis Responsible Persons

Antonios Perperas
Zacharopoulos

6.4 Study co-ordination, data analysis & reporting

6.4.1 Clinical co-ordination and monitoring

Zeincro Hellas S.A. - 30 Anapafseos street, Vrilissia, GR-15235 - Athens, Greece

Phone: +30.210.8047.709

Email: amoschos@zeincro.com

Managing Director

Andreas Moschos

6.4.2 Co-ordination, data management and reporting

CROSS S.A., Switzerland, and its affiliated companies CROSS Research S.A. and CROSS Metrics S.A.

CROSS S.A. - Via F. A. Giorgioli 14, CH-6864 Arzo, Switzerland

Phone: +41.91.6300510

Fax: +41.91.6300511

Email: clinic@croalliance.com

Co-ordination

Angelo Vaccani, Clinical Project Leader

Medical Writing

Andrea Di Stefano, Senior Medical Writer

Statistical Analysis

Andrea Vele, Biostatistician and Data Manager

Quality Assurance Unit

Mario Corrado, Quality Assurance Manager

A list of all investigators and other personnel involved in the study is provided in [Appendix 16.1.4](#).

7 INTRODUCTION

7.1.1 Chronic hepatitis C

Hepatitis C is now recognised as the most common infection causing chronic liver disease in the European population. The prevalence of chronic hepatitis C is not known. The World Health Organisation (WHO) estimates that about 170 million people, 3% of the world's population, are infected by hepatitis C virus (HCV) and are at risk of developing liver cancer and/or liver cirrhosis.

In Europe, where chronic hepatitis C in the vast majority of cases is reported among patients with past blood transfusions (before 1991) and ongoing or previous intravenous drug abuse, the prevalence varies by geographic region from about 0.5% in Northern countries to 2% and higher in Mediterranean countries and in Eastern Europe. Hepatitis C virus of genotype 1 is the predominant genotype globally and in most European regions.

In 1999, the European Association for the Study of the Liver (EASL) issued a consensus statement on the management of hepatitis C. As also defined by the European Medicines Agency EMA ribavirin in combination with recombinant pegylated interferon α (peginterferon) is now considered as the standard of care therapy.

Several trials were conducted in HCV patients treated with peginterferon/ribavirin combination therapy. Combined therapy results in an approximate 2 to 3 fold enhancement in efficacy in the treatment of the naïve population and 10 fold enhancement in those, who relapse following an initial response to interferon α monotherapy. Nevertheless the 50-60% of patients, who receive combination therapy, still fail to achieve a sustained virologic response (defined as the absence of detectable HCV ribonucleic acid at the end of a 24 week follow up). The sustained virologic response is achieved by the 46% of naïve patients with HCV genotype 1 after 48 weeks of treatment with the standard of care therapy and then 24 weeks of follow up, and by the 76% of patients with genotypes 2 or 3 after 24 weeks of treatment with the standard of care therapy and then 24 weeks of follow up. Jensen *et al.* (1) found that 28% of patients having HCV genotype 1 infection achieve a rapid virologic response (RVR; defined as the absence of detectable HCV ribonucleic acid after 4 weeks of treatment) and that 89% of those patients, who had a RVR, achieve a sustained virologic response at the end of a 24 week follow up after 24 weeks of treatment with the standard of care therapy.

The proportion of HCV genotype 1 patients, who achieve a sustained virologic response after only 24 weeks of treatment with the standard of care therapy, is 41.5% (49/118). As reported by Kaiser *et al.* (2) at the 59th Annual Meeting of the American Association for the Study of Liver Diseases (2008), re-treatment with peginterferon/ribavirin combination therapy of HCV patients, who relapsed after a previous 48-week course of standard of care therapy, resulted in a RVR (in this study defined as HCV ribonucleic acid <15 IU/mL) at a frequency of 27%. Among those patients, who achieved RVR, 97% achieved sustained virologic response at the 6th month of follow-up after a 72 week treatment.

At the end, less than 27 % of relapsed patient achieved a sustained virological response after standard treatment.

The patients, who do not achieve a sustained virological response, face a progressive degeneration of liver conditions with a reduced life time expectation.

The main mechanism for the degeneration of liver parenchyma is the progressive inflammation that causes fibrosis, cirrhosis and necrosis, through the increase in tumour necrosis factor α (TNF- α) and other proinflammatory mediators.

7.2 Physiological properties of ammonium chloride

Ammonium chloride is a highly hydrosoluble salt, which exists in aqueous environment in various forms in accordance with the following equilibrium:



Ammonium ion has a pKa of $0.09018 + 2729.92/T$, where T is the absolute temperature in Kelvin degrees. Ammonium is therefore a weak acid, which can influence the acid-base balance of organism fluids, by decreasing mildly the pH towards acid values.

Ammonia is naturally present *in vivo* in the two forms NH_3 and NH_4^+ alternatively present in the intra and extracellular fluids according to the above-mentioned equilibrium. Ammonia is a common metabolic product and one of the major components of urine (3). Clinically high serum ammonia levels may be of great concern. Hyperammonaemia is well known to be toxic and to result in brain impairment, coma and death.

Ammonium chloride is used as a remedy in the case of electrolytic unbalances, i.e. hypochloraemic states or metabolic alkalosis. These pathophysiological conditions may occur following vomiting, suctioning (removal) of stomach content, use of diuretics (water or fluid pills), or with certain stomach disorders. Ammonium chloride also causes mild diuresis and acidifies the urine. Information on ammonium chloride and its chemical formula are presented in the table and the figure below.

Table 7.2.1 Basic information about ammonium chloride

IUPAC name	Ammonium chloride
Chemical formula	NH_4Cl
Molecular weight	53.49 g/mol

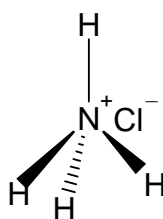


Figure 7.2.1 Ammonium chloride chemical formula

The ammonium ion (NH_4^+) plays a fundamental role in the maintenance of organism acid-base balance. The kidney uses ammonium (NH_4^+) in place of sodium (Na^+) to combine with fixed anions in maintaining acid-base balance, especially as a homeostatic compensatory mechanism in metabolic acidosis. When a loss of hydrogen ions (H^+) occurs and serum chloride (Cl^-) decreases, sodium is made available for combination with bicarbonate (HCO_3^-). This creates an excess of sodium bicarbonate (NaHCO_3) which leads to a rise in blood pH and a state of metabolic alkalosis.

Ammonium chloride is indicated in the treatment of patients with hypochloraemic states and metabolic alkalosis. The therapeutic effects of ammonium chloride depend upon the ability of the kidney to utilise ammonia in the excretion of an excess of fixed anions and the conversion of ammonia to urea by the liver, thereby liberating hydrogen (H^+) and chloride (Cl^-) ions into the extracellular fluid.

Ammonium chloride has been also used as tool to test liver function. Malfunction of the liver involves disturbances of urea synthesis and ammonia detoxification. These phenomena become apparent especially during ammonia loading of patients. By oral administration of $^{15}\text{NH}_4\text{Cl}$ and subsequent analysis of ^{15}N -urea and ^{15}N -ammonia in urine by emission spectrometry, the functional state of the liver can be assessed (4, 5, 6).

7.3 Toxicity of ammonium chloride

The acute oral LD_{50} has been determined to be 1630 mg/kg of body weight (BW) in male rats, 1220 mg/kg of BW in female rats and 1300 mg/kg of BW in male mice. No data for inhalation and dermal acute toxicity are available (7, 8).

A repeated dose toxicity study was conducted using Sprague-Dawley rats (10 males/group) fed a diet containing this substance at 684 mg/kg of BW/day (12300 ppm) for 70 days. This substance had no effect on clinical signs, BW, food consumption or necropsy findings. The urine pH was approximately 6.0, compared to a pH of 7.56 or greater in the control group, and the concentration of urinary calcium increased. However, no crystals were found in urine. The other urinary chemistries (the concentration of magnesium, creatinine, phosphate, protein, and osmolality) were unchanged. No histopathological changes ascribable to this substance were found. The NOAEL for oral repeated dose toxicity is considered to be 684 mg/kg of BW/day (12300 ppm) in male rats. No data on repeated dose toxicity by inhalation and dermal exposure are available (9).

On the basis of experimental evidences ammonium chloride is considered not to be genotoxic. Sprague-Dawley rats were administered 1 mL/kg of BW of a solution at 1/6 M (8.9 mg/kg of BW/day) by gavage on days 7 to 10 of gestation. Neither maternal toxicity nor developmental toxicity including teratogenicity was found. There are three studies in which this substance was tested for carcinogenicity and for promotion effect on the initiator-induced carcinogenesis in the urinary system. These studies showed negative results on carcinogenicity of this substance in rats and mice.

7.4 Clinical experience

A previous Phase I study of ammonium chloride 500 mg tablets was conducted in 20 healthy men and women aged between 18-55 years (10). The study was aimed at collecting safety and tolerability data about the investigational product as compared to placebo. Ammonium chloride or placebo were administered for 3 consecutive days per treatment week for 2 weeks at the dose of 1.5 g twice a day (b.i.d.). Twelve patients received the active compound, while 8 received placebo. The frequency of subjects with adverse events (AEs) in the treatment group receiving ammonium chloride (50% of subjects) did not differ from that in the placebo recipients (50% of subjects). The frequency of subjects with AEs, which the investigator judged as possibly related to the treatment, was 33.3% among subjects receiving ammonium chloride and 25% among the placebo recipients.

The most frequent AE was flatulence with a frequency of 33.3% of subjects among those receiving ammonium chloride and of 25% among the placebo recipients. In the control group headache had the same frequency as flatulence (25% of subjects). Less frequent were diarrhoea and back pain both occurring at a frequency of 16.7% of subjects only in the group receiving ammonium chloride.

No severe adverse events (SAEs) occurred during the study. No AEs leading to subject discontinuation occurred during the study.

No clinically relevant abnormality in vital signs, ECGs, clinical laboratory assays or BW was found. No meaningful effect of ammonium chloride on vital signs, BW, ECGs or haematology, biochemistry and urinalysis parameters was observed.

Gasometric parameters measured in venous plasma reflected the acidifying effect of the repeat dose treatment with ammonium chloride. On average, a decrement of pH towards more acidic values, also lower than 7.35, and an increment of chloride were observed among subjects treated with ammonium chloride. However, the occurrence of any metabolic acidosis can be clearly excluded on the basis of the mean values of the other gasometric parameters. Indeed, no clinical sign of typical compensation of the metabolic acidosis was found, e.g. decrease in the partial pressure of carbon dioxide ($p\text{CO}_2$) and HCO_3^- . No significant change from baseline in $p\text{CO}_2$ values as compared with placebo was found, while the significant changes from baseline in HCO_3^- in comparison with placebo were randomly distributed and did not show any dose-correlation with the administration of ammonium chloride. Significant changes in potassium were few and randomly distributed.

These results allowed concluding that ammonium chloride 500 mg tablets do not induce any clinically relevant change in blood pH, gas and electrolyte values, when administered to healthy volunteers at the dose of 1.5 g b.i.d. for a total of 6 days.

Study results are in accordance with the known safety and tolerability of oral ammonium chloride even at higher doses in the clinical practice. Similar or higher doses have been used in routine clinical practice and have already been studied clinically. For example, the effect of ammonium chloride on urine pH with daily doses of 1.5 and 3 g was studied in 14 healthy volunteers. A significant decrease in urine pH was demonstrated (11). Long-term therapies with ammonium chloride at doses between 1.5 and 3 g were given to 11 patients in order to reduce the risk for new calculus formations or the remaining calculus development after decomposition of infectious renal calculi. Patients were followed-up over a mean period of 32 months. No AEs were recorded for the investigated dose regimens (9).

7.5 Therapeutic use of ammonium chloride in humans

Ammonium chloride has been used extensively both as drug substance and as alimentary ingredient for humans (3) and can also be used as excipient in pharmaceutical formulations. The main side effects are the increase in hydrogen, chloride and ammonium ions in the extracellular fluid and the decrease in the pH.

This substance is approved as a drug in several countries for electrolyte replenishment or expectorants and as food additive (fermentation and blowing agent).

Ammonium chloride is available as a therapeutic agent in Canada since its introduction in 1925. It has been used as a mild diuretic, an expectorant, a weight-reducing agent and as a urine-acidifying agent.

Gastro-protected tablet of 500 mg of ammonium chloride are commercialised in the USA as a dietary supplement under the brand Allergy Research Group. The recommended dose regimen is one to three times daily. The only caution is a potential gentle diuretic effect.

Plastic vials containing 100 mEq of ammonium chloride, USP, commercialised by Hospira Inc., Lake Forest, IL, USA, are approved by the FDA for the treatment of hypochloraemic states and metabolic alkalosis. The recommended maximum daily dose is 200 mEq of ammonium chloride (2 vials) diluted in isotonic (0.9%) sodium chloride solution and infused intravenously. The US Dept. of Health and Human Services foresees the use of ammonium chloride in the radiation emergency medical management. In fact, oral dosing of ammonium chloride is suggested in case of radium and strontium internal contamination at the dose of 1-2 g q.i.d. for up to 6 consecutive days (12).

Ammonium chloride administration is also suggested in case of intoxication with basic drugs, such as amphetamines, in order to facilitate the urinary excretion.

Administration of ammonium chloride is contraindicated in any patient with high plasma ammonia (e.g. severe hepatic failure) or with metabolic acidosis. Known adverse reactions related to ammonium chloride are slight bradycardia, nausea, dizziness and vomiting.

7.6 Other uses of ammonium chloride in humans

Ammonium chloride can be added directly to human food and is considered in the U.S. as Generally Recognized as Safe (GRAS) [US FDA]. Bottled water containing chloride not in excess of 250.0 mg/L is allowed as potable (13).

Ammonium chloride is a common additive to liquorice and consumption of 50-100 g of liquorice lead to an ammonium chloride intake of 1-2 g (Use of minerals in food, German Federal Institute for Risk Assessment, 2006). Ammonium chloride is also used as food additive (flavours) in Germany.

7.7 Rationale

7.7.1 Preliminary observations

During his routine clinical practice at the Dept. of Pathology of the Medical School of Athens, Diamantis Kiassos approaches the supportive therapy of many patients with various degrees of liver malfunction.

The current treatment, limited to hepatic conditions such as inflammation, fibrosis, cirrhosis, compensated insufficiency, hyperbilirubinaemia, is palliative and consists in hydration with electrolytes, vitamins, sucrose etc.

In a remarkable number of patients with liver problems, there were different concomitant pathologies. Part of the population presented also respiratory diseases (COPD, bronchiectasis, lung fibrosis).

Kiassos observed that patients presenting increased transaminases and unconjugated bilirubin and, at the same time, respiratory system problems, had a more favourable outcome as compared with the patients with liver disease only. A decrease in bilirubin was observed in jaundice patients, a decrease in transaminases and a better clinical condition were observed in general.

The hypothesis to explain this observation was that the pharmacological treatment for the respiratory diseases was useful for the improvement of liver conditions.

The common drug product administered to patients was a multi-ingredient expectorant syrup containing ammonium chloride and other ingredients as antihistaminic and anti-cough agents.

After a deep study of the literature, considering that ammonium chloride is fully metabolised by the liver, ammonium chloride was hypothetically identified as the only possible ingredient

that could have had some effect on liver and also that could have solubilised bilirubin in blood, through the systemic acidification, with consequent ionisation of bilirubin and increase in the renal clearance.

Considering the fact that ammonium chloride is a very safe active ingredient, used from more than 50 years, Kiassos started a spontaneous investigation, administering to patients affected by hepatitis C and B, ammonium chloride solution and tablets. The direct experience done with administration of ammonium chloride in the same dose range as the syrup confirmed the interesting effect observed previously and indicated that the ingredient endowed with some beneficial activity on liver conditions was ammonium chloride.

Afterwards, the development of the newly experimented pharmacological treatment was initiated in compliance with the international guidelines on pharmaceutical development.

7.7.2 *Preclinical study*

Based on the above-mentioned observations, Prof. Kiassos conducted a pre-clinical research (14) in the Pathologic Anatomy Department of the Medical School, University of Athens, using a well established animal model (Wistar rats) for acute hepatitis (15, 16) in order to prove the effect of ammonium chloride on hepatitis and hepatic failure.

The protective role of ammonium chloride in thioacetamide (TAA) induced acute hepatic failure was evaluated. TAA was injected intraperitoneally in adult Wistar rats at three consecutive time intervals of 24 h. The experimental induction of hepatic necrosis was accompanied by a dramatic elevation of the hepatic enzymes aspartate aminotransferase (AST) and alanine aminotransferase (ALT) (at about 6000%), increased levels of ammonia, bilirubin, glucose, urea, creatinine and the proinflammatory cytokines interleukin-6 (IL-6) and TNF- α . Notably, serum ammonia was increased above hyperammonemic coma levels. Although supportive care was given to the experimental animals, the majority of them (75%) did not survive. In the rest of them, hepatic encephalopathy of stage 3 and 4 (lack of movement and coma) was observed. The results of ammonium chloride administration were impressive: the survival of the animals increased to 75% and the stage of encephalopathy in the surviving animals decreased to 1 (uncomplicated lethargy). In addition, the hepatic enzymes and TNF- α were reduced to the half of their original values, ammonia fell to sub-quadruple levels (below of that required to induce coma) and the rest of biochemical parameters notably improved. Histopathological examination of the liver revealed that centrilobular necrosis and inflammatory infiltration were reduced to one third while its mitotic activity (indicating liver regeneration) increased by 50%. The above results support the opportunity to start a clinical development and the putative use of ammonium chloride as a supporting treatment to conditions that are related to hepatic degeneration.

The preclinical study has been recently published (14) and was also presented during the annual conference of the Attica Medical Doctor Association (EELIA) in September 2009.

With the former established results, Kiassos proceeded with the obtainment of the European patents nr. EP1875918 (A2) and WO2010/076323.

7.7.3 *Rationale for the pilot study in relapsed hepatitis C patients*

For the first explorative investigation on the efficacy and safety in patients, the most suitable pathologic condition was identified in chronic hepatitis C with relapse after a previous therapeutic cycle.

The reasons for this choice are the following:

- 1) The preclinical model of acute toxic hepatitis, caused by TAA, is described in the literature as a method predictive for the liver damages typical of hepatitis C. According to scientific works in hepatology (17), the effect of a HCV infection is hepatotoxic, associated with the development and persistence of strong, virus-specific responses by cytotoxic T lymphocytes and helper T cells. The histology is characterised by periportal and bridging necrosis, intralobular degeneration and focal necrosis, portal inflammation and fibrosis. The common serological factors are increasing transaminases and increase in TNF- α and bilirubin in the 12% of cases. The chronic hepatitis C and TAA intoxication results in a similar and analogue hepatic damage.
- 2) The relapsed chronic hepatitis C represents a wide problem that affects a remarkable number of people. The relapsed patients who can achieve a complete remission of hepatitis C infection during a second cycle of treatment, are a low percentage of cases and normally face a slow but progressive process of liver degeneration.
- 3) However, a serious liver insufficiency and hepatic failure, with cirrhosis and extensive necrosis, develop in patients only after many years of active infection. Since the inclusion criteria excluded the patients with liver insufficiency and serious impairment of hepatic functions and the patients were regularly treated with the standard therapy for hepatitis C infection, this study fully respected the ethical indications.
- 4) Many of the patients treated during the first clinical experience were affected by chronic hepatitis C.

For the above reasons the chronic hepatitis C with relapses represented the more suitable target for this Phase II pilot clinical study.

7.7.4 Rationale for the trial design and endpoints

The patients affected by chronic hepatitis C infection relapsing after a previous therapeutic cycle were planned to be treated according to the international guidelines that prescribe the combination treatment with pegylated interferon and ribavirin. During the standard of care therapy, the experimental drug was administered according to a double-blind, randomised, parallel-group vs. placebo design. This proof of concept study aimed at investigating the efficacy of ammonium chloride as supportive therapy for the protection from hepatotoxic effect of hepatitis C infection.

The primary parameter was ALT, that is described in the Guideline on the Clinical Evaluation of Direct Acting Antiviral Agents intended for the Treatment of Chronic Hepatitis C (18), as the most important and significant serological parameter in the studied pathology, suitable for the evaluation of the liver condition. All the other parameters that were evaluated during the preclinical study, i.e. TNF- α , IL-6, bilirubin, AST, were also evaluated.

According to literature data, also TNF- α has an important role in liver degeneration from various aetiology (19). Therefore, the variation in this parameter observed in the preclinical study justified the monitoring of TNF- α also in the present study.

The viral load was also evaluated. The evaluation of RVR was also included as a secondary end-point with the objective of investigating the potential positive effect of ammonium chloride added to the standard of care therapy on the viral load. In fact, an increase in IL-6, called also interferon β 2, that could have some action against the virus, was observed in the preclinical study after treatment with ammonium chloride (14).

8 STUDY OBJECTIVES

- To collect preliminary data concerning the efficacy of ammonium chloride 500 mg tablets, in comparison with placebo, in terms of liver protection in patients with HCV, who relapsed after the previous first course of standard of care therapy, during the second cycle of the standard of care therapy of hepatitis C (peginterferon and ribavirin);
- to collect preliminary data concerning the liver functionality of patients with hepatitis C, who relapsed after the previous first course of standard of care therapy, treated with ammonium chloride 500 mg tablets in comparison with placebo during the second cycle of the standard of care therapy of hepatitis C (peginterferon and ribavirin);
- to evaluate the safety and tolerability of the addition of ammonium chloride 500 mg tablets to the hepatitis C standard of care therapy with peginterferon and ribavirin.

8.1 Primary end-points

- Evaluation of the liver protection after treatment with ammonium chloride as compared with placebo in terms of proportion of subjects achieving ALT normalisation after 12 weeks of treatment.

8.2 Secondary end-points

- Comparison of the proportion of subjects achieving normalisation of the value of ALT, tumour necrosis factor- α (TNF- α), aspartate aminotransferase (AST), aspartate aminotransferase to platelets ratio index (APRI), serum hyaluronic acid (HA) and IL-6 between treatments after 4, 8 and 12 weeks of treatment;
- comparison between treatments of the change versus baseline (visit 2, day 1) value of ALT, TNF- α , AST, APRI, HA and IL-6;
- comparison between treatments of the proportion of subjects achieving a RVR defined as the absence of detectable hepatitis C virus ribonucleic acid after 4 weeks of treatment;
- comparison between treatments of the proportion of subjects achieving an EVR, defined as a hepatitis C virus ribonucleic acid level decrease by at least 2 logarithmic units of IU/mL after 12 weeks of treatment;
- comparison between treatments of the change versus the screening assessment (visit 1) of the fibrosis stage by transient elastography (FibroScan[®]);
- evaluation of the safety and tolerability of the study treatments.

9 INVESTIGATIONAL PLAN

9.1 Overall study design and plan

Double-blind, randomised, placebo-controlled, parallel-group, pilot study.

Fifty percent (50%) of patients were planned to receive the test treatment and 50% the control treatment (1:1 ratio).

A copy of the final version of the study protocol dated 04DEC09 and of the versions 2.0 and 3.0 of the amended protocol dated 20DEC10 and 10NOV11 with detailed study procedures are given in [Appendix 16.1.1](#). The study schedule is shown in [§ 9.5.1](#). The study schedule is described in the following paragraphs.

9.1.1 Screening; Visit 1: day -14/-7

The subjects were informed about the aims, procedures and possible risks of the study and were asked to sign the informed consent form. They were asked about medical and surgical past history, previous and concomitant medications and life style. Then they underwent a full physical examination, including BW and height measurement, physical abnormalities assessment, ECG recording, blood pressure (BP) and heart rate (HR) measurement and the collection of blood and urine samples for the routine clinical laboratory assays including haematology, blood chemistry, virology, serum pregnancy test for women and urine analysis. An abdominal echography (transient elastography by FibroScan®) for the assessment of liver fibrosis grade was also performed at the designated diagnostic centre ([§ 6.3.2](#)). Serum HCV ribonucleic acid level and HCV genotype were determined by polymerase chain reaction (PCR) assay. Each screened subject was identified by a progressive screening number.

9.1.2 Treatment phase; Visit 2, day 1, baseline, treatment week 1

The eligible subjects returned to the clinical centre in the early morning of day 1 and were questioned about the occurrence of AEs and the intake of concomitant treatments. Then, the patients were included in the study, if all the inclusion/exclusion criteria were satisfied, and a randomisation number was assigned. A physical examination was performed, vital signs and BW were measured and an ECG was recorded. A pre-dose blood sample was collected for the determination of baseline values of TNF- α , IL-6, ALT, AST, HA and platelets and for baseline routine clinical laboratory assays. The 1st injection of peginterferon α was planned to be performed at the study site. Baseline APRI was calculated. Afterwards, the patients were to take the 1st dose of ammonium chloride or matching placebo according to the randomisation list (at least 15 min before breakfast) and of ribavirin (in fed conditions) in the presence of the investigator or designee (see [§ 9.8](#)). The subjects received a supply of assigned investigational treatment sufficient for the 1st treatment week. The investigator instructed them about the dose regimen. Diary cards were given to the subjects for recording the administration times during the following week, the occurrence of AEs and the intake of concomitant treatments. The patients left the site after being reminded to come back in the early morning of day 8.

9.1.3 Visits 3-5, weeks 2-4

The subjects returned to the study site in the early morning of days 8, 15 and 22 and were questioned about occurrence of AEs and intake of concomitant treatments. A physical

examination including BW was performed and vital signs were measured. The drug accountability of the returned drug supply was planned as count of the returned unused units by the investigator. The fulfilled diary cards were checked for recording of any occurring AEs and intake of concomitant treatments. The 2nd, 3rd and 4th injection of peginterferon α had to be performed. Afterwards, the patients took the 1st doses of ribavirin and of ammonium chloride or matching placebo tablets relative to the 2nd, 3rd and 4th week. The subjects received a supply of assigned investigational treatment sufficient for each subsequent treatment week.

9.1.4 Visit 6, week 5

As visits 3-5, weeks 2-4. In addition, the occurrence of any liver impairment was ascertained by the assessment of decompensated liver failure. Subjects showing signs of decompensated liver failure had to discontinue the treatment. A pre-dose blood sample was collected to determine serum HCV ribonucleic acid and plasma TNF- α , IL-6, ALT, AST, HA and platelets. APRI was calculated. Blood and urine samples were collected for the routine clinical laboratory assays and serum pregnancy test. An ECG was recorded.

9.1.5 Visits 7-9, weeks 6-8

As visits 3-5, weeks 2-4.

9.1.6 Visit 10, week 9

As visit 6, week 5. The HCV ribonucleic acid was not determined.

9.1.7 Visits 11-13, weeks 10-12

As visits 3-5, weeks 2-4.

9.1.8 Visit 14, week 13 (final visit)

Diary cards were checked any occurring AEs and intake of concomitant treatments recorded in the patients' diary cards. A blood sample was collected to determine serum HCV ribonucleic acid and plasma TNF- α , IL-6, ALT, AST, HA and platelets. The subjects underwent a complete physical examination including measurement of BW, vital signs and ECG recording. The same clinical laboratory assays performed at screening with the exception of virology were performed. An abdominal echography (transient elastometry by FibroScan[®]) was performed in order to assess the general condition of liver parenchyma. An assessment of decompensated liver failure was performed. APRI was calculated.

With respect to the scheduled study days, a window of ± 3 days was allowed.

9.2 Discussion of study design, including the choice of control groups

The study design was chosen to investigate the efficacy in terms of liver protection, the safety and tolerability of ammonium chloride 500 mg tablets during the standard of care therapy (peginterferon and ribavirin) in comparison with placebo during the same standard of care therapy.

In 1999, the European Association for the Study of the Liver (EASL) issued a consensus statement on the management of hepatitis C. As also defined by the European Medicines Agency EMA, ribavirin in combination with recombinant pegylated interferon α (peginterferon) is now considered as the standard of care therapy. Several trials were conducted in hepatitis C virus patients treated with peginterferon/ribavirin combination therapy (21, 22, 23). Combining ribavirin with peginterferon enhances by 2 to 3-fold the treatment efficacy in the naïve population and by 10-fold in patients, who relapse following an initial response to interferon α monotherapy. Jensen *et al.* found that 28% of patients with hepatitis C virus genotype 1 infection achieved a RVR, defined as the absence of detectable hepatitis C virus ribonucleic acid after 4 weeks of treatment, and that 89% of those patients, who had a RVR, achieved a sustained virologic response at the end of a 24 week follow up after 24 weeks of treatment with the standard of care therapy (1).

The dose regimen of the standard of care therapy as well as the trial schedule and the trial population were planned in accordance with the EMA guideline on antiviral agents used against HCV (19) and the US National Institute of Health conference consensus statement of the management of hepatitis C (24).

The primary end-point was established after consideration that a primary and generally recognised index of hepatic sufferance is represented by ALT elevation. ALT is described in the Guideline on the Clinical Evaluation of Direct Acting Antiviral Agents intended for the Treatment of Chronic Hepatitis C (18), as the most important and significant serological parameter in this pathology, suitable for the evaluation of the liver condition. All the other parameters that were evaluated during the preclinical study (14), i.e. TNF- α , IL-6, bilirubin, AST as well as vital signs and routine clinical laboratory parameters were also monitored in the present study.

According to literature data, also TNF- α has an important role in liver degeneration from various aetiology (19). Therefore, the variation of this parameter observed in the preclinical study justified the monitoring of TNF- α also in the present study.

The viral load was also evaluated. The evaluation of RVR was included as a secondary end-point with the objective of investigating the potential positive effect of ammonium chloride added to the standard of care therapy on the viral load. In fact, an increase in IL-6, also called interferon β 2, that could have some action against the virus, was observed in the preclinical study after treatment with ammonium chloride (14).

Literature data report that a pH decrease is unfavourable to the entry of HCV into the cells (20). Considering that during the Phase I study a slight decrease in serum pH was reported after intake of ammonium chloride (10), some improvement in the antiviral activity was expected in the present study by adding ammonium chloride to the standard of care therapy.

The scheduled dose regimen for ammonium chloride 500 mg tablets was suggested by the patent originator, Kiassos, the Sponsor's Scientific Advisor, on the basis of his observations done in patients and in accordance with the usual recommended dose regimen of other products containing ammonium chloride. Comparable or higher doses are used in the clinical practice and approved in several countries like Switzerland, where Chloramon[®], Streuli, was marketed. Chloramon[®] was ammonium chloride 400 mg tablets. The indicated dose regimen was up to 12 g daily in the adult with the suggestion to subdivide the daily dose into more

daily intakes with 4-6 h intervals between administrations. The recommended dose regimen foresaw treatment periods of 3-4 days separated by short wash-out intervals.

Safety and tolerability of the treatment with ammonium chloride 500 mg tablets according to the same dose regimen were investigated in comparison with matching placebo in a previous Phase I trial performed at the Phase I Unit, Cross Research S.A., Switzerland (10). The previous study gave evidence of the safety and tolerability of ammonium chloride tablets in healthy male and female subjects.

For the evaluation of fibrotic degeneration of the liver, non-invasive methods were preferred. The use and the reliability of APRI and elastometry were based upon the literature (25, 26, 27).

9.3 Selection of study population

9.3.1 Inclusion criteria

1. Male and female hepatitis C virus infected patients aged 18-65 years inclusive;
2. hepatitis C virus infected patients relapsed after a previous 3 month standard of care therapy (peginterferon and ribavirin);
3. hepatitis C virus ribonucleic acid >600 IU/mL;
4. ALT > 1.3 x upper limit of normality range;
5. absence of advanced hepatic fibrosis: i.e. APRI < 2.2;
6. liver stiffness < 14 KPa by FibroScan®;
7. absence of detectable hepatitis B surface antigen and of HIV 1/2 antibodies. Absence of ongoing hepatitis A symptoms and abnormalities;
8. ability to comprehend the full nature and purpose of the study, including possible risks and side effects; ability to co-operate with the investigator and to comply with the requirements of the entire study;
9. signed written informed consent prior to inclusion in the study;
10. females of child-bearing potential following highly effective contraceptive methods according to the definition of Note 3 of ICH M3 Guideline (implants, injectables, combined oral contraceptives, some IUDs, sexual abstinence or vasectomised partner) (28) or females of not child-bearing potential permanently sterilised or in post-menopausal status for at least 2 years.

9.3.2 Exclusion criteria

1. Ascertained or presumptive hypersensitivity to the active principle and/or formulations ingredients;
2. history of anaphylaxis to drugs or allergic reactions in general;
3. prolonged treatment with any severely hepatotoxic drug product for the 4 weeks preceding the study;
4. concomitant underlying disease that the investigator deemed might interfere with the aims of the study: e.g. autoimmune chronic hepatitis, haemochromatosis, Wilson's disease and α -1 anti-trypsin deficiency, signs of decompensated liver failure, presence of either respiratory or metabolic alkalosis, liver cirrhosis defined by a Child-Pugh value > 5, haemoglobinopathies like thalassaemia and sickle cell anaemia;

5. any abnormality in physical examination, ECG or diagnostic tests, any data of medical history that the investigator deemed might interfere with the aims of the study;
6. neutropenia (<1200 neutrophils/ mm^3);
7. thrombocytopenia (≤ 70000 platelets/ mm^3);
8. abnormal value of albumin;
9. creatinine <50 mL/min;
10. abnormal glucose (with the exception of underlying diabetes of mild intensity: i.e. no glycaemia ≥ 150 mg/dL);
11. subjects likely to be non-compliant or unco-operative during the study according to the investigator or designee's judgement;
12. illiterate subjects;
13. pregnant or lactating females.

9.3.3 *Removal of subjects from therapy or assessment*

Enrolled subjects could be withdrawn for the following reasons:

- voluntary subject's withdrawal for any reason;
- at the discretion of the investigator;
- if an adverse reaction (including a concomitant illness) developed, believed by the investigator incompatible with the continuation of the study;
- the necessary administration of any drug that was not permitted by the exclusion criteria;
- failure to comply with the requirements of the protocol.

For each withdrawn subject, a complete final examination had to be performed at the time of withdrawal to document the subject's health conditions. The reason for withdrawal had to be reported in the CRF and in the subject's medical records.

9.4 Treatments

9.4.1 *Treatments administered*

Subjects assigned to the test treatment received the combination of:

- ammonium chloride 500 mg tablets
- peginterferon α -2a 180 μg /0.5 mL solution for injection
- ribavirin tablets

Subjects assigned to the reference treatment received the combination of:

- ammonium chloride matching placebo tablets
- peginterferon α -2a 180 μg /0.5 mL injectable solution
- ribavirin tablets

In other words, the test investigational product, ammonium chloride 500 mg tablets, or the matching placebo were added to the standard of care therapy (peginterferon and ribavirin) of hepatitis C for relapsers.

T and R are used to abbreviate test and reference (or control) treatment in the tables of the present report.

9.4.2 Identity of investigational product(s)

TEST (T)

Investigational medicinal product	Ammonium chloride tablets
Chemical formula	NH ₄ Cl
CAS number and MW	12125-02-9, 53.49
Manufacturer of the active ingredient	Merck KGaA, Darmstadt, Germany
Manufacturer of the finished product	Laboratorio Farmacologico Milanese s.r.l., Caronno Pertusella, Italy
Packaging and labelling	Pierrel Research IMP S.r.l, Italy
Pharmaceutical form	enteric coated tablets
Dose	500 mg
Administration route	Oral
Batch N.	01/02/09
Expiry date	FEB13

REFERENCE (R)

Reference product	Ammonium chloride matching placebo tablets
Manufacturer of the finished product	Laboratorio Farmacologico Milanese s.r.l., Caronno Pertusella, Italy
Packaging and labelling	Pierrel Research IMP S.r.l, Italy
Pharmaceutical form	enteric coated tablets
Administration route	oral
Batch N.	01/03/09
Expiry date	FEB13

The analytical certificates are enclosed in [Appendix 16.1.6](#).

9.4.3 Method of assigning patients to treatment groups

Patients were assigned to receive either ammonium chloride 500 mg tablets or the ammonium chloride matching placebo according to the randomisation schedule ([Appendix 16.1.7](#)) and the balanced design 1:1 active vs. placebo. The randomisation list was computer-generated by the CRO Biometry Unit using the PLAN procedure of the validated SAS for Windows Version 9.1.3 Service Pack 4 (30).

9.4.4 Selection of doses in the study

The scheduled dose and dose regimen of T and R treatments was suggested by the patent originator, Kiassos, the Sponsor's Scientific Advisor, on the basis of his observations done in patients and in accordance with the usual recommended dose regimen of other products containing ammonium chloride. Comparable or higher doses are used in the clinical practice

and approved in several countries like Switzerland, where Chloramon[®], Streuli was marketed. Chloramon[®] were ammonium chloride 400 mg tablets. The indicated dose regimen was up to 12 g daily in the adult with the suggestion to subdivide the daily dose into more daily intakes with 4-6 h intervals between administrations. The recommended dose regimen foresaw treatment periods of 3-4 days separated by short wash-out intervals.

9.4.5 Selection and timing of dose for each patient

All the subjects allocated to treatment T received ammonium chloride 500 mg tablets, which they took at the dose of 1.5 g b.i.d. for 3 days/week followed by 4 days of wash-out for a total duration of 12 weeks.

All the subjects allocated to treatment R (control treatment) received ammonium chloride matching placebo tablets, which they took according to the same dose regimen (3 days/week followed by 4 days of wash-out) for a total duration of 12 weeks.

Both treatments T and R were taken along with the standard of care combination therapy of HCV, i.e. peginterferon α -2a (180 μ g/week) + ribavirin (BW based dose of 1000-1200 mg/day).

9.4.5.1 Dose regimen

Ammonium chloride 500 mg or matching placebo tablets were self-administered at home (except for the morning of the day of each study visit) at the dose of 1.5 g (corresponding to 3 tablets) in the morning, at least 15 min before breakfast, and 1.5 g in the evening, at least 15 min before dinner, for a total daily dose of 3 g. Self administrations of ammonium chloride or matching placebo took place for 3 consecutive days, followed by 4 days of wash-out. The administration of ammonium chloride was performed on the same week days for the whole duration of the treatment, e.g. if in the 1st treatment week ammonium chloride was administered on Monday, Tuesday and Wednesday, in the following weeks ammonium chloride administrations were maintained on the same week days.

Peginterferon α -2a was injected as a once-weekly sub-cutaneous injection of 180 μ g. The injections of peginterferon were performed once weekly at the study site by the investigator or his/her deputy.

Ribavirin tablets were self-administered in fed conditions at a dose of 500 mg b.i.d. to subjects with BW < 75 kg and at a dose of 600 mg b.i.d. to subjects with a BW \geq 75 kg. In the morning of the visit days, the ribavirin dose was planned to be taken at the study site in the presence of the investigator or designee. Due to logistical reasons, this procedure was never applied (§ 10.2).

When the subjects weekly returned to the study site to undergo the study procedures, ammonium chloride was dispensed from the site pharmacy in an amount sufficient for each treatment week. Ribavirin was purchased by study subjects from public pharmacies.

9.4.5.2 *Route and method of administration*

Ammonium chloride/matching placebo tablets were orally administered as follows:

- three (3) tablets of 500 mg of ammonium chloride/matching placebo b.i.d. to be taken with a glass (approximately 250 mL) of still water, without chewing, in the morning, at least 15 min before breakfast, and in the evening, at least 15 min before dinner. The patients self-administered the IMP at home, except for the morning of the day of each study visit when the investigator or designee supervised patients' self-administration at the study site. Actual times of intake were recorded during the whole treatment period by the patients in their diary cards.

Peginterferon was injected as per standard therapy. Ribavirin was administered orally in fed conditions.

9.4.6 *Blinding*

This was a double-blind study. Each patient received either the add-on therapy with ammonium chloride or the add-on therapy with ammonium chloride matching placebo tablets. The tablets of ammonium chloride 500 mg and matched placebo were indistinguishable and were supplied in an identical packaging. Neither the patients nor the clinical staff were aware of the treatment administered.

Three copies of the randomisation list ([Appendix 16.1.7](#)) were generated and sealed in individual envelopes:

- One copy was sent to the Manufacturer for preparation of individual treatment patient boxes.
- One copy was kept at the CRO Quality Assurance Unit.
- One copy was retained by the CRO Biometry Unit.

Neither the members of the clinical staff nor the Clinical Project Leader nor the Clinical Research Associate/Monitor had access to the randomisation code unless for emergency reasons.

The CRO opened the randomisation code only when the data-entry was complete and the blind review report was issued and finalised by the Biometry Unit. The blind review report ([Appendix 16.1.9](#)) contained the assignment of subjects to the analysis sets and the listings of visit dates, AEs, previous and concomitant treatments, physical examination outcome, medical history, protocol deviations and the primary variable values. The Sponsor reviewed and approved the blind review report that was finalised before the code was opened and the data were analysed.

9.4.7 *Prior and concomitant medication and other constraints*

Any investigational drug other than ammonium chloride was not permitted during the study; prolonged treatment with any severely hepatotoxic drug product must have been stopped at least 4 weeks prior to study start and was not allowed during the trial.

9.4.8 Treatment compliance

The subjects took all the dispensed ammonium chloride 500 mg tablets or ammonium chloride placebo tablets at home during the treatment phase with the exception of the visits at the study sites. The first 3 tablets dispensed at each visit were taken in the presence of the investigator or designee at the study site. The investigator checked the treatment compliance by counting the units returned by the subjects when they came for the visits and recorded on the CRF the compliance with the allocated dose. The actual number of dispensed, taken and returned tablets was recorded. Similarly, the number of dispensed, taken and returned tablets of ribavirin and the time of the injection of peginterferon had to be recorded in the CRFs. Due to logistical reasons, the drug accountability concerning peginterferon and ribavirin was never reported in the CRFs. Neither drug accountability check nor compliance evaluation for peginterferon and ribavirin could be performed.

9.5 Efficacy and safety variables

9.5.1 Efficacy and safety measurements assessed and flow chart

9.5.1.1 ALT, TNF- α , IL-6, AST, HA, platelets and HCV ribonucleic acid

Venous blood samples for the determination of TNF- α , IL-6, ALT, AST, HA and platelets were collected before administration of the investigational product from a forearm vein at the following times:

- Visit 2 (baseline),
- Visit 6 (week 5),
- Visit 10 (week 9),
- Visit 14 (week 13, final visit)

Venous blood samples for the investigations on HCV ribonucleic acid were collected at the following times:

- Visit 1 (screening visit),
- Visit 6 (week 5 at pre-dose),
- Visit 14 (week 13, final visit)

Actual sampling times for each subject were recorded in the individual CRFs.

ALT, TNF- α , AST, platelets and IL-6 were determined in plasma and HA was determined in serum at the centralised laboratory, BARC Europe NV, Belgium, using validated methods. Blood samples collected at the clinical site were delivered by authorised carriers to the central laboratory.

HCV ribonucleic acid was determined in serum samples at the centralised laboratory (BARC Europe NV) using a PCR validated method with a lower limit of detection of 15 IU/mL. At the screening visit, the genotype of HCV was identified for the purpose of subjects' enrolment. Blood samples were collected at the study site and delivered by authorised carriers to the central laboratory.

9.5.1.2 *Assessment of decompensated liver failure*

The assessment of decompensated liver failure was performed at:

- Visit 6 (week 5),
- Visit 10 (week 9),
- Visit 14 (week 13, final visit)

The absence of decompensated liver failure was based on the following parameters:

1. physical aspect: the patient presented a normal BW, absence of serious jaundice both on the skin and sclera, normal activity, absence of abdominal swelling, no signs of ascites at percussion test, absence of legs oedema;
2. patient not in alkalosis (blood pH<7.45);
3. normal intellectual functions, absence of aphasia.

9.5.1.3 *Evaluation of liver fibrosis by abdominal echography*

Fibrotic status of the liver was evaluated by abdominal echography (transient elastometry by FibroScan®) at:

- Visit 1 (screening visit),
- Visit 14 (week 13, final visit)

The test was performed at a centralised diagnostic site (§ 6.3.2).

9.5.1.4 *Evaluation of liver fibrosis by APRI*

Fibrotic status of the liver was also evaluated by calculating the APRI. The APRI was calculated as described by Wai *et al.* (29): $APRI = [(aspartate\ aminotransferase / upper\ limit\ of\ normality\ range) / platelet\ count\ (10^9/L)] \times 100$ using the adopted AST values (ULN are 40 UI/L for women and 45 UI/L for men) and platelets measured on the same visit. APRI was calculated at the following visits in conjunction with availability of results of the clinical laboratory assays:

- Visit 1 (screening visit),
- Visit 2 (baseline),
- Visit 6 (week 5),
- Visit 10 (week 9),
- Visit 14 (week 13, final visit)

9.5.1.5 *Safety variables*

Safety and general tolerability of the ammonium chloride were based on the following assessments:

Record of adverse events

AEs were assessed throughout the study.

Physical examination

A full physical examination including the check of physical abnormalities and the measurement of BW was performed at all visits.

Information about the physical examination and demographic data was recorded by the investigator or designee in the source documentation at the clinical site and in the CRF. Significant findings/illnesses, reported after the start of the study and which met the definition of an AE, were recorded as AEs in the CRF.

Vital signs

Subjects' BP and HR were measured at rest (5 min in sitting position) by the investigator or his/her deputy at each study visit.

Electrocardiograms

12-lead resting ECGs were recorded and interpreted by the investigator at the following time points:

- Visit 1 (screening),
- Visit 2 (baseline),
- Visit 6 (week 5),
- Visit 10 (week 9),
- Visit 14 (week 13, final visit).

Laboratory analysis

Samples of blood and of urine were collected at the following times:

- Visit 1 (screening visit),
- Visit 2 (baseline),
- Visit 6 (week 5),
- Visit 10 (week 9),
- Visit 14 (week 13, final visit)

The following laboratory assays were performed:

Haematology: red blood cells (RBC), white blood cells (WBC) and leukocyte differential count, i.e. lymphocytes (absolute and relative count), monocytes (absolute and relative count), neutrophils (absolute and relative count), basophils (absolute and relative count), eosinophils (absolute and relative count); platelet count, haemoglobin, haematocrit; MCV; MCH; MCHC.

Blood chemistry: total protein, albumin, bilirubin (total and direct), cholesterol (total, HDL and LDL), triglycerides, creatinine, creatinine clearance, glycaemia, urea, uric acid, iron, ferritin, alkaline phosphatase, γ -GT, AST, ALT, LDH, creatine phosphokinase, cholinesterase (CHE), sodium, potassium, calcium, chloride, phosphate, magnesium.

Urinalysis: dipstick urinalysis for the semi-quantitative determination of specific gravity, pH, leukocytes, nitrite, protein, glucose, ketone bodies, urobilinogen, bilirubin and RBC (should the dipstick analysis have been abnormal and clinically significant, the urine sample would have been microscopically analysed searching for RBC, WBC, casts, crystals, bacteria, epithelial cells and yeasts).

Virology (screening visit only): HBs Ag, HAV Ab, HCV Ab, HIV 1/2

A serum pregnancy test was performed at the following times:

- Visit 1 (screening visit),
- Visit 6 (week 5),
- Visit 10 (week 9),
- Visit 14 (week 13, final visit)

Clinical laboratory assays were performed at the centralised laboratory BARC Europe NV, Belgium. The shipment of blood and urine samples from the study site was arranged by the centralised clinical laboratory.

For subjects' screening purposes, the investigator used any analysis performed *in loco* if not older than 2 weeks before the screening visit.

After the end of the study, all the study biological samples were destroyed.

9.5.1.6 Flow chart

The schedule of measurements and activities of the study is given below.

ACTIVITIES	Screening	Baseline						Final visit
Visit	V1	V2	V3 – V5	V6	V7-V9	V10	V11-V13	V14
			Weeks 2-4	Week 5	Weeks 6-8	Week 9	Weeks 10-12	Week 13
	Day -14/-7	Day 1	Days 8, 15, 22	Day 29	Days 36,43,50	Day 57	Days 64, 71,78	Day 85
Informed consent	x							
Demography	x							
Lifestyle	x							
Medical history	x							
Physical examination	x	x	x	x	x	x	x	x
Previous and concomitant treatments	x	x	x	x	x	x	x	x
Height	x							
BW	x	x	x	x	x	x	x	x
Routine clinical laboratory assays (haematology, blood chemistry, urinalysis)	x	x		x		x		x
Aspartate aminotransferase to platelet ratio index (APRI)	x	x		x		x		x
Virology (hepatitis A and B, HIV 1 and 2)	x							
Pregnancy test	x			x		x		x
BP	x	x	x	x	x	x	x	x
HR	x	x	x	x	x	x	x	x
ECG	x	x		x		x		x
Abdominal echography (transient elastometry by FibroScan®)	x							x
HCV RNA in serum	x			x				x
Inclusion/Exclusion criteria	x							
HCV genotype	x							
ALT, TNF- α , AST, HA, IL-6 and platelets		x		x		x		x
Peginterferon injection		x	x	x	x	x	x	
Ammonium chloride/placebo dispensation		x	x	x	x	x	x	
Assessment of decompensated liver failure				x		x		x
Diary cards delivery/check		x	x	x	x	x	x	x
AEs monitoring		x	x	x	x	x	x	x

9.5.2 *Appropriateness of measurements*

All parameters and measurements of the present study were reliable and accurate to accomplish study end-points. See § 9.2 for details on the choice and the rationale of the study parameters.

9.5.3 *Primary variables*

- Proportion of patients achieving ALT normalisation (i.e. achieving a value of ALT within the normal range) after 12 weeks of treatment.

9.5.3.1 *Secondary variables*

Efficacy variables:

- Proportion of subjects achieving normalisation of the value of ALT, TNF- α , AST, APRI, serum HA and IL-6 after 4, 8 and 12 weeks of treatment;
- change versus baseline (visit 2, day 1) of ALT, TNF- α , AST, APRI, HA and IL-6 after 4, 8 and 12 weeks of treatment;
- proportion of subjects achieving a RVR, defined as the absence of detectable HCV RNA, after 4 weeks of treatment;
- proportion of subjects achieving an EVR, defined as a HCV RNA level decrease by at least 2 logarithmic units of IU/mL, after 12 weeks of treatment.

Safety variables:

- Treatment emergent AEs (TEAEs), vital signs (BP, HR), ECG, physical examinations, laboratory parameters, liver stiffness by abdominal echography (transient elastography by FibroScan[®]).

9.5.4 *Drug concentration measurements*

Not applicable.

9.6 *Data quality assurance*

Monitoring visits were conducted by appropriate staff of Zeincro Hellas S.A. (§ 6.4.1). The study was monitored by means of on-site visits and regular inspection of the CRF.

9.7 *Statistical methods planned in the protocol and determination of sample size*

9.7.1 *Statistical and analytical plans*

The statistical and analytical plan as well as the shells of tables and listings of the present CSR were detailed in the SAP document issued on 23JAN13 (see [Appendix 16.1.9](#)). The data documented in this trial and the parameters measured were described using classic statistics, i.e. mean, SD, CV(%), median, minimum and maximum values, for quantitative variables and frequencies for qualitative variables.

Data not available were evaluated as “missing values”.

The statistical analysis on efficacy, demography and safety data was performed using SAS[®] software version 9.1.3 Service Pack 4 for Windows[®] (30).

All the subjects who signed the informed consent form were coded with “unique subject identifiers” when data were extracted from the study database into the domains of the CDISC SDTM model. The unique subject identifier consists of the sponsor study code (KGR03-P03), the 3-digit site number (001), the 4-digit screening number (S001, S002, etc.) and the 3-digit randomisation number (001, 002, etc.). Study code, site number, screening number and randomisation number are separated by slashes (“/”). The last 7 digits of the unique subject identifier, corresponding to the screening + the randomisation numbers will be used to identify the subjects in in-text tables or wording (if applicable).

9.7.1.1 Study populations

The following populations were defined:

- Safety population: all randomised subjects, according to their actual treatment, who received at least one dose of the IMP.
- Intention-to-treat population (ITT): all randomised subjects, according to their randomisation code, irrespective of the treatment received.
- Full analysis set (FAS): all randomised subjects, according to their actual treatment, who received at least one dose of the IMP and had at least one post-baseline assessment of ALT.
- Per-protocol population (PP): all randomised subjects, according to their actual treatment, who did not violate any entry condition and had no major protocol deviation between randomisation and study completion.

Major protocol deviations from the protocol procedures included:

- violations of inclusion/exclusion criteria;
- study discontinuation;
- concomitant medications not allowed, i.e. prolonged treatment with any severely hepatotoxic drug product;
- missing ALT data;
- missing injections of peginterferon;
- compliance of ammonium chloride out of range (80-120%);
- deviations from the window of ± 3 days in the visit schedule.

The assessment of protocol deviations and the inclusion of subjects in the PP population was verified after data entry was complete and prior to the unblinding of treatment code. Therefore, a blind review report was issued before the code opening.

The efficacy analysis was performed on ITT and FAS populations, whereas the safety analysis was performed on the safety population. The efficacy analysis was planned to be performed also on the PP population according to the study protocol (see § 11.1 for results).

9.7.1.2 Analysis on demographic, baseline and background characteristics

Critical demographic characteristics were examined according to qualitative or quantitative data. Qualitative data (e.g. life style, race) were summarised by means of contingency tables. Quantitative data (e.g. age, BW) were summarised using quantitative descriptive statistics such as mean, standard deviation, minimum and maximum values.

The analysis on demographic and baseline characteristics included the following data: subjects' disposition, subjects' assignment to analysis sets, demographic data, lifestyle data, inclusion and exclusion criteria at screening, fertility status and use of contraceptive methods, protocol deviations, medical history, prior and concomitant treatments and remedies other than pharmacological treatments. All the data were listed. Subjects' disposition, subjects' assignment to analysis sets, demographic data, lifestyle data, inclusion and exclusion criteria at screening, protocol deviations, prior and concomitant treatments and remedies other than pharmacological treatments were also summarised in tables.

9.7.1.3 Analysis of the compliance

Compliance was evaluated on the basis of the information reported in the CRF. From visit 2 to visit 14, the following data were collected:

- A: number of IMP tablets administered;
- B: number of IMP tablets dispensed;
- C: number of IMP tablets taken at the previous visit;
- D: number of IMP tablet returned from the previous visit.

The evaluation of the compliance was done at each visit, using the following formula:

$$\frac{C-D}{A+B} \times 100$$

The numerator (C-D) is the number of IMP tablets actually used by the subject. The denominator (A+B) is the scheduled number of IMP tablets to be used. The overall compliance was calculated as the mean of the single compliance values for all the visits. A range between 80-120% was considered satisfactory to declare a subject compliant.

9.7.1.4 Efficacy analysis

The evaluation of the efficacy of the addition of ammonium chloride to the standard of care therapy of hepatitis C was based on ALT, TNF- α , AST, APRI, serum HA and IL-6 at baseline (visit 2, week 1) and after 4, 8 and 12 weeks of treatment and on HCV RNA after 4 and 12 weeks of treatment.

The ITT population was considered as the primary analysis population. Patients with missing assessments of ALT, TNF- α , AST, APRI, serum HA or IL-6 level after 4, 8 and 12 weeks of treatment were termed as not achieving normalisation and the change from baseline values at that particular time point was considered missing. Patients with missing values of HCV RNA

after 4 and 12 weeks of treatment were termed as not achieving a RVR or an EVR respectively.

The FAS and the PP populations were considered as supportive to the ITT in the statistical analysis.

Observed case analysis (whereby missing assessments were excluded) was performed on the FAS and PP populations.

For the efficacy analysis, the following definitions were applied:

- ALT normalisation: ALT values within the normal range, i.e. ALT<42 U/L for men and ALT<32 U/L for women;
- TNF- α normalisation: TNF- α within the normal range, i.e. TNF- α <8.27 pg/mL;
- AST normalisation: AST values within the normal range, i.e. AST<38 U/L for men and AST<32 U/L for women;
- APRI normalisation: APRI within the normal range, i.e. APRI<0.5;
- HA normalisation: HA within the normal range, i.e. HA<75 μ g/L;
- IL-6 normalisation: IL-6 within the normal range, i.e. IL-6<12.0 pg/mL;
- RVR was defined as absence of detectable HCV RNA after 4 weeks of treatment;
- EVR was defined as a HCV RNA decrease by at least 2 logarithmic units of IU/mL after 12 weeks of treatment.

9.7.1.5 Primary efficacy analysis

The proportion of subjects achieving normalisation of ALT after 12 weeks of treatment was compared between treatments by a two group χ^2 test with a 0.05 two-sided significance level.

9.7.1.6 Statistical analysis of secondary efficacy parameters

The proportion of patients achieving normalisation of ALT, TNF- α , AST, APRI, HA and IL-6 after 4, 8 or 12 weeks of treatment and the proportion of patients achieving RVR and EVR was compared between treatments by a two group χ^2 test with a 0.05 two-sided significance level.

The changes from baseline of ALT, TNF- α , AST, APRI, serum HA and IL-6 after 4, 8 and 12 weeks of treatment were compared between treatments by a two-group t-test or a Wilcoxon sum-rank test in case of lack of normality.

9.7.1.7 Analysis of safety parameters

Adverse events

AEs were coded by System Organ Class (SOC) and Preferred Term (PT), using the Medical Dictionary for Regulatory Activities (MedDRA).

AEs were classified as Pre-Treatment AEs (PTAEs) and TEAEs, according to the period of occurrence, as follows:

- Pre-treatment AEs: all AEs occurring before the first dose of the IMP or matching placebo.

- TEAEs: all AEs which occurred or worsened during or after the first dose of the IMP or matching placebo.

Individual PTAEs and TEAEs were listed. No summary table was provided for the PTAEs. TEAEs were summarised by treatment and overall. The number and percentage of subjects with any TEAE and the number of TEAEs was presented by SOC and PT, seriousness, relationship to treatment and severity.

Vital signs and BW

Values of vital signs and BW were listed and summarised by treatment group and visit using descriptive statistics.

Physical examinations

Physical abnormalities were listed.

ECGs parameters

Overall ECG interpretation (Normal, Abnormal/NCR, or Abnormal/CR) was listed and summarised in contingency tables. ECG parameters were listed and summarised using descriptive statistics by treatment groups and time-point.

Laboratory data

The values of laboratory parameters at each analysis, the changes from baseline of ALT, TNF- α , AST, APRI, serum HA and IL-6 after 4, 8 and 12 weeks of treatment and the abnormal laboratory values found at any analysis were listed.

The change in laboratory parameters at Visits 6, 10 and 14 vs. baseline (or screening assessment if baseline is missing) were summarised in shift tables.

Abdominal echography

Abdominal echography interpretation (Normal, Abnormal/NCR, or Abnormal/CR) was listed and summarised in contingency tables. Liver stiffness was listed and summarised by treatment groups and time-point using descriptive statistics.

9.7.2 Determination of sample size

The sample size for this study was not based on any formal power calculation. The number of 70 patients was deemed as sufficient in order to obtain reliable results for the preliminary exploratory purposes of the study. A maximum drop-out rate of 15% was expected. Therefore, 60 patients were expected to complete the trial as per protocol.

9.8 Changes in the conduct of the study or planned analyses

The study protocol was amended for the first time on 17DEC10 before the inclusion of the first study subject. Along protocol amendment 1, also the final version 2.0 of the amended protocol was issued on 20DEC10. Several changes were introduced:

- Due to technical aspects, the analysis of hepatitis A virus (HAV) Ag was replaced with the analysis of HAV Ab for the screening purposes. In the investigator's opinion, the change could not have any impact on the reliability of analysis and evaluation.

- For practical and technical reasons, the analysis of blood ammonia was replaced with blood pH which correlates with the presence of blood ammonia.
- Research Diagnostics, Ilioupolis, Greece, was designated as central laboratory for all clinical and efficacy laboratory analyses.
- Prof. Diamantis Kiassos was introduced as Sponsor Scientific Advisor.
- Angelo Vaccani replaced Ottavia Annoni at CROSS for coordination of the trial.
- Due to the retirement of the Principal Investigator, the initially recruited study site 2 was replaced by a different hospital (Ippokratio General Hospital, Athens).

On 28FEB11, the centralised laboratory designated for the clinical laboratory assays was changed. BARC Europe NV, Belgium, replaced Research Diagnostics as centralised laboratory for all the study clinical laboratory assays.

On 13MAY11, the centralised centre designated for the abdominal echography was changed from Iaso General Clinic, Holargos, Greece to Diagnostic & Therapeutic Centre of Athens, Hygea S.A., Marousi, Greece. The laboratory change was reported in a note to the file, which reported also the closure of study site 2 which did not include any patient. An inclusion criterion was also changed as reported in the same note to file. Subjects with HAV Ab positivity, but in the absence of ongoing hepatitis A symptoms could be included in the study.

The enrolment rate was slow mainly due to the inclusion criteria concerning laboratory parameters. In order to speed up the enrolment rate, the study protocol was amended on 10NOV11. Along protocol amendment 2, also the final version 3.0 of the amended protocol was issued on 10NOV11. Several changes were introduced:

- for inclusion criterion 4, ALT>1.3 instead of 1.5 x upper limit of normality range,
- for inclusion criterion 5, absence of advanced hepatic fibrosis: i.e. APRI<2.2 instead of APRI<2. The inclusion criterion was changed taking in consideration that the adopted upper level of normality for AST applied during the study was 40 UI/L for women and 45 UI/L for men,
- for inclusion criterion 7, absence of detectable hepatitis B surface antigens, of HIV 1/2 antibodies and of ongoing hepatitis A symptoms and abnormalities instead of absence of detectable hepatitis A antibodies, B surface antigens and of HIV 1/2 antibodies,
- for exclusion criterion 6, neutropenia defined as neutrophil count<1200 neutrophils/mm³ instead of <1500 neutrophils/mm³,
- for exclusion criterion 7, thrombocytopenia defined as platelet count≤70000 platelets/mm³ instead of ≤100000 platelets/mm³,
- for exclusion criterion 10, abnormal glucose defined as glycaemia ≥150 mg/dL instead of ≥140 mg/dL.

The changes were promoted and justified by the principal investigator and the Scientific Advisor as more appropriate for the safety standard parameters in patients with hepatitis C.

In addition, the use of any analysis performed *in loco*, if not older than 2 weeks before the screening visit, was introduced to avoid the repetition of blood withdrawals for patients under screening.

In the final version 3.0 of the amended protocol, also the previous changes documented through notes to the file were incorporated.

The dose regimen applied to ribavirin during the study was twice a day instead of once a day. The change from the protocol was documented in the monitoring activity documents. In addition, ribavirin was purchased by the patients at the public pharmacies whenever needed in accordance with the national health service procedures. Therefore, the purchased amount did never correspond to the amount sufficient for one treatment week. Moreover, the investigator or deputies could not receive the unused units at the study site and no ribavirin accountability could be performed. The intake of ribavirin by the patients could be verified only by check of the diary cards.

Blood pH measurement planned in the study protocol to investigate the presence of ammonia in blood was never performed during the study due to technical and ethical reasons. Usually, the blood pH is measured in arterial blood. The measurement in venous blood could be acceptable as a surrogate measure of the parameter, similarly to what done in the previous Phase I study (10). The parameter could not be measured at the centralised laboratory due to the inevitable delay elapsing between the time of blood collection and the assay execution in two different locations. The possibility of performing the assay *in loco* was inquired. However, the investigator refused to perform the assay and gave the justification that it would have been unethical to subject the study patients to an additional arterial blood collection and that the equipment for blood pH determination had access restrictions which rendered the procedure unfeasible.

10 STUDY SUBJECTS

10.1 Disposition of subjects

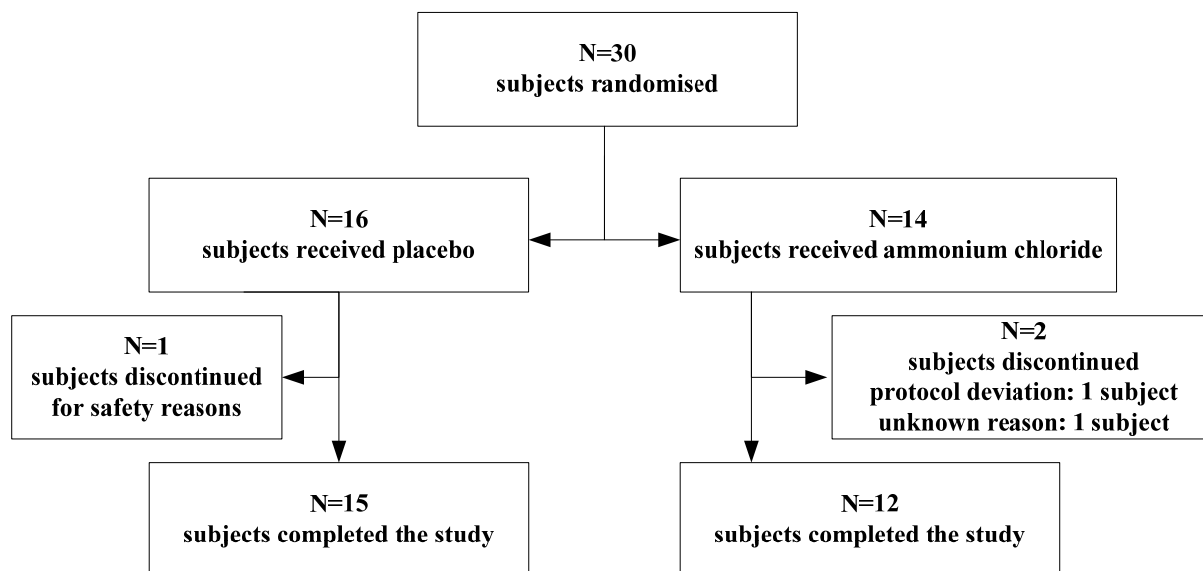


Figure 10.1.1 Subject disposition

The investigator included and randomised 30 subjects. Disposition of subjects is summarised in [Table 14.1.1.1](#). After inclusion, 14 subjects received the test treatment and 16 subjects received the reference treatment. Two (2) of the subjects receiving the test treatment and one placebo recipient discontinued the study prematurely, whilst the remaining 12 subjects receiving the test treatment and the remaining 15 placebo recipients completed the study (Appendix 16.2.1, [Listing 16.2.1.1](#); Appendix 16.2.4, [Listing 16.2.4.1](#)). Study dates are shown in Appendix 16.2.10, [Listing 16.2.10.5](#).

The study was prematurely interrupted according to Sponsor's decision after 27 subjects completed the study.

Details on the discontinued subjects are presented in the table below:

Table 10.1.1 Listing of subjects who discontinued the study

Subject	Discontinuation date	Investigational treatment	Exposure	Reason for discontinuation
S002/001	20APR11	T	18+3 tablets Treatment week 1	Protocol deviation
S036/015	20FEB12	R	3 tablets	Safety reasons
S048/026	07JUN12	T	3 tablets	Unknown reasons

Source: [Listing 16.2.1.1](#), [Listing 16.2.5.1](#) and [Listing 16.2.10.6](#)

10.2 Protocol deviations

Many protocol deviations were observed. Some of the protocol deviations are listed in Appendix 16.2.2, [Listing 16.2.2.1](#) and summarised in [Table 14.1.1.6](#)).

Major protocol deviations were reported for the 30 randomised subjects.

In detail, a study procedure deviation was reported for all 30 randomised subjects with respect to the intake of ribavirin. The accountability of dispensed, taken and returned ribavirin units was never reported in the CRF thus making it impossible to evaluate the compliance to the ribavirin dose regimen. The protocol violation consisted in the following: ribavirin was neither dispensed by nor returned to the study site by the patients. The patients purchased ribavirin from public pharmacies whenever needed in accordance with the national health service procedures (see also § 9.8).

The major study procedure deviations included also, for some subjects, the signature of the informed consent form after subjects had already undergone some study procedures.

Other major protocol deviations were violations of inclusion and exclusion criteria reported for 7 subjects (50%) receiving the test treatment and for 5 subjects (31.3%) receiving the reference treatment. In detail, inclusion criterion 6 on the value of liver stiffness was violated for several subjects, whilst the measurement was not performed for other subjects.

Inclusion criterion 2 was violated for subject S052/030. The subject was screened for a first time in conditions of relapse after a previous 3 month standard of care therapy (peginterferon and ribavirin), but the subject withdrew the consent one day later. After 4 months, the investigator included and randomised again the same subject, whilst he had been under antiviral therapy in the meanwhile, thus no longer satisfying the inclusion criterion of being relapsed after a previous antiviral therapy.

Other inclusion criteria violations included those of the minimum ALT value (inclusion criterion 4), the maximum blood glucose value (exclusion criterion 10) and missing results of haematology tests at screening. However, it is also to be kept in consideration that the normality range of ALT changed during the study. The range 10-65 U/L applied for subjects S035/014, S039/018 and S040/019 did not allow formally satisfying the inclusion criterion 4 due to ALT values respectively of 66, 73 and 83 U/L. If the range 10-41 U/L for males and the range 10-31 U/L for females is applied instead, the 3 subjects did not violate the inclusion criterion.

In addition, the following protocol deviations were reported (see [Table 10.2.1](#)):

Table 10.2.1 Listing of subjects with protocol deviations other than those listed in Appendix 16.2.2, Listing 16.2.2.1

Subject	Protocol deviation
S002/001	Lost to follow up after study discontinuation
S016/007	Incomplete source documents
S016/007	AEs recorded in the patient's diary cards were not reported in the CRF
S017/006	Incomplete source documents
S017/006	AEs recorded in the patient's diary cards were not reported in the CRF
S022/008	Violation of inclusion criterion 7 due to positivity to HIV at screening
S023/010	The amended informed consent form (written information for subjects/informed consent form, version 4.0, 10NOV11, Appendix 16.1.3) was not signed by the patient
S024/009	The amended informed consent form (written information for subjects/informed consent form, version 4.0, 10NOV11, Appendix 16.1.3) was not signed by the patient
S026/011	The amended informed consent form (written information for subjects/informed consent form, version 4.0, 10NOV11, Appendix 16.1.3) was not signed by the patient
S031/013	Enrolment based on laboratory assays performed <i>in loco</i> according to the amended protocol, final version 2.0, before approval obtainment
S046/024	The amended informed consent form (written information for subjects/informed consent form, version 4.0, 10NOV11, Appendix 16.1.3) was not signed by the patient
S049/027	The clinical laboratory results used for subject's screening were not performed at the study site laboratory
S050/028	The clinical laboratory results used for subject's screening were not performed at the study site laboratory
S052/030	The abdominal echography was not repeated on the occasion of the second subject's screening
S052/030	The amended informed consent form (written information for subjects/informed consent form, version 4.0, 10NOV11, Appendix 16.1.3) was not signed by the patient
<i>Source: Protocol Deviation Forms (see documents of monitoring activities)</i>	

11 EFFICACY EVALUATION

11.1 Data set analysed

The inclusion of subjects in the ITT, the FAS and the PP populations was performed prior to the opening of the treatment code and before statistical analysis. Results of validation of subjects' data are shown in Appendix 16.2.3, [Listing 16.2.3.1](#). In the listing, reasons are given for the exclusion of each subject from the PP, the FAS and the ITT population.

During the study, 30 subjects received at least one dose of treatment and were included in the safety and ITT populations. Twenty-seven (27) received at least one dose of treatment and had at least one post-baseline ALT measurement: these subjects were included in the FAS. No subject was included in the PP population, because at least one major protocol violation was reported for all the 27 completers. The size of the study data sets is summarised in [Table 14.1.1.2](#) and in the table below.

The safety analysis was performed on the safety population, whereas the efficacy analysis was performed on the FAS and the ITT populations.

Table 11.1.1 Number of subjects in the analysis data sets

Population	T	R	Total
PP	0	0	0
FAS	12	15	27
ITT	14	16	30
Safety population	14	16	30

Source: [Table 14.1.1.2](#)

11.2 Demographic and other baseline characteristics

Individual demographic data are listed in Appendix 16.2.4, [Listing 16.2.4.3](#).

Baseline demographic data including sex distribution and age, height and BW at study entry are summarised in [Table 14.1.1.3](#) and in the following table.

Table 11.2.1 Summary of sex distribution and mean \pm SD age, height and BW

Population	Treatment	Sex		Age (y)	Height (cm)	BW (kg)
		Males	Females			
Safety and ITT	T	8 (57.1%)	6 (42.9%)	34.1 \pm 7.9	175.4 \pm 7.5	80.78 \pm 12.87
	R	15 (93.8%)	1 (6.3%)	41.2 \pm 14.3	170.6 \pm 10.3	78.54 \pm 24.26
FAS	T	7 (58.3%)	5 (41.7%)	34.5 \pm 8.0	175.7 \pm 7.7	81.50 \pm 12.99
	R	14 (93.3%)	1 (6.7%)	41.8 \pm 14.6	171.5 \pm 10.2	80.33 \pm 24.42

Source: [Table 14.1.1.3](#)

At study entry, all the included patients had chronic hepatitis C (Appendix 16.2.10, [Listing 16.2.10.1](#)). HCV genotyping was investigated at screening. The results of the genotype analysis are listed in Appendix 16.2.8, [Listing 16.2.8.4](#) together with the assay of HAV and HCV antibodies, HBs antigen and HIV 1/2.

The results are summarised in the table below.

Table 11.2.2 Summary of HCV genotype and reactivity to other viruses antibodies/antigens (number of subjects)

Treatment	Virology assays			HCV genotype					
	HAV antibodies	HIV 1/2	Missing	1b	3a	1a	2	4h	Missing
T	6	0	2	3*	3	1	1	0	6
R	8	1	3	2	9	1	0	1	3

*: Subtype was not specified for one subject (S014/04)

Source: [Listing 16.2.8.4](#) and [Listing 16.2.10.6](#)

The frequency of subjects positive to the HAV antibodies but without ongoing infection symptoms or abnormalities was similar in the 2 treatment groups. Almost the half of subjects in each treatment group was positive to HAV antibodies at screening. One subject (S022/008) was randomised though positive to HIV at screening.

Most frequent HCV genotypes among the subjects receiving the test treatment were 1b and 3a (2 and 3 subjects respectively, because genotype 1 without further specifications was found for one subject). Nonetheless, data about the HCV genotype were missing for 6 subjects. The most frequent HCV genotype among the placebo recipients was 3a (9 subjects).

HCV RNA was determined at screening. The baseline value did not satisfy the inclusion criterion 3 for one subject (S031/013) who had less than 600 IU/mL (Appendix 16.2.8, Listing 16.2.8.4; Appendix 16.2.6, [Listing 16.2.6.7](#)). For 6 subjects, the baseline value of HCV RNA was missing.

At the abdominal echography, most subjects showed a low grade fibrosis with a liver stiffness value <14 KPa, with the exception of subjects S002/001, S038/017 and S041/020 who had a value >14KPa and subject S022/008 who had a borderline higher value (14.1 KPa). For 2 other subjects (S039/018 and S040/019), the baseline liver stiffness value was missing (Appendix 16.2.10, [Listing 16.2.10.7](#)).

ALT measured at the screening was >1.3 x the upper limit of the normality range for most included subjects. Subject S031/013 was included with an ALT of 50 U/L which was <1.3x41 U/L.

The screening value of APRI was missing for subjects S017/006, because haematology results were not available for the screening (see Appendix 16.2.2, [Listing 16.2.2.1](#)). For all subjects from S035/014 to the last screened S052/030, the screening value of APRI was missing among the clinical laboratory results (Appendix 16.2.8, [Listing 16.2.8.2](#)). However, APRI, calculated for these subjects with their own screening values of AST and platelets, satisfied the inclusion criteria.

All patients underwent also a full physical examination. Outcome of individual examinations is listed in [Listing 16.2.10.2](#). The only abnormalities reported at the screening were thyroid disorders for the placebo recipient S024/009 and depression and schizophrenia for subject S026/011 receiving the test treatment.

At study entry, the medical and surgical histories were collected for all patients (Appendix 16.2.10, [Listing 16.2.10.1](#)). Underlying diseases were few and included: depression (subjects S014/004 and S026/011 receiving the test treatment and subject S010/002 receiving placebo), deficiency of glucose-6-phosphate dehydrogenase (S022/008 receiving placebo), osteoporosis (S023/010 receiving test), thyroid disorders (S024/009 receiving placebo) and schizophrenia (S026/011 receiving test).

Lifestyle habits of study participants were recorded and summarised in [Table 14.1.1.4](#).

Three (3) subjects (S010/002, S024/009 and S026/011) were under treatment with at least one previous medication at study entry. The frequency of subjects with any prior or concomitant treatment is presented in [Table 14.1.1.7](#). No remedy other than pharmacological treatments was used by the subjects at study entry ([Table 14.1.1.8](#)). All previous treatments, which the subjects were taking against underlying diseases, were continued during the study.

Seven (7) women were included in the study. Six (6) of them had no child-bearing potential due to menopause, surgical sterilisation or obesity. One fertile woman was abstinent ([Appendix 16.2.4](#), [Listing 16.2.4.6](#)).

11.3 Measurement of treatment compliance

The investigator checked the treatment compliance by inquiring the subjects when they returned to the clinic and recorded on the CRF the compliance with the allocated treatment. The actual number of dispensed, taken and returned unused tablets was recorded. Treatment compliance was verified at each visit of the treatment phase by the investigator or deputy by counting the unused tablets returned by subjects. All the completer subjects had a 100% compliance ([Appendix 16.2.5](#), [Listing 16.2.5.1](#)) with the IMP.

The compliance with the dose regimen of peginterferon and ribavirin could not be evaluated (§ 9.8).

11.4 Efficacy results and tabulation of individual subject data

11.4.1 Analysis of efficacy data: ALT, TNF- α , IL-6, AST, HA, APRI and HCV ribonucleic acid

Individual values and individual changes from baseline of ALT, TNF- α , AST, APRI, HA and IL-6 are listed respectively in [Appendix 16.2.8](#), [Listing 16.2.8.5](#), [Listing 16.2.8.6](#), [Listing 16.2.8.7](#), [Listing 16.2.8.8](#), [Listing 16.2.8.9](#) and [Listing 16.2.8.10](#).

Individual values of ALT, TNF- α , AST, APRI, HA and IL-6 after 4, 8 and 12 weeks of treatment and the achievement of their normalisation are listed in [Appendix 16.2.6](#), [Listing 16.2.6.1](#), [Listing 16.2.6.2](#), [Listing 16.2.6.3](#), [Listing 16.2.6.4](#), [Listing 16.2.6.5](#) and [Listing 16.2.6.6](#). Individual values of HCV ribonucleic acid at screening and after 4 and 12 weeks of treatment and the achievement of EVR and RVR are listed in [Appendix 16.2.6](#), [Listing 16.2.6.7](#).

11.4.1.1 Normalisation of ALT

The proportion of subjects achieving normalisation of ALT after 4, 8 and 12 weeks of treatment is summarised in the contingency [Table 14.2.1.1](#). The outcome of the comparison between treatments of the proportion of subjects achieving normalisation is summarised in [Table 14.2.1.2](#). Results are summarised in the table below.

Table 11.4.1.1 Proportion of subjects achieving normalisation of ALT after 4, 8 and 12 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)

	ITT population			FAS population		
	T	R	χ^2	T	R	χ^2
	N=14	N=16	p-value	N=12	N=15	p-value
After 4 weeks	6 (42.9)	10 (62.5)	0.2820	6 (50.0)	10 (66.7)	0.3811
After 8 weeks	8 (57.1)	9 (56.3)	0.9607	8 (66.7)	9 (60.0)	0.7215
After 12 weeks	7 (50.0)	9 (56.3)	0.7321	7 (58.3)	9 (60.0)	0.9302

Source: Table 14.2.1.1 and Table 14.2.1.2

Changes from baseline in ALT values after 4, 8 and 12 weeks of treatment are summarised by treatment group in Table 14.2.1.3. The outcome of the comparison between treatments of the changes from baseline is summarised in Table 14.2.1.4. Results are summarised in the table below.

Table 11.4.1.2 ALT (U/L) change from baseline after 4, 8 and 12 weeks of treatment (mean \pm SD). Outcome of the statistical comparisons between treatments (t test p-value)

	ITT population			FAS population		
	T	R	T test	T	R	T test
	N=12	N=15	p-value	N=12	N=15	p-value
After 4 weeks	-60.3 \pm 98.1	-76.5 \pm 60.0	0.6015	-60.3 \pm 98.1	-76.5 \pm 60.0	0.6015
After 8 weeks	-71.3 \pm 92.2	-81.5 \pm 53.6	0.7218	-71.3 \pm 92.2	-81.5 \pm 53.6	0.7218
After 12 weeks	-63.4 \pm 99.8	-75.2 \pm 57.7	0.7035	-63.4 \pm 99.8	-75.2 \pm 57.7	0.7035

Source: Table 14.2.1.3 and Table 14.2.1.4

Among the subjects receiving the test treatment (FAS), the proportion of subjects achieving normalisation of ALT improved after 8 weeks (from 50 to 66.7%) but then decreased to 58.3% after 12 weeks. The proportion of subjects with normalised ALT was 66.7% after 4 weeks of treatment and 60% after 8 and 12 weeks of treatment among the placebo recipients. On average, the change from baseline in ALT also showed a stronger improvement after 8 weeks than after 12 weeks in both treatment groups. No statistically significant difference between ammonium chloride and matching placebo was detected by comparing either the proportion of subjects with ALT normalisation or the ALT change from baseline.

11.4.1.2 Normalisation of TNF- α

The proportion of subjects achieving normalisation of TNF- α after 4, 8 and 12 weeks of treatment is summarised in the contingency Table 14.2.2.1. The outcome of the comparison between treatments of the proportion of subjects achieving normalisation is summarised in Table 14.2.2.2. Results are summarised in the table below.

Table 11.4.1.3 Proportion of subjects achieving normalisation of TNF- α after 4, 8 and 12 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)

	ITT population			FAS population		
	T	R	χ^2	T	R	χ^2
	N=14	N=16	p-value	N=12	N=15	p-value
After 4 weeks	2 (14.3)	2 (12.5)	0.8859	2 (16.7)	2 (13.3)	0.8086
After 8 weeks	3 (21.4)	5 (31.3)	0.5439	3 (25.0)	5 (33.3)	0.6375
After 12 weeks	1 (7.1)	6 (37.5)	0.0499	1 (8.3)	6 (40.0)	0.0621

Source: Table 14.2.2.1 and Table 14.2.2.2

Changes from baseline in TNF- α values after 4, 8 and 12 weeks of treatment are summarised by treatment group in [Table 14.2.2.3](#). The outcome of the comparison between treatments of the changes from baseline is summarised in [Table 14.2.2.4](#). Results are summarised in the table below.

Table 11.4.1.4 TNF- α (pg/mL) change from baseline after 4, 8 and 12 weeks of treatment (mean \pm SD). Outcome of the statistical comparisons between treatments (t test p-value)

	ITT population			FAS population		
	T	R	T test	T	R	T test
	N=11	N=15	p-value	N=11	N=15	p-value
After 4 weeks	2.695 \pm 3.938	6.485 \pm 19.949	0.6461	2.695 \pm 3.938	6.485 \pm 19.949	0.6461
After 8 weeks	5.888 \pm 7.92	4.995 \pm 10.111	0.5400	5.888 \pm 7.92	4.995 \pm 10.111	0.5400
After 12 weeks	10.389 \pm 13.449	7.002 \pm 22.212	0.0362	10.389 \pm 13.449	7.002 \pm 22.212	0.0362

Source: [Table 14.2.2.3](#) and [Table 14.2.2.4](#)

Among the subjects receiving the test treatment (FAS), the proportion of subjects achieving normalisation of TNF- α improved after 8 weeks (from 16.7 to 25%) but then decreased to 8.3% after 12 weeks. The proportion of subjects with normalised TNF- α increased from 13.3% after 4 weeks of treatment to 33.3% after 8 and to 40% after 12 weeks of treatment among the placebo recipients.

The change from baseline in TNF- α showed a progressive worsening after 8 weeks and then after 12 weeks in the test group, whilst it showed an improvement up to 8 weeks and then a worsening up to 12 weeks of treatment in the reference group.

No significant difference between ammonium chloride and matching placebo was detected by comparing the TNF- α change from baseline. A significant difference between treatments was found in the proportion of subjects with normalisation of TNF- α after 12 weeks in the ITT because the proportion of subjects increased to 37.5% among the placebo recipients, whereas it decreased from 21.4% (after 8 weeks) to 7.1% (after 12 weeks) among subjects receiving the test treatment.

11.4.1.3 Normalisation of AST

The proportion of subjects achieving normalisation of AST after 4, 8 and 12 weeks of treatment is summarised in the contingency [Table 14.2.3.1](#). The outcome of the comparison between treatments of the proportion of subjects achieving normalisation is summarised in [Table 14.2.3.2](#). Results are summarised in the table below.

Table 11.4.1.5 Proportion of subjects achieving normalisation of AST after 4, 8 and 12 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)

	ITT population			FAS population		
	T	R	χ^2	T	R	χ^2
	N=14	N=16	p-value	N=12	N=15	p-value
After 4 weeks	6 (42.9)	11 (68.8)	0.1533	6 (50.0)	11 (73.3)	0.2122
After 8 weeks	9 (64.3)	10 (62.5)	0.9193	9 (75.0)	10 (66.7)	0.6375
After 12 weeks	7 (50.0)	11 (68.8)	0.2956	7 (58.3)	11 (73.3)	0.4113

Source: [Table 14.2.3.1](#) and [Table 14.2.3.2](#)

Changes from baseline in AST values after 4, 8 and 12 weeks of treatment are summarised by treatment group in [Table 14.2.3.3](#). The outcome of the comparison of the changes from baseline between treatments is summarised in [Table 14.2.3.4](#). Results are summarised in the table below.

Table 11.4.1.6 AST (U/L) change from baseline after 4, 8 and 12 weeks of treatment (mean±SD). Outcome of the statistical comparisons between treatments (t test p-value)

	ITT population			FAS population		
	T	R	T test	T	R	T test
	N=12	N=15	p-value	N=12	N=15	p-value
After 4 weeks	-14.1±65.2	-26.2±25.7	0.5085	-14.1±65.2	-26.2±25.7	0.5085
After 8 weeks	-18.7±70.6	-30.1±20.3	0.6569	-18.7±70.6	-30.1±20.3	0.6569
After 12 weeks	-6.8±88.4	-27.3±23.7	0.6056	-6.8±88.4	-27.3±23.7	0.6056

Source: [Table 14.2.3.3](#) and [Table 14.2.3.4](#)

Among the subjects receiving the test treatment (FAS), the proportion of subjects achieving normalisation of AST improved after 8 weeks (from 50 to 75%) but then decreased to 58.3% after 12 weeks. The proportion of subjects with normalised AST decreased from 73.3% after 4 weeks of treatment to 66.7% after 8 and then increased again to 73.3% after 12 weeks of treatment among the placebo recipients.

The change from baseline in AST also showed an improvement after 8 weeks and then a worsening after 12 weeks with both treatments.

No significant difference between ammonium chloride and matching placebo was detected by comparing either the proportion of subjects with AST normalisation or the AST change from baseline.

11.4.1.4 Normalisation of APRI

The proportion of subjects achieving normalisation of APRI after 4, 8 and 12 weeks of treatment is summarised in the contingency [Table 14.2.4.1](#). The outcome of the comparison between treatments of the proportion of subjects achieving normalisation is summarised in [Table 14.2.4.2](#). Results are summarised in the table below.

Table 11.4.1.7 Proportion of subjects achieving normalisation of APRI after 4, 8 and 12 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)

	ITT population			FAS population		
	T	R	χ^2	T	R	χ^2
	N=13	N=16	p-value	N=11*	N=15**	p-value
After 4 weeks	6 (46.2)	8 (50.0)	0.8367	6 (54.5)	8 (53.3)	0.9512
After 8 weeks	6 (46.2)	9 (56.3)	0.5884	6 (60.0)	9 (64.3)	0.8307
After 12 weeks	6 (46.2)	9 (56.3)	0.5884	6 (66.7)	9 (64.3)	0.9069

Source: [Table 14.2.4.1](#) and [Table 14.2.4.2](#)

*: N=10 after 8 weeks and N=9 after 12 weeks;

**: N=14 after 8 and 12 weeks.

Changes from baseline in APRI values after 4, 8 and 12 weeks of treatment are summarised by treatment group in [Table 14.2.4.3](#). The outcome of the comparison of the changes from baseline between treatments is summarised in [Table 14.2.4.4](#). Results are summarised in the table below.

Table 11.4.1.8 APRI change from baseline after 4, 8 and 12 weeks of treatment (mean±SD). Outcome of the statistical comparisons between treatments (t test p-value)

	ITT population			FAS population		
	T	R	T test	T	R	T test
	N=11*	N=15**	p-value	N=11*	N=15**	p-value
After 4 weeks	-0.0984±0.7082	-0.2423±0.4037	0.5171	-0.0984±0.7082	-0.2423±0.4037	0.5171
After 8 weeks	-0.0497±0.9633	-0.2192±0.403	0.6100	-0.0497±0.9633	-0.2192±0.403	0.6100
After 12 weeks	0.0347±1.3208	-0.2184±0.4188	0.8775	0.0347±1.3208	-0.2184±0.4188	0.8775

Source: Table 14.2.4.3 and Table 14.2.4.4

*: N=10 after 8 weeks and N=9 after 12 weeks;

** : N=14 after 8 and 12 weeks.

Among the subjects receiving the test treatment (ITT), the proportion of subjects achieving normalisation of APRI remained constant up to the end of the treatment (46.2%). The proportion of subjects with normalised APRI increased from 50% after 4 weeks of treatment to 56.3% after 8 and 12 weeks of treatment among the placebo recipients. In the FAS, the percentage of subjects receiving the test treatment with normalised APRI increased, because the number of analysed subjects decreased after 8 and after 12 weeks of treatment.

The change from baseline in APRI also showed an improvement after 8 weeks and then a worsening after 12 weeks with the test treatment, while the change from baseline did not vary during the treatment with the reference treatment.

No significant difference between ammonium chloride and matching placebo was detected by comparing either the proportion of subjects with APRI normalisation or the APRI change from baseline.

11.4.1.5 Normalisation of HA

The proportion of subjects achieving normalisation of HA after 4, 8 and 12 weeks of treatment is summarised in the contingency Table 14.2.5.1. The outcome of the comparison between treatments of the proportion of subjects achieving normalisation is summarised in Table 14.2.5.2. Results are summarised in the table below.

Table 11.4.1.9 Proportion of subjects achieving normalisation of HA after 4, 8 and 12 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)

	ITT population			FAS population		
	T	R	χ^2	T	R	χ^2
	N=14	N=16	p-value	N=12	N=15	p-value
After 4 weeks	5 (35.7)	12 (75.0)	0.0303	5 (41.7)	12 (80.0)	0.0404
After 8 weeks	4 (28.6)	14 (87.5)	0.0010	4 (33.3)	14 (93.3)	0.0010
After 12 weeks	4 (28.6)	12 (75.0)	0.0110	4 (33.3)	12 (80.0)	0.0142

Source: Table 14.2.5.1 and Table 14.2.5.2

Changes from baseline of HA values after 4, 8 and 12 weeks of treatment are summarised by treatment group in Table 14.2.5.3. The outcome of the comparison of the changes from baseline between treatments is summarised in Table 14.2.5.4. Results are summarised in the table below.

**Table 11.4.1.10 HA ($\mu\text{g/L}$) change from baseline after 4, 8 and 12 weeks of treatment (mean \pm SD).
Outcome of the statistical comparisons between treatments (t test p-value)**

	ITT population			FAS population		
	T	R	T test	T	R	T test
	N=7	N=6*	p-value	N=7	N=6*	p-value
After 4 weeks	85.1 \pm 50.6	41.5 \pm 106.9	0.3547	85.1 \pm 50.6	41.5 \pm 106.9	0.3547
After 8 weeks	165.1 \pm 134.8	8.0 \pm 86.8	0.0325	165.1 \pm 134.8	8.0 \pm 86.8	0.0325
After 12 weeks	113.4 \pm 80.6	34.0 \pm 13.0	0.0404	113.4 \pm 80.6	34.0 \pm 13.0	0.0404

Source: [Table 14.2.5.3](#) and [Table 14.2.5.4](#)

*: N=5 after 12 weeks.

Among the subjects receiving the test treatment (FAS), the proportion of subjects achieving normalisation of HA improved after 4 weeks (41.7%) but then decreased to 33.3% after 8 and 12 weeks. The proportion of subjects with normalised HA increased from 80% after 4 weeks of treatment to 93.3% after 8 and then decreased again to 80% after 12 weeks of treatment among the placebo recipients.

The change from baseline in HA also showed on average a worsening from 4 to 8 weeks and then a slight improvement up to 12 weeks in the test group, whilst it showed on average an improvement up to 12 weeks of treatment in the reference group.

A significant difference between treatments was found in the proportion of subjects with normalisation of HA after 4, 8 and 12 weeks because the proportion of subjects with normalised HA among the placebo recipients was significantly higher than with ammonium chloride. The change from baseline of HA was also significantly different between treatments after 8 and 12 weeks, because HA showed a decrease from baseline with placebo and an increase from baseline among subjects receiving the test treatment.

11.4.1.6 Normalisation of IL-6

The proportion of subjects achieving normalisation of IL-6 after 4, 8 and 12 weeks of treatment is summarised in the contingency [Table 14.2.6.1](#). Results are summarised in the table below.

Table 11.4.1.11 Proportion of subjects achieving normalisation of IL-6 after 4, 8 and 12 weeks of treatment (number and percentage of subjects)

	ITT population			FAS population		
	T	R	χ^2	T	R	χ^2
	N=14	N=16	p-value	N=12	N=15	p-value
After 4 weeks	12 (85.7)	15 (93.8)	--	12 (100)	15 (100.0)	--
After 8 weeks	12 (85.7)	15 (93.8)	--	12 (100)	15 (100.0)	--
After 12 weeks	12 (85.7)	15 (93.8)	--	12 (100)	15 (100.0)	--

Source: [Table 14.2.6.1](#)

No comparison could be performed on the proportion of subjects with normalisation of IL-6. No change from baseline could be calculated because IL-6 values were <12.0 pg/mL, i.e. under the limit of detection, for all the subjects at all time points including baseline.

11.4.1.7 RVR and EVR

The proportion of subjects achieving RVR after 4 weeks of treatment is summarised in the contingency [Table 14.2.7.1](#). The outcome of the comparison between treatments of the proportion of subjects achieving RVR is summarised in [Table 14.2.7.2](#). Results are summarised in the table below.

Table 11.4.1.12 Proportion of subjects achieving RVR after 4 weeks of treatment (number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)

ITT population			FAS population		
T	R	χ^2	T	R	χ^2
N=14	N=16	p-value	N=12	N=14	p-value
4 (28.6)	5 (31.5)	0.8731	4 (33.3)	5 (35.7)	0.8988

Source: [Table 14.2.7.1](#) and [Table 14.2.7.2](#)

The proportion of subjects achieving EVR after 12 weeks of treatment is summarised in the contingency [Table 14.2.7.3](#). The outcome of the comparison of the proportion of subjects achieving EVR between treatments is summarised in [Table 14.2.7.4](#). Results are summarised in the table below.

Table 11.4.1.13 Proportion of subjects achieving EVR after 12 weeks of treatment (Number and percentage of subjects). Outcome of the statistical comparisons between treatments (χ^2 p-value)

ITT population			FAS population		
T	R	χ^2	T	R	χ^2
N=14	N=16	p-value	N=11	N=14	p-value
11 (78.6)	12 (75.0)	0.8175	11 (100)	12 (85.7)	0.1912

Source: [Table 14.2.7.3](#) and [Table 14.2.7.4](#)

Among the subjects receiving the test treatment (FAS), the proportion of subjects achieving RVR was 33.3%, whilst it was 35.7% among the placebo recipients. An EVR was achieved by the 100% of the FAS subjects receiving the test treatment and by the 85.7% of placebo recipients.

No significant difference between treatments was detected.

11.4.2 Statistical/analytical Issues

No statistical or analytical issues emerged during the analysis.

11.4.3 Tabulation of individual response data

- Individual data of ALT normalisation are listed in Appendix 16.2.6, [Listing 16.2.6.1](#).
- Individual data of TNF- α normalisation are listed in Appendix 16.2.6, [Listing 16.2.6.2](#).
- Individual data of AST normalisation are listed in Appendix 16.2.6, [Listing 16.2.6.3](#).
- Individual data of APRI normalisation are listed in Appendix 16.2.6, [Listing 16.2.6.4](#).
- Individual data of HA normalisation are listed in Appendix 16.2.6, [Listing 16.2.6.5](#).
- Individual data of IL-6 normalisation are listed in Appendix 16.2.6, [Listing 16.2.6.6](#).
- Individual data of achievement of RVR and EVR are listed in Appendix 16.2.6, [Listing 16.2.6.7](#).

- Individual concentrations of ALT, TNF- α , IL-6, AST, HA, platelets and HCV ribonucleic acid are listed in Appendix 16.2.8, [Listing 16.2.8.1](#), [Listing 16.2.8.2](#) and [Listing 16.2.8.4](#).
- Individual changes from baseline of ALT, TNF- α , AST, APRI, HA and IL-6 are listed respectively in Appendix 16.2.8, [Listing 16.2.8.5](#), [Listing 16.2.8.6](#), [Listing 16.2.8.7](#), [Listing 16.2.8.8](#), [Listing 16.2.8.9](#) and [Listing 16.2.8.10](#).

11.4.4 Drug dose, drug concentration, and relationships to response

Results of the analysis on the relationship between ammonium chloride 500 mg tablets, administered according to the scheduled dose regimen added to the standard of care antiviral therapy, and the response in terms of efficacy of the additional treatment are presented in § [11.4.1](#). Conclusions are drawn below.

11.4.5 Drug-drug and drug-disease interactions

No interaction of the addition of ammonium chloride 500 mg tablets or matching placebo on the antiviral standard of care therapy of HCV was evaluated in the present study.

11.4.6 By-subject displays

Individual listings of efficacy data are collected in Appendix 16.2.6.

11.4.7 Efficacy conclusions

11.4.7.1 Primary end-point

- The improvement of the liver conditions observed by adding ammonium chloride 500 mg tablets to the standard of care therapy of HCV in terms of proportion of subjects achieving ALT normalisation after 12 weeks of treatment was not better than that with the matching placebo in either the ITT population (50% vs. 56.3%) or the FAS (58.3% vs. 60%).

The effect of the addition of ammonium chloride to the standard of care therapy was not significantly different from the addition of the matching placebo in terms of ALT normalisation for the whole duration of the treatment.

11.4.7.2 Secondary end-points

- The improvement of the liver conditions observed by adding ammonium chloride 500 mg tablets to the standard of care therapy of HCV in terms of proportion of subjects with ALT normalisation after 8 weeks of treatment was similar to that with the matching placebo in the ITT population (57.1% vs. 56.3%) and better than that with the matching placebo in the FAS (66.7% vs. 60%). On average, the change from baseline in ALT showed a stronger improvement after 8 weeks than after 12 weeks in both treatment groups.

However, no significant difference between ammonium chloride and matching placebo was detected.

- After 4 weeks of treatment, the proportion of subjects with ALT normalisation was not better with ammonium chloride than with the matching placebo in either the ITT population (42.9% vs. 62.5%) or the FAS (50% vs. 66.7%).

No significant difference between treatments was detected.

- An improvement of hepatitis C in terms of normalisation of TNF- α was similar with ammonium chloride and with the matching placebo after 4 weeks of treatment in both the ITT population (14.3% vs. 12.5%) and the FAS (16.7% vs. 13.3%).

After 8 and 12 weeks, the improvement of hepatitis C in terms of normalisation of TNF- α in the subjects receiving ammonium chloride was not better than that with the matching placebo in either the ITT population (21.4% vs. 31.3% after 8 weeks and 7.1% vs. 37.5% after 12 weeks) or the FAS (25% vs. 33.3% after 8 weeks and 8.3% vs. 40% after 12 weeks). The change from baseline showed on average an increase in TNF- α with both treatments.

The observed normalisation of TNF- α was not significantly different between treatments up to 8 weeks of treatment. After 12 weeks of treatment, the proportion of subjects with normalised TNF- α after ammonium chloride was significantly lower than with the matching placebo. No significant difference in change from baseline was detected between treatments.

- An improvement of the liver conditions in terms of normalisation of AST was better with ammonium chloride than that with the matching placebo after 8 weeks of treatment in both the ITT population (64.3% vs. 62.5%) and the FAS (75% vs. 66.7%).

After 4 and 12 weeks, the improvement of the liver conditions in terms of normalisation of AST in the subjects receiving ammonium chloride was not better than that with the matching placebo in either the ITT population (42.9% vs. 68.8% after 4 weeks and 50% vs. 68.8% after 12 weeks) or the FAS (50% vs. 73.3% after 4 weeks and 58.3% vs. 73.3% after 12 weeks).

No significant difference between treatments was detected.

- An improvement of the liver conditions in terms of normalisation of APRI was better with ammonium chloride than that with the matching placebo after 4 and 12 weeks of treatment in the FAS (54.5% vs. 53.3% after 4 weeks and 66.7% vs. 64.3% after 12 weeks).

The improvement of the liver conditions in terms of normalisation of APRI in the subjects receiving ammonium chloride was not better than that with the matching placebo in either the ITT population at any time point (46.2% vs. 50% after 4 weeks, 46.2% vs. 56.3% after 8 weeks and 46.2% vs. 56.3% after 12 weeks) or the FAS after 8 weeks (60% vs. 64.3%).

No significant difference between treatments was detected.

- The improvement of the liver conditions in terms of normalisation of HA in the subjects receiving ammonium chloride was not better than that with the matching placebo in either the ITT population (35.7% vs. 75% after 4 weeks, 28.6% vs. 87.5% after 8 weeks and 28.6% vs. 75% after 12 weeks) or the FAS (41.7% vs. 80% after 4 weeks, 33.3% vs. 93.3% after 8 weeks and 33.3% vs. 80% after 12 weeks) at any time point. The change from baseline showed on average a worsening up to 8 weeks and then an improvement up to 12 weeks with the test treatment and an improvement up to 12 weeks with placebo.

The effect of placebo on the HA normalisation was significantly better than that of ammonium chloride at all the time points.

- The proportion of subjects achieving a RVR after 4 weeks and an EVR after 12 weeks was similar after test and placebo. No significant difference between treatments was detected.
- No evaluation of IL-6 was possible, because the values of the parameter were <12.0 pg/mL, i.e. under the limit of detection for all the subjects at all the time points including baseline.

12 SAFETY EVALUATION

12.1 Extent of exposure

The 27 completers took ammonium chloride 500 mg tablets or matching placebo according to the dose regimen up to the end of the study together with the standard of care therapy for hepatitis C (peginterferon+ribavirin). See § 11.3 for details on the compliance to the treatment with the IMP. In Appendix 16.2.10, Listing 16.2.10.6, details on the assigned treatment and on the intake of IMP or matching placebo at the study visits can be found.

Subject S002/001 discontinued the study at visit 3 after having taken 21 tablets of ammonium chloride corresponding to 8 days of treatment. Subject S036/015 took only the first 3 tablets of placebo on study day 1 and then discontinued the study. Subject S048/026 took the first 3 tablets of ammonium chloride on study day 1 and received the first supply of test treatment, but discontinued the study later (Appendix 16.2.5, Listing 16.2.5.1; Appendix 16.2.10, Listing 16.2.10.6).

The mean extent of exposure to ammonium chloride is summarised in Table 14.3.5.7.

12.2 Adverse events (AEs)

12.2.1 Brief summary of adverse events

No SAE occurred throughout the study. No subject discontinued the study due to any treatment emergent AE (TEAE) (Table 14.3.2.1).

Frequency of subjects with TEAEs and overview of TEAEs is presented in the tables below.

Table 12.2.1.1 Summary of subjects with TEAEs; number and percentage of subjects with TEAEs and number of TEAEs are reported

	T N=14 n (%) [n TEAE]	R N=16 n (%) [n TEAE]	Overall N=30 n (%) [n TEAE]
Subjects with at least one TEAE	4 (28.6%) [8]	2 (12.5%) [10]	6 (20%) [18]
Subjects with at least one related TEAE	0 (0)	2 (12.5%) [9]	2 (6.7%) [9]
Subjects with TEAEs leading to discontinuation	0 (0)	0 (0)	0 (0)
Subjects with at least one SAE	0 (0)	0 (0)	0 (0)

Source: Table 14.3.1.1

Table 12.2.1.2 Overview of TEAEs by intensity; number and percentage of subjects with TEAEs and number of TEAEs are reported

	T N=14 n (%) [n TEAE]	R N=16 n (%) [n TEAE]	Overall N=30 n (%) [n TEAE]
TEAE Severity			
Mild	3 (21.4%) [5]	2 (12.5%) [10]	5 (16.7%) [15]
Moderate	1 (7.1%) [3]	0	1 (3.3%) [3]

Source: Table 14.3.1.3

12.2.2 Display of adverse events

Frequency of reported TEAEs, calculated as incidence in the population, is presented in the table below.

Table 12.2.2.1 Number of subjects reporting and number of reported TEAEs by SOC and PT

MedDRA* description (SOC term)	MedDRA* description (PT term)	Treatment			
		T N=14		R N=16	
		[n TEAE]	n (%)	[n TEAE]	n (%)
General disorders and administration site conditions	--	3	3 (21.4%)	5	2 (12.5%)
	Pyrexia	2	2 (14.3%)	3	2 (12.5%)
	Fatigue	1	1 (7.1%)	2	1 (6.3%)
Nervous system disorders	--	3	3 (21.4%)	4	2 (12.5%)
	Headache	3	3 (21.4%)	3	1 (6.3%)
	Dizziness	0	0	1	1 (6.3%)
Musculoskeletal and connective tissue disorders	--	1	1 (7.1%)	1	1 (6.3%)
	Arthralgia	0	0	1	1 (6.3%)
	Back pain	1	1 (7.1%)	0	0
Respiratory, thoracic and mediastinal disorders	--	1	1 (7.1%)	0	0
	Cough	1	1 (7.1%)	0	0

Source: [Table 14.3.1.2](#)

*: MedDRA version 15.1

TEAEs occurred at a frequency of 28.6% with the test treatment and at a frequency of 12.5% with the matching placebo. The most frequent TEAE was headache, reported at a frequency of 21.4% (3 subjects) with the test treatment and of 6.3% (1 subject) with the reference treatment.

Therapeutic countermeasures were taken against the episodes of headache and pyrexia of subject S002/001, dizziness of subject S010/002 and headache of subject S015/005. In detail, subject S002/001 took orally once 1 g of paracetamol (Depon®) against headache and once 500 mg of paracetamol against pyrexia (Appendix 16.2.7, Listing 16.2.7.1 and Appendix 16.2.10, Listing 16.2.10.3). Subject S010/002 suffered from one episode of mild dizziness during week 13 of treatment and took once 50 mg of flunarizine (Sbelium®). Subject S015/005 suffered from one episode of mild intensity headache after week 3 and took 500 mg of paracetamol (Depon®).

Outcome of the majority of the TEAEs was resolution (Appendix 16.2.7, Listing 16.2.7.1). Subject S015/005 was suffering from intermittent mild fatigue starting from the beginning of week 2. Subject S016/007 was suffering from a continuous mild headache starting from treatment day 1. Subject S041/020 complained of 3 TEAEs, i.e. continuous pyrexia of moderate severity (37.5° C) starting from treatment day 1, intermittent back pain of moderate severity starting from treatment day 4 and intermittent cough of moderate severity starting from treatment week 2. All these TEAEs did not resolve before the end of the study.

12.2.2.1 Treatment-related adverse events

The investigator judged 9 out of the 18 reported TEAEs as related to the intake of ammonium chloride or matching placebo.

Related TEAEs occurred at an overall frequency of 6.7%. In detail, related TEAEs were reported only for placebo recipients at a frequency of 12.5%, whereas no related TEAE was reported for subjects receiving the test treatment.

The number and frequency of treatment-related TEAEs and of subjects with treatment-related TEAEs are presented per treatment in the table below:

Table 12.2.2.2 Number of subjects reporting and number of reported TEAEs by SOC and PT

MedDRA* description (SOC term)	MedDRA* description (PT term)	Treatment			
		T N=14		R N=16	
		[n AE]	n (%)	[n AE]	n (%)
General disorders and administration site conditions	--	0	0	4	1 (6.3%)
	Pyrexia	0	0	2	1 (6.3%)
	Fatigue	0	0	2	1 (6.3%)
Nervous system disorders	--	0	0	4	2 (12.5%)
	Headache	0	0	3	1 (6.3%)
	Dizziness	0	0	1	1 (6.3%)
Musculoskeletal and connective tissue disorders	--	0	0	1	1 (6.3%)
	Arthralgia	0	0	1	1 (6.3%)

Source: [Table 14.3.1.4](#)

*: MedDRA version 15.1

Most frequent related TEAEs as a SOC were nervous system disorders (12.5%). Each related TEAE as PT occurred at a frequency of 6.3%.

Outcome of all related TEAEs was resolution (Appendix 16.2.7, [Listing 16.2.7.1](#)).

12.2.3 Analysis of adverse events

Individual TEAEs were listed in [Listing 16.2.7.1](#). Each TEAE was coded using the Medical Dictionary for Regulatory Activities (MedDRA) version 15.1 according to the verbatim description, the SOC and the PT. Relationship to study treatment (definite, probable, possible, unlikely, not related, unassessable) and severity (mild, moderate, severe, life threatening) are also shown.

TEAEs were summarised by treatment in tables of frequency. Frequency of TEAEs and frequency of subjects with any AE were presented in [Table 14.3.1.1](#) through [Table 14.3.1.4](#).

12.2.4 Listing of adverse events by subject

All TEAEs for each subject are listed by treatment in Appendix 16.2.7, [Listing 16.2.7.1](#)

12.3 Deaths, other serious adverse events, and other significant adverse events

No deaths or serious or other significant adverse events occurred during the study ([Table 14.3.2.1](#)).

12.4 Clinical laboratory evaluation

12.4.1 *Listing of individual laboratory measurements by subject and each abnormal laboratory value*

Individual values of haematology, biochemistry, urinalysis and virology measured during the study are listed respectively in Appendix 16.2.8, [Listing 16.2.8.1](#), [Listing 16.2.8.2](#), [Listing 16.2.8.3](#) and [Listing 16.2.8.4](#). Individual laboratory abnormalities found throughout the study are listed in [Table 14.3.4.1](#).

Shifts from baseline of quantitative laboratory parameters assayed on day 29 (week 5), day 57 (week 9) and day 85 (week 13) are presented in [Table 14.3.4.2](#), [Table 14.3.4.4](#) and [Table 14.3.4.6](#), while shifts from baseline of the qualitative laboratory parameters are presented in [Table 14.3.4.3](#), [Table 14.3.4.5](#) and [Table 14.3.4.7](#).

12.4.2 *Evaluation of each laboratory parameter*

In both treatment groups, a normalisation of ALT and AST (42.9% for both enzymes in the test group vs. 62.5% and 68.8% respectively with placebo) was generally observed from baseline to day 29 (visit 6). An elevation of TNF- α was observed at a frequency of 21.4% with the test treatment and of 37.5% with placebo, concomitantly with a normalisation (14.3% with the test and 12.5% with placebo). Generally, also decrements in haemoglobin, haematocrit, RBCs, platelets, WBCs, neutrophils, monocytes and lymphocytes and an increment in ferritin could be observed in both groups ([Table 14.3.4.2](#)).

An elevation of chloride was found at a frequency of 14.3% in the test group and of 25% with placebo. Any correlation of this abnormality with the intake of ammonium chloride may be reasonably excluded ([Table 14.3.4.2](#)).

On day 57 ([Table 14.3.4.4](#)), the rate of normalisation of ALT and AST improved among subjects receiving ammonium chloride (57.1% for ALT and 64.3% for AST), whereas it decreased among the placebo recipients (56.3% for ALT and 62.5% for AST).

The rate of elevation of chloride did not change in the test group (14.3%), while it decreased among placebo recipients (12.5%).

The rate of normalisation of γ -GT increased in the test group (from 28.6% to 35.7%), while it did not change with placebo (31.3%). Also the elevation of TNF- α was observed at a lower frequency (14.3%) with the test treatment and with placebo (18.8%), concomitantly with a normalisation (21.4% with the test and 31.3% with placebo). The shift of the other above mentioned parameters from baseline was similar to results of day 29.

On day 85 ([Table 14.3.4.6](#)), the rate of normalisation of ALT and AST decreased among subjects receiving ammonium chloride (50% for both enzymes), whereas it did not change from day 57 for ALT (56.3%) and it increased for AST among the placebo recipients (68.8%).

The rate of elevation of chloride did not change from day 57 in the test group (14.3%), while it decreased among placebo recipients (6.3%).

The rate of normalisation of γ -GT did not change from day 57 in the test group (35.7%), while it decreased with placebo (31.3%). The elevation of TNF- α was observed at a higher frequency (28.6%) with the test treatment, while it did not change with placebo (18.8%), concomitantly with a normalisation (7.1% with the test and 6.3% with placebo). The shift of the other above mentioned parameters from baseline was similar to results of day 57.

The investigator deemed all the found abnormalities as devoid of clinical relevance.

12.5 Vital signs, physical findings, and other observations related to safety

12.5.1 Body weight

BW measured at each study visit is summarised by descriptive statistics in [Table 14.3.5.1](#). On average, the BW did not vary as compared with baseline with either treatment. No clinically significant change was found by the investigator.

12.5.2 Vital signs

Mean SBP, DBP and HR measured at each study visit are summarised by descriptive statistics in [Table 14.3.5.2](#). Minor deviations from the baseline mean values could be observed in all measured parameters. However, no clinically relevant abnormality was found by the investigator for any parameter. No clinically significant change from baseline was observed. No significant effect of treatment on vital signs was detected during the study.

12.5.3 Electrocardiograms

ECG parameters are summarised by treatment group and time of recording in [Table 14.3.5.4](#). Clinical interpretation of the ECG findings is summarised in [Table 14.3.5.3](#).

All the ECG recordings collected during the study were judged as normal by the investigator for all the subjects ([Table 14.3.5.3](#)). No clinically relevant abnormality was found by the investigator for any parameter.

With respect to PQ, QRS and QT, some very high values were recorded during the study, although the investigator judged all of them as normal. In detail, subjects S014/004, S015/005 and S016/007, all receiving the test treatment, had very high values of PQ and QRS ranging between 200 and 500 ms at all recordings including screening ([Appendix 16.2.9, Listing 16.2.9.4](#)). For the same 3 subjects, some QT values ranging between 108-112 ms were also reported. Other 14 subjects had some isolated measures of QRS \geq 200 ms with peaks of 400 ms and values of PQ ranging between 300 and 400 ms. For 2 placebo recipients, S010/002 and S013/003, two discrete measures of QT of 600 ms and 900 ms respectively were reported. These elevated values are above the normality limit for PQ, QRS and QT. These abnormalities could not be explained with the known side effects of the cotreatment with peginterferon and ribavirin, which on the other hand can induce tachycardia. However, the investigator did not judge the elevated parameters as clinically relevant.

12.5.4 Evaluation of liver stiffness

Mean liver stiffness measured by abdominal echography is summarised by treatment group and time of recording in [Table 14.3.5.6](#) and in the table below. The frequency of the clinical interpretation of the abdominal echography findings is presented in [Table 14.3.5.5](#).

Table 12.5.4.1 Mean liver stiffness measured at screening and final visit (week 13) (kPa). Mean±SD, median and range are presented

	Safety population		
	T N=13	R N=15	Overall N=28
Screening	11.22±6.88	8.57±4.25	9.80±5.68
	10.40 (4.4-29.9)	7.30 (5.1-20.9)	7.85 (4.4-29.9)
After 12 weeks	N=11	N=14	N=25
	8.62±4.64	8.98±6.36	8.82±5.56
	7.60 (4.0-20.3)	6.35 (4.6-27.0)	6.40 (4.0-27.0)

Source: [Table 14.3.5.6](#)

Generally, a decrease in liver stiffness was observed with the test treatment. On average, liver stiffness decreased from an initial 11.22±6.88 kPa to a final 8.62±4.64 kPa, whereas no relevant change was observed among the placebo recipients with an initial 8.57±4.25 kPa and a final 8.98±6.36 kPa. The mean values after 12 weeks correspond to liver stiffness values defined for fibrosis of moderate intensity (31).

In terms of proportion of subjects, 13 out of 24 subjects achieved a decrease in liver stiffness, 6 out of 24 did not have any change in liver stiffness and 5 out of 24 had a worsening of liver stiffness value.

12.5.5 Assessment of decompensated liver failure

The investigator assessed symptoms of decompensated liver failure after 4, 8 and 12 weeks of treatment. The outcome of subjects' individual assessments is presented in Appendix 16.2.10, [Listing 16.2.10.9](#). No subject had any sign of decompensated liver failure at any assessment time point.

12.6 Safety conclusions

- Overall 18 TEAEs were reported for 6 (20%) subjects during the study, 8 for 4 (28.6%) subjects receiving ammonium chloride and 10 for 2 (12.5%) placebo recipients;
- Nine (9) related TEAEs were reported during the study for 2 (6.7%) subjects, who were placebo recipients. No related TEAE was reported for subjects receiving ammonium chloride;
- The most frequently reported TEAE was headache, which was experienced by 3 of the 14 (21.4%) subjects receiving ammonium chloride and by one of the 16 (6.3%) placebo recipients, to whom 3 episodes of headache occurred. No episode of headache occurred to subjects receiving ammonium chloride was judged related to the treatment.
- No SAEs occurred during the study;
- No TEAE leading any subject to discontinuation due to safety reasons occurred;

- No relevant effects of either treatment on blood pressure, heart rate or body weight were observed.
- Clinical laboratory parameters showed an improvement of hepatitis C during the treatment, in particular up to day 57. General decreases in haematology parameters observed during the study are known side effects of the cotreatment with peginterferon and ribavirin.
- No significant unwanted effect of ammonium chloride on the clinical laboratory parameters was observed.
- No clinically relevant abnormality in ECGs was found by the investigator. However, many extremely high values of ECG parameters were recorded for 17 subjects during the study including the screening visit.
- A decrease in the liver stiffness was found on average in subjects receiving ammonium chloride at week 13 from the screening visit, whereas no relevant change could be observed among the placebo recipients.
- No subject showed any sign of decompensated liver failure during the treatment.

13 DISCUSSION AND OVERALL CONCLUSIONS

13.1 Discussion

The present study collected preliminary data concerning the efficacy and safety of ammonium chloride 500 mg tablets, in comparison with placebo, in terms of liver protection in patients with hepatitis C virus (HCV), who relapsed after a previous first course of standard of care therapy, and undergoing a second cycle of the standard of care therapy of hepatitis C with peginterferon and ribavirin. Ammonium chloride 500 mg tablets or matching placebo were added to the second course of standard of care antiviral therapy. The ammonium chloride dose regimen was 1.5 g b.i.d. for 3 days of administration/week followed by a wash-out of 4 days/week, for a total duration of 12 weeks of treatment. Ammonium chloride matching placebo tablets were administered as a negative control according to the same regimen as the active treatment and according to the parallel-group design. The study was interrupted according to Sponsor's decision after 27 subjects completed the study.

The study was performed in 30 male and female patients with chronic hepatitis C relapsed after a previous 3 month standard of care therapy. All 30 subjects received at least one dose of treatment and were included in the safety and ITT populations. Twenty-seven (27) subjects received at least one dose of treatment and had at least one post-baseline measurement of the primary parameter: these subjects were included in the FAS. No subject was included in the PP population, because at least one major protocol violation was reported for all the 27 completers. In particular, major protocol deviations were violations of inclusion and exclusion criteria reported for 7 subjects (50%) receiving the test treatment and for 5 subjects (31.3%) receiving the reference treatment. All the subjects had at least one major violation of study procedures.

Generally, the addition of ammonium chloride 500 mg tablets to the standard of care therapy did not improve the efficacy of the treatment as compared to the addition of the matching placebo. The investigated efficacy parameters ALT, TNF- α , AST, APRI, HA and viral load did not show significant differences between treatments, with only few exceptions. At week 8, the proportion of subjects receiving the test treatment and with normalisation of ALT and AST was higher than that of placebo recipients. Similarly, the proportion of subjects receiving the test treatment and with normalisation of APRI after 4 and 12 weeks was higher than that of the placebo recipients only in the FAS. However, no significant difference between treatments was detected when these variables were compared statistically.

Overall, 18 TEAEs were reported for 6 (20%) subjects during the study, 8 for 4 (28.6%) subjects receiving ammonium chloride and 10 for 2 (12.5%) placebo recipients. Nine (9) related TEAEs were reported during the study for 2 (6.7%) subjects, who were placebo recipients. No related TEAE was reported for subjects receiving ammonium chloride. The most frequent TEAE was headache that occurred at a frequency of 21.4% (3 subjects) with ammonium chloride and of 6.3% (1 subject) with the matching placebo. No SAEs occurred during the study. No TEAE leading any subject to discontinuation due to safety reasons occurred.

No relevant effects of either treatment on blood pressure, heart rate or body weight were observed.

Clinical laboratory parameters showed an improvement of hepatitis C during the treatment, in particular up to day 57. General decreases in haematology parameters observed during the study are known side effects of the cotreatment with peginterferon and ribavirin. No significant unwanted effect of ammonium chloride on the clinical laboratory parameters was observed.

No clinically relevant abnormality in ECGs was found by the investigator. However, many extremely high values of ECG parameters were recorded for 17 subjects during the study including the screening visit. The investigator confirmed the reliability and the correctness and also the clinical irrelevance of these values.

A decrease in the liver stiffness was found on average in subjects receiving ammonium chloride at week 13 from the screening visit, whereas no relevant change could be observed among the placebo recipients.

No subject showed any sign of decompensated liver failure during the treatment.

13.2 Conclusions

Ammonium chloride 500 mg tablets, developed by PHF S.A., Switzerland, were administered to patients with hepatitis C virus (HCV), who relapsed after a previous first course of standard of care therapy and undergoing a second cycle of the standard of care therapy of hepatitis C with peginterferon and ribavirin. Ammonium chloride 500 mg tablets or matching placebo were added to the second course of standard of care antiviral therapy. The ammonium chloride or matching placebo dose regimen was 1.5 g b.i.d. for 3 days of administration/week followed by a wash-out of 4 days/week, for a total duration of 12 weeks of treatment.

Generally, the addition of ammonium chloride 500 mg tablets to the standard of care therapy did not improve the efficacy of the treatment as compared to the addition of the matching placebo. The investigated efficacy parameters ALT, TNF- α , AST, APRI, HA and viral load did not show significant differences between treatments, with only few exceptions. However, a decrease in the liver stiffness was found on average in subjects receiving ammonium chloride from the screening visit after 12 weeks, whereas no relevant change could be observed among the placebo recipients. In percentage, the occurrence of TEAEs was slightly higher with ammonium chloride than with placebo (28.6% vs. 12.5%), but no treatment related TEAE occurred to patients receiving ammonium chloride. No relevant effects of either treatment on blood pressure, heart rate or body weight were observed. No significant unwanted effect of ammonium chloride on the clinical laboratory parameters was observed.

14 TABLES AND FIGURES REFERRED TO BUT NOT INCLUDED IN THE TEXT

14.1 Demographic data and other baseline characteristics

14.1.1 *Demography and other baseline characteristics*

Table 14.1.1.1 Subjects' disposition

Population Disposition Reason (if any)	Overall N=30 n (%)
Eligible	30 (100.0)
Randomised - T	14 (100.0)
Treated - T	14 (100.0)
Completed - T	12 (85.7)
Discontinued - T	2 (14.3)
Protocol deviation	1 (7.1)
Unknown	1 (7.1)
Randomised - R	16 (100.0)
Treated - R	16 (100.0)
Completed - R	15 (93.8)
Discontinued - R	1 (6.3)
Safety reasons	1 (6.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.4.1](#) - Subjects' disposition

Program: Tables\c101-ds-tbl.sas

Table 14.1.1.2 Populations

	T N=14 n (%)	R N=16 n (%)	Overall N=30 n (%)
Safety population	14 (100.0)	16 (100.0)	30 (100.0)
FAS population	12 (85.7)	15 (93.8)	27 (90.0)
PP population	0 (0.0)	0 (0.0)	0 (0.0)
ITT population	14 (100.0)	16 (100.0)	30 (100.0)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.4.2](#) - Populations

Program: Tables\c101-ds-tbl.sas

Table 14.1.1.3 Demography

–	–	Statistics	Safety population			FAS population			ITT population		
			T N=14	R N=16	Overall N=30	T N=12	R N=15	Overall N=27	T N=14	R N=16	Overall N=30
Sex	Male	n (%)	8 (57.1)	15 (93.8)	23 (76.7)	7 (58.3)	14 (93.3)	21 (77.8)	8 (57.1)	15 (93.8)	23 (76.7)
	Female	n (%)	6 (42.9)	1 (6.3)	7 (23.3)	5 (41.7)	1 (6.7)	6 (22.2)	6 (42.9)	1 (6.3)	7 (23.3)
Race	White	n (%)	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)	14 (100.0)	16 (100.0)	30 (100.0)
Age (years)		N	16	14	30	15	12	27	16	14	30
		Mean	34.1	41.2	37.4	34.5	41.8	37.7	34.1	41.2	37.4
		SD	7.9	14.3	11.7	8.0	14.6	11.8	7.9	14.3	11.7
		CV%	23.2	34.8	31.3	23.2	35.1	31.2	23.2	34.8	31.3
		Min	27	23	23	27	23	23	27	23	23
		Median	31.0	39.5	32.0	32.0	39.5	32.0	31.0	39.5	32.0
		Max	51	64	64	51	64	64	51	64	64
Height (cm)		N	16	13	29	15	12	27	16	13	29
		Mean	175.4	170.6	173.3	175.7	171.5	173.8	175.4	170.6	173.3
		SD	7.5	10.3	9.0	7.7	10.2	9.0	7.5	10.3	9.0
		CV%	4.3	6.0	5.2	4.4	6.0	5.2	4.3	6.0	5.2
		Min	156	160	156	156	160	156	156	160	156
		Median	177.0	172.0	175.0	178.0	172.5	176.0	177.0	172.0	175.0
		Max	186	192	192	186	192	192	186	192	192

Table 14.1.1.3 Demography

	Statistics	Safety population			FAS population			ITT population		
		T N=14	R N=16	Overall N=30	T N=12	R N=15	Overall N=27	T N=14	R N=16	Overall N=30
Body weight (kg)	N	16	13	29	15	12	27	16	13	29
	Mean	80.78	78.54	79.78	81.50	80.33	80.98	80.78	78.54	79.78
	SD	12.87	24.26	18.50	12.99	24.42	18.53	12.87	24.26	18.50
	CV%	15.93	30.89	23.19	15.94	30.40	22.88	15.93	30.89	23.19
	Min	61.0	49.0	49.0	61.0	49.0	49.0	61.0	49.0	49.0
	Median	77.50	72.00	75.00	80.00	76.00	80.00	77.50	72.00	75.00
	Max	107.0	125.0	125.0	107.0	125.0	125.0	107.0	125.0	125.0

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Height and weight at screening visit were not done for subject S048/026

Source: [Listing 16.2.4.3](#) - Demography

Program: Tables\c101-dm-tbl.sas

Table 14.1.1.4 Lifestyle summary

Category Status Substance Consumption	Safety population			FAS population			ITT population		
	T N=14 n (%)	R N=16 n (%)	Overall N=30 n (%)	T N=12 n (%)	R N=15 n (%)	Overall N=27 n (%)	T N=14 n (%)	R N=16 n (%)	Overall N=30 n (%)
Drug abuse	13 (92.9)	16 (100.0)	29 (96.7)	12 (100.0)	15 (100.0)	27 (100.0)	13 (92.9)	16 (100.0)	29 (96.7)
No	8 (57.1)	4 (25.0)	12 (40.0)	7 (58.3)	4 (26.7)	11 (40.7)	8 (57.1)	4 (25.0)	12 (40.0)
Yes	5 (35.7)	12 (75.0)	17 (56.7)	5 (41.7)	11 (73.3)	16 (59.3)	5 (35.7)	12 (75.0)	17 (56.7)
Tobacco	13 (92.9)	16 (100.0)	29 (96.7)	12 (100.0)	15 (100.0)	27 (100.0)	13 (92.9)	16 (100.0)	29 (96.7)
Non-smoker	6 (42.9)	3 (18.8)	9 (30.0)	6 (50.0)	3 (20.0)	9 (33.3)	6 (42.9)	3 (18.8)	9 (30.0)
Smoker	7 (50.0)	13 (81.3)	20 (66.7)	6 (50.0)	12 (80.0)	18 (66.7)	7 (50.0)	13 (81.3)	20 (66.7)
Cigarettes	7 (50.0)	13 (81.3)	20 (66.7)	6 (50.0)	12 (80.0)	18 (66.7)	7 (50.0)	13 (81.3)	20 (66.7)
15/Day	0 (0.0)	2 (12.5)	2 (6.7)	0 (0.0)	2 (13.3)	2 (7.4)	0 (0.0)	2 (12.5)	2 (6.7)
20/Day	5 (35.7)	8 (50.0)	13 (43.3)	4 (33.3)	7 (46.7)	11 (40.7)	5 (35.7)	8 (50.0)	13 (43.3)
25/Day	1 (7.1)	2 (12.5)	3 (10.0)	1 (8.3)	2 (13.3)	3 (11.1)	1 (7.1)	2 (12.5)	3 (10.0)
40/Day	1 (7.1)	1 (6.3)	2 (6.7)	1 (8.3)	1 (6.7)	2 (7.4)	1 (7.1)	1 (6.3)	2 (6.7)
Alcohol	13 (92.9)	16 (100.0)	29 (96.7)	12 (100.0)	15 (100.0)	27 (100.0)	13 (92.9)	16 (100.0)	29 (96.7)
Teetotaller	12 (85.7)	7 (43.8)	19 (63.3)	11 (91.7)	7 (46.7)	18 (66.7)	12 (85.7)	7 (43.8)	19 (63.3)
Ex-drinker	1 (7.1)	8 (50.0)	9 (30.0)	1 (8.3)	7 (46.7)	8 (29.6)	1 (7.1)	8 (50.0)	9 (30.0)
Drinker	0 (0.0)	1 (6.3)	1 (3.3)	0 (0.0)	1 (6.7)	1 (3.7)	0 (0.0)	1 (6.3)	1 (3.3)
Wine	0 (0.0)	1 (6.3)	1 (3.3)	0 (0.0)	1 (6.7)	1 (3.7)	0 (0.0)	1 (6.3)	1 (3.3)
1/Day	0 (0.0)	1 (6.3)	1 (3.3)	0 (0.0)	1 (6.7)	1 (3.7)	0 (0.0)	1 (6.3)	1 (3.3)

Table 14.1.1.4 Lifestyle summary

Category Status Substance Consumption	Safety population			FAS population			ITT population		
	T N=14 n (%)	R N=16 n (%)	Overall N=30 n (%)	T N=12 n (%)	R N=15 n (%)	Overall N=27 n (%)	T N=14 n (%)	R N=16 n (%)	Overall N=30 n (%)
Xanthine	13 (92.9)	16 (100.0)	29 (96.7)	12 (100.0)	15 (100.0)	27 (100.0)	13 (92.9)	16 (100.0)	29 (96.7)
No consumption	1 (7.1)	1 (6.3)	2 (6.7)	1 (8.3)	1 (6.7)	2 (7.4)	1 (7.1)	1 (6.3)	2 (6.7)
Consumption	12 (85.7)	15 (93.8)	27 (90.0)	11 (91.7)	14 (93.3)	25 (92.6)	12 (85.7)	15 (93.8)	27 (90.0)
Coffee	10 (71.4)	15 (93.8)	25 (83.3)	9 (75.0)	14 (93.3)	23 (85.2)	10 (71.4)	15 (93.8)	25 (83.3)
1/Day	2 (14.3)	5 (31.3)	7 (23.3)	1 (8.3)	4 (26.7)	5 (18.5)	2 (14.3)	5 (31.3)	7 (23.3)
2/Day	3 (21.4)	8 (50.0)	11 (36.7)	3 (25.0)	8 (53.3)	11 (40.7)	3 (21.4)	8 (50.0)	11 (36.7)
3/Day	3 (21.4)	1 (6.3)	4 (13.3)	3 (25.0)	1 (6.7)	4 (14.8)	3 (21.4)	1 (6.3)	4 (13.3)
4/Day	1 (7.1)	1 (6.3)	2 (6.7)	1 (8.3)	1 (6.7)	2 (7.4)	1 (7.1)	1 (6.3)	2 (6.7)
7/Day	1 (7.1)	0 (0.0)	1 (3.3)	1 (8.3)	0 (0.0)	1 (3.7)	1 (7.1)	0 (0.0)	1 (3.3)
Tea	2 (14.3)	0 (0.0)	2 (6.7)	2 (16.7)	0 (0.0)	2 (7.4)	2 (14.3)	0 (0.0)	2 (6.7)
1/Day	1 (7.1)	0 (0.0)	1 (3.3)	1 (8.3)	0 (0.0)	1 (3.7)	1 (7.1)	0 (0.0)	1 (3.3)
3/Day	1 (7.1)	0 (0.0)	1 (3.3)	1 (8.3)	0 (0.0)	1 (3.7)	1 (7.1)	0 (0.0)	1 (3.3)
Cola	2 (14.3)	2 (12.5)	4 (13.3)	2 (16.7)	2 (13.3)	4 (14.8)	2 (14.3)	2 (12.5)	4 (13.3)
1/Day	1 (7.1)	2 (12.5)	3 (10.0)	1 (8.3)	2 (13.3)	3 (11.1)	1 (7.1)	2 (12.5)	3 (10.0)
2/Day	1 (7.1)	0 (0.0)	1 (3.3)	1 (8.3)	0 (0.0)	1 (3.7)	1 (7.1)	0 (0.0)	1 (3.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Lifestyle data were not collected for subject S048/026

Source: Listing 16.2.4.4 – Lifestyle

Program: Tables\c101-su-tbl.sas

Table 14.1.1.5 Not met IE criteria summary

According to the Investigator's opinion no subject violated any inclusion/exclusion criterion. The actual number of subjects who violated the inclusion/exclusion criteria is reported in Table 14.1.1.6 - Protocol deviations

Source: [Listing 16.2.4.5](#) - Not met Inclusion/Exclusion criteria

Program: Tables\c101-ie-tbl.sas

Table 14.1.1.6 Protocol deviations

Deviation category Deviation coded term	Safety population			FAS population			ITT population		
	T N=14 n (%)	R N=16 n (%)	Overall N=30 n (%)	T N=12 n (%)	R N=15 n (%)	Overall N=27 n (%)	T N=14 n (%)	R N=16 n (%)	Overall N=30 n (%)
Number of subjects with any protocol deviation	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)	14 (100.0)	16 (100.0)	30 (100.0)
Major	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)	14 (100.0)	16 (100.0)	30 (100.0)
Study procedure deviation	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)	14 (100.0)	16 (100.0)	30 (100.0)
Inclusion criteria deviation	7 (50.0)	5 (31.3)	12 (40.0)	6 (50.0)	5 (33.3)	11 (40.7)	7 (50.0)	5 (31.3)	12 (40.0)
Minor	2 (14.3)	5 (31.3)	7 (23.3)	2 (16.7)	5 (33.3)	7 (25.9)	2 (14.3)	5 (31.3)	7 (23.3)
Scheduled time window deviation	2 (14.3)	4 (25.0)	6 (20.0)	2 (16.7)	4 (26.7)	6 (22.2)	2 (14.3)	4 (25.0)	6 (20.0)
Study procedure deviation	0 (0.0)	1 (6.3)	1 (3.3)	0 (0.0)	1 (6.7)	1 (3.7)	0 (0.0)	1 (6.3)	1 (3.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: A subject can have more than one deviation

Source: Source: [Listing 16.2.2.1](#) - Protocol deviations

Program: Tables\c101-dv-tbl.sas

Table 14.1.1.7 Previous and concomitant medications by ATC term and standardised medication name

ATC level 4 term ¹ Standardised medication name ¹	Safety population		
	T N=14 n (%)	R N=16 n (%)	Overall N=30 n (%)
Subjects with any concomitant medication	3 (21.4)	2 (12.5)	5 (16.7)
Anilides	2 (14.3)	0 (0.0)	2 (6.7)
Depon	2 (14.3)	0 (0.0)	2 (6.7)
Antivertigo preparation	0 (0.0)	1 (6.3)	1 (3.3)
Sibelium	0 (0.0)	1 (6.3)	1 (3.3)
Benzodiazepine derivatives	0 (0.0)	1 (6.3)	1 (3.3)
Stedon	0 (0.0)	1 (6.3)	1 (3.3)
Butyrophenone derivatives	1 (7.1)	0 (0.0)	1 (3.3)
Haloperidol	1 (7.1)	0 (0.0)	1 (3.3)
Diazepines, oxazepines, thiazepines and oxepines	0 (0.0)	1 (6.3)	1 (3.3)
Seroquel	0 (0.0)	1 (6.3)	1 (3.3)
Other antidepressants	0 (0.0)	1 (6.3)	1 (3.3)
Remeron	0 (0.0)	1 (6.3)	1 (3.3)
Other antiepileptics	0 (0.0)	1 (6.3)	1 (3.3)
Lyrica	0 (0.0)	1 (6.3)	1 (3.3)
Tertiary amines	1 (7.1)	0 (0.0)	1 (3.3)
Biperiden	1 (7.1)	0 (0.0)	1 (3.3)
Thyroid hormones	0 (0.0)	1 (6.3)	1 (3.3)
Thyrohormone	0 (0.0)	1 (6.3)	1 (3.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note 1: WHODDE version September 1, 2012

Source: [Listing 16.2.10.3](#) - Previous and concomitant medications

Program: Tables\c101-cm-tbl.sas

Table 14.1.1.8 Other therapies by ATC term and standardised medication name

Not applicable

14.2 Efficacy data

14.2.1 ALT normalisation

Table 14.2.1.1 Proportion of subjects with ALT (U/L) normalisation

Time-point	ITT population			FAS population		
	T n (%)	R n (%)	Overall n (%)	T n (%)	R n (%)	Overall n (%)
Visit 6 - After 4 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
ALT normalisation not achieved	8 (57.1)	6 (37.5)	14 (46.7)	6 (50.0)	5 (33.3)	11 (40.7)
ALT normalisation achieved	6 (42.9)	10 (62.5)	16 (53.3)	6 (50.0)	10 (66.7)	16 (59.3)
Visit 10 - After 8 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
ALT normalisation not achieved	6 (42.9)	7 (43.8)	13 (43.3)	4 (33.3)	6 (40.0)	10 (37.0)
ALT normalisation achieved	8 (57.1)	9 (56.3)	17 (56.7)	8 (66.7)	9 (60.0)	17 (63.0)
Visit 14 - After 12 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
ALT normalisation not achieved	7 (50.0)	7 (43.8)	14 (46.7)	5 (41.7)	6 (40.0)	11 (40.7)
ALT normalisation achieved	7 (50.0)	9 (56.3)	16 (53.3)	7 (58.3)	9 (60.0)	16 (59.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

ALT normalisation: Value of ALT within the normal range (Male: ALT < 42 U/L; Female: ALT < 32 U/L)

ITT population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been termed as not achieving normalisation

FAS population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been excluded from analysis

Source: [Listing 16.2.6.1](#) – ALT (U/L) normalisation

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.1.2 ALT (U/L) normalisation – Outcome of the statistical comparison

Time point	Parameter	Test	Value of χ^2	p-value	Statistical significance	Difference of Proportions [95% CI]	Odds Ratio [95% CI]
Visit 6 (after 4 weeks of treatment) - ITT population	ALT (U/L)	χ^2	1.1575	0.2820	Not significant	0.2 [-0.2 - 0.5]	0.4500 [0.0815 - 2.4210]
Visit 6 (after 4 weeks of treatment) - FAS population	ALT (U/L)	χ^2	0.7670	0.3811	Not significant	0.2 [-0.2 - 0.5]	0.5000 [0.0801 - 3.0656]
Visit 10 (after 8 weeks of treatment) - ITT population	ALT (U/L)	χ^2	0.0024	0.9607	Not significant	0.0 [-0.4 - 0.3]	1.0370 [0.1948 - 5.5826]
Visit 10 (after 8 weeks of treatment) - FAS population	ALT (U/L)	χ^2	0.1271	0.7215	Not significant	-0.1 [-0.4 - 0.3]	1.3333 [0.2134 - 8.9079]
Visit 14 (after 12 weeks of treatment) - ITT population	ALT (U/L)	χ^2	0.1172	0.7321	Not significant	0.1 [-0.3 - 0.4]	0.7778 [0.1467 - 4.1033]
Visit 14 (after 12 weeks of treatment) - FAS population	ALT (U/L)	χ^2	0.0077	0.9302	Not significant	0.0 [-0.4 - 0.4]	0.9333 [0.1550 - 5.7372]

ALT normalisation: Value of ALT within the normal range (Male: ALT < 42 U/L; Female: ALT < 32 U/L)

ITT population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been termed as not achieving normalisation

FAS population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been excluded from analysis

Source: [Listing 16.2.6.1](#) – ALT (U/L) normalisation

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.1.3 ALT (U/L) change from baseline (Visit 2)

Time-point	Statistics	ITT population			FAS population		
		T	R	Overall	T	R	Overall
Visit 6 - After 4 weeks of treatment	N	12	15	27	12	15	27
	Mean	-60.3	-76.5	-69.3	-60.3	-76.5	-69.3
	SD	98.1	60	78	98.1	60	78
	CV%	-162.6	-78.4	-112.4	-162.6	-78.4	-112.4
	Min	-255	-178	-255	-255	-178	-255
	Median	-76	-71	-71	-76	-71	-71
	Max	163	29	163	163	29	163
Visit 10 - After 8 weeks of treatment	N	12	15	27	12	15	27
	Mean	-71.3	-81.5	-77	-71.3	-81.5	-77
	SD	92.2	53.6	71.9	92.2	53.6	71.9
	CV%	-129.3	-65.7	-93.4	-129.3	-65.7	-93.4
	Min	-258	-178	-258	-258	-178	-258
	Median	-80.5	-74	-74	-80.5	-74	-74
	Max	124	-10	124	124	-10	124
Visit 14 - After 12 weeks of treatment	N	12	15	27	12	15	27
	Mean	-63.4	-75.2	-70	-63.4	-75.2	-70
	SD	99.8	57.7	77.7	99.8	57.7	77.7
	CV%	-157.3	-76.8	-111.1	-157.3	-76.8	-111.1
	Min	-256	-178	-256	-256	-178	-256
	Median	-72	-71	-71	-72	-71	-71
	Max	162	12	162	162	12	162

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.8.5](#) – ALT (U/L) change from baseline

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.1.4 ALT (U/L) change from baseline (Visit 2) - Statistical comparison between treatment groups

Change	Parameter	Test	Mean T	Mean R	p-value	Statistical significance
Visit 2 (Baseline) vs Visit 6 (after 4 weeks of treatment) - ITT	ALT (U/L)	T-Test	-60.33	-76.53	0.6015	Not significant
Visit 2 (Baseline) vs Visit 6 (after 4 weeks of treatment) - FAS	ALT (U/L)	T-Test	-60.33	-76.53	0.6015	Not significant
Visit 2 (Baseline) vs Visit 10 (after 8 weeks of treatment) - ITT	ALT (U/L)	T-Test	-71.33	-81.53	0.7218	Not significant
Visit 2 (Baseline) vs Visit 10 (after 8 weeks of treatment) - FAS	ALT (U/L)	T-Test	-71.33	-81.53	0.7218	Not significant
Visit 2 (Baseline) vs Visit 14 (after 12 weeks of treatment) - ITT	ALT (U/L)	T-Test	-63.42	-75.2	0.7035	Not significant
Visit 2 (Baseline) vs Visit 14 (after 12 weeks of treatment) - FAS	ALT (U/L)	T-Test	-63.42	-75.2	0.7035	Not significant

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.8.5](#) – ALT (U/L) change from baseline

Program: Tables\c101-lb-01-tbl.sas

14.2.2 Normalisation of TNF- α

Table 14.2.2.1 Proportion of subjects with TNF-alpha (pg/mL) normalisation

Time-point	ITT population			FAS population		
	T n (%)	R n (%)	Overall n (%)	T n (%)	R n (%)	Overall n (%)
Visit 6 - After 4 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
TNF-alpha normalisation not achieved	12 (85.7)	14 (87.5)	26 (86.7)	10 (83.3)	13 (86.7)	23 (85.2)
TNF-alpha normalisation achieved	2 (14.3)	2 (12.5)	4 (13.3)	2 (16.7)	2 (13.3)	4 (14.8)
Visit 10 - After 8 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
TNF-alpha normalisation not achieved	11 (78.6)	11 (68.8)	22 (73.3)	9 (75.0)	10 (66.7)	19 (70.4)
TNF-alpha normalisation achieved	3 (21.4)	5 (31.3)	8 (26.7)	3 (25.0)	5 (33.3)	8 (29.6)
Visit 14 - After 12 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
TNF-alpha normalisation not achieved	13 (92.9)	10 (62.5)	23 (76.7)	11 (91.7)	9 (60.0)	20 (74.1)
TNF-alpha normalisation achieved	1 (7.1)	6 (37.5)	7 (23.3)	1 (8.3)	6 (40.0)	7 (25.9)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

TNF-alpha normalisation: Value of TNF-alpha within the normal range (TNF-alpha<8.27 pg/mL)

ITT population: Subjects with missing assessments of TNF-alpha after 4, 8 or 12 weeks of treatment have been termed as not achieving normalisation

FAS population: Subjects with missing assessments of TNF-alpha after 4, 8 or 12 weeks of treatment have been excluded from analysis

Source: [Listing 16.2.6.2](#) – TNF-alpha (pg/mL) normalisation

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.2.2 TNF- α (pg/mL) normalisation - Statistical comparison between treatment groups

Time point	Parameter	Test	Value of χ^2	p-value	Statistical significance	Difference of Proportions [95% CI]	Odds Ratio [95% CI]
Visit 6 (after 4 weeks of treatment) - ITT population	TNF- α (pg/mL)	χ^2	0.0206	0.8859	Not significant	0.0 [-0.3 - 0.2]	1.1667 [0.0736 - 18.3229]
Visit 6 (after 4 weeks of treatment) - FAS population	TNF- α (pg/mL)	χ^2	0.0587	0.8086	Not significant	0.0 [-0.3 - 0.2]	1.3000 [0.0801 - 20.7111]
Visit 10 (after 8 weeks of treatment) - ITT population	TNF- α (pg/mL)	χ^2	0.3683	0.5439	Not significant	0.1 [-0.2 - 0.4]	0.6000 [0.0755 - 4.0835]
Visit 10 (after 8 weeks of treatment) - FAS population	TNF- α (pg/mL)	χ^2	0.2220	0.6375	Not significant	0.1 [-0.3 - 0.4]	0.6667 [0.0810 - 4.7290]
Visit 14 (after 12 weeks of treatment) - ITT population	TNF- α (pg/mL)	χ^2	3.8465	0.0499	Significant	0.3 [0.0 - 0.6]	0.1282 [0.0026 - 1.4095]
Visit 14 (after 12 weeks of treatment) - FAS population	TNF- α (pg/mL)	χ^2	3.4811	0.0621	Not significant	0.3 [0.0 - 0.6]	0.1364 [0.0027 - 1.5548]

TNF- α normalisation: value of TNF- α within the normal range (TNF- α <8.27)

ITT population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been termed as not achieving normalisation

FAS population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been excluded from analysis

Source: [Listing 16.2.6.2](#) – TNF- α (pg/mL) normalisation

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.2.3 TNF- α (pg/mL) change from baseline (Visit 2)

Time-point	Statistics	ITT population			FAS population		
		T	R	Overall	T	R	Overall
Visit 6 - After 4 weeks of treatment	N	11	15	26	11	15	26
	Mean	2.695	6.485	4.882	2.695	6.485	4.882
	SD	3.938	19.949	15.254	3.938	19.949	15.254
	CV%	146.134	307.595	312.493	146.134	307.595	312.493
	Min	-0.75	-9.51	-9.51	-0.75	-9.51	-9.51
	Median	1.51	2.99	2.21	1.51	2.99	2.21
	Max	13.92	77.19	77.19	13.92	77.19	77.19
Visit 10 - After 8 weeks of treatment	N	11	15	26	11	15	26
	Mean	5.888	4.995	5.373	5.888	4.995	5.373
	SD	7.92	10.111	9.086	7.92	10.111	9.086
	CV%	134.512	202.444	169.109	134.512	202.444	169.109
	Min	-2.83	-6.38	-6.38	-2.83	-6.38	-6.38
	Median	3.64	2.92	3.05	3.64	2.92	3.05
	Max	21.37	29.2	29.2	21.37	29.2	29.2
Visit 14 - After 12 weeks of treatment	N	11	15	26	11	15	26
	Mean	10.389	7.002	8.435	10.389	7.002	8.435
	SD	13.449	22.212	18.75	13.449	22.212	18.75
	CV%	129.456	317.218	222.282	129.456	317.218	222.282
	Min	0.05	-10.15	-10.15	0.05	-10.15	-10.15
	Median	6.63	2.31	3.68	6.63	2.31	3.68
	Max	48.25	85.72	85.72	48.25	85.72	85.72

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: Listing 16.2.8.6 – TNF- α (pg/mL) change from baseline

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.2.4 TNF- α (pg/mL) change from baseline (Visit 2) - Statistical comparison between treatment groups

Change	Parameter	Test	Mean T	Mean R	p-value	Statistical significance
Visit 2 (Baseline) vs Visit 6 (after 4 weeks of treatment) - ITT	TNF- α (pg/mL)	Wilcoxon sum-rank test			0.6461	Not significant
Visit 2 (Baseline) vs Visit 6 (after 4 weeks of treatment) - FAS	TNF- α (pg/mL)	Wilcoxon sum-rank test			0.6461	Not significant
Visit 2 (Baseline) vs Visit 10 (after 8 weeks of treatment) - ITT	TNF- α (pg/mL)	Wilcoxon sum-rank test			0.5400	Not significant
Visit 2 (Baseline) vs Visit 10 (after 8 weeks of treatment) - FAS	TNF- α (pg/mL)	Wilcoxon sum-rank test			0.5400	Not significant
Visit 2 (Baseline) vs Visit 14 (after 12 weeks of treatment) - ITT	TNF- α (pg/mL)	Wilcoxon sum-rank test			0.0362	Significant
Visit 2 (Baseline) vs Visit 14 (after 12 weeks of treatment) - FAS	TNF- α (pg/mL)	Wilcoxon sum-rank test			0.0362	Significant

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.8.6](#) – TNF- α (pg/mL) change from baseline

Program: Tables\c101-lb-01-tbl.sas

14.2.3 Normalisation of AST

Table 14.2.3.1 Proportion of subjects with AST (U/L) normalisation

Time-point	ITT population			FAS population		
	T n (%)	R n (%)	Overall n (%)	T n (%)	R n (%)	Overall n (%)
Visit 6 - After 4 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
AST normalisation not achieved	8 (57.1)	5 (31.3)	13 (43.3)	6 (50.0)	4 (26.7)	10 (37.0)
AST normalisation achieved	6 (42.9)	11 (68.8)	17 (56.7)	6 (50.0)	11 (73.3)	17 (63.0)
Visit 10 - After 8 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
AST normalisation not achieved	5 (35.7)	6 (37.5)	11 (36.7)	3 (25.0)	5 (33.3)	8 (29.6)
AST normalisation achieved	9 (64.3)	10 (62.5)	19 (63.3)	9 (75.0)	10 (66.7)	19 (70.4)
Visit 14 - After 12 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
AST normalisation not achieved	7 (50.0)	5 (31.3)	12 (40.0)	5 (41.7)	4 (26.7)	9 (33.3)
AST normalisation achieved	7 (50.0)	11 (68.8)	18 (60.0)	7 (58.3)	11 (73.3)	18 (66.7)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

AST normalisation: Value of AST within the normal range (Male: AST<38 U/L; Female: AST<32 U/L)

ITT population: Subjects with missing assessments of AST after 4, 8 or 12 weeks of treatment have been termed as not achieving normalisation

FAS population: Subjects with missing assessments of AST after 4, 8 or 12 weeks of treatment have been excluded from analysis

Source: [Listing 16.2.6.3](#) – AST (U/L) normalisation

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.3.2 AST (U/L) normalisation - Statistical comparison between treatment groups

Time point	Parameter	Test	Value of χ^2	p-value	Statistical significance	Difference of Proportions [95% CI]	Odds Ratio [95% CI]
Visit 6 (after 4 weeks of treatment) - ITT population	AST (U/L)	χ^2	2.0386	0.1533	Not significant	0.3 [-0.1 - 0.6]	0.3409 [0.0588 - 1.8974]
Visit 6 (after 4 weeks of treatment) - FAS population	AST (U/L)	χ^2	1.5565	0.2122	Not significant	0.2 [-0.1 - 0.6]	0.3636 [0.0535 - 2.3519]
Visit 10 (after 8 weeks of treatment) - ITT population	AST (U/L)	χ^2	0.0103	0.9193	Not significant	0.0 [-0.4 - 0.3]	1.0800 [0.1922 - 6.2275]
Visit 10 (after 8 weeks of treatment) - FAS population	AST (U/L)	χ^2	0.2220	0.6375	Not significant	-0.1 [-0.4 - 0.3]	1.5000 [0.2115 - 12.3528]
Visit 14 (after 12 weeks of treatment) - ITT population	AST (U/L)	χ^2	1.0938	0.2956	Not significant	0.2 [-0.2 - 0.5]	0.4545 [0.0793 - 2.5261]
Visit 14 (after 12 weeks of treatment) - FAS population	AST (U/L)	χ^2	0.6750	0.4113	Not significant	0.2 [-0.2 - 0.5]	0.5091 [0.0739 - 3.4050]

AST normalisation: value of AST within the normal range (Male: AST<38 U/L; Female: AST<32 U/L)

ITT population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been termed as not achieving normalisation

FAS population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been excluded from analysis

Source: [Listing 16.2.6.3](#) – AST (U/L) normalisation

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.3.3 AST (U/L) change from baseline (Visit 2)

Time-point	Statistics	ITT population			FAS population		
		T	R	Overall	T	R	Overall
Visit 6 - After 4 weeks of treatment	N	12	15	27	12	15	27
	Mean	-14.1	-26.2	-20.8	-14.1	-26.2	-20.8
	SD	65.2	25.7	46.9	65.2	25.7	46.9
	CV%	-463.3	-98.2	-225.1	-463.3	-98.2	-225.1
	Min	-108	-80	-108	-108	-80	-108
	Median	-21.5	-22	-22	-21.5	-22	-22
	Max	151	26	151	151	26	151
Visit 10 - After 8 weeks of treatment	N	12	15	27	12	15	27
	Mean	-18.7	-30.1	-25	-18.7	-30.1	-25
	SD	70.6	20.3	48.6	70.6	20.3	48.6
	CV%	-378.3	-67.4	-194.5	-378.3	-67.4	-194.5
	Min	-111	-84	-111	-111	-84	-111
	Median	-23.5	-29	-25	-23.5	-29	-25
	Max	167	-3	167	167	-3	167
Visit 14 - After 12 weeks of treatment	N	12	15	27	12	15	27
	Mean	-6.8	-27.3	-18.1	-6.8	-27.3	-18.1
	SD	88.4	23.7	61	88.4	23.7	61
	CV%	-1309.2	-87	-335.9	-1309.2	-87	-335.9
	Min	-113	-83	-113	-113	-83	-113
	Median	-22.5	-26	-24	-22.5	-26	-24
	Max	238	6	238	238	6	238

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.8.7](#) – AST (U/L) change from baseline

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.3.4 AST (U/L) change from baseline (Visit 2) - Statistical comparison between treatment groups

Change	Parameter	Test	Mean T	Mean R	p-value	Statistical significance
Visit 2 (Baseline) vs Visit 6 (after 4 weeks of treatment) - ITT	AST (U/L)	Wilcoxon sum-rank test			0.5085	Not significant
Visit 2 (Baseline) vs Visit 6 (after 4 weeks of treatment) - FAS	AST (U/L)	Wilcoxon sum-rank test			0.5085	Not significant
Visit 2 (Baseline) vs Visit 10 (after 8 weeks of treatment) - ITT	AST (U/L)	Wilcoxon sum-rank test			0.6569	Not significant
Visit 2 (Baseline) vs Visit 10 (after 8 weeks of treatment) - FAS	AST (U/L)	Wilcoxon sum-rank test			0.6569	Not significant
Visit 2 (Baseline) vs Visit 14 (after 12 weeks of treatment) - ITT	AST (U/L)	Wilcoxon sum-rank test			0.6056	Not significant
Visit 2 (Baseline) vs Visit 14 (after 12 weeks of treatment) - FAS	AST (U/L)	Wilcoxon sum-rank test			0.6056	Not significant

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.8.7](#) – AST (U/L) change from baseline

Program: Tables\c101-lb-01-tbl.sas

14.2.4 Normalisation of APRI

Table 14.2.4.1 Proportion of subjects with APRI normalisation

Time-point	ITT population			FAS population		
	T n (%)	R n (%)	Overall n (%)	T n (%)	R n (%)	Overall n (%)
Visit 6 - After 4 weeks of treatment	13 (100.0)	16 (100.0)	29 (100.0)	11 (100.0)	15 (100.0)	26 (100.0)
APRI normalisation not achieved	7 (53.8)	8 (50.0)	15 (51.7)	5 (45.5)	7 (46.7)	12 (46.2)
APRI normalisation achieved	6 (46.2)	8 (50.0)	14 (48.3)	6 (54.5)	8 (53.3)	14 (53.8)
Visit 10 - After 8 weeks of treatment	13 (100.0)	16 (100.0)	29 (100.0)	10 (100.0)	14 (100.0)	24 (100.0)
APRI normalisation not achieved	7 (53.8)	7 (43.8)	14 (48.3)	4 (40.0)	5 (35.7)	9 (37.5)
APRI normalisation achieved	6 (46.2)	9 (56.3)	15 (51.7)	6 (60.0)	9 (64.3)	15 (62.5)
Visit 14 - After 12 weeks of treatment	13 (100.0)	16 (100.0)	29 (100.0)	9 (100.0)	14 (100.0)	23 (100.0)
APRI normalisation not achieved	7 (53.8)	7 (43.8)	14 (48.3)	3 (33.3)	5 (35.7)	8 (34.8)
APRI normalisation achieved	6 (46.2)	9 (56.3)	15 (51.7)	6 (66.7)	9 (64.3)	15 (65.2)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

APRI normalisation: Value of APRI within the normal range (APRI<0.5)

ITT population: Subjects with missing assessments of APRI after 4, 8 or 12 weeks of treatment have been termed as not achieving normalisation

FAS population: Subjects with missing assessments of APRI after 4, 8 or 12 weeks of treatment have been excluded from analysis

Note: Subject S048/026 has been excluded from ITT population APRI analysis because all the assessments are missing

Source: Listing 16.2.6.4 – APRI normalisation

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.4.2 APRI normalisation - Statistical comparison between treatment groups

Time point	Parameter	Test	Value of χ^2	p-value	Statistical significance	Difference of Proportions [95% CI]	Odds Ratio [95% CI]
Visit 6 (after 4 weeks of treatment) - ITT population	APRI	χ^2	0.0425	0.8367	Not significant	0.0 [-0.3 - 0.4]	0.8571 [0.1557 - 4.6684]
Visit 6 (after 4 weeks of treatment) - FAS population	APRI	χ^2	0.0038	0.9512	Not significant	0.0 [-0.4 - 0.4]	1.0500 [0.1706 - 6.5806]
Visit 10 (after 8 weeks of treatment) - ITT population	APRI	χ^2	0.2928	0.5884	Not significant	0.1 [-0.3 - 0.5]	0.6667 [0.1202 - 3.6477]
Visit 10 (after 8 weeks of treatment) - FAS population	APRI	χ^2	0.0457	0.8307	Not significant	0.0 [-0.4 - 0.4]	0.8333 [0.1176 - 6.1717]
Visit 14 (after 12 weeks of treatment) - ITT population	APRI	χ^2	0.2928	0.5884	Not significant	0.1 [-0.3 - 0.5]	0.6667 [0.1202 - 3.6477]
Visit 14 (after 12 weeks of treatment) - FAS population	APRI	χ^2	0.0137	0.9069	Not significant	0.0 [-0.4 - 0.4]	1.1111 [0.1423 - 9.9377]

APRI normalisation: value of APRI within the normal range (APRI<0.5)

ITT population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been termed as not achieving normalisation

FAS population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been excluded from analysis

Note: Subject S048/026 has been excluded from ITT population APRI analysis because all the assessments are missing

Source: [Listing 16.2.6.4](#) – APRI normalisation

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.4.3 APRI change from baseline (Visit 2)

Time-point	Statistics	ITT population			FAS population		
		T	R	Overall	T	R	Overall
Visit 6 - After 4 weeks of treatment	N	11	15	26	11	15	26
	Mean	-0.0984	-0.2423	-0.1814	-0.0984	-0.2423	-0.1814
	SD	0.7082	0.4037	0.5451	0.7082	0.4037	0.5451
	CV%	-719.9515	-166.6246	-300.5111	-719.9515	-166.6246	-300.5111
	Min	-1.484	-1.02	-1.484	-1.484	-1.02	-1.484
	Median	-0.163	-0.146	-0.1545	-0.163	-0.146	-0.1545
	Max	1.29	0.755	1.29	1.29	0.755	1.29
Visit 10 - After 8 weeks of treatment	N	10	14	24	10	14	24
	Mean	-0.0497	-0.2192	-0.1486	-0.0497	-0.2192	-0.1486
	SD	0.9633	0.403	0.6798	0.9633	0.403	0.6798
	CV%	-1938.228	-183.8316	-457.55	-1938.228	-183.8316	-457.55
	Min	-1.558	-0.712	-1.558	-1.558	-0.712	-1.558
	Median	-0.174	-0.2665	-0.186	-0.174	-0.2665	-0.186
	Max	1.927	0.591	1.927	1.927	0.591	1.927
Visit 14 - After 12 weeks of treatment	N	9	14	23	9	14	23
	Mean	0.0347	-0.2184	-0.1194	0.0347	-0.2184	-0.1194
	SD	1.3208	0.4188	0.8683	1.3208	0.4188	0.8683
	CV%	3810.0061	-191.7181	-727.2732	3810.0061	-191.7181	-727.2732
	Min	-1.548	-0.909	-1.548	-1.548	-0.909	-1.548
	Median	-0.153	-0.301	-0.252	-0.153	-0.301	-0.252
	Max	3.287	0.45	3.287	3.287	0.45	3.287

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: Listing 16.2.8.8 – APRI change from baseline

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.4.4 APRI change from baseline (Visit 2) - Statistical comparison between treatment groups

Change	Parameter	Test	Mean T	Mean R	p-value	Statistical significance
Visit 2 (Baseline) vs Visit 6 (after 4 weeks of treatment) - ITT	APRI	T-Test	-0.098	-0.242	0.5171	Not significant
Visit 2 (Baseline) vs Visit 6 (after 4 weeks of treatment) - FAS	APRI	T-Test	-0.098	-0.242	0.5171	Not significant
Visit 2 (Baseline) vs Visit 10 (after 8 weeks of treatment) - ITT	APRI	T-Test	-0.05	-0.219	0.6100	Not significant
Visit 2 (Baseline) vs Visit 10 (after 8 weeks of treatment) - FAS	APRI	T-Test	-0.05	-0.219	0.6100	Not significant
Visit 2 (Baseline) vs Visit 14 (after 12 weeks of treatment) - ITT	APRI	Wilcoxon sum-rank test			0.8775	Not significant
Visit 2 (Baseline) vs Visit 14 (after 12 weeks of treatment) - FAS	APRI	Wilcoxon sum-rank test			0.8775	Not significant

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.8.8](#) – APRI change from baseline

Program: Tables\c101-lb-01-tbl.sas

14.2.5 Normalisation of HA

Table 14.2.5.1 Proportion of subjects with HA (µg/L) normalisation

Time-point	ITT population			FAS population		
	T n (%)	R n (%)	Overall n (%)	T n (%)	R n (%)	Overall n (%)
Visit 6 - After 4 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
HA normalisation not achieved	9 (64.3)	4 (25.0)	13 (43.3)	7 (58.3)	3 (20.0)	10 (37.0)
HA normalisation achieved	5 (35.7)	12 (75.0)	17 (56.7)	5 (41.7)	12 (80.0)	17 (63.0)
Visit 10 - After 8 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
HA normalisation not achieved	10 (71.4)	2 (12.5)	12 (40.0)	8 (66.7)	1 (6.7)	9 (33.3)
HA normalisation achieved	4 (28.6)	14 (87.5)	18 (60.0)	4 (33.3)	14 (93.3)	18 (66.7)
Visit 14 - After 12 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
HA normalisation not achieved	10 (71.4)	4 (25.0)	14 (46.7)	8 (66.7)	3 (20.0)	11 (40.7)
HA normalisation achieved	4 (28.6)	12 (75.0)	16 (53.3)	4 (33.3)	12 (80.0)	16 (59.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

HA normalisation: Value of HA within the normal range (HA<75 µg/L)

ITT population: Subjects with missing assessments of HA after 4, 8 or 12 weeks of treatment have been termed as not achieving normalisation

FAS population: Subjects with missing assessments of HA after 4, 8 or 12 weeks of treatment have been excluded from analysis

Source: [Listing 16.2.6.5](#) – HA (µg/L) normalisation

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.5.2 HA (µg/L) normalisation - Statistical comparison between treatment groups

Time point	Parameter	Test	Value of χ^2	p-value	Statistical significance	Difference of Proportions [95% CI]	Odds Ratio [95% CI]
Visit 6 (after 4 weeks of treatment) - ITT population	HA (µg/L)	χ^2	4.6930	0.0303	Significant	0.4 [0.1 - 0.7]	0.1852 [0.0285 - 1.1163]
Visit 6 (after 4 weeks of treatment) - FAS population	HA (µg/L)	χ^2	4.2009	0.0404	Significant	0.4 [0.0 - 0.7]	0.1786 [0.0221 - 1.2665]
Visit 10 (after 8 weeks of treatment) - ITT population	HA (µg/L)	χ^2	10.8036	0.0010	Significant	0.6 [0.3 - 0.9]	0.0571 [0.0049 - 0.4709]
Visit 10 (after 8 weeks of treatment) - FAS population	HA (µg/L)	χ^2	10.8000	0.0010	Significant	0.6 [0.3 - 0.9]	0.0357 [0.0008 - 0.4512]
Visit 14 (after 12 weeks of treatment) - ITT population	HA (µg/L)	χ^2	6.4668	0.0110	Significant	0.5 [0.1 - 0.8]	0.1333 [0.0193 - 0.8444]
Visit 14 (after 12 weeks of treatment) - FAS population	HA (µg/L)	χ^2	6.0136	0.0142	Significant	0.5 [0.1 - 0.8]	0.1250 [0.0150 - 0.9183]

HA normalisation: value of HA within the normal range (HA<75 µg/L)

ITT population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been termed as not achieving normalisation

FAS population: Subjects with missing assessments of ALT after 4, 8 or 12 weeks of treatment have been excluded from analysis

Source: [Listing 16.2.6.5](#) – HA (µg/L) normalisation

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.5.3 HA (µg/L) change from baseline (Visit 2)

Time-point	Statistics	ITT population			FAS population		
		T	R	Overall	T	R	Overall
Visit 6 - After 4 weeks of treatment	N	7	6	13	7	6	13
	Mean	85.1	41.5	65	85.1	41.5	65
	SD	50.6	106.9	81	50.6	106.9	81
	CV%	59.4	257.6	124.6	59.4	257.6	124.6
	Min	27	-138	-138	27	-138	-138
	Median	87	41.5	69	87	41.5	69
Visit 10 - After 8 weeks of treatment	Max	170	156	170	170	156	170
	N	7	6	13	7	6	13
	Mean	165.1	8	92.6	165.1	8	92.6
	SD	134.8	86.8	137.4	134.8	86.8	137.4
	CV%	81.6	1085.6	148.3	81.6	1085.6	148.3
	Min	11	-148	-148	11	-148	-148
Visit 14 - After 12 weeks of treatment	Median	130	21.5	32	130	21.5	32
	Max	338	120	338	338	120	338
	N	7	5	12	7	5	12
	Mean	113.4	34	80.3	113.4	34	80.3
	SD	80.6	13	72.7	80.6	13	72.7
	CV%	71.1	38.3	90.5	71.1	38.3	90.5
	Min	5	15	5	5	15	5
	Median	104	39	47.5	104	39	47.5
	Max	218	48	218	218	48	218

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Non numeric values have been excluded in the calculation of change from baseline

Source: [Listing 16.2.8.9](#) – HA (µg/L) change from baseline

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.5.4 HA (µg/L) change from baseline (Visit 2) - Statistical comparison between treatment groups

Change	Parameter	Test	Mean T	Mean R	p-value	Statistical significance
Visit 2 (Baseline) vs Visit 6 (after 4 weeks of treatment) - ITT	HA (µg/L)	T-Test	85.143	41.5	0.3547	Not significant
Visit 2 (Baseline) vs Visit 6 (after 4 weeks of treatment) - FAS	HA (µg/L)	T-Test	85.143	41.5	0.3547	Not significant
Visit 2 (Baseline) vs Visit 10 (after 8 weeks of treatment) - ITT	HA (µg/L)	T-Test	165.14	8	0.0325	Significant
Visit 2 (Baseline) vs Visit 10 (after 8 weeks of treatment) - FAS	HA (µg/L)	T-Test	165.14	8	0.0325	Significant
Visit 2 (Baseline) vs Visit 14 (after 12 weeks of treatment) - ITT	HA (µg/L)	T-Test	113.43	34	0.0404	Significant
Visit 2 (Baseline) vs Visit 14 (after 12 weeks of treatment) - FAS	HA (µg/L)	T-Test	113.43	34	0.0404	Significant

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.8.9](#) – HA (µg/L) change from baseline

Program: Tables\c101-lb-01-tbl.sas

14.2.6 Normalisation of IL-6

Table 14.2.6.1 Proportion of subjects with IL-6 (pg/mL) normalisation

Time-point	ITT population			FAS population		
	T n (%)	R n (%)	Overall n (%)	T n (%)	R n (%)	Overall n (%)
Visit 6 - After 4 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
IL-6 normalisation not achieved	2 (14.3)	1 (6.3)	3 (10.0)	0 (0.0)	0 (0.0)	0 (0.0)
IL-6 normalisation achieved	12 (85.7)	15 (93.8)	27 (90.0)	12 (100.0)	15 (100.0)	27 (100.0)
Visit 10 - After 8 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
IL-6 normalisation not achieved	2 (14.3)	1 (6.3)	3 (10.0)	0 (0.0)	0 (0.0)	0 (0.0)
IL-6 normalisation achieved	12 (85.7)	15 (93.8)	27 (90.0)	12 (100.0)	15 (100.0)	27 (100.0)
Visit 14 - After 12 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	15 (100.0)	27 (100.0)
IL-6 normalisation not achieved	2 (14.3)	1 (6.3)	3 (10.0)	0 (0.0)	0 (0.0)	0 (0.0)
IL-6 normalisation achieved	12 (85.7)	15 (93.8)	27 (90.0)	12 (100.0)	15 (100.0)	27 (100.0)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

IL-6 normalisation: Value of IL-6 within the normal range (IL-6<12.0 pg/mL)

ITT population: Subjects with missing assessments of IL-6 after 4, 8 or 12 weeks of treatment have been termed as not achieving normalisation

FAS population: Subjects with missing assessments of IL-6 after 4, 8 or 12 weeks of treatment have been excluded from analysis

Note: The values of IL-6 (where not missing) have been always reported as '<12.0 pg/mL' for each visit and each subject

Source: Listing 16.2.6.6 – IL-6 (pg/mL) normalisation

Program: Tables\c101-lb-01-tbl.sas

Table 14.2.6.2 IL-6 (pg/mL) normalisation - Statistical comparison between treatment groups

The values of IL-6 (where not missing) have been always reported as <12.0 pg/mL for each visit and each subject

Table 14.2.6.3 IL-6 (pg/mL) change from baseline (Visit 2)

The values of IL-6 (where not missing) have been always reported as '<12.0 pg/mL' for each visit and each subject, therefore change from baseline cannot be calculated

Table 14.2.6.4 IL-6 (pg/mL) change from baseline (Visit 2) - Statistical comparison between treatment groups

Change from baseline cannot be calculated, therefore statistical comparison is not applicable

14.2.7 RVR and EVR

Table 14.2.7.1 Proportion of subjects achieving RVR

Time-point	ITT population			FAS population		
	T n(%)	R n(%)	Overall n(%)	T n(%)	R n(%)	Overall n(%)
Visit 6 - After 4 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	12 (100.0)	14 (100.0)	26 (100.0)
RVR not achieved	10 (71.4)	11 (68.8)	21 (70.0)	8 (66.7)	9 (64.3)	17 (65.4)
RVR achieved	4 (28.6)	5 (31.3)	9 (30.0)	4 (33.3)	5 (35.7)	9 (34.6)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

RVR: Absence of detectable HCV RNA after 4 weeks of treatment

ITT population: Subjects with missing values of HCV RNA after 4 weeks of treatment have been termed as not achieving a RVR

FAS population: Subjects with missing values of HCV RNA after 4 weeks of treatment have been excluded from analysis

Source: Listing 16.2.6.7 - Subjects achieving RVR or EVR

Program: Tables\c101-lb-02-tbl.sas

Table 14.2.7.2 Summary of subjects achieving RVR - Statistical comparison between treatment groups

Time point	Parameter	Test	Value of χ^2	p-value	Statistical significance	Difference of Proportions [95% CI]	Odds Ratio [95% CI]
Visit 6 (after 4 weeks of treatment) - ITT Population	RVR	χ^2	0.0255	0.8731	Not significant	0.0 [-0.3 - 0.4]	0.8800 [0.1338 - 5.4914]
Visit 6 (after 4 weeks of treatment) - FAS Population	RVR	χ^2	0.0162	0.8988	Not significant	0.0 [-0.3 - 0.4]	0.9000 [0.1289 - 6.0034]

RVR: Absence of detectable HCV RNA after 4 weeks of treatment

ITT population: Subjects with missing values of HCV RNA after 4 weeks of treatment have been termed as not achieving a RVR

FAS population: Subjects with missing values of HCV RNA after 4 weeks of treatment have been excluded from analysis

Source: [Listing 16.2.6.7](#) - Subjects achieving RVR or EVR

Program: Tables\c101-lb-02-tbl.sas

Table 14.2.7.3 Proportion of subjects achieving EVR

Time-point	ITT population			FAS population		
	T n(%)	R n(%)	Overall n(%)	T n(%)	R n(%)	Overall n(%)
Visit 14 - After 12 weeks of treatment	14 (100.0)	16 (100.0)	30 (100.0)	11 (100.0)	14 (100.0)	25 (100.0)
EVR not achieved	3 (21.4)	4 (25.0)	7 (23.3)	0 (0.0)	2 (14.3)	2 (8.0)
EVR achieved	11 (78.6)	12 (75.0)	23 (76.7)	11 (100.0)	12 (85.7)	23 (92.0)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

EVR: HCV RNA level decrease by at least 2 logarithmic units of IU/mL after 12 weeks of treatment or absence of detectable HCV RNA after 4 weeks of treatment

ITT population: Subjects with missing values of HCV RNA after 12 weeks of treatment have been termed as not achieving a EVR

ITT population: Subjects with missing values of HCV RNA at screening and detectable values of HCV RNA after 12 weeks of treatment have been termed as not achieving a EVR

FAS population: Subjects with missing values of HCV RNA after 12 weeks of treatment have been excluded from analysis

FAS population: Subjects with missing values of HCV RNA at screening and detectable values of HCV RNA after 12 weeks of treatment have been excluded from analysis

Source: [Listing 16.2.6.7](#) - Subjects achieving RVR or EVR

Program: Tables\c101-lb-02-tbl.sas

Table 14.2.7.4 Summary of subjects achieving EVR - Statistical comparison between treatment groups

Time point	Parameter	Test	Value of χ^2	p-value	Statistical significance	Difference of Proportions [95% CI]	Odds Ratio [95% CI]
Visit 14 (after 12 weeks of treatment) - ITT Population	EVR	χ^2	0.0532	0.8175	Not significant	0.0 [-0.3 - 0.3]	1.2222 [0.1629 - 10.2328]
Visit 14 (after 12 weeks of treatment) - FAS Population	EVR	χ^2	1.7081	0.1912	Not significant	-0.1 [-0.3 - 0.0]	[0.2284 -]

EVR: HCV RNA level decrease by at least 2 logarithmic units of IU/mL after 12 weeks of treatment or absence of detectable HCV RNA after 4 weeks of treatment

ITT population: Subjects with missing values of HCV RNA after 12 weeks of treatment have been termed as not achieving a EVR

ITT population: Subjects with missing values of HCV RNA at screening and detectable values of HCV RNA after 12 weeks of treatment have been termed as not achieving a EVR

FAS population: Subjects with missing values of HCV RNA after 12 weeks of treatment have been excluded from analysis

FAS population: Subjects with missing values of HCV RNA at screening and detectable values of HCV RNA after 12 weeks of treatment have been excluded from analysis

Source: [Listing 16.2.6.7](#) - Subjects achieving RVR or EVR

Program: Tables\c101-lb-02-tbl.sas

14.3 Safety data

14.3.1 Displays of adverse events

Table 14.3.1.1 Global incidence of treatment emergent adverse events - Safety population

	T N=14 n (%) [n AE]	Safety population R N=16 n (%) [n AE]	Overall N=30 n (%) [n AE]
Subjects with any Treatment Emergent AE	4 (28.6) [8]	2 (12.5) [10]	6 (20.0) [18]
Related	0 (0.0) [0]	2 (12.5) [9]	2 (6.7) [9]
Not related	4 (28.6) [8]	1 (6.3) [1]	5 (16.7) [9]
Mild	3 (21.4) [5]	2 (12.5) [10]	5 (16.7) [15]
Moderate	1 (7.1) [3]	0 (0.0) [0]	1 (3.3) [3]
Severe	0 (0.0) [0]	0 (0.0) [0]	0 (0.0) [0]
Leading to discontinuation	0 (0.0) [0]	0 (0.0) [0]	0 (0.0) [0]
Subjects with any Serious Treatment Emergent AE	0 (0.0) [0]	0 (0.0) [0]	0 (0.0) [0]
Related	0 (0.0) [0]	0 (0.0) [0]	0 (0.0) [0]
Not related	0 (0.0) [0]	0 (0.0) [0]	0 (0.0) [0]
Leading to discontinuation	0 (0.0) [0]	0 (0.0) [0]	0 (0.0) [0]
Life-threatening	0 (0.0) [0]	0 (0.0) [0]	0 (0.0) [0]
Leading to death	0 (0.0) [0]	0 (0.0) [0]	0 (0.0) [0]

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

All the AEs with onset "Unknown" (where it was not possible to establish if the AE occurred before or after first exposure) have been included in the analysis

All the AEs with relationship defined as "Possible", "Probable", "Definite" or "Unassessable" were considered "Related" to study treatment

All the AEs with relationship defined as "Not related", "Unlikely" were considered "Not related" to study treatment

Source: [Listing 16.2.7.1](#) - Treatment emergent AEs

Program: Tables\c101-ac-01-tbl.sas

Table 14.3.1.2 Subjects with treatment emergent adverse events by system organ class and preferred term - Safety population

System Organ Class ¹ Preferred Term ¹	T N=14 n (%) [n AE]	Safety population R N=16 n (%) [n AE]	Overall N=30 n (%) [n AE]
Subjects with any Treatment Emergent AE	4 (28.6) [8]	2 (12.5) [10]	6 (20.0) [18]
General disorders and administration site conditions	3 (21.4) [3]	2 (12.5) [5]	5 (16.7) [8]
Pyrexia	2 (14.3) [2]	2 (12.5) [3]	4 (13.3) [5]
Fatigue	1 (7.1) [1]	1 (6.3) [2]	2 (6.7) [3]
Nervous system disorders	3 (21.4) [3]	2 (12.5) [4]	5 (16.7) [7]
Headache	3 (21.4) [3]	1 (6.3) [3]	4 (13.3) [6]
Dizziness	0 (0.0) [0]	1 (6.3) [1]	1 (3.3) [1]
Musculoskeletal and connective tissue disorders	1 (7.1) [1]	1 (6.3) [1]	2 (6.7) [2]
Arthralgia	0 (0.0) [0]	1 (6.3) [1]	1 (3.3) [1]
Back pain	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Respiratory, thoracic and mediastinal disorders	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Cough	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

All the AEs with onset "Unknown" (where it was not possible to establish if the AE occurred before or after first exposure) have been included in the analysis

Note 1: MedDRA version 15.1

Source: [Listing 16.2.7.1](#) - Treatment emergent AEs

Program: Tables\c101-ae-02-tbl.sas

Table 14.3.1.3 Subjects with treatment emergent adverse events by system organ class, preferred term and severity - Safety population

Severity System Organ Class ¹ Preferred Term ¹	Safety population		
	T N=14 n (%) [n AE]	R N=16 n (%) [n AE]	Overall N=30 n (%) [n AE]
Subjects with any Treatment Emergent AE	4 (28.6) [8]	2 (12.5) [10]	6 (20.0) [18]
Mild	3 (21.4) [5]	2 (12.5) [10]	5 (16.7) [15]
Musculoskeletal and connective tissue disorders	0 (0.0) [0]	1 (6.3) [1]	1 (3.3) [1]
Arthralgia	0 (0.0) [0]	1 (6.3) [1]	1 (3.3) [1]
General disorders and administration site	2 (14.3) [2]	2 (12.5) [5]	4 (13.3) [7]
Fatigue	1 (7.1) [1]	1 (6.3) [2]	2 (6.7) [3]
Pyrexia	1 (7.1) [1]	2 (12.5) [3]	3 (10.0) [4]
Nervous system disorders	3 (21.4) [3]	2 (12.5) [4]	5 (16.7) [7]
Dizziness	0 (0.0) [0]	1 (6.3) [1]	1 (3.3) [1]
Headache	3 (21.4) [3]	1 (6.3) [3]	4 (13.3) [6]
Moderate	1 (7.1) [3]	0 (0.0) [0]	1 (3.3) [3]
General disorders and administration site	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Pyrexia	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Musculoskeletal and connective tissue disorders	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Back pain	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Respiratory, thoracic and mediastinal disorders	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Cough	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Severe	0 (0.0) [0]	0 (0.0) [0]	0 (0.0) [0]

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

All the AEs with onset "Unknown" (where it was not possible to establish if the AE occurred before or after first exposure) have been included in the analysis

Note 1: MedDRA version 15.1

Source: [Listing 16.2.7.1](#) - Treatment emergent AEs

Program: Tables\c101-ae-02-tbl.sas

Table 14.3.1.4 Subjects with treatment emergent adverse events by system organ class, preferred term and relationship to study treatment - Safety population

Relationship to study treatment System Organ Class ¹ Preferred Term ¹	Safety population		
	T	R	Overall
	N=14 n (%) [n AE]	N=16 n (%) [n AE]	N=30 n (%) [n AE]
Subjects with any Treatment Emergent AE	4 (28.6) [8]	2 (12.5) [10]	6 (20.0) [18]
Related	0 (0.0) [0]	2 (12.5) [9]	2 (6.7) [9]
General disorders and administration site conditions	0 (0.0) [0]	1 (6.3) [4]	1 (3.3) [4]
Fatigue	0 (0.0) [0]	1 (6.3) [2]	1 (3.3) [2]
Pyrexia	0 (0.0) [0]	1 (6.3) [2]	1 (3.3) [2]
Musculoskeletal and connective tissue disorders	0 (0.0) [0]	1 (6.3) [1]	1 (3.3) [1]
Arthralgia	0 (0.0) [0]	1 (6.3) [1]	1 (3.3) [1]
Nervous system disorders	0 (0.0) [0]	2 (12.5) [4]	2 (6.7) [4]
Dizziness	0 (0.0) [0]	1 (6.3) [1]	1 (3.3) [1]
Headache	0 (0.0) [0]	1 (6.3) [3]	1 (3.3) [3]
Not related	4 (28.6) [8]	1 (6.3) [1]	5 (16.7) [9]
Musculoskeletal and connective tissue disorders	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Back pain	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Respiratory, thoracic and mediastinal disorders	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Cough	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Nervous system disorders	3 (21.4) [3]	0 (0.0) [0]	3 (10.0) [3]
Headache	3 (21.4) [3]	0 (0.0) [0]	3 (10.0) [3]
General disorders and administration site conditions	3 (21.4) [3]	1 (6.3) [1]	4 (13.3) [4]
Fatigue	1 (7.1) [1]	0 (0.0) [0]	1 (3.3) [1]
Pyrexia	2 (14.3) [2]	1 (6.3) [1]	3 (10.0) [3]

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

All the AEs with onset "Unknown" (where it was not possible to establish if the AE occurred before or after first exposure) have been included in the analysis

All the AEs with relationship defined as "Possible", "Probable", "Definite" or "Unassessable" were considered "Related" to study treatment

All the AEs with relationship defined as "Not related", "Unlikely" were considered "Not related" to study treatment

Note 1: MedDRA version 15.1

Source: [Listing 16.2.7.1](#) - Treatment emergent AEs

Program: Tables\c101-ae-02-tbl.sas

14.3.2 *Listing of deaths, other serious and significant adverse events*

Table 14.3.2.1 Deaths and Other Serious or Significant Adverse Events

No deaths or other serious or significant adverse events reported in the study

14.3.3 *Narrative of deaths, other serious and significant adverse events*

There were no deaths or other serious adverse events.

14.3.4 Abnormal laboratory value listing (each subject)

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S002/001	Screening		04APR11 10:50	Alanine Aminotransferase (U/L)	60	0 - 31	H	CR
KGR03-P03/001/S002/001	Screening		04APR11 10:50	Aspartate Aminotransferase (U/L)	80	0 - 31	H	CR
KGR03-P03/001/S002/001	Screening		04APR11 10:50	γ Glutamyl Transferase (U/L)	67	6 - 32	H	NCR
KGR03-P03/001/S002/001	Screening		04APR11 10:50	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S002/001	Screening		04APR11 10:50	Hepatitis C Virus RNA (IU/mL)	516467	0 - 11	H	CR
KGR03-P03/001/S002/001	Screening		04APR11 11:00	Specific Gravity	1.013	1.015 - 1.03	L	NCR
KGR03-P03/001/S002/001	Visit 2		13APR11 10:15	Specific Gravity	1.009	1.015 - 1.03	L	NCR
KGR03-P03/001/S002/001	Visit 2		13APR11 10:20	Alanine Aminotransferase (U/L)	80	0 - 31	H	CR
KGR03-P03/001/S002/001	Visit 2		13APR11 10:20	Aspartate Aminotransferase (U/L)	107	0 - 31	H	CR
KGR03-P03/001/S002/001	Visit 2		13APR11 10:20	γ Glutamyl Transferase (U/L)	79	6 - 32	H	NCR
KGR03-P03/001/S002/001	Visit 2		13APR11 10:20	Hyaluronic Acid (μg/L)	240	0 - 74	H	CR
KGR03-P03/001/S010/002	Screening		01JUN11 9:15	Alanine Aminotransferase (U/L)	76	0 - 41	H	CR
KGR03-P03/001/S010/002	Screening		01JUN11 9:15	Aspartate Aminotransferase (U/L)	56	0 - 37	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S010/002	Screening		01JUN11 9:15	Creatine Phosphokinase (U/L)	456	39 - 308	H	NCR
KGR03-P03/001/S010/002	Screening		01JUN11 9:15	HDL Cholesterol (mmol/L)	1.01	1.05 - 99999	L	NCR
KGR03-P03/001/S010/002	Screening		01JUN11 9:15	Urea (mmol/L)	7.8	2.5 - 7.5	H	NCR
KGR03-P03/001/S010/002	Screening		01JUN11 9:15	Mean Corpuscular HGB Concentration (g/L)	325	326 - 359	L	NCR
KGR03-P03/001/S010/002	Screening		01JUN11 9:15	Platelets (10 ⁹ /L)	133	145 - 390	L	NCR
KGR03-P03/001/S010/002	Screening		01JUN11 9:15	HAV Ab	Reactive	Non-Reactive	A	NCR
KGR03-P03/001/S010/002	Screening		01JUN11 9:15	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S010/002	Screening		01JUN11 9:15	Hepatitis C Virus RNA (IU/mL)	1359699	0 - 11	H	CR
KGR03-P03/001/S010/002	Screening		01JUN11 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S010/002	Screening		01JUN11 9:30	Urine Dipstick RBC	+	Negative	A	NCR
KGR03-P03/001/S010/002	Visit 2		09JUN11 9:30	Alanine Aminotransferase (U/L)	57	0 - 41	H	CR
KGR03-P03/001/S010/002	Visit 2		09JUN11 9:30	Aspartate Aminotransferase (U/L)	44	0 - 37	H	CR
KGR03-P03/001/S010/002	Visit 2		09JUN11 9:30	Ferritin (µg/L)	19	20 - 360	L	NCR
KGR03-P03/001/S010/002	Visit 2		09JUN11 9:30	HDL Cholesterol (mmol/L)	0.96	1.05 - 99999	L	NCR
KGR03-P03/001/S010/002	Visit 2		09JUN11 9:30	Iron (µmol/L)	7.2	14.3 - 28.6	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S010/002	Visit 2		09JUN11 9:40	Urine Dipstick RBC	+	Negative	A	NCR
KGR03-P03/001/S010/002	Visit 2		09JUN11 9:40	Urine Microanalysis RBC (/uL)	108	0 - 25	H	NCR
KGR03-P03/001/S010/002	Visit 6	R	07JUL11 9:30	Chloride (mmol/L)	109	96 - 108	H	NCR
KGR03-P03/001/S010/002	Visit 6	R	07JUL11 9:30	HDL Cholesterol (mmol/L)	0.88	1.05 - 99999	L	NCR
KGR03-P03/001/S010/002	Visit 6	R	07JUL11 9:30	Monocytes Absolute (10 ⁹ /L)	0.23	0.25 - 0.95	L	NCR
KGR03-P03/001/S010/002	Visit 6	R	07JUL11 9:30	Platelets (10 ⁹ /L)	68	145 - 390	L	CR
KGR03-P03/001/S010/002	Visit 6	R	07JUL11 9:30	Hepatitis C Virus RNA (IU/mL)	51	0 - 11	H	CR
KGR03-P03/001/S010/002	Visit 10	R	04AUG11 9:30	Alanine Aminotransferase (U/L)	47	0 - 41	H	CR
KGR03-P03/001/S010/002	Visit 10	R	04AUG11 9:30	Aspartate Aminotransferase (U/L)	41	0 - 37	H	CR
KGR03-P03/001/S010/002	Visit 10	R	04AUG11 9:30	LDL Cholesterol (mmol/L)	3.44	0 - 3.36	H	NCR
KGR03-P03/001/S010/002	Visit 10	R	04AUG11 9:30	Lymphocytes Absolute (10 ⁹ /L)	1.02	1.1 - 3.7	L	NCR
KGR03-P03/001/S010/002	Visit 10	R	04AUG11 9:30	Mean Corpuscular HGB Concentration (g/L)	325	326 - 359	L	NCR
KGR03-P03/001/S010/002	Visit 10	R	04AUG11 9:30	Monocytes Absolute (10 ⁹ /L)	0.20	0.25 - 0.95	L	NCR
KGR03-P03/001/S010/002	Visit 10	R	04AUG11 9:30	Neutrophils Absolute (10 ⁹ /L)	1.29	2.1 - 6.9	L	CR
KGR03-P03/001/S010/002	Visit 10	R	04AUG11 9:30	Platelets (10 ⁹ /L)	72	145 - 390	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S010/002	Visit 10	R	04AUG11 9:30	White Blood Cells (10 ⁹ /L)	2.52	3.6 - 10	L	CR
KGR03-P03/001/S010/002	Visit 14 - final	R	02SEP11 9:45	HDL Cholesterol (mmol/L)	1.01	1.05 - 99999	L	NCR
KGR03-P03/001/S010/002	Visit 14 - final	R	02SEP11 9:45	Lymphocytes Absolute (10 ⁹ /L)	0.84	1.1 - 3.7	L	CR
KGR03-P03/001/S010/002	Visit 14 - final	R	02SEP11 9:45	Monocytes Absolute (10 ⁹ /L)	0.20	0.25 - 0.95	L	NCR
KGR03-P03/001/S010/002	Visit 14 - final	R	02SEP11 9:45	Neutrophils Absolute (10 ⁹ /L)	1.71	2.1 - 6.9	L	CR
KGR03-P03/001/S010/002	Visit 14 - final	R	02SEP11 9:45	Platelets (10 ⁹ /L)	65	145 - 390	L	CR
KGR03-P03/001/S010/002	Visit 14 - final	R	02SEP11 9:45	White Blood Cells (10 ⁹ /L)	2.81	3.6 - 10	L	CR
KGR03-P03/001/S013/003	Screening		07JUN11 10:05	Alanine Aminotransferase (U/L)	90	0 - 41	H	CR
KGR03-P03/001/S013/003	Screening		07JUN11 10:05	Aspartate Aminotransferase (U/L)	44	0 - 37	H	CR
KGR03-P03/001/S013/003	Screening		07JUN11 10:05	HDL Cholesterol (mmol/L)	1.04	1.05 - 99999	L	NCR
KGR03-P03/001/S013/003	Screening		07JUN11 10:05	Triglycerides (mmol/L)	2.49	0 - 1.69	H	NCR
KGR03-P03/001/S013/003	Screening		07JUN11 10:05	HAV Ab	Reactive	Non-Reactive	A	NCR
KGR03-P03/001/S013/003	Screening		07JUN11 10:05	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S013/003	Screening		07JUN11 10:05	Hepatitis C Virus RNA (IU/mL)	398450	0 - 11	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S013/003	Screening		07JUN11 10:10	Specific Gravity	1.033	1.015 - 1.03	H	NCR
KGR03-P03/001/S013/003	Screening		07JUN11 10:10	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S013/003	Visit 2		16JUN11 9:30	Specific Gravity	1.033	1.015 - 1.03	H	NCR
KGR03-P03/001/S013/003	Visit 2		16JUN11 9:40	Alanine Aminotransferase (U/L)	87	0 - 41	H	CR
KGR03-P03/001/S013/003	Visit 2		16JUN11 9:40	Albumin (g/L)	53	35 - 52	H	NCR
KGR03-P03/001/S013/003	Visit 2		16JUN11 9:40	Aspartate Aminotransferase (U/L)	40	0 - 37	H	CR
KGR03-P03/001/S013/003	Visit 2		16JUN11 9:40	Sodium (mmol/L)	146	133 - 145	H	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Chloride (mmol/L)	112	96 - 108	H	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Ferritin (µg/L)	561	20 - 360	H	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	HDL Cholesterol (mmol/L)	0.88	1.05 - 99999	L	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Iron (µmol/L)	29.9	14.3 - 28.6	H	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Sodium (mmol/L)	146	133 - 145	H	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Triglycerides (mmol/L)	2.58	0 - 1.69	H	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Haematocrit (v/v)	0.338	0.382 - 0.495	L	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Haemoglobin (g/L)	111	130 - 170	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Lymphocytes Absolute (10 ⁹ /L)	1.01	1.1 - 3.7	L	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Neutrophils Absolute (10 ⁹ /L)	1.03	2.1 - 6.9	L	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Red Blood Cells (10 ¹² /L)	3.63	4.12 - 5.59	L	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	White Blood Cells (10 ⁹ /L)	2.35	3.6 - 10	L	NCR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Tumour Necrosis Factor α (pg/mL)	11.44	0 - 8.26	H	CR
KGR03-P03/001/S013/003	Visit 6	R	14JUL11 9:30	Specific Gravity	1.034	1.015 - 1.03	H	NCR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Alanine Aminotransferase (U/L)	46	0 - 41	H	CR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Chloride (mmol/L)	112	96 - 108	H	NCR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Ferritin (μ g/L)	453	20 - 360	H	NCR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	HDL Cholesterol (mmol/L)	0.85	1.05 - 99999	L	NCR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Iron (μ mol/L)	28.8	14.3 - 28.6	H	NCR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Sodium (mmol/L)	147	133 - 145	H	NCR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Triglycerides (mmol/L)	1.80	0 - 1.69	H	NCR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Haematocrit (v/v)	0.323	0.382 - 0.495	L	CR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Haemoglobin (g/L)	107	130 - 170	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Lymphocytes Absolute (10 ⁹ /L)	0.78	1.1 - 3.7	L	NCR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Monocytes Relative (%)	13.0	4 - 12	H	NCR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Neutrophils Absolute (10 ⁹ /L)	0.96	2.1 - 6.9	L	CR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Red Blood Cells (10 ¹² /L)	3.41	4.12 - 5.59	L	NCR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	White Blood Cells (10 ⁹ /L)	2.01	3.6 - 10	L	CR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Tumour Necrosis Factor α (pg/mL)	10.88	0 - 8.26	H	CR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Specific Gravity	1.035	1.015 - 1.03	H	NCR
KGR03-P03/001/S013/003	Visit 10	R	11AUG11 9:30	Urine Dipstick Protein	+	Negative	A	NCR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Alanine Aminotransferase (U/L)	65	0 - 41	H	CR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Aspartate Aminotransferase (U/L)	40	0 - 37	H	CR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Chloride (mmol/L)	110	96 - 108	H	NCR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Ferritin (μ g/L)	497	20 - 360	H	NCR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	HDL Cholesterol (mmol/L)	0.96	1.05 - 99999	L	NCR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Haematocrit (v/v)	0.339	0.382 - 0.495	L	CR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Haemoglobin (g/L)	109	130 - 170	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Lymphocytes Absolute (10 ⁹ /L)	0.98	1.1 - 3.7	L	NCR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Lymphocytes Relative (%)	50.0	15 - 47	H	NCR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Mean Corpuscular HGB Concentration (g/L)	322	326 - 359	L	NCR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Monocytes Absolute (10 ⁹ /L)	0.18	0.25 - 0.95	L	NCR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Neutrophils Absolute (10 ⁹ /L)	0.79	2.1 - 6.9	L	CR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Neutrophils Relative (%)	37.0	43 - 73	L	CR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Red Blood Cells (10 ¹² /L)	3.49	4.12 - 5.59	L	NCR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	White Blood Cells (10 ⁹ /L)	1.97	3.6 - 10	L	CR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Tumour Necrosis Factor α (pg/mL)	12.21	0 - 8.26	H	CR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Specific Gravity	1.033	1.015 - 1.03	H	NCR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S013/003	Visit 14 - final	R	19SEP11 9:10	Urine Dipstick Protein	+	Negative	A	NCR
KGR03-P03/001/S014/004	Screening		29JUN11 8:30	Alanine Aminotransferase (U/L)	192	0 - 41	H	CR
KGR03-P03/001/S014/004	Screening		29JUN11 8:30	Aspartate Aminotransferase (U/L)	81	0 - 37	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S014/004	Screening		29JUN11 8:30	Chloride (mmol/L)	109	96 - 108	H	NCR
KGR03-P03/001/S014/004	Screening		29JUN11 8:30	Creatinine (µmol/L)	116.7	0 - 102.9	H	NCR
KGR03-P03/001/S014/004	Screening		29JUN11 8:30	γ Glutamyl Transferase (U/L)	66	10 - 49	H	CR
KGR03-P03/001/S014/004	Screening		29JUN11 8:30	Sodium (mmol/L)	146	133 - 145	H	NCR
KGR03-P03/001/S014/004	Screening		29JUN11 8:30	Platelets (10 ⁹ /L)	128	145 - 390	L	CR
KGR03-P03/001/S014/004	Screening		29JUN11 8:30	HAV Ab	Reactive	Non-Reactive	A	NCR
KGR03-P03/001/S014/004	Screening		29JUN11 8:30	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S014/004	Screening		29JUN11 8:30	Hepatitis C Virus RNA (IU/mL)	602642	0 - 11	H	CR
KGR03-P03/001/S014/004	Screening		29JUN11 8:35	Specific Gravity	1.005	1.015 - 1.03	L	NCR
KGR03-P03/001/S014/004	Visit 2		08JUL11 9:10	Alanine Aminotransferase (U/L)	116	0 - 41	H	CR
KGR03-P03/001/S014/004	Visit 2		08JUL11 9:10	Aspartate Aminotransferase (U/L)	50	0 - 37	H	CR
KGR03-P03/001/S014/004	Visit 2		08JUL11 9:10	γ Glutamyl Transferase (U/L)	76	10 - 49	H	NCR
KGR03-P03/001/S014/004	Visit 2		08JUL11 9:10	Phosphate (mmol/L)	0.714	0.775 - 1.421	L	NCR
KGR03-P03/001/S014/004	Visit 2		08JUL11 9:10	Haematocrit (v/v)	0.504	0.382 - 0.495	H	NCR
KGR03-P03/001/S014/004	Visit 2		08JUL11 9:10	Platelets (10 ⁹ /L)	139	145 - 390	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S014/004	Visit 2		08JUL11 9:10	Tumour Necrosis Factor α (pg/mL)	8.99	0 - 8.26	H	CR
KGR03-P03/001/S014/004	Visit 2		08JUL11 9:10	Specific Gravity	1.008	1.015 - 1.03	L	NCR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Ferritin (μ g/L)	423	20 - 360	H	NCR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	HDL Cholesterol (mmol/L)	1.04	1.05 - 99999	L	NCR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Lactate Dehydrogenase (U/L)	251	97 - 236	H	NCR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Triglycerides (mmol/L)	2.08	0 - 1.69	H	NCR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Uric Acid (mmol/L)	0.44	0.21 - 0.41	H	NCR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Haematocrit (v/v)	0.377	0.382 - 0.495	L	CR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Haemoglobin (g/L)	123	130 - 170	L	CR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Lymphocytes Absolute (10^9 /L)	1.03	1.1 - 3.7	L	NCR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Monocytes Relative (%)	14.0	4 - 12	H	NCR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Neutrophils Absolute (10^9 /L)	1.26	2.1 - 6.9	L	CR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Platelets (10^9 /L)	103	145 - 390	L	CR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Red Blood Cells (10^{12} /L)	4.03	4.12 - 5.59	L	NCR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	White Blood Cells (10^9 /L)	2.87	3.6 - 10	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Hepatitis C Virus RNA (IU/mL)	90	0 - 11	H	CR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Tumour Necrosis Factor α (pg/mL)	9.55	0 - 8.26	H	CR
KGR03-P03/001/S014/004	Visit 6	T	05AUG11 9:45	Specific Gravity	1.009	1.015 - 1.03	L	NCR
KGR03-P03/001/S014/004	Visit 10	T	02SEP11 10:00	Ferritin (μ g/L)	504	20 - 360	H	NCR
KGR03-P03/001/S014/004	Visit 10	T	02SEP11 10:00	HDL Cholesterol (mmol/L)	0.85	1.05 - 99999	L	NCR
KGR03-P03/001/S014/004	Visit 10	T	02SEP11 10:00	Lactate Dehydrogenase (U/L)	370	97 - 236	H	NCR
KGR03-P03/001/S014/004	Visit 10	T	02SEP11 10:00	Phosphate (mmol/L)	0.620	0.775 - 1.421	L	NCR
KGR03-P03/001/S014/004	Visit 10	T	02SEP11 10:00	Triglycerides (mmol/L)	2.40	0 - 1.69	H	NCR
KGR03-P03/001/S014/004	Visit 10	T	02SEP11 10:00	Tumour Necrosis Factor α (pg/mL)	9.43	0 - 8.26	H	CR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:20	Haemoglobin (g/L)	128	130 - 170	L	CR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:20	Lymphocytes Absolute (10^9 /L)	0.71	1.1 - 3.7	L	NCR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:20	Mean Corpuscular HGB Concentration (g/L)	316	326 - 359	L	NCR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:20	Mean Corpuscular Volume (fL)	105.6	82 - 99	H	NCR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:20	Monocytes Absolute (10^9 /L)	0.17	0.25 - 0.95	L	NCR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:20	Neutrophils Absolute (10^9 /L)	1.19	2.1 - 6.9	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:20	Red Blood Cells (10 ¹² /L)	3.82	4.12 - 5.59	L	NCR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:20	White Blood Cells (10 ⁹ /L)	2.08	3.6 - 10	L	CR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:20	Tumour Necrosis Factor α (pg/mL)	10.56	0 - 8.26	H	CR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:20	Specific Gravity	1.007	1.015 - 1.03	L	NCR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:30	Alanine Aminotransferase (U/L)	43	0 - 41	H	CR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:30	Aspartate Aminotransferase (U/L)	42	0 - 37	H	CR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:30	Creatine Phosphokinase (U/L)	617	39 - 308	H	NCR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:30	Creatinine (μ mol/L)	104.3	0 - 102.9	H	CR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:30	Ferritin (μ g/L)	396	20 - 360	H	NCR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:30	HDL Cholesterol (mmol/L)	0.91	1.05 - 99999	L	NCR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:30	Lactate Dehydrogenase (U/L)	385	97 - 236	H	NCR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:30	Phosphate (mmol/L)	0.598	0.775 - 1.421	L	NCR
KGR03-P03/001/S014/004	Visit 14 - final	T	30SEP11 9:30	Triglycerides (mmol/L)	1.95	0 - 1.69	H	NCR
KGR03-P03/001/S015/005	Screening		29JUN11 9:15	Alanine Aminotransferase (U/L)	134	0 - 41	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S015/005	Screening		29JUN11 9:15	Aspartate Aminotransferase (U/L)	62	0 - 37	H	CR
KGR03-P03/001/S015/005	Screening		29JUN11 9:15	Chloride (mmol/L)	110	96 - 108	H	NCR
KGR03-P03/001/S015/005	Screening		29JUN11 9:15	Glucose (mmol/L)	3.44	3.89 - 7.77	L	NCR
KGR03-P03/001/S015/005	Screening		29JUN11 9:15	Sodium (mmol/L)	148	133 - 145	H	NCR
KGR03-P03/001/S015/005	Screening		29JUN11 9:15	Mean Corpuscular HGB Concentration (g/L)	322	326 - 359	L	NCR
KGR03-P03/001/S015/005	Screening		29JUN11 9:15	Mean Corpuscular Volume (fL)	100.3	82 - 99	H	NCR
KGR03-P03/001/S015/005	Screening		29JUN11 9:15	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S015/005	Screening		29JUN11 9:15	Hepatitis C Virus RNA (IU/mL)	9571134	0 - 11	H	CR
KGR03-P03/001/S015/005	Screening		29JUN11 9:15	Specific Gravity	1.034	1.015 - 1.03	H	NCR
KGR03-P03/001/S015/005	Visit 2		08JUL11 10:00	Alanine Aminotransferase (U/L)	135	0 - 41	H	CR
KGR03-P03/001/S015/005	Visit 2		08JUL11 10:00	Aspartate Aminotransferase (U/L)	60	0 - 37	H	CR
KGR03-P03/001/S015/005	Visit 2		08JUL11 10:00	Mean Corpuscular HGB Concentration (g/L)	323	326 - 359	L	NCR
KGR03-P03/001/S015/005	Visit 2		08JUL11 10:00	Mean Corpuscular Volume (fL)	100.8	82 - 99	H	NCR
KGR03-P03/001/S015/005	Visit 2		08JUL11 10:00	Monocytes Absolute (10 ⁹ /L)	0.23	0.25 - 0.95	L	NCR
KGR03-P03/001/S015/005	Visit 2		08JUL11 10:00	Specific Gravity	1.039	1.015 - 1.03	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S015/005	Visit 2		08JUL11 10:00	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S015/005	Visit 2		08JUL11 10:00	Urine Dipstick WBC	+++	Negative	A	NCR
KGR03-P03/001/S015/005	Visit 2		08JUL11 10:00	Urine Microanalysis WBC (/uL)	105	0 - 25	H	NCR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Alanine Aminotransferase (U/L)	52	0 - 41	H	CR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Aspartate Aminotransferase (U/L)	55	0 - 37	H	CR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Calcium (mmol/L)	2.13	2.15 - 2.5	L	NCR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Creatine Phosphokinase (U/L)	583	39 - 308	H	NCR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Ferritin (µg/L)	752	20 - 360	H	NCR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	HDL Cholesterol (mmol/L)	0.98	1.05 - 99999	L	NCR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Iron (µmol/L)	29.7	14.3 - 28.6	H	NCR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Haemoglobin (g/L)	126	130 - 170	L	CR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Lymphocytes Absolute (10 ⁹ /L)	0.96	1.1 - 3.7	L	NCR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Mean Corpuscular HGB Concentration (g/L)	318	326 - 359	L	NCR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Mean Corpuscular Volume (fL)	101.7	82 - 99	H	NCR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Monocytes Absolute (10 ⁹ /L)	0.19	0.25 - 0.95	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Neutrophils Absolute (10 ⁹ /L)	0.92	2.1 - 6.9	L	CR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Red Blood Cells (10 ¹² /L)	3.88	4.12 - 5.59	L	CR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	White Blood Cells (10 ⁹ /L)	2.13	3.6 - 10	L	CR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Hepatitis C Virus RNA (IU/mL)	16	0 - 11	H	CR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Hyaluronic Acid (µg/L)	144	0 - 74	H	CR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Tumour Necrosis Factor α (pg/mL)	9.55	0 - 8.26	H	CR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Urine Dipstick WBC	+	Negative	A	NCR
KGR03-P03/001/S015/005	Visit 6	T	05AUG11 9:15	Urine Microanalysis WBC (/µL)	61	0 - 25	H	NCR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Alanine Aminotransferase (U/L)	45	0 - 41	H	CR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Calcium (mmol/L)	2.08	2.15 - 2.5	L	NCR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Chloride (mmol/L)	109	96 - 108	H	NCR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Ferritin (µg/L)	1009	20 - 360	H	NCR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Glucose (mmol/L)	3.72	3.89 - 7.77	L	
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	HDL Cholesterol (mmol/L)	0.96	1.05 - 99999	L	NCR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Iron (µmol/L)	30.6	14.3 - 28.6	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Haematocrit (v/v)	0.327	0.382 - 0.495	L	CR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Haemoglobin (g/L)	105	130 - 170	L	CR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Lymphocytes Absolute (10 ⁹ /L)	0.91	1.1 - 3.7	L	CR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Mean Corpuscular HGB Concentration (g/L)	320	326 - 359	L	NCR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Mean Corpuscular Haemoglobin (pg)	34.1	27 - 34	H	NCR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Mean Corpuscular Volume (fL)	106.5	82 - 99	H	NCR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Monocytes Absolute (10 ⁹ /L)	0.14	0.25 - 0.95	L	NCR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Neutrophils Absolute (10 ⁹ /L)	0.99	2.1 - 6.9	L	CR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Red Blood Cells (10 ¹² /L)	3.07	4.12 - 5.59	L	NCR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	White Blood Cells (10 ⁹ /L)	2.07	3.6 - 10	L	CR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Hyaluronic Acid (µg/L)	322	0 - 74	H	CR
KGR03-P03/001/S015/005	Visit 10	T	02SEP11 10:00	Tumour Necrosis Factor α (pg/mL)	10.82	0 - 8.26	H	CR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Alanine Aminotransferase (U/L)	42	0 - 41	H	CR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Calcium (mmol/L)	2.13	2.15 - 2.5	L	NCR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Chloride (mmol/L)	109	96 - 108	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Ferritin (µg/L)	1006	20 - 360	H	NCR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	HDL Cholesterol (mmol/L)	0.88	1.05 - 99999	L	NCR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Iron (µmol/L)	34.0	14.3 - 28.6	H	NCR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Triglycerides (mmol/L)	2.16	0 - 1.69	H	NCR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Haematocrit (v/v)	0.328	0.382 - 0.495	L	CR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Haemoglobin (g/L)	104	130 - 170	L	CR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Lymphocytes Absolute (10 ⁹ /L)	0.71	1.1 - 3.7	L	NCR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Mean Corpuscular HGB Concentration (g/L)	315	326 - 359	L	NCR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Mean Corpuscular Haemoglobin (pg)	34.4	27 - 34	H	NCR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Mean Corpuscular Volume (fL)	109.1	82 - 99	H	NCR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Monocytes Absolute (10 ⁹ /L)	0.17	0.25 - 0.95	L	NCR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Neutrophils Absolute (10 ⁹ /L)	1.00	2.1 - 6.9	L	CR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Red Blood Cells (10 ¹² /L)	3.01	4.12 - 5.59	L	NCR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	White Blood Cells (10 ⁹ /L)	1.93	3.6 - 10	L	CR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Hyaluronic Acid (µg/L)	181	0 - 74	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Tumour Necrosis Factor α (pg/mL)	14.95	0 - 8.26	H	CR
KGR03-P03/001/S015/005	Visit 14 - final	T	30SEP11 9:10	Specific Gravity	1.014	1.015 - 1.03	L	NCR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	Alanine Aminotransferase (U/L)	85	0 - 41	H	CR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	Aspartate Aminotransferase (U/L)	76	0 - 37	H	CR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	Ferritin (μ g/L)	13	20 - 360	L	NCR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	γ Glutamyl Transferase (U/L)	66	10 - 49	H	NCR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	HDL Cholesterol (mmol/L)	0.98	1.05 - 99999	L	NCR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	Iron (μ mol/L)	5.0	14.3 - 28.6	L	NCR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	Mean Corpuscular HGB Concentration (g/L)	319	326 - 359	L	NCR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	HAV Ab	Reactive	Non-Reactive	A	NCR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	Hepatitis C Virus RNA (IU/mL)	3153589	0 - 11	H	CR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	Specific Gravity	1.035	1.015 - 1.03	H	NCR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	Urine Dipstick Bilirubin	+	Negative	A	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	Urine Dipstick Urobilinogen	+	Negative	A	NCR
KGR03-P03/001/S016/007	Screening		08JUL11 10:30	Urine Dipstick pH	7.5	5 - 7	H	NCR
KGR03-P03/001/S016/007	Visit 2		22JUL11 10:30	Alanine Aminotransferase (U/L)	74	0 - 41	H	CR
KGR03-P03/001/S016/007	Visit 2		22JUL11 10:30	Aspartate Aminotransferase (U/L)	61	0 - 37	H	CR
KGR03-P03/001/S016/007	Visit 2		22JUL11 10:30	Ferritin (µg/L)	14	20 - 360	L	NCR
KGR03-P03/001/S016/007	Visit 2		22JUL11 10:30	HDL Cholesterol (mmol/L)	1.01	1.05 - 99999	L	NCR
KGR03-P03/001/S016/007	Visit 2		22JUL11 10:30	Iron (µmol/L)	9.3	14.3 - 28.6	L	NCR
KGR03-P03/001/S016/007	Visit 2		22JUL11 10:30	Tumour Necrosis Factor α (pg/mL)	14.15	0 - 8.26	H	CR
KGR03-P03/001/S016/007	Visit 2		22JUL11 10:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S016/007	Visit 2		22JUL11 10:30	Urine Dipstick Urobilinogen	+	Negative	A	NCR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	Alanine Aminotransferase (U/L)	66	0 - 41	H	CR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	Alkaline Phosphatase (U/L)	136	31 - 121	H	NCR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	Aspartate Aminotransferase (U/L)	69	0 - 37	H	CR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	γ Glutamyl Transferase (U/L)	255	10 - 49	H	NCR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	HDL Cholesterol (mmol/L)	1.01	1.05 - 99999	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	Iron (µmol/L)	9.5	14.3 - 28.6	L	NCR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	Triglycerides (mmol/L)	2.11	0 - 1.69	H	NCR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	Monocytes Absolute (10 ⁹ /L)	0.24	0.25 - 0.95	L	NCR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	Neutrophils Absolute (10 ⁹ /L)	1.47	2.1 - 6.9	L	CR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	White Blood Cells (10 ⁹ /L)	2.99	3.6 - 10	L	CR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	Tumour Necrosis Factor α (pg/mL)	14.43	0 - 8.26	H	CR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	Specific Gravity	1.033	1.015 - 1.03	H	NCR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S016/007	Visit 6	T	19AUG11 10:00	Urine Dipstick Urobilinogen	+	Negative	A	NCR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	Calcium (mmol/L)	2.10	2.15 - 2.5	L	NCR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	γ Glutamyl Transferase (U/L)	51	10 - 49	H	NCR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	HDL Cholesterol (mmol/L)	1.01	1.05 - 99999	L	NCR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	Iron (µmol/L)	13.8	14.3 - 28.6	L	NCR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	Magnesium (mmol/L)	0.654	0.658 - 1.07	L	NCR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	Haemoglobin (g/L)	129	130 - 170	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	Lymphocytes Relative (%)	56.0	15 - 47	H	NCR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	Monocytes Absolute (10 ⁹ /L)	0.09	0.25 - 0.95	L	NCR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	Neutrophils Absolute (10 ⁹ /L)	0.90	2.1 - 6.9	L	CR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	Neutrophils Relative (%)	37.0	43 - 73	L	CR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	Platelets (10 ⁹ /L)	113	145 - 390	L	CR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	White Blood Cells (10 ⁹ /L)	2.36	3.6 - 10	L	CR
KGR03-P03/001/S016/007	Visit 10	T	19SEP11 10:15	Tumour Necrosis Factor α (pg/mL)	14.16	0 - 8.26	H	CR
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Creatine Phosphokinase (U/L)	1313	39 - 308	H	NCR
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Glucose (mmol/L)	3.72	3.89 - 7.77	L	
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Iron (μ mol/L)	11.1	14.3 - 28.6	L	NCR
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Sodium (mmol/L)	148	133 - 145	H	NCR
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Neutrophils Absolute (10 ⁹ /L)	1.99	2.1 - 6.9	L	CR
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Platelets (10 ⁹ /L)	108	145 - 390	L	CR
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Hyaluronic Acid (μ g/L)	178	0 - 74	H	CR
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Tumour Necrosis Factor α (pg/mL)	26.51	0 - 8.26	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Specific Gravity	1.034	1.015 - 1.03	H	NCR
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Urine Dipstick Urobilinogen	+	Negative	A	NCR
KGR03-P03/001/S016/007	Visit 14 - final	T	14OCT11 10:30	Urine Microanalysis Crystals	Positive	Negative	A	NCR
KGR03-P03/001/S017/006	Screening		08JUL11 11:00	Alanine Aminotransferase (U/L)	119	0 - 41	H	CR
KGR03-P03/001/S017/006	Screening		08JUL11 11:00	Aspartate Aminotransferase (U/L)	65	0 - 37	H	CR
KGR03-P03/001/S017/006	Screening		08JUL11 11:00	Ferritin (µg/L)	518	20 - 360	H	NCR
KGR03-P03/001/S017/006	Screening		08JUL11 11:00	γ Glutamyl Transferase (U/L)	56	10 - 49	H	NCR
KGR03-P03/001/S017/006	Screening		08JUL11 11:00	Iron (µmol/L)	40.5	14.3 - 28.6	H	NCR
KGR03-P03/001/S017/006	Screening		08JUL11 11:00	Total Cholesterol (mmol/L)	5.39	0 - 5.17	H	NCR
KGR03-P03/001/S017/006	Screening		08JUL11 11:00	HAV Ab	Reactive	Non-Reactive	A	NCR
KGR03-P03/001/S017/006	Screening		08JUL11 11:00	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S017/006	Screening		08JUL11 11:00	Hepatitis C Virus RNA (IU/mL)	500266	0 - 11	H	CR
KGR03-P03/001/S017/006	Visit 2		22JUL11 10:00	Alanine Aminotransferase (U/L)	127	0 - 41	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S017/006	Visit 2		22JUL11 10:00	Aspartate Aminotransferase (U/L)	72	0 - 37	H	CR
KGR03-P03/001/S017/006	Visit 2		22JUL11 10:00	Ferritin (µg/L)	508	20 - 360	H	NCR
KGR03-P03/001/S017/006	Visit 2		22JUL11 10:00	γ Glutamyl Transferase (U/L)	56	10 - 49	H	CR
KGR03-P03/001/S017/006	Visit 2		22JUL11 10:00	Lactate Dehydrogenase (U/L)	344	97 - 236	H	NCR
KGR03-P03/001/S017/006	Visit 2		22JUL11 10:00	Total Cholesterol (mmol/L)	5.72	0 - 5.17	H	NCR
KGR03-P03/001/S017/006	Visit 2		22JUL11 10:00	Mean Corpuscular Haemoglobin (pg)	34.3	27 - 34	H	NCR
KGR03-P03/001/S017/006	Visit 2		22JUL11 10:00	Mean Corpuscular Volume (fL)	102.3	82 - 99	H	NCR
KGR03-P03/001/S017/006	Visit 2		22JUL11 10:00	Platelets (10 ⁹ /L)	115	145 - 390	L	CR
KGR03-P03/001/S017/006	Visit 6	R	19AUG11 10:00	Alanine Aminotransferase (U/L)	45	0 - 41	H	CR
KGR03-P03/001/S017/006	Visit 6	R	19AUG11 10:00	Aspartate Aminotransferase (U/L)	40	0 - 37	H	CR
KGR03-P03/001/S017/006	Visit 6	R	19AUG11 10:00	Ferritin (µg/L)	1206	20 - 360	H	NCR
KGR03-P03/001/S017/006	Visit 6	R	19AUG11 10:00	Lymphocytes Relative (%)	65.0	15 - 47	H	NCR
KGR03-P03/001/S017/006	Visit 6	R	19AUG11 10:00	Monocytes Absolute (10 ⁹ /L)	0.24	0.25 - 0.95	L	CR
KGR03-P03/001/S017/006	Visit 6	R	19AUG11 10:00	Neutrophils Absolute (10 ⁹ /L)	0.70	2.1 - 6.9	L	NCR
KGR03-P03/001/S017/006	Visit 6	R	19AUG11 10:00	Neutrophils Relative (%)	26.0	43 - 73	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S017/006	Visit 6	R	19AUG11 10:00	Platelets (10 ⁹ /L)	86	145 - 390	L	CR
KGR03-P03/001/S017/006	Visit 6	R	19AUG11 10:00	White Blood Cells (10 ⁹ /L)	2.70	3.6 - 10	L	CR
KGR03-P03/001/S017/006	Visit 6	R	19AUG11 10:00	Hepatitis C Virus RNA (IU/mL)	6497	0 - 11	H	CR
KGR03-P03/001/S017/006	Visit 6	R	19AUG11 10:00	Specific Gravity	1.032	1.015 - 1.03	H	NCR
KGR03-P03/001/S017/006	Visit 10	R	19SEP11 9:45	Alanine Aminotransferase (U/L)	48	0 - 41	H	CR
KGR03-P03/001/S017/006	Visit 10	R	19SEP11 9:45	Aspartate Aminotransferase (U/L)	41	0 - 37	H	CR
KGR03-P03/001/S017/006	Visit 10	R	19SEP11 9:45	Ferritin (µg/L)	1542	20 - 360	H	NCR
KGR03-P03/001/S017/006	Visit 10	R	19SEP11 9:45	Lymphocytes Relative (%)	55.0	15 - 47	H	NCR
KGR03-P03/001/S017/006	Visit 10	R	19SEP11 9:45	Monocytes Absolute (10 ⁹ /L)	0.08	0.25 - 0.95	L	NCR
KGR03-P03/001/S017/006	Visit 10	R	19SEP11 9:45	Monocytes Relative (%)	3.0	4 - 12	L	NCR
KGR03-P03/001/S017/006	Visit 10	R	19SEP11 9:45	Neutrophils Absolute (10 ⁹ /L)	1.17	2.1 - 6.9	L	CR
KGR03-P03/001/S017/006	Visit 10	R	19SEP11 9:45	Neutrophils Relative (%)	42.0	43 - 73	L	CR
KGR03-P03/001/S017/006	Visit 10	R	19SEP11 9:45	White Blood Cells (10 ⁹ /L)	2.78	3.6 - 10	L	CR
KGR03-P03/001/S017/006	Visit 14 - final	R	14OCT11 9:30	Alanine Aminotransferase (U/L)	45	0 - 41	H	CR
KGR03-P03/001/S017/006	Visit 14 - final	R	14OCT11 9:30	Aspartate Aminotransferase (U/L)	40	0 - 37	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S017/006	Visit 14 - final	R	14OCT11 9:30	Ferritin (µg/L)	1624	20 - 360	H	NCR
KGR03-P03/001/S017/006	Visit 14 - final	R	14OCT11 9:30	Glucose (mmol/L)	3.33	3.89 - 7.77	L	
KGR03-P03/001/S017/006	Visit 14 - final	R	14OCT11 9:30	Phosphate (mmol/L)	0.720	0.775 - 1.421	L	NCR
KGR03-P03/001/S017/006	Visit 14 - final	R	14OCT11 9:30	Lymphocytes Absolute (10 ⁹ /L)	1.02	1.1 - 3.7	L	NCR
KGR03-P03/001/S017/006	Visit 14 - final	R	14OCT11 9:30	Neutrophils Absolute (10 ⁹ /L)	1.02	2.1 - 6.9	L	CR
KGR03-P03/001/S017/006	Visit 14 - final	R	14OCT11 9:30	White Blood Cells (10 ⁹ /L)	2.31	3.6 - 10	L	CR
KGR03-P03/001/S017/006	Visit 14 - final	R	14OCT11 9:30	Urine Dipstick pH	7.5	5 - 7	H	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Alanine Aminotransferase (U/L)	103	0 - 41	H	CR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Albumin (g/L)	53	35 - 52	H	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Aspartate Aminotransferase (U/L)	40	0 - 37	H	CR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Direct Bilirubin (µmol/L)	5.3	0 - 5	H	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	γ Glutamyl Transferase (U/L)	113	10 - 49	H	CR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	HDL Cholesterol (mmol/L)	0.96	1.05 - 99999	L	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Iron (µmol/L)	29.9	14.3 - 28.6	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Sodium (mmol/L)	146	133 - 145	H	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Mean Corpuscular HGB Concentration (g/L)	314	326 - 359	L	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Mean Corpuscular Haemoglobin (pg)	21.5	27 - 34	L	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Mean Corpuscular Volume (fL)	68.4	82 - 99	L	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Platelets (10 ⁹ /L)	122	145 - 390	L	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Red Blood Cells (10 ¹² /L)	6.87	4.12 - 5.59	H	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	White Blood Cells (10 ⁹ /L)	10.13	3.6 - 10	H	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	HCV Ab	Reactive	Non-Reactive	A	
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	HIV 1/2	Reactive	Non-Reactive	A	
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Hepatitis C Virus RNA (IU/mL)	83548	0 - 11	H	CR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Urine Dipstick WBC	+++	Negative	A	NCR
KGR03-P03/001/S022/008	Screening		30SEP11 11:30	Urine Microanalysis WBC (/μL)	62	0 - 25	H	NCR
KGR03-P03/001/S022/008	Visit 2		13OCT11 11:00	Alanine Aminotransferase (U/L)	124	0 - 41	H	CR
KGR03-P03/001/S022/008	Visit 2		13OCT11 11:00	Aspartate Aminotransferase (U/L)	50	0 - 37	H	CR
KGR03-P03/001/S022/008	Visit 2		13OCT11 11:00	γ Glutamyl Transferase (U/L)	125	10 - 49	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S022/008	Visit 2		13OCT11 11:00	Iron (µmol/L)	30.8	14.3 - 28.6	H	NCR
KGR03-P03/001/S022/008	Visit 2		13OCT11 11:00	Sodium (mmol/L)	146	133 - 145	H	NCR
KGR03-P03/001/S022/008	Visit 2		13OCT11 11:00	Mean Corpuscular HGB Concentration (g/L)	304	326 - 359	L	NCR
KGR03-P03/001/S022/008	Visit 2		13OCT11 11:00	Mean Corpuscular Haemoglobin (pg)	21.2	27 - 34	L	NCR
KGR03-P03/001/S022/008	Visit 2		13OCT11 11:00	Mean Corpuscular Volume (fL)	69.7	82 - 99	L	NCR
KGR03-P03/001/S022/008	Visit 2		13OCT11 11:00	Platelets (10 ⁹ /L)	107	145 - 390	L	CR
KGR03-P03/001/S022/008	Visit 2		13OCT11 11:00	Red Blood Cells (10 ¹² /L)	6.91	4.12 - 5.59	H	NCR
KGR03-P03/001/S022/008	Visit 2		13OCT11 11:00	Tumour Necrosis Factor α (pg/mL)	11.57	0 - 8.26	H	CR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	Chloride (mmol/L)	109	96 - 108	H	NCR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	γ Glutamyl Transferase (U/L)	94	10 - 49	H	CR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	HDL Cholesterol (mmol/L)	0.70	1.05 - 99999	L	NCR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	Iron (µmol/L)	37.6	14.3 - 28.6	H	NCR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	Lactate Dehydrogenase (U/L)	252	97 - 236	H	NCR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	Sodium (mmol/L)	148	133 - 145	H	NCR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	Mean Corpuscular HGB Concentration (g/L)	307	326 - 359	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	Mean Corpuscular Haemoglobin (pg)	20.6	27 - 34	L	NCR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	Mean Corpuscular Volume (fL)	67.2	82 - 99	L	NCR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	Platelets (10 ⁹ /L)	83	145 - 390	L	CR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	Red Blood Cells (10 ¹² /L)	6.41	4.12 - 5.59	H	NCR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	Tumour Necrosis Factor α (pg/mL)	14.64	0 - 8.26	H	CR
KGR03-P03/001/S022/008	Visit 6	R	10NOV11 9:00	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Albumin (g/L)	53	35 - 52	H	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	γ Glutamyl Transferase (U/L)	80	10 - 49	H	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	HDL Cholesterol (mmol/L)	0.52	1.05 - 99999	L	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Lactate Dehydrogenase (U/L)	347	97 - 236	H	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Sodium (mmol/L)	149	133 - 145	H	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Triglycerides (mmol/L)	4.21	0 - 1.69	H	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Erythroblasts (% of WBC)	1.0	0 - 0	H	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Mean Corpuscular HGB Concentration (g/L)	317	326 - 359	L	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Mean Corpuscular Haemoglobin (pg)	21.3	27 - 34	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Mean Corpuscular Volume (fL)	67.3	82 - 99	L	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Platelets (10 ⁹ /L)	143	145 - 390	L	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Red Blood Cells (10 ¹² /L)	6.12	4.12 - 5.59	H	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Tumour Necrosis Factor α (pg/mL)	8.31	0 - 8.26	H	CR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Urine Dipstick Urobilinogen	+	Negative	A	NCR
KGR03-P03/001/S022/008	Visit 10	R	08DEC11 9:00	Urine Dipstick WBC	+	Negative	A	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Direct Bilirubin (μ mol/L)	7.2	0 - 5	H	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Ferritin (μ g/L)	464	20 - 360	H	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	γ Glutamyl Transferase (U/L)	86	10 - 49	H	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	HDL Cholesterol (mmol/L)	0.62	1.05 - 99999	L	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Iron (μ mol/L)	30.6	14.3 - 28.6	H	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Lactate Dehydrogenase (U/L)	348	97 - 236	H	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Phosphate (mmol/L)	0.694	0.775 - 1.421	L	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Sodium (mmol/L)	148	133 - 145	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Haemoglobin (g/L)	121	130 - 170	L	CR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Mean Corpuscular HGB Concentration (g/L)	306	326 - 359	L	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Mean Corpuscular Haemoglobin (pg)	20.9	27 - 34	L	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Mean Corpuscular Volume (fL)	68.1	82 - 99	L	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Platelets (10 ⁹ /L)	138	145 - 390	L	CR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Red Blood Cells (10 ¹² /L)	5.79	4.12 - 5.59	H	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Urine Dipstick Urobilinogen	+	Negative	A	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Urine Dipstick WBC	++	Negative	A	NCR
KGR03-P03/001/S022/008	Visit 14 - final	R	05JAN12 9:30	Urine Microanalysis WBC (/μL)	36	0 - 25	H	NCR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Alanine Aminotransferase (U/L)	66	0 - 31	H	CR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Aspartate Aminotransferase (U/L)	46	0 - 31	H	CR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	γ Glutamyl Transferase (U/L)	33	6 - 32	H	NCR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Glucose (mmol/L)	9.82	3.89 - 7.77	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Lactate Dehydrogenase (U/L)	256	97 - 236	H	NCR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Pseudocholinesterase (kU/L)	4.8	5.3 - 12.9	L	NCR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Lymphocytes Absolute (10 ⁹ /L)	0.64	1.1 - 3.7	L	NCR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Lymphocytes Relative (%)	12.7	15 - 47	L	NCR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Monocytes Absolute (10 ⁹ /L)	0.09	0.25 - 0.95	L	NCR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Monocytes Relative (%)	1.7	4 - 12	L	NCR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Neutrophils Relative (%)	84.9	43 - 73	H	CR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	HAV Ab	Reactive	Non-Reactive	A	NCR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Hepatitis C Virus RNA (IU/mL)	46070	0 - 11	H	CR
KGR03-P03/001/S023/010	Screening		11OCT11 10:30	Urine Dipstick Protein	+	Negative	A	NCR
KGR03-P03/001/S023/010	Visit 2		25OCT11 10:20	Alanine Aminotransferase (U/L)	54	0 - 31	H	CR
KGR03-P03/001/S023/010	Visit 2		25OCT11 10:20	Aspartate Aminotransferase (U/L)	49	0 - 31	H	CR
KGR03-P03/001/S023/010	Visit 2		25OCT11 10:20	Lactate Dehydrogenase (U/L)	265	97 - 236	H	NCR
KGR03-P03/001/S023/010	Visit 2		25OCT11 10:20	Pseudocholinesterase (kU/L)	4.9	5.3 - 12.9	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S023/010	Visit 2		25OCT11 10:20	Lymphocytes Absolute (10 ⁹ /L)	0.76	1.1 - 3.7	L	NCR
KGR03-P03/001/S023/010	Visit 2		25OCT11 10:20	Monocytes Absolute (10 ⁹ /L)	0.11	0.25 - 0.95	L	NCR
KGR03-P03/001/S023/010	Visit 2		25OCT11 10:20	Neutrophils Absolute (10 ⁹ /L)	0.93	2.1 - 6.9	L	CR
KGR03-P03/001/S023/010	Visit 2		25OCT11 10:20	White Blood Cells (10 ⁹ /L)	1.82	3.6 - 10	L	CR
KGR03-P03/001/S023/010	Visit 2		25OCT11 10:20	Specific Gravity	1.013	1.015 - 1.03	L	NCR
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	Lactate Dehydrogenase (U/L)	265	97 - 236	H	NCR
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	Pseudocholinesterase (kU/L)	4.4	5.3 - 12.9	L	NCR
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	Haematocrit (v/v)	0.313	0.335 - 0.453	L	CR
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	Haemoglobin (g/L)	108	116 - 154	L	CR
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	Lymphocytes Absolute (10 ⁹ /L)	0.70	1.1 - 3.7	L	NCR
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	Monocytes Absolute (10 ⁹ /L)	0.20	0.25 - 0.95	L	NCR
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	Neutrophils Absolute (10 ⁹ /L)	0.86	2.1 - 6.9	L	CR
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	Red Blood Cells (10 ¹² /L)	3.22	3.68 - 5.09	L	
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	White Blood Cells (10 ⁹ /L)	1.80	3.6 - 10	L	CR
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	Hepatitis C Virus RNA (IU/mL)	754	0 - 11	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	Hyaluronic Acid (µg/L)	139	0 - 74	H	CR
KGR03-P03/001/S023/010	Visit 6	T	22NOV11 10:30	Specific Gravity	1.011	1.015 - 1.03	L	NCR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Glucose (mmol/L)	3.72	3.89 - 7.77	L	
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Iron (µmol/L)	8.6	9 - 26.9	L	NCR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Lactate Dehydrogenase (U/L)	270	97 - 236	H	NCR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Pseudocholinesterase (kU/L)	4.1	5.3 - 12.9	L	NCR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Haematocrit (v/v)	0.308	0.335 - 0.453	L	CR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Haemoglobin (g/L)	106	116 - 154	L	CR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Lymphocytes Absolute (10 ⁹ /L)	0.70	1.1 - 3.7	L	CR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Mean Corpuscular Haemoglobin (pg)	34.5	27 - 34	H	NCR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Mean Corpuscular Volume (fL)	100.5	82 - 99	H	NCR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Monocytes Absolute (10 ⁹ /L)	0.18	0.25 - 0.95	L	NCR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Neutrophils Absolute (10 ⁹ /L)	1.09	2.1 - 6.9	L	CR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Platelets (10 ⁹ /L)	131	145 - 390	L	NCR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Red Blood Cells (10 ¹² /L)	3.07	3.68 - 5.09	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	White Blood Cells (10 ⁹ /L)	1.99	3.6 - 10	L	CR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Hyaluronic Acid (µg/L)	79	0 - 74	H	CR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Urine Dipstick RBC	+	Negative	A	NCR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Urine Dipstick WBC	+++	Negative	A	NCR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Urine Microanalysis Bacteria (/µL)	2835	0 - 100	H	NCR
KGR03-P03/001/S023/010	Visit 10	T	20DEC11 10:30	Urine Microanalysis WBC (/µL)	100	0 - 25	H	NCR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Aspartate Aminotransferase (U/L)	33	0 - 31	H	CR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Lactate Dehydrogenase (U/L)	309	97 - 236	H	NCR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Pseudocholinesterase (kU/L)	4.3	5.3 - 12.9	L	NCR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Sodium (mmol/L)	146	133 - 145	H	NCR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Total Cholesterol (mmol/L)	5.59	0 - 5.17	H	NCR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Haematocrit (v/v)	0.302	0.335 - 0.453	L	CR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Haemoglobin (g/L)	104	116 - 154	L	CR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Lymphocytes Absolute (10 ⁹ /L)	0.30	1.1 - 3.7	L	NCR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Lymphocytes Relative (%)	12.0	15 - 47	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Mean Corpuscular Haemoglobin (pg)	34.8	27 - 34	H	NCR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Mean Corpuscular Volume (fL)	101.3	82 - 99	H	NCR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Neutrophils Absolute (10 ⁹ /L)	1.82	2.1 - 6.9	L	NCR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Neutrophils Relative (%)	74.0	43 - 73	H	NCR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Platelets (10 ⁹ /L)	120	145 - 390	L	CR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Red Blood Cells (10 ¹² /L)	2.98	3.68 - 5.09	L	NCR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	White Blood Cells (10 ⁹ /L)	2.46	3.6 - 10	L	CR
KGR03-P03/001/S023/010	Visit 14 - final	T	17JAN12 10:30	Hyaluronic Acid (µg/L)	151	0 - 74	H	CR
KGR03-P03/001/S024/009	Screening		18OCT11 10:10	Alanine Aminotransferase (U/L)	159	0 - 41	H	CR
KGR03-P03/001/S024/009	Screening		18OCT11 10:10	Aspartate Aminotransferase (U/L)	104	0 - 37	H	CR
KGR03-P03/001/S024/009	Screening		18OCT11 10:10	Iron (µmol/L)	33.3	14.3 - 28.6	H	NCR
KGR03-P03/001/S024/009	Screening		18OCT11 10:10	Total Cholesterol (mmol/L)	5.34	0 - 5.17	H	NCR
KGR03-P03/001/S024/009	Screening		18OCT11 10:10	Platelets (10 ⁹ /L)	141	145 - 390	L	NCR
KGR03-P03/001/S024/009	Screening		18OCT11 10:10	HAV Ab	Reactive	Non-Reactive	A	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S024/009	Screening		18OCT11 10:10	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S024/009	Screening		18OCT11 10:10	Hepatitis C Virus RNA (IU/mL)	617543	0 - 11	H	CR
KGR03-P03/001/S024/009	Screening		18OCT11 10:10	Urine Dipstick RBC	+	Negative	A	NCR
KGR03-P03/001/S024/009	Visit 2		25OCT11 9:30	Alanine Aminotransferase (U/L)	160	0 - 41	H	CR
KGR03-P03/001/S024/009	Visit 2		25OCT11 9:30	Aspartate Aminotransferase (U/L)	103	0 - 37	H	CR
KGR03-P03/001/S024/009	Visit 2		25OCT11 9:30	Direct Bilirubin (μmol/L)	7.4	0 - 5	H	NCR
KGR03-P03/001/S024/009	Visit 2		25OCT11 9:30	Iron (μmol/L)	43.0	14.3 - 28.6	H	NCR
KGR03-P03/001/S024/009	Visit 2		25OCT11 9:30	Total Bilirubin (μmol/L)	22.4	0 - 20.4	H	NCR
KGR03-P03/001/S024/009	Visit 2		25OCT11 9:30	Mean Corpuscular Volume (fL)	99.3	82 - 99	H	NCR
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Direct Bilirubin (μmol/L)	6.0	0 - 5	H	NCR
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Ferritin (μg/L)	826	20 - 360	H	NCR
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Iron (μmol/L)	36.7	14.3 - 28.6	H	NCR
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Total Cholesterol (mmol/L)	5.39	0 - 5.17	H	NCR
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Haemoglobin (g/L)	127	130 - 170	L	CR
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Mean Corpuscular Volume (fL)	99.9	82 - 99	H	

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Neutrophils Absolute (10 ⁹ /L)	1.66	2.1 - 6.9	L	CR
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Platelets (10 ⁹ /L)	138	145 - 390	L	CR
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Red Blood Cells (10 ¹² /L)	3.83	4.12 - 5.59	L	CR
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Hepatitis C Virus RNA (IU/mL)	28	0 - 11	H	CR
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Tumour Necrosis Factor α (pg/mL)	11.12	0 - 8.26	H	CR
KGR03-P03/001/S024/009	Visit 6	R	22NOV11 10:00	Specific Gravity	1.014	1.015 - 1.03	L	NCR
KGR03-P03/001/S024/009	Visit 10	R	20DEC11 10:00	Alanine Aminotransferase (U/L)	47	0 - 41	H	CR
KGR03-P03/001/S024/009	Visit 10	R	20DEC11 10:00	Aspartate Aminotransferase (U/L)	48	0 - 37	H	CR
KGR03-P03/001/S024/009	Visit 10	R	20DEC11 10:00	Ferritin (μ g/L)	585	20 - 360	H	
KGR03-P03/001/S024/009	Visit 10	R	20DEC11 10:00	Iron (μ mol/L)	38.1	14.3 - 28.6	H	NCR
KGR03-P03/001/S024/009	Visit 10	R	20DEC11 10:00	LDL Cholesterol (mmol/L)	3.44	0 - 3.36	H	NCR
KGR03-P03/001/S024/009	Visit 10	R	20DEC11 10:00	Lactate Dehydrogenase (U/L)	268	97 - 236	H	NCR
KGR03-P03/001/S024/009	Visit 10	R	20DEC11 10:00	Total Cholesterol (mmol/L)	5.75	0 - 5.17	H	NCR
KGR03-P03/001/S024/009	Visit 10	R	20DEC11 10:00	Mean Corpuscular Volume (fL)	100.5	82 - 99	H	NCR
KGR03-P03/001/S024/009	Visit 10	R	20DEC11 10:00	Platelets (10 ⁹ /L)	120	145 - 390	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S024/009	Visit 10	R	20DEC11 10:00	Red Blood Cells (10 ¹² /L)	3.90	4.12 - 5.59	L	NCR
KGR03-P03/001/S024/009	Visit 10	R	20DEC11 10:00	Specific Gravity	1.011	1.015 - 1.03	L	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Direct Bilirubin (µmol/L)	6.5	0 - 5	H	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Ferritin (µg/L)	560	20 - 360	H	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Glucose (mmol/L)	3.55	3.89 - 7.77	L	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Iron (µmol/L)	35.3	14.3 - 28.6	H	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Lactate Dehydrogenase (U/L)	240	97 - 236	H	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Total Bilirubin (µmol/L)	22.7	0 - 20.4	H	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Total Cholesterol (mmol/L)	5.28	0 - 5.17	H	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Haematocrit (v/v)	0.365	0.382 - 0.495	L	CR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Haemoglobin (g/L)	120	130 - 170	L	CR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Mean Corpuscular Volume (fL)	100.6	82 - 99	H	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Monocytes Absolute (10 ⁹ /L)	0.21	0.25 - 0.95	L	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Neutrophils Absolute (10 ⁹ /L)	1.76	2.1 - 6.9	L	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Platelets (10 ⁹ /L)	118	145 - 390	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Red Blood Cells (10 ¹² /L)	3.63	4.12 - 5.59	L	NCR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	White Blood Cells (10 ⁹ /L)	3.16	3.6 - 10	L	CR
KGR03-P03/001/S024/009	Visit 14 - final	R	17JAN12 10:30	Tumour Necrosis Factor α (pg/mL)	9.06	0 - 8.26	H	CR
KGR03-P03/001/S026/011	Screening		18OCT11 11:30	Alanine Aminotransferase (U/L)	246	0 - 31	H	CR
KGR03-P03/001/S026/011	Screening		18OCT11 11:30	Aspartate Aminotransferase (U/L)	92	0 - 31	H	CR
KGR03-P03/001/S026/011	Screening		18OCT11 11:30	γ Glutamyl Transferase (U/L)	111	6 - 32	H	NCR
KGR03-P03/001/S026/011	Screening		18OCT11 11:30	Phosphate (mmol/L)	1.424	0.775 - 1.421	H	NCR
KGR03-P03/001/S026/011	Screening		18OCT11 11:30	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S026/011	Screening		18OCT11 11:30	Hepatitis C Virus RNA (IU/mL)	1594002	0 - 11	H	CR
KGR03-P03/001/S026/011	Screening		18OCT11 11:30	Urine Dipstick Nitrite	+	Negative	A	NCR
KGR03-P03/001/S026/011	Screening		18OCT11 11:30	Urine Dipstick WBC	+++	Negative	A	NCR
KGR03-P03/001/S026/011	Screening		18OCT11 11:30	Urine Microanalysis Bacteria (/μL)	16480	0 - 100	H	NCR
KGR03-P03/001/S026/011	Screening		18OCT11 11:30	Urine Microanalysis Epithelial Cells (/μL)	105	0 - 30	H	NCR
KGR03-P03/001/S026/011	Screening		18OCT11 11:30	Urine Microanalysis WBC (/μL)	56	0 - 25	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	Alanine Aminotransferase (U/L)	271	0 - 31	H	CR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	Aspartate Aminotransferase (U/L)	126	0 - 31	H	CR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	γ Glutamyl Transferase (U/L)	104	6 - 32	H	CR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	Glucose (mmol/L)	3.55	3.89 - 7.77	L	NCR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	Phosphate (mmol/L)	1.638	0.775 - 1.421	H	NCR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	Urea (mmol/L)	7.8	2.5 - 7.5	H	NCR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	White Blood Cells ($10^9/L$)	10.16	3.6 - 10	H	NCR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	Urine Dipstick Nitrite	+	Negative	A	NCR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	Urine Dipstick RBC	++	Negative	A	NCR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	Urine Dipstick WBC	+	Negative	A	NCR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	Urine Microanalysis Bacteria (/μL)	15107	0 - 100	H	NCR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	Urine Microanalysis Epithelial Cells (/μL)	65	0 - 30	H	NCR
KGR03-P03/001/S026/011	Visit 2		25OCT11 10:45	Urine Microanalysis WBC (/μL)	26	0 - 25	H	NCR
KGR03-P03/001/S026/011	Visit 6	T	22NOV11 9:15	Chloride (mmol/L)	112	96 - 108	H	NCR
KGR03-P03/001/S026/011	Visit 6	T	22NOV11 9:15	Tumour Necrosis Factor α (pg/mL)	8.41	0 - 8.26	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S026/011	Visit 6	T	22NOV11 9:15	Urine Dipstick Nitrite	+	Negative	A	NCR
KGR03-P03/001/S026/011	Visit 6	T	22NOV11 9:15	Urine Dipstick WBC	+	Negative	A	NCR
KGR03-P03/001/S026/011	Visit 6	T	22NOV11 9:15	Urine Microanalysis Bacteria (/μL)	5417	0 - 100	H	NCR
KGR03-P03/001/S026/011	Visit 6	T	22NOV11 9:15	Urine Microanalysis Epithelial Cells (/μL)	75	0 - 30	H	NCR
KGR03-P03/001/S026/011	Visit 6	T	22NOV11 9:15	Urine Microanalysis WBC (/μL)	52	0 - 25	H	NCR
KGR03-P03/001/S026/011	Visit 10	T	20DEC11 9:30	Glucose (mmol/L)	8.94	3.89 - 7.77	H	
KGR03-P03/001/S026/011	Visit 10	T	20DEC11 9:30	Triglycerides (mmol/L)	2.98	0 - 1.69	H	NCR
KGR03-P03/001/S026/011	Visit 10	T	20DEC11 9:30	Haemoglobin (g/L)	115	116 - 154	L	NCR
KGR03-P03/001/S026/011	Visit 10	T	20DEC11 9:30	Monocytes Absolute (10 ⁹ /L)	0.22	0.25 - 0.95	L	NCR
KGR03-P03/001/S026/011	Visit 10	T	20DEC11 9:30	Red Blood Cells (10 ¹² /L)	3.65	3.68 - 5.09	L	NCR
KGR03-P03/001/S026/011	Visit 10	T	20DEC11 9:30	Hyaluronic Acid (μg/L)	98	0 - 74	H	CR
KGR03-P03/001/S026/011	Visit 10	T	20DEC11 9:30	Urine Dipstick Nitrite	+	Negative	A	NCR
KGR03-P03/001/S026/011	Visit 10	T	20DEC11 9:30	Urine Microanalysis Bacteria (/μL)	17563	0 - 100	H	NCR
KGR03-P03/001/S026/011	Visit 10	T	20DEC11 9:30	Urine Microanalysis Epithelial Cells (/μL)	63	0 - 30	H	NCR
KGR03-P03/001/S026/011	Visit 14 - final	T	17JAN12 9:30	Chloride (mmol/L)	109	96 - 108	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S026/011	Visit 14 - final	T	17JAN12 9:30	Monocytes Absolute (10 ⁹ /L)	0.24	0.25 - 0.95	L	NCR
KGR03-P03/001/S026/011	Visit 14 - final	T	17JAN12 9:30	Tumour Necrosis Factor α (pg/mL)	10.61	0 - 8.26	H	CR
KGR03-P03/001/S026/011	Visit 14 - final	T	17JAN12 9:30	Urine Dipstick Nitrite	+	Negative	A	NCR
KGR03-P03/001/S026/011	Visit 14 - final	T	17JAN12 9:30	Urine Dipstick WBC	+++	Negative	A	NCR
KGR03-P03/001/S026/011	Visit 14 - final	T	17JAN12 9:30	Urine Microanalysis Bacteria (/μL)	7110	0 - 100	H	NCR
KGR03-P03/001/S026/011	Visit 14 - final	T	17JAN12 9:30	Urine Microanalysis Epithelial Cells (/μL)	102	0 - 30	H	NCR
KGR03-P03/001/S026/011	Visit 14 - final	T	17JAN12 9:30	Urine Microanalysis WBC (/μL)	44	0 - 25	H	NCR
KGR03-P03/001/S028/012	Screening		06DEC11 9:10	Alanine Aminotransferase (U/L)	83	0 - 41	H	CR
KGR03-P03/001/S028/012	Screening		06DEC11 9:10	HDL Cholesterol (mmol/L)	0.83	1.05 - 99999	L	NCR
KGR03-P03/001/S028/012	Screening		06DEC11 9:10	Iron (μmol/L)	7.9	14.3 - 28.6	L	NCR
KGR03-P03/001/S028/012	Screening		06DEC11 9:10	LDL Cholesterol (mmol/L)	3.68	0 - 3.36	H	NCR
KGR03-P03/001/S028/012	Screening		06DEC11 9:10	Total Cholesterol (mmol/L)	6.16	0 - 5.17	H	NCR
KGR03-P03/001/S028/012	Screening		06DEC11 9:10	Triglycerides (mmol/L)	3.31	0 - 1.69	H	NCR
KGR03-P03/001/S028/012	Screening		06DEC11 9:10	Haematocrit (v/v)	0.509	0.382 - 0.495	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S028/012	Screening		06DEC11 9:10	Haemoglobin (g/L)	172	130 - 170	H	CR
KGR03-P03/001/S028/012	Screening		06DEC11 9:10	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S028/012	Screening		06DEC11 9:10	Hepatitis C Virus RNA (IU/mL)	1241747	0 - 11	H	CR
KGR03-P03/001/S028/012	Screening		06DEC11 9:10	Specific Gravity	1.011	1.015 - 1.03	L	NCR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	Alanine Aminotransferase (U/L)	93	0 - 41	H	CR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	Aspartate Aminotransferase (U/L)	41	0 - 37	H	CR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	γ Glutamyl Transferase (U/L)	54	10 - 49	H	NCR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	HDL Cholesterol (mmol/L)	0.96	1.05 - 99999	L	NCR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	LDL Cholesterol (mmol/L)	4.30	0 - 3.36	H	
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	Total Cholesterol (mmol/L)	6.79	0 - 5.17	H	NCR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	Triglycerides (mmol/L)	3.07	0 - 1.69	H	NCR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	Basophils Absolute (10 ⁹ /L)	0.12	0 - 0.07	H	NCR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	Haematocrit (v/v)	0.509	0.382 - 0.495	H	CR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	Haemoglobin (g/L)	172	130 - 170	H	NCR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	Neutrophils Absolute (10 ⁹ /L)	8.56	2.1 - 6.9	H	

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	Neutrophils Relative (%)	73.7	43 - 73	H	NCR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	White Blood Cells (10 ⁹ /L)	11.61	3.6 - 10	H	NCR
KGR03-P03/001/S028/012	Visit 2		20DEC11 9:30	Tumour Necrosis Factor α (pg/mL)	21.57	0 - 8.26	H	CR
KGR03-P03/001/S028/012	Visit 6	R	17JAN12 9:30	Alanine Aminotransferase (U/L)	47	0 - 41	H	CR
KGR03-P03/001/S028/012	Visit 6	R	17JAN12 9:30	HDL Cholesterol (mmol/L)	0.78	1.05 - 99999	L	NCR
KGR03-P03/001/S028/012	Visit 6	R	17JAN12 9:30	Iron (μ mol/L)	33.1	14.3 - 28.6	H	NCR
KGR03-P03/001/S028/012	Visit 6	R	17JAN12 9:30	Lactate Dehydrogenase (U/L)	255	97 - 236	H	NCR
KGR03-P03/001/S028/012	Visit 6	R	17JAN12 9:30	Basophils Absolute (10 ⁹ /L)	0.09	0 - 0.07	H	NCR
KGR03-P03/001/S028/012	Visit 6	R	17JAN12 9:30	Basophils Relative (%)	1.8	0 - 1	H	NCR
KGR03-P03/001/S028/012	Visit 6	R	17JAN12 9:30	Haemoglobin (g/L)	129	130 - 170	L	CR
KGR03-P03/001/S028/012	Visit 6	R	17JAN12 9:30	Red Blood Cells (10 ¹² /L)	4.07	4.12 - 5.59	L	NCR
KGR03-P03/001/S028/012	Visit 6	R	17JAN12 9:30	Hepatitis C Virus RNA (IU/mL)	77887	0 - 11	H	CR
KGR03-P03/001/S028/012	Visit 6	R	17JAN12 9:30	Tumour Necrosis Factor α (pg/mL)	26.76	0 - 8.26	H	CR
KGR03-P03/001/S028/012	Visit 6	R	17JAN12 9:30	Specific Gravity	1.012	1.015 - 1.03	L	NCR
KGR03-P03/001/S028/012	Visit 10	R	14FEB12 9:30	Direct Bilirubin (μ mol/L)	5.3	0 - 5	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S028/012	Visit 10	R	14FEB12 9:30	Ferritin (µg/L)	421	20 - 360	H	NCR
KGR03-P03/001/S028/012	Visit 10	R	14FEB12 9:30	HDL Cholesterol (mmol/L)	0.91	1.05 - 99999	L	NCR
KGR03-P03/001/S028/012	Visit 10	R	14FEB12 9:30	Basophils Relative (%)	1.3	0 - 1	H	NCR
KGR03-P03/001/S028/012	Visit 10	R	14FEB12 9:30	Mean Corpuscular HGB Concentration (g/L)	323	326 - 359	L	NCR
KGR03-P03/001/S028/012	Visit 10	R	14FEB12 9:30	Mean Corpuscular Volume (fL)	100.8	82 - 99	H	NCR
KGR03-P03/001/S028/012	Visit 10	R	14FEB12 9:30	Tumour Necrosis Factor α (pg/mL)	35.19	0 - 8.26	H	CR
KGR03-P03/001/S028/012	Visit 10	R	14FEB12 9:30	Urine Dipstick WBC	++	Negative	A	NCR
KGR03-P03/001/S028/012	Visit 14 - final	R	13MAR12 9:30	Alanine Aminotransferase (U/L)	76	0 - 41	H	CR
KGR03-P03/001/S028/012	Visit 14 - final	R	13MAR12 9:30	Direct Bilirubin (µmol/L)	7.4	0 - 5	H	NCR
KGR03-P03/001/S028/012	Visit 14 - final	R	13MAR12 9:30	Ferritin (µg/L)	477	20 - 360	H	NCR
KGR03-P03/001/S028/012	Visit 14 - final	R	13MAR12 9:30	HDL Cholesterol (mmol/L)	0.78	1.05 - 99999	L	NCR
KGR03-P03/001/S028/012	Visit 14 - final	R	13MAR12 9:30	Triglycerides (mmol/L)	1.82	0 - 1.69	H	NCR
KGR03-P03/001/S028/012	Visit 14 - final	R	13MAR12 9:30	Uric Acid (mmol/L)	0.44	0.21 - 0.41	H	NCR
KGR03-P03/001/S028/012	Visit 14 - final	R	13MAR12 9:30	Mean Corpuscular Volume (fL)	100.9	82 - 99	H	NCR
KGR03-P03/001/S028/012	Visit 14 - final	R	13MAR12 9:30	Red Blood Cells (10 ¹² /L)	4.04	4.12 - 5.59	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S028/012	Visit 14 - final	R	13MAR12 9:30	Hepatitis C Virus RNA (IU/mL)	1405447	0 - 11	H	CR
KGR03-P03/001/S028/012	Visit 14 - final	R	13MAR12 9:30	Tumour Necrosis Factor α (pg/mL)	29.65	0 - 8.26	H	CR
KGR03-P03/001/S031/013	Screening		28DEC11 9:30	Alanine Aminotransferase (U/L)	50	0 - 41	H	CR
KGR03-P03/001/S031/013	Screening		28DEC11 9:30	Aspartate Aminotransferase (U/L)	44	0 - 37	H	CR
KGR03-P03/001/S031/013	Screening		28DEC11 9:30	Direct Bilirubin (μ mol/L)	8.7	0 - 5	H	NCR
KGR03-P03/001/S031/013	Screening		28DEC11 9:30	γ Glutamyl Transferase (U/L)	60	10 - 49	H	NCR
KGR03-P03/001/S031/013	Screening		28DEC11 9:30	Iron (μ mol/L)	11.8	14.3 - 28.6	L	NCR
KGR03-P03/001/S031/013	Screening		28DEC11 9:30	Total Bilirubin (μ mol/L)	27.7	0 - 20.4	H	NCR
KGR03-P03/001/S031/013	Screening		28DEC11 9:30	Triglycerides (mmol/L)	1.80	0 - 1.69	H	NCR
KGR03-P03/001/S031/013	Screening		28DEC11 9:30	HAV Ab	Reactive	Non-Reactive	A	NCR
KGR03-P03/001/S031/013	Screening		28DEC11 9:30	HCV Ab	Reactive	Non-Reactive	A	CR
KGR03-P03/001/S031/013	Screening		28DEC11 9:30	Hepatitis C Virus RNA (IU/mL)	395	0 - 11	H	CR
KGR03-P03/001/S031/013	Screening		28DEC11 9:30	Urine Dipstick RBC	+	Negative	A	NCR
KGR03-P03/001/S031/013	Visit 2		12JAN12 10:00	Alanine Aminotransferase (U/L)	99	0 - 41	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S031/013	Visit 2		12JAN12 10:00	Aspartate Aminotransferase (U/L)	63	0 - 37	H	CR
KGR03-P03/001/S031/013	Visit 2		12JAN12 10:00	Chloride (mmol/L)	109	96 - 108	H	NCR
KGR03-P03/001/S031/013	Visit 2		12JAN12 10:00	Direct Bilirubin (µmol/L)	6.0	0 - 5	H	NCR
KGR03-P03/001/S031/013	Visit 2		12JAN12 10:00	γ Glutamyl Transferase (U/L)	50	10 - 49	H	NCR
KGR03-P03/001/S031/013	Visit 2		12JAN12 10:00	HDL Cholesterol (mmol/L)	0.83	1.05 - 99999	L	NCR
KGR03-P03/001/S031/013	Visit 2		12JAN12 10:00	Iron (µmol/L)	6.8	14.3 - 28.6	L	NCR
KGR03-P03/001/S031/013	Visit 2		12JAN12 10:00	Sodium (mmol/L)	146	133 - 145	H	NCR
KGR03-P03/001/S031/013	Visit 2		12JAN12 10:00	Triglycerides (mmol/L)	2.16	0 - 1.69	H	NCR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Alanine Aminotransferase (U/L)	74	0 - 41	H	CR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Aspartate Aminotransferase (U/L)	61	0 - 37	H	CR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Calcium (mmol/L)	2.13	2.15 - 2.5	L	NCR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Direct Bilirubin (µmol/L)	11.1	0 - 5	H	NCR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Total Bilirubin (µmol/L)	43.3	0 - 20.4	H	NCR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Uric Acid (mmol/L)	0.19	0.21 - 0.41	L	NCR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Haematocrit (v/v)	0.367	0.382 - 0.495	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Haemoglobin (g/L)	123	130 - 170	L	CR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Lymphocytes Relative (%)	56.0	15 - 47	H	NCR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Neutrophils Absolute (10 ⁹ /L)	0.64	2.1 - 6.9	L	NCR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Neutrophils Relative (%)	31.0	43 - 73	L	NCR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	White Blood Cells (10 ⁹ /L)	2.07	3.6 - 10	L	CR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Tumour Necrosis Factor α (pg/mL)	9.54	0 - 8.26	H	CR
KGR03-P03/001/S031/013	Visit 6	R	14FEB12 10:30	Specific Gravity	1.031	1.015 - 1.03	H	NCR
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	Creatinine (μ mol/L)	108.7	0 - 102.9	H	NCR
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	Direct Bilirubin (μ mol/L)	13.2	0 - 5	H	NCR
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	Ferritin (μ g/L)	478	20 - 360	H	NCR
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	HDL Cholesterol (mmol/L)	0.91	1.05 - 99999	L	NCR
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	Iron (μ mol/L)	5.0	14.3 - 28.6	L	NCR
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	Total Bilirubin (μ mol/L)	46.3	0 - 20.4	H	NCR
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	Haematocrit (v/v)	0.368	0.382 - 0.495	L	NCR
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	Haemoglobin (g/L)	122	130 - 170	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	Lymphocytes Absolute (10 ⁹ /L)	1.02	1.1 - 3.7	L	NCR
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	Neutrophils Relative (%)	75.0	43 - 73	H	NCR
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	Red Blood Cells (10 ¹² /L)	4.11	4.12 - 5.59	L	NCR
KGR03-P03/001/S031/013	Visit 10	R	08MAR12 10:30	Specific Gravity	1.031	1.015 - 1.03	H	
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	Direct Bilirubin (µmol/L)	10.9	0 - 5	H	NCR
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	Ferritin (µg/L)	470	20 - 360	H	NCR
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	Glucose (mmol/L)	3.27	3.89 - 7.77	L	NCR
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	HDL Cholesterol (mmol/L)	0.83	1.05 - 99999	L	NCR
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	Total Bilirubin (µmol/L)	35.1	0 - 20.4	H	NCR
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	Eosinophils Relative (%)	10.0	0 - 7	H	NCR
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	Haematocrit (v/v)	0.355	0.382 - 0.495	L	CR
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	Haemoglobin (g/L)	115	130 - 170	L	CR
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	Lymphocytes Absolute (10 ⁹ /L)	0.82	1.1 - 3.7	L	NCR
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	Neutrophils Absolute (10 ⁹ /L)	0.96	2.1 - 6.9	L	NCR
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	Neutrophils Relative (%)	42.0	43 - 73	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	Red Blood Cells (10 ¹² /L)	3.84	4.12 - 5.59	L	NCR
KGR03-P03/001/S031/013	Visit 14 - final	R	05APR12 10:30	White Blood Cells (10 ⁹ /L)	2.28	3.6 - 10	L	CR
KGR03-P03/001/S035/014	Screening		09FEB12	Alanine Aminotransferase (U/L)	66	10 - 65	H	
KGR03-P03/001/S035/014	Screening		09FEB12	Alkaline Phosphatase (U/L)	226	50 - 136	H	
KGR03-P03/001/S035/014	Screening		09FEB12	Aspartate Aminotransferase (U/L)	45	2 - 40	H	
KGR03-P03/001/S035/014	Screening		09FEB12	HDL Cholesterol (mg/dL)	43	55 -	L	
KGR03-P03/001/S035/014	Screening		09FEB12	Total Cholesterol (mg/dL)	125	140 - 200	L	
KGR03-P03/001/S035/014	Screening		09FEB12	HAV Ab	12.96	>= 1	H	
KGR03-P03/001/S035/014	Screening		09FEB12	HCV Ab	12.50	>= 1	H	
KGR03-P03/001/S035/014	Visit 2		20FEB12 9:30	Alanine Aminotransferase (U/L)	41	0 - 31	H	CR
KGR03-P03/001/S035/014	Visit 2		20FEB12 9:30	Alkaline Phosphatase (U/L)	188	31 - 121	H	NCR
KGR03-P03/001/S035/014	Visit 2		20FEB12 9:30	Aspartate Aminotransferase (U/L)	40	0 - 31	H	CR
KGR03-P03/001/S035/014	Visit 2		20FEB12 9:30	γ Glutamyl Transferase (U/L)	35	6 - 32	H	NCR
KGR03-P03/001/S035/014	Visit 2		20FEB12 9:30	Tumour Necrosis Factor α (pg/mL)	9.58	0 - 8.26	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Alanine Aminotransferase (U/L)	53	0 - 31	H	CR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Alkaline Phosphatase (U/L)	157	31 - 121	H	CR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Aspartate Aminotransferase (U/L)	54	0 - 31	H	CR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Direct Bilirubin (µmol/L)	7.2	0 - 5	H	NCR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Ferritin (µg/L)	538	20 - 360	H	NCR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	γ Glutamyl Transferase (U/L)	35	6 - 32	H	NCR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	HDL Cholesterol (mmol/L)	0.93	1.05 - 99999	L	NCR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Sodium (mmol/L)	146	133 - 145	H	NCR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Lymphocytes Absolute (10 ⁹ /L)	1.04	1.1 - 3.7	L	NCR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Neutrophils Absolute (10 ⁹ /L)	1.11	2.1 - 6.9	L	CR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	White Blood Cells (10 ⁹ /L)	2.47	3.6 - 10	L	CR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Hepatitis C Virus RNA (IU/mL)	14	0 - 11	H	CR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Hyaluronic Acid (µg/L)	126	0 - 74	H	CR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Tumour Necrosis Factor α (pg/mL)	12.07	0 - 8.26	H	CR
KGR03-P03/001/S035/014	Visit 6	T	20MAR12 9:30	Specific Gravity	1.031	1.015 - 1.03	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Alanine Aminotransferase (U/L)	68	0 - 31	H	CR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Alkaline Phosphatase (U/L)	146	31 - 121	H	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Aspartate Aminotransferase (U/L)	67	0 - 31	H	CR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Calcium (mmol/L)	2.17	2.2 - 2.55	L	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Direct Bilirubin (µmol/L)	6.5	0 - 5	H	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Ferritin (µg/L)	706	20 - 360	H	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	γ Glutamyl Transferase (U/L)	46	6 - 32	H	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	HDL Cholesterol (mmol/L)	0.88	1.05 - 99999	L	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Iron (µmol/L)	27.0	9 - 26.9	H	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Phosphate (mmol/L)	0.833	0.904 - 1.292	L	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Lymphocytes Absolute (10 ⁹ /L)	0.91	1.1 - 3.7	L	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Mean Corpuscular HGB Concentration (g/L)	319	326 - 359	L	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Monocytes Absolute (10 ⁹ /L)	0.14	0.25 - 0.95	L	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Neutrophils Absolute (10 ⁹ /L)	0.95	2.1 - 6.9	L	NCR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Platelets (10 ⁹ /L)	99	145 - 390	L	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	White Blood Cells (10 ⁹ /L)	2.03	3.6 - 10	L	CR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Hyaluronic Acid (µg/L)	377	0 - 74	H	CR
KGR03-P03/001/S035/014	Visit 10	T	17APR12 9:30	Tumour Necrosis Factor α (pg/mL)	14.02	0 - 8.26	H	
KGR03-P03/001/S035/014	Visit 14 - final	T	15MAY12 9:30	Alanine Aminotransferase (U/L)	69	0 - 31	H	CR
KGR03-P03/001/S035/014	Visit 14 - final	T	15MAY12 9:30	Aspartate Aminotransferase (U/L)	71	0 - 31	H	CR
KGR03-P03/001/S035/014	Visit 14 - final	T	15MAY12 9:30	Calcium (mmol/L)	2.10	2.2 - 2.55	L	NCR
KGR03-P03/001/S035/014	Visit 14 - final	T	15MAY12 9:30	Direct Bilirubin (µmol/L)	7.0	0 - 5	H	NCR
KGR03-P03/001/S035/014	Visit 14 - final	T	15MAY12 9:30	Ferritin (µg/L)	940	20 - 360	H	NCR
KGR03-P03/001/S035/014	Visit 14 - final	T	15MAY12 9:30	γ Glutamyl Transferase (U/L)	49	6 - 32	H	NCR
KGR03-P03/001/S035/014	Visit 14 - final	T	15MAY12 9:30	HDL Cholesterol (mmol/L)	0.75	1.05 - 99999	L	NCR
KGR03-P03/001/S035/014	Visit 14 - final	T	15MAY12 9:30	Hyaluronic Acid (µg/L)	257	0 - 74	H	CR
KGR03-P03/001/S035/014	Visit 14 - final	T	15MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	12.02	0 - 8.26	H	CR
KGR03-P03/001/S036/015	Screening		10FEB12	Alanine Aminotransferase (U/L)	100	10 - 65	H	
KGR03-P03/001/S036/015	Screening		10FEB12	Creatinine (mg/dL)	0.78	0.8 - 1.3	L	

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S036/015	Screening		10FEB12	Total Protein (g/dL)	8.7	6.4 - 8.2	H	
KGR03-P03/001/S036/015	Screening		10FEB12	Eosinophils Absolute (10 ⁹ /L)	0.55	0 - 0.45	H	
KGR03-P03/001/S036/015	Screening		10FEB12	Lymphocytes Absolute (10 ⁹ /L)	5.19	1 - 4.8	H	
KGR03-P03/001/S036/015	Screening		10FEB12	Mean Corpuscular Haemoglobin (pg)	31.5	27 - 31	H	
KGR03-P03/001/S036/015	Screening		10FEB12	Mean Corpuscular Volume (fL)	96.3	80 - 96	H	
KGR03-P03/001/S036/015	Screening		10FEB12	Platelets (μL)	423	150 - 400	H	
KGR03-P03/001/S036/015	Screening		10FEB12	White Blood Cells (10 ⁹ /L)	12.90	4 - 11	H	
KGR03-P03/001/S036/015	Visit 2		20FEB12 10:00	Alanine Aminotransferase (U/L)	142	0 - 41	H	CR
KGR03-P03/001/S036/015	Visit 2		20FEB12 10:00	Aspartate Aminotransferase (U/L)	100	0 - 37	H	CR
KGR03-P03/001/S036/015	Visit 2		20FEB12 10:00	HDL Cholesterol (mmol/L)	0.85	1.05 - 99999	L	NCR
KGR03-P03/001/S036/015	Visit 2		20FEB12 10:00	Iron (μmol/L)	7.9	14.3 - 28.6	L	NCR
KGR03-P03/001/S036/015	Visit 2		20FEB12 10:00	Eosinophils Absolute (10 ⁹ /L)	0.54	0 - 0.48	H	NCR
KGR03-P03/001/S036/015	Visit 2		20FEB12 10:00	Neutrophils Absolute (10 ⁹ /L)	8.97	2.1 - 6.9	H	NCR
KGR03-P03/001/S036/015	Visit 2		20FEB12 10:00	White Blood Cells (10 ⁹ /L)	12.92	3.6 - 10	H	NCR
KGR03-P03/001/S036/015	Visit 2		20FEB12 10:00	Tumour Necrosis Factor α (pg/mL)	17.23	0 - 8.26	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S036/015	Visit 2		20FEB12 10:00	Urine Dipstick RBC	+++	Negative	A	NCR
KGR03-P03/001/S036/015	Visit 2		20FEB12 10:00	Urine Dipstick WBC	++	Negative	A	NCR
KGR03-P03/001/S036/015	Visit 2		20FEB12 10:00	Urine Microanalysis WBC (/μL)	36	0 - 25	H	NCR
KGR03-P03/001/S037/016	Screening		15FEB12	Alanine Aminotransferase (U/L)	144	10 - 65	H	CR
KGR03-P03/001/S037/016	Screening		15FEB12	Aspartate Aminotransferase (U/L)	64	2 - 40	H	CR
KGR03-P03/001/S037/016	Screening		15FEB12	Direct Bilirubin (mg/dL)	0.75	- 0.3	H	NCR
KGR03-P03/001/S037/016	Screening		15FEB12	Total Bilirubin (mg/dL)	1.50	>= 1	H	NCR
KGR03-P03/001/S037/016	Screening		15FEB12	Mean Corpuscular HGB Concentration (g/dL)	31.9	32 - 36	L	NCR
KGR03-P03/001/S037/016	Screening		15FEB12	HAV Ab	13.04	>= 1	H	NCR
KGR03-P03/001/S037/016	Screening		15FEB12	HCV Ab	15.24	>= 1	H	CR
KGR03-P03/001/S037/016	Visit 2		20FEB12 11:30	Alanine Aminotransferase (U/L)	112	0 - 41	H	CR
KGR03-P03/001/S037/016	Visit 2		20FEB12 11:30	Albumin (g/L)	55	35 - 52	H	NCR
KGR03-P03/001/S037/016	Visit 2		20FEB12 11:30	Aspartate Aminotransferase (U/L)	58	0 - 37	H	CR
KGR03-P03/001/S037/016	Visit 2		20FEB12 11:30	γ Glutamyl Transferase (U/L)	59	10 - 49	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S037/016	Visit 2		20FEB12 11:30	HDL Cholesterol (mmol/L)	0.70	1.05 - 99999	L	NCR
KGR03-P03/001/S037/016	Visit 2		20FEB12 11:30	Pseudocholinesterase (kU/L)	3.0	5.3 - 12.9	L	NCR
KGR03-P03/001/S037/016	Visit 2		20FEB12 11:30	Sodium (mmol/L)	148	133 - 145	H	NCR
KGR03-P03/001/S037/016	Visit 2		20FEB12 11:30	Total Protein (g/L)	85	63 - 84	H	NCR
KGR03-P03/001/S037/016	Visit 2		20FEB12 11:30	Triglycerides (mmol/L)	3.85	0 - 1.69	H	CR
KGR03-P03/001/S037/016	Visit 2		20FEB12 11:30	Tumour Necrosis Factor α (pg/mL)	10.22	0 - 8.26	H	CR
KGR03-P03/001/S037/016	Visit 2		20FEB12 11:30	Specific Gravity	1.009	1.015 - 1.03	L	NCR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	Alanine Aminotransferase (U/L)	70	0 - 41	H	CR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	Aspartate Aminotransferase (U/L)	63	0 - 37	H	CR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	Ferritin (μ g/L)	887	20 - 360	H	NCR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	γ Glutamyl Transferase (U/L)	79	10 - 49	H	NCR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	HDL Cholesterol (mmol/L)	0.60	1.05 - 99999	L	NCR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	Pseudocholinesterase (kU/L)	2.7	5.3 - 12.9	L	NCR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	Total Cholesterol (mmol/L)	5.54	0 - 5.17	H	NCR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	Triglycerides (mmol/L)	12.79	0 - 1.69	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	Monocytes Absolute (10 ⁹ /L)	0.15	0.25 - 0.95	L	NCR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	Platelets (10 ⁹ /L)	121	145 - 390	L	NCR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	Hepatitis C Virus RNA (IU/mL)	656	0 - 11	H	CR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	Hyaluronic Acid (µg/L)	104	0 - 74	H	CR
KGR03-P03/001/S037/016	Visit 6	T	20MAR12 10:30	Tumour Necrosis Factor α (pg/mL)	13.24	0 - 8.26	H	CR
KGR03-P03/001/S037/016	Visit 10	T	17APR12 9:30	Alanine Aminotransferase (U/L)	67	0 - 41	H	CR
KGR03-P03/001/S037/016	Visit 10	T	17APR12 9:30	Aspartate Aminotransferase (U/L)	56	0 - 37	H	CR
KGR03-P03/001/S037/016	Visit 10	T	17APR12 9:30	Ferritin (µg/L)	1307	20 - 360	H	NCR
KGR03-P03/001/S037/016	Visit 10	T	17APR12 9:30	γ Glutamyl Transferase (U/L)	101	10 - 49	H	NCR
KGR03-P03/001/S037/016	Visit 10	T	17APR12 9:30	HDL Cholesterol (mmol/L)	0.47	1.05 - 99999	L	NCR
KGR03-P03/001/S037/016	Visit 10	T	17APR12 9:30	Pseudocholinesterase (kU/L)	2.3	5.3 - 12.9	L	NCR
KGR03-P03/001/S037/016	Visit 10	T	17APR12 9:30	Triglycerides (mmol/L)	8.38	0 - 1.69	H	NCR
KGR03-P03/001/S037/016	Visit 10	T	17APR12 9:30	Hyaluronic Acid (µg/L)	174	0 - 74	H	CR
KGR03-P03/001/S037/016	Visit 10	T	17APR12 9:30	Tumour Necrosis Factor α (pg/mL)	16.64	0 - 8.26	H	CR
KGR03-P03/001/S037/016	Visit 14 - final	T	15MAY12 9:30	Alanine Aminotransferase (U/L)	90	0 - 41	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S037/016	Visit 14 - final	T	15MAY12 9:30	Aspartate Aminotransferase (U/L)	86	0 - 37	H	CR
KGR03-P03/001/S037/016	Visit 14 - final	T	15MAY12 9:30	Ferritin (µg/L)	1095	20 - 360	H	NCR
KGR03-P03/001/S037/016	Visit 14 - final	T	15MAY12 9:30	γ Glutamyl Transferase (U/L)	117	10 - 49	H	NCR
KGR03-P03/001/S037/016	Visit 14 - final	T	15MAY12 9:30	HDL Cholesterol (mmol/L)	0.21	1.05 - 99999	L	NCR
KGR03-P03/001/S037/016	Visit 14 - final	T	15MAY12 9:30	Triglycerides (mmol/L)	5.80	0 - 1.69	H	NCR
KGR03-P03/001/S037/016	Visit 14 - final	T	15MAY12 9:30	Hepatitis C Virus RNA (IU/mL)	12	0 - 11	H	CR
KGR03-P03/001/S037/016	Visit 14 - final	T	15MAY12 9:30	Hyaluronic Acid (µg/L)	91	0 - 74	H	CR
KGR03-P03/001/S037/016	Visit 14 - final	T	15MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	16.85	0 - 8.26	H	CR
KGR03-P03/001/S038/017	Screening		14FEB12	Alanine Aminotransferase (U/L)	154	10 - 65	H	
KGR03-P03/001/S038/017	Screening		14FEB12	Aspartate Aminotransferase (U/L)	61	2 - 40	H	
KGR03-P03/001/S038/017	Screening		14FEB12	Ferritin (ng/mL)	566.5	13 - 150	H	
KGR03-P03/001/S038/017	Screening		14FEB12	γ Glutamyl Transferase (U/L)	363	5 - 55	H	
KGR03-P03/001/S038/017	Screening		14FEB12	HDL Cholesterol (mg/dL)	32	55 -	L	
KGR03-P03/001/S038/017	Screening		14FEB12	Total Cholesterol (mg/dL)	208	140 - 200	H	

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S038/017	Screening		14FEB12	Triglycerides (mg/dL)	165	50 - 150	H	
KGR03-P03/001/S038/017	Screening		14FEB12	Basophils Relative (%)	1.28	>= 1	H	
KGR03-P03/001/S038/017	Screening		14FEB12	Eosinophils Absolute (10 ⁹ /L)	0.46	0 - 0.45	H	
KGR03-P03/001/S038/017	Screening		14FEB12	Lymphocytes Absolute (10 ⁹ /L)	6.48	1 - 4.8	H	
KGR03-P03/001/S038/017	Screening		14FEB12	Lymphocytes Relative (%)	56.80	20 - 45	H	
KGR03-P03/001/S038/017	Screening		14FEB12	Monocytes Absolute (10 ⁹ /L)	0.92	0 - 0.8	H	
KGR03-P03/001/S038/017	Screening		14FEB12	Neutrophils Relative (%)	29.80	40 - 75	L	
KGR03-P03/001/S038/017	Screening		14FEB12	White Blood Cells (10 ⁹ /L)	11.40	4 - 11	H	
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Alanine Aminotransferase (U/L)	150	0 - 41	H	CR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Aspartate Aminotransferase (U/L)	79	0 - 37	H	CR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Calcium (mmol/L)	2.63	2.15 - 2.5	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Direct Bilirubin (μmol/L)	5.3	0 - 5	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Ferritin (μg/L)	683	20 - 360	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	γ Glutamyl Transferase (U/L)	287	10 - 49	H	CR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Iron (μmol/L)	45.1	14.3 - 28.6	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	LDL Cholesterol (mmol/L)	3.78	0 - 3.36	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Phosphate (mmol/L)	1.470	0.775 - 1.421	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Potassium (mmol/L)	5.5	3.3 - 5.1	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Total Cholesterol (mmol/L)	6.16	0 - 5.17	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Triglycerides (mmol/L)	2.15	0 - 1.69	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Eosinophils Absolute (10 ⁹ /L)	0.52	0 - 0.48	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Haematocrit (v/v)	0.507	0.382 - 0.495	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Lymphocytes Absolute (10 ⁹ /L)	4.00	1.1 - 3.7	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Mean Corpuscular Volume (fL)	100.4	82 - 99	H	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Neutrophils Relative (%)	39.0	43 - 73	L	NCR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Tumour Necrosis Factor α (pg/mL)	14.95	0 - 8.26	H	CR
KGR03-P03/001/S038/017	Visit 2		24FEB12 9:30	Specific Gravity	1.009	1.015 - 1.03	L	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Alanine Aminotransferase (U/L)	179	0 - 41	H	CR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Aspartate Aminotransferase (U/L)	105	0 - 37	H	CR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Direct Bilirubin (μ mol/L)	7.5	0 - 5	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Ferritin (µg/L)	1661	20 - 360	H	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	γ Glutamyl Transferase (U/L)	251	10 - 49	H	CR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	HDL Cholesterol (mmol/L)	0.96	1.05 - 99999	L	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Iron (µmol/L)	53.9	14.3 - 28.6	H	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	LDL Cholesterol (mmol/L)	4.14	0 - 3.36	H	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Total Cholesterol (mmol/L)	6.11	0 - 5.17	H	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Triglycerides (mmol/L)	2.16	0 - 1.69	H	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Uric Acid (mmol/L)	0.47	0.21 - 0.41	H	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Lymphocytes Absolute (10 ⁹ /L)	4.08	1.1 - 3.7	H	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Lymphocytes Relative (%)	57.0	15 - 47	H	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Neutrophils Absolute (10 ⁹ /L)	2.08	2.1 - 6.9	L	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Neutrophils Relative (%)	29.0	43 - 73	L	NCR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Hepatitis C Virus RNA (IU/mL)	157718	0 - 11	H	CR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Hyaluronic Acid (µg/L)	108	0 - 74	H	CR
KGR03-P03/001/S038/017	Visit 6	R	23MAR12 9:30	Tumour Necrosis Factor α (pg/mL)	14.80	0 - 8.26	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Alanine Aminotransferase (U/L)	130	0 - 41	H	CR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Aspartate Aminotransferase (U/L)	67	0 - 37	H	CR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Ferritin (µg/L)	1596	20 - 360	H	NCR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	γ Glutamyl Transferase (U/L)	245	10 - 49	H	CR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Iron (µmol/L)	45.8	14.3 - 28.6	H	NCR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	LDL Cholesterol (mmol/L)	4.35	0 - 3.36	H	NCR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Phosphate (mmol/L)	1.502	0.775 - 1.421	H	NCR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Total Cholesterol (mmol/L)	6.37	0 - 5.17	H	NCR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Triglycerides (mmol/L)	1.83	0 - 1.69	H	NCR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Lymphocytes Relative (%)	57.0	15 - 47	H	NCR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Mean Corpuscular HGB Concentration (g/L)	314	326 - 359	L	NCR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Mean Corpuscular Volume (fL)	105.1	82 - 99	H	NCR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Monocytes Absolute (10 ⁹ /L)	0.12	0.25 - 0.95	L	NCR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Monocytes Relative (%)	2.0	4 - 12	L	NCR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Neutrophils Relative (%)	39.0	43 - 73	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Tumour Necrosis Factor α (pg/mL)	20.12	0 - 8.26	H	CR
KGR03-P03/001/S038/017	Visit 10	R	20APR12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Alanine Aminotransferase (U/L)	162	0 - 41	H	CR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Aspartate Aminotransferase (U/L)	85	0 - 37	H	CR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Direct Bilirubin (μ mol/L)	5.3	0 - 5	H	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Ferritin (μ g/L)	1769	20 - 360	H	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	γ Glutamyl Transferase (U/L)	220	10 - 49	H	CR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	HDL Cholesterol (mmol/L)	1.04	1.05 - 99999	L	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Iron (μ mol/L)	45.1	14.3 - 28.6	H	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	LDL Cholesterol (mmol/L)	4.33	0 - 3.36	H	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Phosphate (mmol/L)	1.502	0.775 - 1.421	H	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Total Cholesterol (mmol/L)	6.60	0 - 5.17	H	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Total Protein (g/L)	86	63 - 84	H	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Triglycerides (mmol/L)	2.21	0 - 1.69	H	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Uric Acid (mmol/L)	0.49	0.21 - 0.41	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Haematocrit (v/v)	0.497	0.382 - 0.495	H	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Mean Corpuscular HGB Concentration (g/L)	303	326 - 359	L	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Mean Corpuscular Volume (fL)	107.7	82 - 99	H	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Monocytes Relative (%)	3.0	4 - 12	L	NCR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Hepatitis C Virus RNA (IU/mL)	2834	0 - 11	H	CR
KGR03-P03/001/S038/017	Visit 14 - final	R	18MAY12 9:30	Tumor Necrosis Factor α (pg/mL)	19.56	0 - 8.26	H	CR
KGR03-P03/001/S039/018	Screening		20FEB12	Alanine Aminotransferase (U/L)	73	10 - 65	H	
KGR03-P03/001/S039/018	Screening		20FEB12	Alkaline Phosphatase (U/L)	180	50 - 136	H	
KGR03-P03/001/S039/018	Screening		20FEB12	Aspartate Aminotransferase (U/L)	62	2 - 40	H	
KGR03-P03/001/S039/018	Screening		20FEB12	γ Glutamyl Transferase (U/L)	79	5 - 55	H	
KGR03-P03/001/S039/018	Screening		20FEB12	Lymphocytes Absolute ($10^9/L$)	0.72	1 - 4.8	L	
KGR03-P03/001/S039/018	Screening		20FEB12	Mean Corpuscular HGB Concentration (g/dL)	31.9	32 - 36	L	
KGR03-P03/001/S039/018	Screening		20FEB12	Neutrophils Absolute ($10^9/L$)	1.74	1.8 - 7.8	L	
KGR03-P03/001/S039/018	Screening		20FEB12	Platelets (μL)	109	150 - 400	L	

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S039/018	Screening		20FEB12	White Blood Cells (10 ⁹ /L)	2.82	4 - 11	L	
KGR03-P03/001/S039/018	Screening		20FEB12	HAV Ab	10.53	>= 1	H	
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	Alanine Aminotransferase (U/L)	54	0 - 31	H	CR
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	Albumin (g/L)	34	35 - 52	L	NCR
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	Aspartate Aminotransferase (U/L)	72	0 - 31	H	CR
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	Calcium (mmol/L)	2.10	2.15 - 2.5	L	NCR
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	Direct Bilirubin (μmol/L)	5.5	0 - 5	H	NCR
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	γ Glutamyl Transferase (U/L)	38	6 - 32	H	NCR
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	Pseudocholinesterase (kU/L)	2.6	5.3 - 12.9	L	NCR
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	Lymphocytes Absolute (10 ⁹ /L)	1.08	1.1 - 3.7	L	NCR
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	Platelets (10 ⁹ /L)	112	145 - 390	L	NCR
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	Tumor Necrosis Factor A (pg/mL)	8.64	0 - 8.26	H	CR
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	Specific Gravity	1.011	1.015 - 1.03	L	NCR
KGR03-P03/001/S039/018	Visit 2		24FEB12 10:30	Urine Dipstick pH	7.5	5 - 7	H	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Alanine Aminotransferase (U/L)	33	0 - 31	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Albumin (g/L)	34	35 - 52	L	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Alkaline Phosphatase (U/L)	126	31 - 121	H	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Aspartate Aminotransferase (U/L)	52	0 - 31	H	CR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Calcium (mmol/L)	1.98	2.15 - 2.5	L	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Direct Bilirubin (µmol/L)	10.4	0 - 5	H	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Ferritin (µg/L)	398	20 - 360	H	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	γ Glutamyl Transferase (U/L)	34	6 - 32	H	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Lactate Dehydrogenase (U/L)	342	97 - 236	H	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Pseudocholinesterase (kU/L)	2.5	5.3 - 12.9	L	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Total Bilirubin (µmol/L)	31.1	0 - 20.4	H	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Urea (mmol/L)	2.3	2.5 - 7.5	L	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Haematocrit (v/v)	0.321	0.335 - 0.453	L	CR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Haemoglobin (g/L)	104	116 - 154	L	CR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Lymphocytes Absolute (10 ⁹ /L)	0.68	1.1 - 3.7	L	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Mean Corpuscular HGB Concentration (g/L)	325	326 - 359	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Monocytes Absolute (10 ⁹ /L)	0.18	0.25 - 0.95	L	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Neutrophils Absolute (10 ⁹ /L)	1.62	2.1 - 6.9	L	CR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Platelets (10 ⁹ /L)	89	145 - 390	L	CR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Red Blood Cells (10 ¹² /L)	3.31	3.68 - 5.09	L	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	White Blood Cells (10 ⁹ /L)	2.53	3.6 - 10	L	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Hepatitis C Virus RNA (IU/mL)	7448	0 - 11	H	CR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Hyaluronic Acid (µg/L)	207	0 - 74	H	CR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Tumour Necrosis Factor α (pg/mL)	9.56	0 - 8.26	H	CR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Specific Gravity	1.012	1.015 - 1.03	L	NCR
KGR03-P03/001/S039/018	Visit 6	R	23MAR12 9:30	Urine Dipstick pH	7.5	5 - 7	H	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Alanine Aminotransferase (U/L)	32	0 - 31	H	CR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Albumin (g/L)	33	35 - 52	L	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Aspartate Aminotransferase (U/L)	48	0 - 31	H	CR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Calcium (mmol/L)	1.95	2.15 - 2.5	L	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Chloride (mmol/L)	110	96 - 108	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Direct Bilirubin (μmol/L)	6.7	0 - 5	H	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Ferritin (μg/L)	468	20 - 360	H	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	γ Glutamyl Transferase (U/L)	37	6 - 32	H	CR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Lactate Dehydrogenase (U/L)	357	97 - 236	H	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Pseudocholinesterase (kU/L)	2.4	5.3 - 12.9	L	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Haemoglobin (g/L)	104	116 - 154	L	CR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Lymphocytes Absolute (10 ⁹ /L)	0.63	1.1 - 3.7	L	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Mean Corpuscular HGB Concentration (g/L)	307	326 - 359	L	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Mean Corpuscular Volume (fL)	107.8	82 - 99	H	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Monocytes Absolute (10 ⁹ /L)	0.07	0.25 - 0.95	L	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Neutrophils Absolute (10 ⁹ /L)	1.02	2.1 - 6.9	L	CR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Platelets (10 ⁹ /L)	61	145 - 390	L	CR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Red Blood Cells (10 ¹² /L)	3.13	3.68 - 5.09	L	CR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	White Blood Cells (10 ⁹ /L)	1.76	3.6 - 10	L	CR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Hyaluronic Acid (μg/L)	171	0 - 74	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Tumour Necrosis Factor α (pg/mL)	12.90	0 - 8.26	H	CR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Specific Gravity	1.013	1.015 - 1.03	L	NCR
KGR03-P03/001/S039/018	Visit 10	R	20APR12 9:30	Urine Dipstick pH	8.0	5 - 7	H	NCR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Alanine Aminotransferase (U/L)	36	0 - 31	H	CR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Aspartate Aminotransferase (U/L)	61	0 - 31	H	CR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Calcium (mmol/L)	2.13	2.15 - 2.5	L	NCR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Direct Bilirubin (μ mol/L)	5.1	0 - 5	H	NCR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Ferritin (μ g/L)	431	20 - 360	H	NCR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	γ Glutamyl Transferase (U/L)	41	6 - 32	H	CR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Lactate Dehydrogenase (U/L)	416	97 - 236	H	NCR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Haemoglobin (g/L)	112	116 - 154	L	NCR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Mean Corpuscular HGB Concentration (g/L)	302	326 - 359	L	NCR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Mean Corpuscular Volume (fL)	108.4	82 - 99	H	NCR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Platelets (10^9 /L)	80	145 - 390	L	CR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Red Blood Cells (10^{12} /L)	3.42	3.68 - 5.09	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	White Blood Cells (10 ⁹ /L)	2.10	3.6 - 10	L	NCR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Hepatitis C Virus RNA (IU/mL)	2815	0 - 11	H	CR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Hyaluronic Acid (µg/L)	99	0 - 74	H	CR
KGR03-P03/001/S039/018	Visit 14 - final	R	18MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	12.29	0 - 8.26	H	CR
KGR03-P03/001/S040/019	Screening		08FEB12	Alanine Aminotransferase (U/L)	83	10 - 65	H	
KGR03-P03/001/S040/019	Screening		08FEB12	Aspartate Aminotransferase (U/L)	49	2 - 40	H	
KGR03-P03/001/S040/019	Screening		08FEB12	γ Glutamyl Transferase (U/L)	59	5 - 55	H	
KGR03-P03/001/S040/019	Screening		08FEB12	HDL Cholesterol (mg/dL)	41	55 -	L	
KGR03-P03/001/S040/019	Screening		08FEB12	Phosphate (mg/dL)	2.3	2.5 - 4.9	L	
KGR03-P03/001/S040/019	Screening		08FEB12	Total Cholesterol (mg/dL)	135	140 - 200	L	
KGR03-P03/001/S040/019	Screening		08FEB12	HAV Ab	13.01	>= 1	H	
KGR03-P03/001/S040/019	Screening		08FEB12	HCV Ab	9.48	>= 1	H	
KGR03-P03/001/S040/019	Visit 2		24FEB12 9:30	Alanine Aminotransferase (U/L)	67	0 - 31	H	CR
KGR03-P03/001/S040/019	Visit 2		24FEB12 9:30	Aspartate Aminotransferase (U/L)	51	0 - 31	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S040/019	Visit 2		24FEB12 9:30	γ Glutamyl Transferase (U/L)	37	6 - 32	H	NCR
KGR03-P03/001/S040/019	Visit 2		24FEB12 9:30	Urine Dipstick WBC	++	Negative	A	NCR
KGR03-P03/001/S040/019	Visit 2		24FEB12 9:30	Urine Dipstick pH	8.0	5 - 7	H	NCR
KGR03-P03/001/S040/019	Visit 2		24FEB12 9:30	Urine Microanalysis Bacteria (/μL)	110	0 - 100	H	NCR
KGR03-P03/001/S040/019	Visit 2		24FEB12 9:30	Urine Microanalysis Epithelial Cells (/μL)	46	0 - 30	H	NCR
KGR03-P03/001/S040/019	Visit 2		24FEB12 9:30	Urine Microanalysis WBC (/μL)	35	0 - 25	H	NCR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Alanine Aminotransferase (U/L)	230	0 - 31	H	CR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Aspartate Aminotransferase (U/L)	202	0 - 31	H	CR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Direct Bilirubin (μmol/L)	5.1	0 - 5	H	NCR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	γ Glutamyl Transferase (U/L)	137	6 - 32	H	NCR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	HDL Cholesterol (mmol/L)	1.01	1.05 - 99999	L	NCR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Lactate Dehydrogenase (U/L)	299	97 - 236	H	NCR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Monocytes Absolute (10 ⁹ /L)	0.24	0.25 - 0.95	L	NCR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Hyaluronic Acid (μg/L)	188	0 - 74	H	CR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Urine Dipstick RBC	+	Negative	A	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Urine Dipstick WBC	+++	Negative	A	NCR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Urine Microanalysis Bacteria (/μL)	1292	0 - 100	H	NCR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Urine Microanalysis Epithelial Cells (/μL)	74	0 - 30	H	NCR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Urine Microanalysis RBC (/μL)	34	0 - 25	H	NCR
KGR03-P03/001/S040/019	Visit 6	T	23MAR12 9:30	Urine Microanalysis WBC (/μL)	142	0 - 25	H	NCR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	Alanine Aminotransferase (U/L)	191	0 - 31	H	CR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	Alkaline Phosphatase (U/L)	128	31 - 121	H	NCR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	Aspartate Aminotransferase (U/L)	218	0 - 31	H	CR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	Direct Bilirubin (μmol/L)	10.1	0 - 5	H	NCR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	γ Glutamyl Transferase (U/L)	367	6 - 32	H	CR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	HDL Cholesterol (mmol/L)	0.96	1.05 - 99999	L	NCR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	Mean Corpuscular HGB Concentration (g/L)	307	326 - 359	L	NCR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	Monocytes Absolute (10 ⁹ /L)	0.16	0.25 - 0.95	L	NCR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	Monocytes Relative (%)	3.1	4 - 12	L	NCR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	Neutrophils Relative (%)	74.1	43 - 73	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	Hyaluronic Acid (µg/L)	282	0 - 74	H	CR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	Urine Dipstick WBC	+	Negative	A	NCR
KGR03-P03/001/S040/019	Visit 10	T	20APR12 9:30	Urine Microanalysis WBC (/µL)	28	0 - 25	H	NCR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Alanine Aminotransferase (U/L)	229	0 - 31	H	CR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Alkaline Phosphatase (U/L)	129	31 - 121	H	NCR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Aspartate Aminotransferase (U/L)	289	0 - 31	H	CR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Calcium (mmol/L)	2.10	2.15 - 2.5	L	NCR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Direct Bilirubin (µmol/L)	13.2	0 - 5	H	NCR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	γ Glutamyl Transferase (U/L)	445	6 - 32	H	CR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	HDL Cholesterol (mmol/L)	0.93	1.05 - 99999	L	NCR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Lactate Dehydrogenase (U/L)	241	97 - 236	H	NCR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Lymphocytes Absolute (10 ⁹ /L)	0.83	1.1 - 3.7	L	NCR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Mean Corpuscular HGB Concentration (g/L)	309	326 - 359	L	NCR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Monocytes Absolute (10 ⁹ /L)	0.08	0.25 - 0.95	L	NCR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Monocytes Relative (%)	2.1	4 - 12	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Neutrophils Relative (%)	75.8	43 - 73	H	NCR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Hyaluronic Acid (µg/L)	214	0 - 74	H	CR
KGR03-P03/001/S040/019	Visit 14 - final	T	18MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	8.59	0 - 8.26	H	CR
KGR03-P03/001/S041/020	Screening		05MAR12	Alanine Aminotransferase (U/L)	209	10 - 65	H	
KGR03-P03/001/S041/020	Screening		05MAR12	Alkaline Phosphatase (U/L)	137	50 - 136	H	
KGR03-P03/001/S041/020	Screening		05MAR12	Aspartate Aminotransferase (U/L)	170	2 - 40	H	
KGR03-P03/001/S041/020	Screening		05MAR12	γ Glutamyl Transferase (U/L)	135	15 - 85	H	
KGR03-P03/001/S041/020	Screening		05MAR12	HDL Cholesterol (mg/dL)	40	55 -	L	
KGR03-P03/001/S041/020	Screening		05MAR12	Basophils Relative (%)	1.12	≥ 1	H	
KGR03-P03/001/S041/020	Screening		05MAR12	Eosinophils Relative (%)	0.88	1 - 6	L	
KGR03-P03/001/S041/020	Screening		05MAR12	Mean Corpuscular HGB Concentration (g/dL)	30.9	32 - 36	L	
KGR03-P03/001/S041/020	Screening		05MAR12	Mean Corpuscular Haemoglobin (pg)	26.1	27 - 31	L	
KGR03-P03/001/S041/020	Screening		05MAR12	Monocytes Relative (%)	13.20	2 - 10	H	
KGR03-P03/001/S041/020	Screening		05MAR12	Red Blood Cells (10/L)	6.07	3.8 - 6	H	

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S041/020	Screening		05MAR12	HCV Ab	14.27	>= 1	H	
KGR03-P03/001/S041/020	Visit 2		08MAR12 9:30	Alanine Aminotransferase (U/L)	157	0 - 41	H	CR
KGR03-P03/001/S041/020	Visit 2		08MAR12 9:30	Aspartate Aminotransferase (U/L)	143	0 - 37	H	CR
KGR03-P03/001/S041/020	Visit 2		08MAR12 9:30	Direct Bilirubin (µmol/L)	5.6	0 - 5	H	NCR
KGR03-P03/001/S041/020	Visit 2		08MAR12 9:30	Ferritin (µg/L)	362	20 - 360	H	NCR
KGR03-P03/001/S041/020	Visit 2		08MAR12 9:30	γ Glutamyl Transferase (U/L)	101	10 - 49	H	CR
KGR03-P03/001/S041/020	Visit 2		08MAR12 9:30	Sodium (mmol/L)	146	133 - 145	H	NCR
KGR03-P03/001/S041/020	Visit 2		08MAR12 9:30	Erythroblasts (% of WBC)	1.0	0 - 0	H	NCR
KGR03-P03/001/S041/020	Visit 2		08MAR12 9:30	Mean Corpuscular HGB Concentration (g/L)	325	326 - 359	L	NCR
KGR03-P03/001/S041/020	Visit 2		08MAR12 9:30	Monocytes Relative (%)	13.0	4 - 12	H	NCR
KGR03-P03/001/S041/020	Visit 2		08MAR12 9:30	Hyaluronic Acid (µg/L)	120	0 - 74	H	CR
KGR03-P03/001/S041/020	Visit 2		08MAR12 9:30	Urine Dipstick WBC	++	Negative	A	NCR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Aspartate Aminotransferase (U/L)	38	0 - 37	H	CR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Calcium (mmol/L)	2.03	2.2 - 2.55	L	NCR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Direct Bilirubin (µmol/L)	7.7	0 - 5	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Ferritin (µg/L)	501	20 - 360	H	NCR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Iron (µmol/L)	39.0	14.3 - 28.6	H	NCR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Magnesium (mmol/L)	0.991	0.658 - 0.987	H	NCR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Phosphate (mmol/L)	0.649	0.743 - 1.195	L	NCR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Pseudocholinesterase (kU/L)	5.0	5.3 - 12.9	L	NCR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Uric Acid (mmol/L)	0.45	0.21 - 0.41	H	NCR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Haemoglobin (g/L)	124	130 - 170	L	CR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Mean Corpuscular HGB Concentration (g/L)	310	326 - 359	L	NCR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Monocytes Relative (%)	14.0	4 - 12	H	NCR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Hepatitis C Virus RNA (IU/mL)	1554258	0 - 11	H	CR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Hyaluronic Acid (µg/L)	147	0 - 74	H	CR
KGR03-P03/001/S041/020	Visit 6	T	05APR12 9:30	Tumour Necrosis Factor α (pg/mL)	18.84	0 - 8.26	H	
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Calcium (mmol/L)	2.13	2.2 - 2.55	L	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Direct Bilirubin (µmol/L)	8.0	0 - 5	H	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Ferritin (µg/L)	520	20 - 360	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	HDL Cholesterol (mmol/L)	0.93	1.05 - 99999	L	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Iron (µmol/L)	33.5	14.3 - 28.6	H	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Magnesium (mmol/L)	1.024	0.658 - 0.987	H	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Phosphate (mmol/L)	0.572	0.743 - 1.195	L	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Sodium (mmol/L)	146	133 - 145	H	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Uric Acid (mmol/L)	0.54	0.21 - 0.41	H	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Haemoglobin (g/L)	124	130 - 170	L	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Lymphocytes Absolute (10 ⁹ /L)	1.04	1.1 - 3.7	L	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Mean Corpuscular HGB Concentration (g/L)	300	326 - 359	L	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Monocytes Relative (%)	13.0	4 - 12	H	NCR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Hyaluronic Acid (µg/L)	131	0 - 74	H	CR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	19.97	0 - 8.26	H	CR
KGR03-P03/001/S041/020	Visit 10	T	03MAY12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Calcium (mmol/L)	2.10	2.2 - 2.55	L	NCR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Direct Bilirubin (µmol/L)	6.5	0 - 5	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Ferritin (µg/L)	487	20 - 360	H	NCR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	HDL Cholesterol (mmol/L)	0.93	1.05 - 99999	L	NCR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Iron (µmol/L)	32.6	14.3 - 28.6	H	NCR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Phosphate (mmol/L)	0.717	0.743 - 1.195	L	NCR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Pseudocholinesterase (kU/L)	5.0	5.3 - 12.9	L	NCR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Uric Acid (mmol/L)	0.48	0.21 - 0.41	H	NCR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Haemoglobin (g/L)	115	130 - 170	L	NCR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Mean Corpuscular HGB Concentration (g/L)	298	326 - 359	L	NCR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Red Blood Cells (10 ¹² /L)	4.05	4.12 - 5.59	L	NCR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Hepatitis C Virus RNA (IU/mL)	1533541	0 - 11	H	CR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Hyaluronic Acid (µg/L)	182	0 - 74	H	CR
KGR03-P03/001/S041/020	Visit 14 - final	T	31MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	13.29	0 - 8.26	H	CR
KGR03-P03/001/S043/021	Screening		21FEB12	Alanine Aminotransferase (U/L)	216	10 - 65	H	
KGR03-P03/001/S043/021	Screening		21FEB12	Aspartate Aminotransferase (U/L)	86	2 - 40	H	

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S043/021	Screening		21FEB12	Basophils Relative (%)	1.58	>= 1	H	
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	Alanine Aminotransferase (U/L)	201	0 - 41	H	CR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	Albumin (g/L)	58	35 - 52	H	NCR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	Aspartate Aminotransferase (U/L)	103	0 - 37	H	CR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	Direct Bilirubin (µmol/L)	6.7	0 - 5	H	NCR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	γ Glutamyl Transferase (U/L)	57	10 - 49	H	NCR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	Iron (µmol/L)	39.6	14.3 - 28.6	H	NCR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	Total Cholesterol (mmol/L)	5.18	0 - 5.17	H	NCR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	Haematocrit (v/v)	0.518	0.382 - 0.495	H	NCR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	Haemoglobin (g/L)	173	130 - 170	H	NCR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	Mean Corpuscular Volume (fL)	100.9	82 - 99	H	NCR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	Neutrophils Absolute (10 ⁹ /L)	7.29	2.1 - 6.9	H	NCR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	White Blood Cells (10 ⁹ /L)	10.28	3.6 - 10	H	NCR
KGR03-P03/001/S043/021	Visit 2		13MAR12 10:00	Tumour Necrosis Factor α (pg/mL)	11.89	0 - 8.26	H	CR
KGR03-P03/001/S043/021	Visit 6	R	10APR12 10:30	Chloride (mmol/L)	109	96 - 108	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S043/021	Visit 6	R	10APR12 10:30	Direct Bilirubin (µmol/L)	5.6	0 - 5	H	NCR
KGR03-P03/001/S043/021	Visit 6	R	10APR12 10:30	Ferritin (µg/L)	613	20 - 360	H	NCR
KGR03-P03/001/S043/021	Visit 6	R	10APR12 10:30	Haemoglobin (g/L)	128	130 - 170	L	NCR
KGR03-P03/001/S043/021	Visit 6	R	10APR12 10:30	Mean Corpuscular HGB Concentration (g/L)	322	326 - 359	L	NCR
KGR03-P03/001/S043/021	Visit 6	R	10APR12 10:30	Mean Corpuscular Volume (fL)	101.0	82 - 99	H	NCR
KGR03-P03/001/S043/021	Visit 6	R	10APR12 10:30	Neutrophils Absolute (10 ⁹ /L)	6.96	2.1 - 6.9	H	NCR
KGR03-P03/001/S043/021	Visit 6	R	10APR12 10:30	Red Blood Cells (10 ¹² /L)	3.93	4.12 - 5.59	L	NCR
KGR03-P03/001/S043/021	Visit 6	R	10APR12 10:30	Tumour Necrosis Factor α (pg/mL)	8.30	0 - 8.26	H	CR
KGR03-P03/001/S043/021	Visit 10	R	08MAY12 9:30	Ferritin (µg/L)	578	20 - 360	H	NCR
KGR03-P03/001/S043/021	Visit 10	R	08MAY12 9:30	HDL Cholesterol (mmol/L)	0.98	1.05 - 99999	L	CR
KGR03-P03/001/S043/021	Visit 10	R	08MAY12 9:30	Iron (µmol/L)	13.8	14.3 - 28.6	L	NCR
KGR03-P03/001/S043/021	Visit 10	R	08MAY12 9:30	Triglycerides (mmol/L)	4.01	0 - 1.69	H	CR
KGR03-P03/001/S043/021	Visit 10	R	08MAY12 9:30	Haemoglobin (g/L)	125	130 - 170	L	NCR
KGR03-P03/001/S043/021	Visit 10	R	08MAY12 9:30	Mean Corpuscular HGB Concentration (g/L)	324	326 - 359	L	NCR
KGR03-P03/001/S043/021	Visit 10	R	08MAY12 9:30	Mean Corpuscular Volume (fL)	99.8	82 - 99	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S043/021	Visit 10	R	08MAY12 9:30	Platelets (10 ⁹ /L)	138	145 - 390	L	CR
KGR03-P03/001/S043/021	Visit 10	R	08MAY12 9:30	Red Blood Cells (10 ¹² /L)	3.86	4.12 - 5.59	L	NCR
KGR03-P03/001/S043/021	Visit 10	R	08MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	9.49	0 - 8.26	H	CR
KGR03-P03/001/S043/021	Visit 14 - final	R	05JUN12 9:30	Ferritin (μ g/L)	588	20 - 360	H	NCR
KGR03-P03/001/S043/021	Visit 14 - final	R	05JUN12 9:30	Glucose (mmol/L)	2.94	3.89 - 7.77	L	
KGR03-P03/001/S043/021	Visit 14 - final	R	05JUN12 9:30	HDL Cholesterol (mmol/L)	1.01	1.05 - 99999	L	NCR
KGR03-P03/001/S043/021	Visit 14 - final	R	05JUN12 9:30	Triglycerides (mmol/L)	2.95	0 - 1.69	H	NCR
KGR03-P03/001/S043/021	Visit 14 - final	R	05JUN12 9:30	Mean Corpuscular HGB Concentration (g/L)	316	326 - 359	L	NCR
KGR03-P03/001/S043/021	Visit 14 - final	R	05JUN12 9:30	Mean Corpuscular Volume (fL)	101.2	82 - 99	H	NCR
KGR03-P03/001/S043/021	Visit 14 - final	R	05JUN12 9:30	Red Blood Cells (10 ¹² /L)	4.07	4.12 - 5.59	L	NCR
KGR03-P03/001/S043/021	Visit 14 - final	R	05JUN12 9:30	Tumour Necrosis Factor α (pg/mL)	9.68	0 - 8.26	H	CR
KGR03-P03/001/S044/022	Screening		24APR12	Alanine Aminotransferase (U/L)	85	10 - 65	H	
KGR03-P03/001/S044/022	Screening		24APR12	Aspartate Aminotransferase (U/L)	90	2 - 40	H	
KGR03-P03/001/S044/022	Screening		24APR12	Total Cholesterol (mg/dL)	218	140 - 200	H	

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S044/022	Visit 2		30APR12 9:30	Alanine Aminotransferase (U/L)	91	0 - 31	H	CR
KGR03-P03/001/S044/022	Visit 2		30APR12 9:30	Aspartate Aminotransferase (U/L)	42	0 - 31	H	CR
KGR03-P03/001/S044/022	Visit 2		30APR12 9:30	γ Glutamyl Transferase (U/L)	37	6 - 32	H	CR
KGR03-P03/001/S044/022	Visit 2		30APR12 9:30	Urea (mmol/L)	8.7	2.5 - 7.5	H	CR
KGR03-P03/001/S044/022	Visit 2		30APR12 9:30	Mean Corpuscular Volume (fL)	99.6	82 - 99	H	NCR
KGR03-P03/001/S044/022	Visit 2		30APR12 9:30	Urine Dipstick WBC	+++	Negative	A	NCR
KGR03-P03/001/S044/022	Visit 2		30APR12 9:30	Urine Microanalysis Bacteria (/μL)	1061	0 - 100	H	NCR
KGR03-P03/001/S044/022	Visit 2		30APR12 9:30	Urine Microanalysis Crystals	Positive	Negative	A	NCR
KGR03-P03/001/S044/022	Visit 2		30APR12 9:30	Urine Microanalysis Epithelial Cells (/μL)	75	0 - 30	H	NCR
KGR03-P03/001/S044/022	Visit 2		30APR12 9:30	Urine Microanalysis WBC (/μL)	55	0 - 25	H	NCR
KGR03-P03/001/S044/022	Visit 6	T	29MAY12 9:30	Mean Corpuscular HGB Concentration (g/L)	316	326 - 359	L	NCR
KGR03-P03/001/S044/022	Visit 6	T	29MAY12 9:30	Mean Corpuscular Volume (fL)	100.9	82 - 99	H	NCR
KGR03-P03/001/S044/022	Visit 6	T	29MAY12 9:30	Monocytes Absolute (10 ⁹ /L)	0.24	0.25 - 0.95	L	NCR
KGR03-P03/001/S044/022	Visit 6	T	29MAY12 9:30	Neutrophils Absolute (10 ⁹ /L)	1.85	2.1 - 6.9	L	NCR
KGR03-P03/001/S044/022	Visit 6	T	29MAY12 9:30	White Blood Cells (10 ⁹ /L)	3.53	3.6 - 10	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S044/022	Visit 6	T	29MAY12 9:30	Hyaluronic Acid (µg/L)	92	0 - 74	H	CR
KGR03-P03/001/S044/022	Visit 6	T	29MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	10.64	0 - 8.26	H	CR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Ferritin (µg/L)	367	20 - 360	H	NCR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Uric Acid (mmol/L)	0.14	0.15 - 0.35	L	NCR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Haemoglobin (g/L)	115	116 - 154	L	NCR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Lymphocytes Absolute (10 ⁹ /L)	0.75	1.1 - 3.7	L	NCR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Mean Corpuscular HGB Concentration (g/L)	319	326 - 359	L	NCR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Mean Corpuscular Volume (fL)	100.1	82 - 99	H	NCR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Red Blood Cells (10 ¹² /L)	3.61	3.68 - 5.09	L	NCR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Hyaluronic Acid (µg/L)	75	0 - 74	H	CR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Tumour Necrosis Factor α (pg/mL)	21.50	0 - 8.26	H	CR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Urine Dipstick WBC	+++	Negative	A	NCR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Urine Microanalysis Bacteria (/µL)	2633	0 - 100	H	NCR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Urine Microanalysis Epithelial Cells (/µL)	60	0 - 30	H	NCR
KGR03-P03/001/S044/022	Visit 10	T	26JUN12 9:30	Urine Microanalysis WBC (/µL)	26	0 - 25	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Urea (mmol/L)	8.2	2.5 - 7.5	H	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Uric Acid (mmol/L)	0.14	0.15 - 0.35	L	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Haemoglobin (g/L)	109	116 - 154	L	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Lymphocytes Absolute (10 ⁹ /L)	0.76	1.1 - 3.7	L	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Mean Corpuscular HGB Concentration (g/L)	313	326 - 359	L	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Mean Corpuscular Volume (fL)	100.9	82 - 99	H	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Monocytes Absolute (10 ⁹ /L)	0.17	0.25 - 0.95	L	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Neutrophils Absolute (10 ⁹ /L)	1.20	2.1 - 6.9	L	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Platelets (10 ⁹ /L)	142	145 - 390	L	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Red Blood Cells (10 ¹² /L)	3.46	3.68 - 5.09	L	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	White Blood Cells (10 ⁹ /L)	2.18	3.6 - 10	L	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Hyaluronic Acid (µg/L)	206	0 - 74	H	CR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Tumour Necrosis Factor α (pg/mL)	20.58	0 - 8.26	H	CR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Urine Dipstick WBC	++	Negative	A	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Urine Microanalysis Bacteria (/µL)	2913	0 - 100	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Urine Microanalysis Crystals	Positive	Negative	A	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Urine Microanalysis Epithelial Cells (/μL)	45	0 - 30	H	NCR
KGR03-P03/001/S044/022	Visit 14 - final	T	24JUL12 9:30	Urine Microanalysis WBC (/μL)	27	0 - 25	H	NCR
KGR03-P03/001/S045/023	Screening		25APR12	Alanine Aminotransferase (U/L)	196	10 - 65	H	
KGR03-P03/001/S045/023	Screening		25APR12	Aspartate Aminotransferase (U/L)	74	2 - 40	H	
KGR03-P03/001/S045/023	Screening		25APR12	Creatinine (mg/dL)	0.76	0.8 - 1.3	L	
KGR03-P03/001/S045/023	Screening		25APR12	Direct Bilirubin (mg/dL)	0.31	- 0.3	H	
KGR03-P03/001/S045/023	Screening		25APR12	γ Glutamyl Transferase (U/L)	160	15 - 85	H	
KGR03-P03/001/S045/023	Screening		25APR12	Total Bilirubin (mg/dL)	1.20	>= 1	H	
KGR03-P03/001/S045/023	Screening		25APR12	Eosinophils Absolute (10 ⁹ /L)	0.48	0 - 0.45	H	
KGR03-P03/001/S045/023	Screening		25APR12	Eosinophils Relative (%)	6.75	1 - 6	H	
KGR03-P03/001/S045/023	Screening		25APR12	HCV Ab	15.51	>= 1	H	
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Alanine Aminotransferase (U/L)	156	0 - 41	H	CR
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Aspartate Aminotransferase (U/L)	63	0 - 37	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Direct Bilirubin (μmol/L)	14.0	0 - 5	H	NCR
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	γ Glutamyl Transferase (U/L)	114	10 - 49	H	CR
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Glucose (mmol/L)	3.50	3.89 - 7.77	L	NCR
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Total Bilirubin (μmol/L)	32.7	0 - 20.4	H	NCR
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Eosinophils Absolute (10 ⁹ /L)	0.53	0 - 0.48	H	NCR
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Eosinophils Relative (%)	7.7	0 - 7	H	NCR
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Lymphocytes Relative (%)	47.5	15 - 47	H	NCR
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Neutrophils Relative (%)	33.8	43 - 73	L	CR
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Tumour Necrosis Factor α (pg/mL)	10.41	0 - 8.26	H	CR
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Specific Gravity	1.032	1.015 - 1.03	H	NCR
KGR03-P03/001/S045/023	Visit 2		30APR12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	Alanine Aminotransferase (U/L)	43	0 - 41	H	CR
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	Direct Bilirubin (μmol/L)	8.0	0 - 5	H	NCR
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	Ferritin (μg/L)	682	20 - 360	H	NCR
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	γ Glutamyl Transferase (U/L)	70	10 - 49	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	Total Bilirubin (µmol/L)	26.5	0 - 20.4	H	NCR
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	Lymphocytes Relative (%)	62.0	15 - 47	H	NCR
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	Mean Corpuscular HGB Concentration (g/L)	323	326 - 359	L	NCR
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	Neutrophils Absolute (10 ⁹ /L)	1.10	2.1 - 6.9	L	NCR
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	Neutrophils Relative (%)	26.0	43 - 73	L	NCR
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	Platelets (10 ⁹ /L)	121	145 - 390	L	NCR
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	Hepatitis C Virus RNA (IU/mL)	102	0 - 11	H	CR
KGR03-P03/001/S045/023	Visit 6	T	29MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	14.06	0 - 8.26	H	CR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Direct Bilirubin (µmol/L)	7.9	0 - 5	H	NCR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Ferritin (µg/L)	705	20 - 360	H	NCR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Haemoglobin (g/L)	124	130 - 170	L	NCR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Lymphocytes Relative (%)	49.0	15 - 47	H	NCR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Mean Corpuscular HGB Concentration (g/L)	325	326 - 359	L	NCR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Neutrophils Absolute (10 ⁹ /L)	0.92	2.1 - 6.9	L	NCR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Neutrophils Relative (%)	35.0	43 - 73	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Platelets (10 ⁹ /L)	97	145 - 390	L	CR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Red Blood Cells (10 ¹² /L)	3.94	4.12 - 5.59	L	NCR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	White Blood Cells (10 ⁹ /L)	2.55	3.6 - 10	L	NCR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Tumour Necrosis Factor α (pg/mL)	27.21	0 - 8.26	H	CR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Specific Gravity	1.033	1.015 - 1.03	H	NCR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S045/023	Visit 10	T	26JUN12 9:30	Urine Dipstick Urobilinogen	+	Negative	A	NCR
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	Direct Bilirubin (μ mol/L)	7.5	0 - 5	H	NCR
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	Ferritin (μ g/L)	547	20 - 360	H	NCR
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	Total Bilirubin (μ mol/L)	23.3	0 - 20.4	H	NCR
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	Lymphocytes Relative (%)	51.0	15 - 47	H	NCR
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	Mean Corpuscular HGB Concentration (g/L)	319	326 - 359	L	NCR
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	Mean Corpuscular Volume (fL)	99.2	82 - 99	H	NCR
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	Monocytes Relative (%)	15.0	4 - 12	H	NCR
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	Neutrophils Absolute (10 ⁹ /L)	0.98	2.1 - 6.9	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	Neutrophils Relative (%)	32.0	43 - 73	L	NCR
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	Platelets (10 ⁹ /L)	143	145 - 390	L	NCR
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	White Blood Cells (10 ⁹ /L)	2.87	3.6 - 10	L	NCR
KGR03-P03/001/S045/023	Visit 14 - final	T	24JUL12 9:30	Tumour Necrosis Factor α (pg/mL)	58.66	0 - 8.26	H	CR
KGR03-P03/001/S046/024	Screening		02MAY12	Alanine Aminotransferase (U/L)	286	10 - 65	H	
KGR03-P03/001/S046/024	Screening		02MAY12	Aspartate Aminotransferase (U/L)	79	2 - 40	H	
KGR03-P03/001/S046/024	Screening		02MAY12	γ Glutamyl Transferase (U/L)	146	15 - 85	H	
KGR03-P03/001/S046/024	Screening		02MAY12	HAV Ab	13.45	≥ 1	H	
KGR03-P03/001/S046/024	Screening		02MAY12	HCV Ab	13.27	≥ 1	H	
KGR03-P03/001/S046/024	Visit 2		03MAY12 9:30	Alanine Aminotransferase (U/L)	198	0 - 41	H	CR
KGR03-P03/001/S046/024	Visit 2		03MAY12 9:30	Aspartate Aminotransferase (U/L)	58	0 - 37	H	CR
KGR03-P03/001/S046/024	Visit 2		03MAY12 9:30	Direct Bilirubin (μ mol/L)	5.6	0 - 5	H	NCR
KGR03-P03/001/S046/024	Visit 2		03MAY12 9:30	γ Glutamyl Transferase (U/L)	100	10 - 49	H	NCR
KGR03-P03/001/S046/024	Visit 2		03MAY12 9:30	Iron (μ mol/L)	30.3	14.3 - 28.6	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S046/024	Visit 2		03MAY12 9:30	Hyaluronic Acid (µg/L)	168	0 - 74	H	CR
KGR03-P03/001/S046/024	Visit 2		03MAY12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Direct Bilirubin (µmol/L)	7.4	0 - 5	H	NCR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Ferritin (µg/L)	731	20 - 360	H	NCR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	HDL Cholesterol (mmol/L)	0.93	1.05 - 99999	L	NCR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Iron (µmol/L)	45.3	14.3 - 28.6	H	NCR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Phosphate (mmol/L)	0.510	0.775 - 1.421	L	NCR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Haematocrit (v/v)	0.335	0.382 - 0.495	L	CR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Haemoglobin (g/L)	108	130 - 170	L	CR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Lymphocytes Absolute (10 ⁹ /L)	1.02	1.1 - 3.7	L	NCR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Mean Corpuscular HGB Concentration (g/L)	323	326 - 359	L	NCR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Neutrophils Absolute (10 ⁹ /L)	1.90	2.1 - 6.9	L	CR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Red Blood Cells (10 ¹² /L)	3.46	4.12 - 5.59	L	NCR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	White Blood Cells (10 ⁹ /L)	3.36	3.6 - 10	L	NCR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Hepatitis C Virus RNA (IU/mL)	98	0 - 11	H	CR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	8.31	0 - 8.26	H	CR
KGR03-P03/001/S046/024	Visit 6	R	31MAY12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Direct Bilirubin (μ mol/L)	6.3	0 - 5	H	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Ferritin (μ g/L)	717	20 - 360	H	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Sodium (mmol/L)	146	133 - 145	H	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Haemoglobin (g/L)	122	130 - 170	L	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Lymphocytes Absolute (10^9 /L)	0.98	1.1 - 3.7	L	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Lymphocytes Relative (%)	9.0	15 - 47	L	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Mean Corpuscular HGB Concentration (g/L)	301	326 - 359	L	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Mean Corpuscular Volume (fL)	107.3	82 - 99	H	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Neutrophils Absolute (10^9 /L)	9.22	2.1 - 6.9	H	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Neutrophils Band Form (%)	6.0	0 - 5	H	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Neutrophils Relative (%)	79.0	43 - 73	H	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Red Blood Cells (10^{12} /L)	3.78	4.12 - 5.59	L	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	White Blood Cells (10^9 /L)	10.85	3.6 - 10	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Tumour Necrosis Factor α (pg/mL)	32.23	0 - 8.26	H	CR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Specific Gravity	1.037	1.015 - 1.03	H	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Urine Dipstick Protein	+	Negative	A	NCR
KGR03-P03/001/S046/024	Visit 10	R	28JUN12 9:30	Urine Microanalysis Crystals	Positive	Negative	A	NCR
KGR03-P03/001/S046/024	Visit 14 - final	R	26JUL12 9:30	Direct Bilirubin ($\mu\text{mol/L}$)	6.0	0 - 5	H	NCR
KGR03-P03/001/S046/024	Visit 14 - final	R	26JUL12 9:30	Ferritin ($\mu\text{g/L}$)	813	20 - 360	H	NCR
KGR03-P03/001/S046/024	Visit 14 - final	R	26JUL12 9:30	Phosphate (mmol/L)	0.452	0.775 - 1.421	L	NCR
KGR03-P03/001/S046/024	Visit 14 - final	R	26JUL12 9:30	Uric Acid (mmol/L)	0.42	0.21 - 0.41	H	NCR
KGR03-P03/001/S046/024	Visit 14 - final	R	26JUL12 9:30	Haematocrit (v/v)	0.368	0.382 - 0.495	L	NCR
KGR03-P03/001/S046/024	Visit 14 - final	R	26JUL12 9:30	Haemoglobin (g/L)	110	130 - 170	L	NCR
KGR03-P03/001/S046/024	Visit 14 - final	R	26JUL12 9:30	Lymphocytes Absolute ($10^9/\text{L}$)	1.07	1.1 - 3.7	L	NCR
KGR03-P03/001/S046/024	Visit 14 - final	R	26JUL12 9:30	Mean Corpuscular HGB Concentration (g/L)	300	326 - 359	L	NCR
KGR03-P03/001/S046/024	Visit 14 - final	R	26JUL12 9:30	Mean Corpuscular Volume (fL)	105.7	82 - 99	H	NCR
KGR03-P03/001/S046/024	Visit 14 - final	R	26JUL12 9:30	Red Blood Cells ($10^{12}/\text{L}$)	3.48	4.12 - 5.59	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S046/024	Visit 14 - final	R	26JUL12 9:30	Tumour Necrosis Factor α (pg/mL)	10.52	0 - 8.26	H	CR
KGR03-P03/001/S047/025	Screening		03MAY12	Alanine Aminotransferase (U/L)	159	10 - 65	H	
KGR03-P03/001/S047/025	Screening		03MAY12	Aspartate Aminotransferase (U/L)	72	2 - 40	H	
KGR03-P03/001/S047/025	Screening		03MAY12	Lymphocytes Relative (%)	45.10	20 - 45	H	
KGR03-P03/001/S047/025	Screening		03MAY12	HAV Ab	10.28	≥ 1	H	
KGR03-P03/001/S047/025	Screening		03MAY12	HCV Ab	12.75	≥ 1	H	
KGR03-P03/001/S047/025	Visit 2		10MAY12 9:30	Alanine Aminotransferase (U/L)	104	0 - 41	H	CR
KGR03-P03/001/S047/025	Visit 2		10MAY12 9:30	Aspartate Aminotransferase (U/L)	60	0 - 37	H	CR
KGR03-P03/001/S047/025	Visit 2		10MAY12 9:30	Iron (μ mol/L)	14.0	14.3 - 28.6	L	NCR
KGR03-P03/001/S047/025	Visit 2		10MAY12 9:30	LDL Cholesterol (mmol/L)	3.81	0 - 3.36	H	NCR
KGR03-P03/001/S047/025	Visit 2		10MAY12 9:30	Total Cholesterol (mmol/L)	5.67	0 - 5.17	H	NCR
KGR03-P03/001/S047/025	Visit 2		10MAY12 9:30	Uric Acid (mmol/L)	0.17	0.21 - 0.41	L	NCR
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	LDL Cholesterol (mmol/L)	3.50	0 - 3.36	H	NCR
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	Total Cholesterol (mmol/L)	5.44	0 - 5.17	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	Haemoglobin (g/L)	129	130 - 170	L	NCR
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	Lymphocytes Relative (%)	51.0	15 - 47	H	NCR
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	Mean Corpuscular HGB Concentration (g/L)	324	326 - 359	L	NCR
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	Neutrophils Absolute (10 ⁹ /L)	1.34	2.1 - 6.9	L	NCR
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	Neutrophils Relative (%)	40.0	43 - 73	L	NCR
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	Red Blood Cells (10 ¹² /L)	4.04	4.12 - 5.59	L	NCR
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	White Blood Cells (10 ⁹ /L)	3.36	3.6 - 10	L	NCR
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	Hepatitis C Virus RNA (IU/mL)	250	0 - 11	H	CR
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	Hyaluronic Acid (µg/L)	175	0 - 74	H	CR
KGR03-P03/001/S047/025	Visit 6	R	14JUN12 9:30	Tumour Necrosis Factor α (pg/mL)	8.53	0 - 8.26	H	CR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Calcium (mmol/L)	2.13	2.15 - 2.5	L	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Direct Bilirubin (µmol/L)	5.5	0 - 5	H	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	LDL Cholesterol (mmol/L)	3.52	0 - 3.36	H	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Total Cholesterol (mmol/L)	5.26	0 - 5.17	H	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Uric Acid (mmol/L)	0.19	0.21 - 0.41	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Haemoglobin (g/L)	129	130 - 170	L	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Lymphocytes Relative (%)	49.2	15 - 47	H	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Mean Corpuscular HGB Concentration (g/L)	322	326 - 359	L	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Mean Corpuscular Volume (fL)	100.8	82 - 99	H	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Monocytes Relative (%)	12.4	4 - 12	H	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Neutrophils Absolute (10 ⁹ /L)	1.25	2.1 - 6.9	L	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Neutrophils Relative (%)	37.2	43 - 73	L	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Platelets (10 ⁹ /L)	144	145 - 390	L	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Red Blood Cells (10 ¹² /L)	3.98	4.12 - 5.59	L	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	White Blood Cells (10 ⁹ /L)	3.35	3.6 - 10	L	NCR
KGR03-P03/001/S047/025	Visit 10	R	12JUL12 9:30	Tumour Necrosis Factor α (pg/mL)	9.48	0 - 8.26	H	CR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	Calcium (mmol/L)	2.13	2.15 - 2.5	L	NCR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	Direct Bilirubin (μ mol/L)	5.1	0 - 5	H	NCR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	HDL Cholesterol (mmol/L)	1.04	1.05 - 99999	L	NCR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	LDL Cholesterol (mmol/L)	3.44	0 - 3.36	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	Total Cholesterol (mmol/L)	5.21	0 - 5.17	H	NCR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	Haemoglobin (g/L)	123	130 - 170	L	NCR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	Mean Corpuscular HGB Concentration (g/L)	315	326 - 359	L	NCR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	Mean Corpuscular Volume (fL)	103.4	82 - 99	H	NCR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	Neutrophils Absolute (10 ⁹ /L)	1.27	2.1 - 6.9	L	NCR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	Red Blood Cells (10 ¹² /L)	3.77	4.12 - 5.59	L	NCR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	White Blood Cells (10 ⁹ /L)	2.77	3.6 - 10	L	NCR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	Hyaluronic Acid (µg/L)	76	0 - 74	H	CR
KGR03-P03/001/S047/025	Visit 14 - final	R	09AUG12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S048/026	Screening		17MAY12	Alanine Aminotransferase (U/L)	115	10 - 65	H	
KGR03-P03/001/S048/026	Screening		17MAY12	Aspartate Aminotransferase (U/L)	43	2 - 40	H	
KGR03-P03/001/S048/026	Screening		17MAY12	Basophils Relative (%)	1.45	>= 1	H	
KGR03-P03/001/S048/026	Screening		17MAY12	Mean Corpuscular HGB Concentration (g/dL)	31.6	32 - 36	L	
KGR03-P03/001/S048/026	Screening		17MAY12	HCV Ab	15.63	>= 1	H	

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S048/026	Visit 2		31MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	10.44	0 - 8.26	H	CR
KGR03-P03/001/S049/027	Screening		17MAY12	Alanine Aminotransferase (U/L)	99	5 - 45	H	
KGR03-P03/001/S049/027	Screening		17MAY12	Aspartate Aminotransferase (U/L)	66	5 - 40	H	
KGR03-P03/001/S049/027	Screening		17MAY12	Creatine Phosphokinase (U/L)	176	38 - 174	H	
KGR03-P03/001/S049/027	Screening		17MAY12	Iron (μ g/dL)	204	70 - 180	H	
KGR03-P03/001/S049/027	Screening		17MAY12	HCV Ab	13.71	≥ 1	H	
KGR03-P03/001/S049/027	Visit 2		31MAY12 9:30	Alanine Aminotransferase (U/L)	112	0 - 41	H	CR
KGR03-P03/001/S049/027	Visit 2		31MAY12 9:30	Aspartate Aminotransferase (U/L)	47	0 - 37	H	CR
KGR03-P03/001/S049/027	Visit 2		31MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	8.92	0 - 8.26	H	CR
KGR03-P03/001/S049/027	Visit 2		31MAY12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S049/027	Visit 6	T	28JUN12 9:30	Chloride (mmol/L)	109	96 - 108	H	NCR
KGR03-P03/001/S049/027	Visit 6	T	28JUN12 9:30	Direct Bilirubin (μ mol/L)	5.5	0 - 5	H	NCR
KGR03-P03/001/S049/027	Visit 6	T	28JUN12 9:30	Ferritin (μ g/L)	370	20 - 360	H	NCR
KGR03-P03/001/S049/027	Visit 6	T	28JUN12 9:30	HDL Cholesterol (mmol/L)	0.98	1.05 - 99999	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S049/027	Visit 6	T	28JUN12 9:30	Haematocrit (v/v)	0.365	0.382 - 0.495	L	NCR
KGR03-P03/001/S049/027	Visit 6	T	28JUN12 9:30	Haemoglobin (g/L)	117	130 - 170	L	NCR
KGR03-P03/001/S049/027	Visit 6	T	28JUN12 9:30	Mean Corpuscular HGB Concentration (g/L)	320	326 - 359	L	NCR
KGR03-P03/001/S049/027	Visit 6	T	28JUN12 9:30	Red Blood Cells (10 ¹² /L)	3.94	4.12 - 5.59	L	NCR
KGR03-P03/001/S049/027	Visit 6	T	28JUN12 9:30	Hepatitis C Virus RNA (IU/mL)	19	0 - 11	H	CR
KGR03-P03/001/S049/027	Visit 6	T	28JUN12 9:30	Tumour Necrosis Factor α (pg/mL)	22.84	0 - 8.26	H	CR
KGR03-P03/001/S049/027	Visit 10	T	26JUL12 9:30	Chloride (mmol/L)	109	96 - 108	H	NCR
KGR03-P03/001/S049/027	Visit 10	T	26JUL12 9:30	Ferritin (μ g/L)	452	20 - 360	H	NCR
KGR03-P03/001/S049/027	Visit 10	T	26JUL12 9:30	Glucose (mmol/L)	3.72	3.89 - 7.77	L	NCR
KGR03-P03/001/S049/027	Visit 10	T	26JUL12 9:30	HDL Cholesterol (mmol/L)	0.93	1.05 - 99999	L	NCR
KGR03-P03/001/S049/027	Visit 10	T	26JUL12 9:30	Haematocrit (v/v)	0.374	0.382 - 0.495	L	NCR
KGR03-P03/001/S049/027	Visit 10	T	26JUL12 9:30	Haemoglobin (g/L)	116	130 - 170	L	NCR
KGR03-P03/001/S049/027	Visit 10	T	26JUL12 9:30	Mean Corpuscular HGB Concentration (g/L)	311	326 - 359	L	NCR
KGR03-P03/001/S049/027	Visit 10	T	26JUL12 9:30	Monocytes Absolute (10 ⁹ /L)	0.24	0.25 - 0.95	L	NCR
KGR03-P03/001/S049/027	Visit 10	T	26JUL12 9:30	Red Blood Cells (10 ¹² /L)	3.88	4.12 - 5.59	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S049/027	Visit 10	T	26JUL12 9:30	Tumour Necrosis Factor α (pg/mL)	30.29	0 - 8.26	H	CR
KGR03-P03/001/S049/027	Visit 10	T	26JUL12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S049/027	Visit 14 - final	T	23AUG12 9:30	Ferritin (μ g/L)	496	20 - 360	H	NCR
KGR03-P03/001/S049/027	Visit 14 - final	T	23AUG12 9:30	HDL Cholesterol (mmol/L)	0.91	1.05 - 99999	L	NCR
KGR03-P03/001/S049/027	Visit 14 - final	T	23AUG12 9:30	Haematocrit (v/v)	0.378	0.382 - 0.495	L	NCR
KGR03-P03/001/S049/027	Visit 14 - final	T	23AUG12 9:30	Haemoglobin (g/L)	119	130 - 170	L	NCR
KGR03-P03/001/S049/027	Visit 14 - final	T	23AUG12 9:30	Mean Corpuscular HGB Concentration (g/L)	314	326 - 359	L	NCR
KGR03-P03/001/S049/027	Visit 14 - final	T	23AUG12 9:30	Red Blood Cells (10^{12} /L)	3.84	4.12 - 5.59	L	NCR
KGR03-P03/001/S049/027	Visit 14 - final	T	23AUG12 9:30	Tumour Necrosis Factor α (pg/mL)	23.83	0 - 8.26	H	CR
KGR03-P03/001/S049/027	Visit 14 - final	T	23AUG12 9:30	Specific Gravity	1.033	1.015 - 1.03	H	NCR
KGR03-P03/001/S049/027	Visit 14 - final	T	23AUG12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR
KGR03-P03/001/S049/027	Visit 14 - final	T	23AUG12 9:30	Urine Dipstick Urobilinogen	+	Negative	A	NCR
KGR03-P03/001/S049/027	Visit 14 - final	T	23AUG12 9:30	Urine Microanalysis RBC (/ μ L)	36	0 - 25	H	NCR
KGR03-P03/001/S050/028	Screening		17MAY12	Alanine Aminotransferase (U/L)	120	5 - 45	H	

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S050/028	Screening		17MAY12	Aspartate Aminotransferase (U/L)	46	5 - 40	H	
KGR03-P03/001/S050/028	Screening		17MAY12	Creatine Phosphokinase (U/L)	272	38 - 174	H	
KGR03-P03/001/S050/028	Screening		17MAY12	γ Glutamyl Transferase (U/L)	235	5 - 49	H	
KGR03-P03/001/S050/028	Screening		17MAY12	LDL Cholesterol (mg/dL)	175	0 - 160	H	
KGR03-P03/001/S050/028	Screening		17MAY12	Total Cholesterol (mg/dL)	208	0 - 200	H	
KGR03-P03/001/S050/028	Screening		17MAY12	Triglycerides (mg/dL)	173	- 150	H	
KGR03-P03/001/S050/028	Screening		17MAY12	HCV Ab	16.67	≥ 1	H	
KGR03-P03/001/S050/028	Visit 2		31MAY12 9:30	Alanine Aminotransferase (U/L)	95	0 - 41	H	CR
KGR03-P03/001/S050/028	Visit 2		31MAY12 9:30	Aspartate Aminotransferase (U/L)	42	0 - 37	H	CR
KGR03-P03/001/S050/028	Visit 2		31MAY12 9:30	γ Glutamyl Transferase (U/L)	244	10 - 49	H	NCR
KGR03-P03/001/S050/028	Visit 2		31MAY12 9:30	LDL Cholesterol (mmol/L)	3.42	0 - 3.36	H	NCR
KGR03-P03/001/S050/028	Visit 2		31MAY12 9:30	Total Cholesterol (mmol/L)	5.78	0 - 5.17	H	NCR
KGR03-P03/001/S050/028	Visit 2		31MAY12 9:30	Triglycerides (mmol/L)	2.25	0 - 1.69	H	NCR
KGR03-P03/001/S050/028	Visit 2		31MAY12 9:30	Tumour Necrosis Factor α (pg/mL)	12.50	0 - 8.26	H	CR
KGR03-P03/001/S050/028	Visit 2		31MAY12 9:30	Urine Dipstick Bilirubin	+	Negative	A	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	Direct Bilirubin (µmol/L)	5.1	0 - 5	H	NCR
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	Ferritin (µg/L)	444	20 - 360	H	NCR
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	γ Glutamyl Transferase (U/L)	190	10 - 49	H	NCR
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	HDL Cholesterol (mmol/L)	0.91	1.05 - 99999	L	NCR
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	Iron (µmol/L)	12.2	14.3 - 28.6	L	NCR
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	Triglycerides (mmol/L)	1.89	0 - 1.69	H	NCR
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	Mean Corpuscular HGB Concentration (g/L)	321	326 - 359	L	NCR
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	Monocytes Relative (%)	3.8	4 - 12	L	NCR
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	Neutrophils Absolute (10 ⁹ /L)	7.06	2.1 - 6.9	H	NCR
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	Neutrophils Relative (%)	79.3	43 - 73	H	NCR
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	Platelets (10 ⁹ /L)	134	145 - 390	L	NCR
KGR03-P03/001/S050/028	Visit 6	R	28JUN12 9:30	Tumour Necrosis Factor α (pg/mL)	89.69	0 - 8.26	H	CR
KGR03-P03/001/S050/028	Visit 10	R	26JUL12 9:30	Ferritin (µg/L)	441	20 - 360	H	NCR
KGR03-P03/001/S050/028	Visit 10	R	26JUL12 9:30	γ Glutamyl Transferase (U/L)	175	10 - 49	H	NCR
KGR03-P03/001/S050/028	Visit 10	R	26JUL12 9:30	HDL Cholesterol (mmol/L)	0.93	1.05 - 99999	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S050/028	Visit 10	R	26JUL12 9:30	LDL Cholesterol (mmol/L)	3.50	0 - 3.36	H	NCR
KGR03-P03/001/S050/028	Visit 10	R	26JUL12 9:30	Total Cholesterol (mmol/L)	5.23	0 - 5.17	H	NCR
KGR03-P03/001/S050/028	Visit 10	R	26JUL12 9:30	Triglycerides (mmol/L)	1.71	0 - 1.69	H	NCR
KGR03-P03/001/S050/028	Visit 10	R	26JUL12 9:30	Mean Corpuscular HGB Concentration (g/L)	315	326 - 359	L	NCR
KGR03-P03/001/S050/028	Visit 10	R	26JUL12 9:30	Mean Corpuscular Volume (fL)	99.2	82 - 99	H	NCR
KGR03-P03/001/S050/028	Visit 10	R	26JUL12 9:30	Platelets (10 ⁹ /L)	130	145 - 390	L	NCR
KGR03-P03/001/S050/028	Visit 10	R	26JUL12 9:30	Tumour Necrosis Factor α (pg/mL)	41.70	0 - 8.26	H	CR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	Ferritin (μ g/L)	623	20 - 360	H	NCR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	γ Glutamyl Transferase (U/L)	192	10 - 49	H	NCR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	HDL Cholesterol (mmol/L)	0.91	1.05 - 99999	L	NCR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	Iron (μ mol/L)	12.0	14.3 - 28.6	L	NCR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	LDL Cholesterol (mmol/L)	3.39	0 - 3.36	H	NCR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	Total Cholesterol (mmol/L)	5.39	0 - 5.17	H	NCR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	Triglycerides (mmol/L)	1.97	0 - 1.69	H	NCR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	Mean Corpuscular HGB Concentration (g/L)	314	326 - 359	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	Mean Corpuscular Volume (fL)	100.0	82 - 99	H	NCR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	Platelets (10 ⁹ /L)	137	145 - 390	L	NCR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	Hyaluronic Acid (µg/L)	102	0 - 74	H	CR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	Tumour Necrosis Factor α (pg/mL)	98.22	0 - 8.26	H	CR
KGR03-P03/001/S050/028	Visit 14 - final	R	23AUG12 9:30	Specific Gravity	1.032	1.015 - 1.03	H	NCR
KGR03-P03/001/S051/029	Screening		05JUN12	Alanine Aminotransferase (U/L)	204	10 - 65	H	
KGR03-P03/001/S051/029	Screening		05JUN12	Aspartate Aminotransferase (U/L)	46	2 - 40	H	
KGR03-P03/001/S051/029	Visit 2		12JUN12 9:30	Alanine Aminotransferase (U/L)	179	0 - 41	H	CR
KGR03-P03/001/S051/029	Visit 2		12JUN12 9:30	Aspartate Aminotransferase (U/L)	55	0 - 37	H	CR
KGR03-P03/001/S051/029	Visit 2		12JUN12 9:30	HDL Cholesterol (mmol/L)	0.73	1.05 - 99999	L	NCR
KGR03-P03/001/S051/029	Visit 2		12JUN12 9:30	LDL Cholesterol (mmol/L)	6.14	0 - 3.36	H	NCR
KGR03-P03/001/S051/029	Visit 2		12JUN12 9:30	Total Cholesterol (mmol/L)	7.82	0 - 5.17	H	NCR
KGR03-P03/001/S051/029	Visit 2		12JUN12 9:30	Platelets (10 ⁹ /L)	125	145 - 390	L	NCR
KGR03-P03/001/S051/029	Visit 6	R	10JUL12 9:30	LDL Cholesterol (mmol/L)	4.53	0 - 3.36	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S051/029	Visit 6	R	10JUL12 9:30	Phosphate (mmol/L)	0.698	0.775 - 1.421	L	NCR
KGR03-P03/001/S051/029	Visit 6	R	10JUL12 9:30	Total Cholesterol (mmol/L)	6.66	0 - 5.17	H	NCR
KGR03-P03/001/S051/029	Visit 6	R	10JUL12 9:30	Triglycerides (mmol/L)	2.11	0 - 1.69	H	NCR
KGR03-P03/001/S051/029	Visit 6	R	10JUL12 9:30	Platelets (10 ⁹ /L)	119	145 - 390	L	NCR
KGR03-P03/001/S051/029	Visit 6	R	10JUL12 9:30	Hepatitis C Virus RNA (IU/mL)	44	0 - 11	H	CR
KGR03-P03/001/S051/029	Visit 6	R	10JUL12 9:30	Tumour Necrosis Factor α (pg/mL)	9.10	0 - 8.26	H	CR
KGR03-P03/001/S051/029	Visit 10	R	07AUG12 9:30	HDL Cholesterol (mmol/L)	1.04	1.05 - 99999	L	NCR
KGR03-P03/001/S051/029	Visit 10	R	07AUG12 9:30	LDL Cholesterol (mmol/L)	5.98	0 - 3.36	H	NCR
KGR03-P03/001/S051/029	Visit 10	R	07AUG12 9:30	Total Cholesterol (mmol/L)	8.00	0 - 5.17	H	NCR
KGR03-P03/001/S051/029	Visit 10	R	07AUG12 9:30	Mean Corpuscular HGB Concentration (g/L)	320	326 - 359	L	NCR
KGR03-P03/001/S051/029	Visit 10	R	07AUG12 9:30	Platelets (10 ⁹ /L)	108	145 - 390	L	NCR
KGR03-P03/001/S051/029	Visit 14 - final	R	04SEP12 9:30	Alanine Aminotransferase (U/L)	60	0 - 41	H	CR
KGR03-P03/001/S051/029	Visit 14 - final	R	04SEP12 9:30	γ Glutamyl Transferase (U/L)	85	10 - 49	H	NCR
KGR03-P03/001/S051/029	Visit 14 - final	R	04SEP12 9:30	Glucose (mmol/L)	8.38	3.89 - 7.77	H	
KGR03-P03/001/S051/029	Visit 14 - final	R	04SEP12 9:30	LDL Cholesterol (mmol/L)	6.09	0 - 3.36	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S051/029	Visit 14 - final	R	04SEP12 9:30	Total Cholesterol (mmol/L)	8.50	0 - 5.17	H	NCR
KGR03-P03/001/S051/029	Visit 14 - final	R	04SEP12 9:30	Triglycerides (mmol/L)	2.83	0 - 1.69	H	NCR
KGR03-P03/001/S051/029	Visit 14 - final	R	04SEP12 9:30	Uric Acid (mmol/L)	0.45	0.21 - 0.41	H	NCR
KGR03-P03/001/S052/030	Screening		14JUN12	Alanine Aminotransferase (U/L)	107	10 - 65	H	
KGR03-P03/001/S052/030	Screening		14JUN12	Aspartate Aminotransferase (U/L)	63	2 - 40	H	
KGR03-P03/001/S052/030	Screening		14JUN12	Sodium (mmol/L)	134.8	136 - 145	L	
KGR03-P03/001/S052/030	Screening		14JUN12	Mean Corpuscular Haemoglobin (pg)	31.6	27 - 31	H	
KGR03-P03/001/S052/030	Screening		14JUN12	Monocytes Absolute (10 ⁹ /L)	0.98	0 - 0.8	H	
KGR03-P03/001/S052/030	Screening		14JUN12	Monocytes Relative (%)	11.00	2 - 10	H	
KGR03-P03/001/S052/030	Visit 2		19JUN12 9:30	Alanine Aminotransferase (U/L)	68	0 - 41	H	CR
KGR03-P03/001/S052/030	Visit 2		19JUN12 9:30	Aspartate Aminotransferase (U/L)	46	0 - 37	H	CR
KGR03-P03/001/S052/030	Visit 2		19JUN12 9:30	HDL Cholesterol (mmol/L)	0.83	1.05 - 99999	L	NCR
KGR03-P03/001/S052/030	Visit 2		19JUN12 9:30	Uric Acid (mmol/L)	0.43	0.21 - 0.41	H	NCR
KGR03-P03/001/S052/030	Visit 2		19JUN12 9:30	Eosinophils Absolute (10 ⁹ /L)	0.49	0 - 0.48	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S052/030	Visit 2		19JUN12 9:30	White Blood Cells (10 ⁹ /L)	11.45	3.6 - 10	H	NCR
KGR03-P03/001/S052/030	Visit 2		19JUN12 9:30	Tumour Necrosis Factor α (pg/mL)	21.55	0 - 8.26	H	CR
KGR03-P03/001/S052/030	Visit 2		19JUN12 9:30	Urine Dipstick RBC	++	Negative	A	NCR
KGR03-P03/001/S052/030	Visit 2		19JUN12 9:30	Urine Microanalysis RBC (/μL)	26	0 - 25	H	NCR
KGR03-P03/001/S052/030	Visit 6	R	17JUL12 9:30	HDL Cholesterol (mmol/L)	0.80	1.05 - 99999	L	NCR
KGR03-P03/001/S052/030	Visit 6	R	17JUL12 9:30	Lactate Dehydrogenase (U/L)	242	97 - 236	H	NCR
KGR03-P03/001/S052/030	Visit 6	R	17JUL12 9:30	Lymphocytes Absolute (10 ⁹ /L)	4.55	1.1 - 3.7	H	NCR
KGR03-P03/001/S052/030	Visit 6	R	17JUL12 9:30	Lymphocytes Relative (%)	49.0	15 - 47	H	NCR
KGR03-P03/001/S052/030	Visit 6	R	17JUL12 9:30	Neutrophils Relative (%)	38.0	43 - 73	L	NCR
KGR03-P03/001/S052/030	Visit 6	R	17JUL12 9:30	Tumour Necrosis Factor α (pg/mL)	12.04	0 - 8.26	H	CR
KGR03-P03/001/S052/030	Visit 6	R	17JUL12 9:30	Urine Dipstick WBC	+++	Negative	A	NCR
KGR03-P03/001/S052/030	Visit 6	R	17JUL12 9:30	Urine Microanalysis Bacteria (/μL)	263	0 - 100	H	NCR
KGR03-P03/001/S052/030	Visit 6	R	17JUL12 9:30	Urine Microanalysis WBC (/μL)	270	0 - 25	H	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Calcium (mmol/L)	2.13	2.15 - 2.5	L	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Ferritin (μg/L)	480	20 - 360	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	HDL Cholesterol (mmol/L)	0.57	1.05 - 99999	L	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Phosphate (mmol/L)	0.756	0.775 - 1.421	L	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Pseudocholinesterase (kU/L)	4.7	5.3 - 12.9	L	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Haematocrit (v/v)	0.374	0.382 - 0.495	L	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Haemoglobin (g/L)	121	130 - 170	L	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Mean Corpuscular HGB Concentration (g/L)	323	326 - 359	L	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Red Blood Cells (10 ¹² /L)	3.92	4.12 - 5.59	L	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Tumour Necrosis Factor α (pg/mL)	15.17	0 - 8.26	H	CR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Urine Dipstick WBC	+++	Negative	A	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Urine Microanalysis Bacteria (/μL)	236	0 - 100	H	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Urine Microanalysis Epithelial Cells (/μL)	45	0 - 30	H	NCR
KGR03-P03/001/S052/030	Visit 10	R	14AUG12 9:30	Urine Microanalysis WBC (/μL)	93	0 - 25	H	NCR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Direct Bilirubin (μmol/L)	5.8	0 - 5	H	NCR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Ferritin (μg/L)	452	20 - 360	H	NCR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Glucose (mmol/L)	3.77	3.89 - 7.77	L	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	HDL Cholesterol (mmol/L)	0.85	1.05 - 99999	L	NCR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Iron (µmol/L)	10.0	14.3 - 28.6	L	NCR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Uric Acid (mmol/L)	0.42	0.21 - 0.41	H	NCR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Mean Corpuscular HGB Concentration (g/L)	324	326 - 359	L	NCR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Neutrophils Absolute (10 ⁹ /L)	7.61	2.1 - 6.9	H	NCR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	White Blood Cells (10 ⁹ /L)	10.88	3.6 - 10	H	NCR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Hepatitis C Virus RNA (IU/mL)	44893	0 - 11	H	CR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Tumour Necrosis Factor α (pg/mL)	11.40	0 - 8.26	H	CR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Specific Gravity	1.011	1.015 - 1.03	L	NCR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Urine Dipstick RBC	+	Negative	A	NCR
KGR03-P03/001/S052/030	Visit 14 - final	R	11SEP12 9:30	Urine Microanalysis RBC (/µL)	26	0 - 25	H	NCR

Table 14.3.4.1 Abnormal laboratory values - Safety population

Unique Subject Identifier	Visit	Last Treatment	Sampling Date/Time	Parameter	Value	Normal Range	Abnormality ¹	Clinical Assessment ²
---------------------------------	-------	-------------------	-----------------------	-----------	-------	-----------------	--------------------------	-------------------------------------

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note 1: N=Within normal range, A=Different from reference value, H=Higher than normal range, L=Lower than normal range

Note 2: N=Normal, NCR=Abnormal not clinically relevant, CR=Abnormal clinically relevant

Source: [Listing 16.2.8.1](#), [Listing 16.2.8.2](#), [Listing 16.2.8.3](#) and [Listing 16.2.8.4](#) – Individual laboratory measurements

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.2 Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 6				
		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Alanine Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	14 (100.0)	0 (0.0)	6 (42.9)	6 (42.9)	2 (14.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	6 (42.9)	6 (42.9)	2 (14.3)
Albumin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	11 (78.6)	0 (0.0)	1 (7.1)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Alkaline Phosphatase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	1 (7.1)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	2 (14.3)	2 (14.3)
Aspartate Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	14 (100.0)	0 (0.0)	6 (42.9)	6 (42.9)	2 (14.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	6 (42.9)	6 (42.9)	2 (14.3)
Basophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Basophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	12 (85.7)	0 (0.0)	1 (7.1)
	High	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)

Table 14.3.4.2 Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 6				
		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Calcium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	2 (14.3)	10 (71.4)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	2 (14.3)	10 (71.4)	0 (0.0)	2 (14.3)
Chloride	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	2 (14.3)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	2 (14.3)	2 (14.3)
Creatine Phosphokinase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
Creatinine	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Creatinine Clearance	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	6 (42.9)	0 (0.0)	0 (0.0)	0 (0.0)	6 (42.9)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	8 (57.1)	0 (0.0)	0 (0.0)	0 (0.0)	8 (57.1)
	Total	14 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	14 (100.0)
Direct Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	7 (50.0)	3 (21.4)	2 (14.3)
	High	2 (14.3)	0 (0.0)	0 (0.0)	2 (14.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	7 (50.0)	5 (35.7)	2 (14.3)

Table 14.3.4.2 Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 6				
		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Eosinophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	11 (78.6)	0 (0.0)	2 (14.3)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Eosinophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	11 (78.6)	0 (0.0)	2 (14.3)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Erythroblasts	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Missing	13 (92.9)	0 (0.0)	0 (0.0)	0 (0.0)	13 (92.9)
	Total	14 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	14 (100.0)
Ferritin	Low	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Normal	11 (78.6)	0 (0.0)	4 (28.6)	6 (42.9)	1 (7.1)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	5 (35.7)	7 (50.0)	2 (14.3)
γ Glutamyl Transferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	4 (28.6)	0 (0.0)	3 (21.4)	1 (7.1)	0 (0.0)
	High	9 (64.3)	0 (0.0)	4 (28.6)	4 (28.6)	1 (7.1)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	7 (50.0)	5 (35.7)	2 (14.3)
Glucose	Low	2 (14.3)	0 (0.0)	2 (14.3)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	10 (71.4)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)

Table 14.3.4.2 Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Visit 6		
				Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
HDL Cholesterol	Low	2 (14.3)	2 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	11 (78.6)	5 (35.7)	5 (35.7)	0 (0.0)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	7 (50.0)	5 (35.7)	0 (0.0)	2 (14.3)
Haematocrit	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	2 (14.3)	9 (64.3)	0 (0.0)	2 (14.3)
	High	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	3 (21.4)	9 (64.3)	0 (0.0)	2 (14.3)
Haemoglobin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	5 (35.7)	7 (50.0)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	5 (35.7)	7 (50.0)	0 (0.0)	2 (14.3)
Hyaluronic Acid	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	5 (35.7)	6 (42.9)	1 (7.1)
	High	2 (14.3)	0 (0.0)	0 (0.0)	1 (7.1)	1 (7.1)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	5 (35.7)	7 (50.0)	2 (14.3)
Interleukin 6	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Iron	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	9 (64.3)	2 (14.3)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	1 (7.1)	9 (64.3)	2 (14.3)	2 (14.3)

Table 14.3.4.2 Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 6				
		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
LDL Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	12 (85.7)	0 (0.0)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Lactate Dehydrogenase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	9 (64.3)	2 (14.3)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	9 (64.3)	3 (21.4)	2 (14.3)
Lymphocytes Absolute	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	3 (21.4)	8 (57.1)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	4 (28.6)	8 (57.1)	0 (0.0)	2 (14.3)
Lymphocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	11 (78.6)	0 (0.0)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
Magnesium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	11 (78.6)	1 (7.1)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
Mean Corpuscular HGB Concentration	Low	3 (21.4)	2 (14.3)	0 (0.0)	0 (0.0)	1 (7.1)
	Normal	11 (78.6)	3 (21.4)	7 (50.0)	0 (0.0)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	5 (35.7)	7 (50.0)	0 (0.0)	2 (14.3)

Table 14.3.4.2 Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 6				
		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Mean Corpuscular Haemoglobin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Mean Corpuscular Volume	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	10 (71.4)	0 (0.0)	2 (14.3)
	High	2 (14.3)	0 (0.0)	0 (0.0)	2 (14.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	2 (14.3)	2 (14.3)
Monocytes Absolute	Low	2 (14.3)	2 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	4 (28.6)	6 (42.9)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	6 (42.9)	6 (42.9)	0 (0.0)	2 (14.3)
Monocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	1 (7.1)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	2 (14.3)	2 (14.3)
Neutrophils Absolute	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	6 (42.9)	5 (35.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	7 (50.0)	5 (35.7)	0 (0.0)	2 (14.3)
Neutrophils Band Form	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	14 (100.0)	0 (0.0)	1 (7.1)	0 (0.0)	13 (92.9)
	Total	14 (100.0)	0 (0.0)	1 (7.1)	0 (0.0)	13 (92.9)

Table 14.3.4.2 Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 6				
		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Neutrophils Relative	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	11 (78.6)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	1 (7.1)	11 (78.6)	0 (0.0)	2 (14.3)
Phosphate	Low	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	1 (7.1)	9 (64.3)	0 (0.0)	2 (14.3)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	1 (7.1)	11 (78.6)	0 (0.0)	2 (14.3)
Platelets	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	2 (14.3)	8 (57.1)	0 (0.0)	3 (21.4)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	3 (21.4)	8 (57.1)	0 (0.0)	3 (21.4)
Potassium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Pseudocholinesterase	Low	2 (14.3)	2 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	11 (78.6)	1 (7.1)	9 (64.3)	0 (0.0)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	3 (21.4)	9 (64.3)	0 (0.0)	2 (14.3)
Red Blood Cells	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	4 (28.6)	8 (57.1)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	4 (28.6)	8 (57.1)	0 (0.0)	2 (14.3)

Table 14.3.4.2 Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 6				
		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Sodium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	9 (64.3)	1 (7.1)	2 (14.3)
	High	2 (14.3)	0 (0.0)	2 (14.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
Specific Gravity	Low	4 (28.6)	2 (14.3)	1 (7.1)	0 (0.0)	1 (7.1)
	Normal	7 (50.0)	0 (0.0)	5 (35.7)	2 (14.3)	0 (0.0)
	High	2 (14.3)	0 (0.0)	2 (14.3)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	2 (14.3)	8 (57.1)	2 (14.3)	2 (14.3)
Total Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	11 (78.6)	0 (0.0)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
Total Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
Total Protein	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	11 (78.6)	0 (0.0)	1 (7.1)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Triglycerides	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	9 (64.3)	2 (14.3)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	9 (64.3)	3 (21.4)	2 (14.3)

Table 14.3.4.2 Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 6				
		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Tumor Necrosis Factor α	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	6 (42.9)	0 (0.0)	2 (14.3)	3 (21.4)	1 (7.1)
	High	7 (50.0)	0 (0.0)	0 (0.0)	6 (42.9)	1 (7.1)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	2 (14.3)	10 (71.4)	2 (14.3)
Urea	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	10 (71.4)	0 (0.0)	2 (14.3)
	High	2 (14.3)	0 (0.0)	2 (14.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Uric Acid	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	2 (14.3)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	2 (14.3)	2 (14.3)
Urine Dipstick pH	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	11 (78.6)	0 (0.0)	1 (7.1)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
White Blood Cells	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	5 (35.7)	5 (35.7)	0 (0.0)	2 (14.3)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	6 (42.9)	6 (42.9)	0 (0.0)	2 (14.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: [Listing 16.2.8.1](#), [Listing 16.2.8.2](#), [Listing 16.2.8.3](#), [Listing 16.2.8.4](#) – Individual laboratory measurements

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.2, continued Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Alanine Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)
Albumin	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	12 (75.0)	0 (0.0)	1 (6.3)
	High	2 (12.5)	0 (0.0)	2 (12.5)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	14 (87.5)	0 (0.0)	1 (6.3)
Alkaline Phosphatase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
Aspartate Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	16 (100.0)	0 (0.0)	11 (68.8)	4 (25.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	11 (68.8)	4 (25.0)	1 (6.3)
Basophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	14 (87.5)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
Basophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
Calcium	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	1 (6.3)	12 (75.0)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	2 (12.5)	13 (81.3)	0 (0.0)	1 (6.3)

Table 14.3.4.2, continued Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Chloride	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	10 (62.5)	4 (25.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	11 (68.8)	4 (25.0)	1 (6.3)
Creatine Phosphokinase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Creatinine	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Creatinine Clearance	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	7 (43.8)	0 (0.0)	0 (0.0)	0 (0.0)	7 (43.8)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	9 (56.3)	0 (0.0)	0 (0.0)	0 (0.0)	9 (56.3)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
Direct Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	10 (62.5)	0 (0.0)	8 (50.0)	1 (6.3)	1 (6.3)
	High	6 (37.5)	0 (0.0)	0 (0.0)	6 (37.5)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	8 (50.0)	7 (43.8)	1 (6.3)
Eosinophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	13 (81.3)	0 (0.0)	0 (0.0)
	High	3 (18.8)	0 (0.0)	2 (12.5)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Eosinophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)

Table 14.3.4.2, continued Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Erythroblasts	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
Ferritin	Low	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	6 (37.5)	6 (37.5)	1 (6.3)
	High	2 (12.5)	0 (0.0)	0 (0.0)	2 (12.5)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	7 (43.8)	8 (50.0)	1 (6.3)
Gamma Glutamyl Transferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	7 (43.8)	0 (0.0)	6 (37.5)	0 (0.0)	1 (6.3)
	High	9 (56.3)	0 (0.0)	5 (31.3)	4 (25.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	11 (68.8)	4 (25.0)	1 (6.3)
Glucose	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
HDL Cholesterol	Low	6 (37.5)	3 (18.8)	2 (12.5)	0 (0.0)	1 (6.3)
	Normal	10 (62.5)	5 (31.3)	5 (31.3)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	8 (50.0)	7 (43.8)	0 (0.0)	1 (6.3)
Haematocrit	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	4 (25.0)	8 (50.0)	0 (0.0)	1 (6.3)
	High	3 (18.8)	0 (0.0)	3 (18.8)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	4 (25.0)	11 (68.8)	0 (0.0)	1 (6.3)
Haemoglobin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	6 (37.5)	7 (43.8)	0 (0.0)	1 (6.3)
	High	2 (12.5)	2 (12.5)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	8 (50.0)	7 (43.8)	0 (0.0)	1 (6.3)

Table 14.3.4.2, continued Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Hyaluronic Acid	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	11 (68.8)	3 (18.8)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	12 (75.0)	3 (18.8)	1 (6.3)
Interleukin 6	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Iron	Low	4 (25.0)	0 (0.0)	3 (18.8)	0 (0.0)	1 (6.3)
	Normal	7 (43.8)	1 (6.3)	4 (25.0)	2 (12.5)	0 (0.0)
	High	5 (31.3)	0 (0.0)	1 (6.3)	4 (25.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	8 (50.0)	6 (37.5)	1 (6.3)
LDL Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	11 (68.8)	0 (0.0)	10 (62.5)	0 (0.0)	1 (6.3)
	High	5 (31.3)	0 (0.0)	2 (12.5)	3 (18.8)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	12 (75.0)	3 (18.8)	1 (6.3)
Lactate Dehydrogenase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	10 (62.5)	4 (25.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	11 (68.8)	4 (25.0)	1 (6.3)
Lymphocytes Absolute	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	2 (12.5)	10 (62.5)	1 (6.3)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	3 (18.8)	10 (62.5)	2 (12.5)	1 (6.3)
Lymphocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)

Table 14.3.4.2, continued Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Magnesium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Mean Corpuscular HGB Concentration	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	5 (31.3)	9 (56.3)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	6 (37.5)	9 (56.3)	0 (0.0)	1 (6.3)
Mean Corpuscular Haemoglobin	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	0 (0.0)	13 (81.3)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	14 (87.5)	0 (0.0)	1 (6.3)
Mean Corpuscular Volume	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	11 (68.8)	0 (0.0)	10 (62.5)	0 (0.0)	1 (6.3)
	High	4 (25.0)	0 (0.0)	2 (12.5)	2 (12.5)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	12 (75.0)	2 (12.5)	1 (6.3)
Monocytes Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	3 (18.8)	12 (75.0)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	3 (18.8)	12 (75.0)	0 (0.0)	1 (6.3)
Monocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	1 (6.3)	14 (87.5)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	14 (87.5)	0 (0.0)	1 (6.3)
Neutrophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	8 (50.0)	4 (25.0)	1 (6.3)	0 (0.0)
	High	3 (18.8)	0 (0.0)	1 (6.3)	1 (6.3)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	8 (50.0)	5 (31.3)	2 (12.5)	1 (6.3)

Table 14.3.4.2, continued Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Neutrophils Band Form	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
Neutrophils Relative	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	4 (25.0)	8 (50.0)	1 (6.3)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	5 (31.3)	9 (56.3)	1 (6.3)	1 (6.3)
Phosphate	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	2 (12.5)	12 (75.0)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	2 (12.5)	13 (81.3)	0 (0.0)	1 (6.3)
Platelets	Low	4 (25.0)	4 (25.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (75.0)	3 (18.8)	8 (50.0)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	7 (43.8)	8 (50.0)	0 (0.0)	1 (6.3)
Potassium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	14 (87.5)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Pseudocholinesterase	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	14 (87.5)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	14 (87.5)	0 (0.0)	1 (6.3)
Reactive Lymphocytes	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	1 (6.3)	0 (0.0)	15 (93.8)
	Total	16 (100.0)	0 (0.0)	1 (6.3)	0 (0.0)	15 (93.8)

Table 14.3.4.2, continued Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Red Blood Cells	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	7 (43.8)	7 (43.8)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	7 (43.8)	7 (43.8)	1 (6.3)	1 (6.3)
Sodium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	12 (75.0)	0 (0.0)	1 (6.3)
	High	3 (18.8)	0 (0.0)	1 (6.3)	2 (12.5)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	13 (81.3)	2 (12.5)	1 (6.3)
Specific Gravity	Low	2 (12.5)	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	2 (12.5)	8 (50.0)	2 (12.5)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	3 (18.8)	9 (56.3)	3 (18.8)	1 (6.3)
Total Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	12 (75.0)	2 (12.5)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	13 (81.3)	2 (12.5)	1 (6.3)
Total Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	9 (56.3)	0 (0.0)	7 (43.8)	1 (6.3)	1 (6.3)
	High	7 (43.8)	0 (0.0)	4 (25.0)	3 (18.8)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	11 (68.8)	4 (25.0)	1 (6.3)
Total Protein	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Triglycerides	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (75.0)	0 (0.0)	9 (56.3)	2 (12.5)	1 (6.3)
	High	4 (25.0)	0 (0.0)	2 (12.5)	2 (12.5)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	11 (68.8)	4 (25.0)	1 (6.3)

Table 14.3.4.2, continued Shift tables of laboratory values (quantitative tests) - Visit 6 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Tumor Necrosis Factor Alpha	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	8 (50.0)	0 (0.0)	2 (12.5)	6 (37.5)	0 (0.0)
	High	8 (50.0)	0 (0.0)	0 (0.0)	7 (43.8)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	2 (12.5)	13 (81.3)	1 (6.3)
Urea	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	1 (6.3)	14 (87.5)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	14 (87.5)	0 (0.0)	1 (6.3)
Uric Acid	Low	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	1 (6.3)	11 (68.8)	1 (6.3)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	13 (81.3)	1 (6.3)	1 (6.3)
Urine Dipstick pH	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	14 (87.5)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
White Blood Cells	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (75.0)	6 (37.5)	6 (37.5)	0 (0.0)	0 (0.0)
	High	4 (25.0)	0 (0.0)	3 (18.8)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	6 (37.5)	9 (56.3)	0 (0.0)	1 (6.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: Listing 16.2.8.1, Listing 16.2.8.2, Listing 16.2.8.3, Listing 16.2.8.4 – Individual laboratory measurements

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.3 Shift tables of laboratory values (qualitative tests) - Visit 6 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 6 Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick Bilirubin	Normal	9 (64.3)	8 (57.1)	0 (0.0)	1 (7.1)
	Abnormal	4 (28.6)	3 (21.4)	1 (7.1)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	11 (78.6)	1 (7.1)	2 (14.3)
Urine Dipstick Glucose	Normal	13 (92.9)	12 (85.7)	0 (0.0)	1 (7.1)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	12 (85.7)	0 (0.0)	2 (14.3)
Urine Dipstick Ketones	Normal	13 (92.9)	12 (85.7)	0 (0.0)	1 (7.1)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	12 (85.7)	0 (0.0)	2 (14.3)
Urine Dipstick Nitrite	Normal	12 (85.7)	11 (78.6)	0 (0.0)	1 (7.1)
	Abnormal	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	11 (78.6)	1 (7.1)	2 (14.3)
Urine Dipstick Protein	Normal	13 (92.9)	12 (85.7)	0 (0.0)	1 (7.1)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	12 (85.7)	0 (0.0)	2 (14.3)
Urine Dipstick RBC	Normal	12 (85.7)	10 (71.4)	1 (7.1)	1 (7.1)
	Abnormal	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	11 (78.6)	1 (7.1)	2 (14.3)
Urine Dipstick Urobilinogen	Normal	12 (85.7)	11 (78.6)	0 (0.0)	1 (7.1)
	Abnormal	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	11 (78.6)	1 (7.1)	2 (14.3)

Table 14.3.4.3 Shift tables of laboratory values (qualitative tests) - Visit 6 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 6 Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick WBC	Normal	8 (57.1)	7 (50.0)	0 (0.0)	1 (7.1)
	Abnormal	5 (35.7)	2 (14.3)	3 (21.4)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	9 (64.3)	3 (21.4)	2 (14.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: [Listing 16.2.8.3](#) – Individual laboratory measurements

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.3, continued Shift tables of laboratory values (qualitative tests) - Visit 6 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 6 Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick Bilirubin	Normal	14 (87.5)	12 (75.0)	1 (6.3)	1 (6.3)
	Abnormal	2 (12.5)	1 (6.3)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	13 (81.3)	2 (12.5)	1 (6.3)
Urine Dipstick Glucose	Normal	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
Urine Dipstick Ketones	Normal	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)

Table 14.3.4.3, continued Shift tables of laboratory values (qualitative tests) - Visit 6 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 6

Parameter		Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 6	
				Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick Nitrite	Normal	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
Urine Dipstick Protein	Normal	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
Urine Dipstick Protein (mg/dL)	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	0 (0.0)	16 (100.0)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	16 (100.0)
Urine Dipstick RBC	Normal	13 (81.3)	13 (81.3)	0 (0.0)	0 (0.0)
	Abnormal	3 (18.8)	2 (12.5)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
Urine Dipstick Urobilinogen	Normal	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
Urine Dipstick WBC	Normal	15 (93.8)	14 (87.5)	1 (6.3)	0 (0.0)
	Abnormal	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	14 (87.5)	1 (6.3)	1 (6.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: [Listing 16.2.8.3](#) – Individual laboratory measurements

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.4 Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline)		Visit 10		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Alanine Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	14 (100.0)	0 (0.0)	8 (57.1)	4 (28.6)	2 (14.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	8 (57.1)	4 (28.6)	2 (14.3)
Albumin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	11 (78.6)	0 (0.0)	1 (7.1)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Alkaline Phosphatase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	1 (7.1)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	2 (14.3)	2 (14.3)
Aspartate Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	14 (100.0)	0 (0.0)	9 (64.3)	3 (21.4)	2 (14.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	9 (64.3)	3 (21.4)	2 (14.3)
Basophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	10 (71.4)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	0 (0.0)	4 (28.6)
Basophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	0 (0.0)	3 (21.4)
	High	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	0 (0.0)	4 (28.6)

Table 14.3.4.4 Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
		N=14 n (%)				
Calcium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	4 (28.6)	8 (57.1)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	4 (28.6)	8 (57.1)	0 (0.0)	2 (14.3)
Chloride	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	2 (14.3)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	2 (14.3)	2 (14.3)
Creatine Phosphokinase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Creatinine	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Creatinine Clearance	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	6 (42.9)	0 (0.0)	0 (0.0)	0 (0.0)	6 (42.9)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	8 (57.1)	0 (0.0)	0 (0.0)	0 (0.0)	8 (57.1)
	Total	14 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	14 (100.0)
Direct Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	8 (57.1)	2 (14.3)	2 (14.3)
	High	2 (14.3)	0 (0.0)	0 (0.0)	2 (14.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	8 (57.1)	4 (28.6)	2 (14.3)
Eosinophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	9 (64.3)	0 (0.0)	4 (28.6)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	0 (0.0)	4 (28.6)

Table 14.3.4.4 Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline)		Visit 10		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Eosinophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	9 (64.3)	0 (0.0)	4 (28.6)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	0 (0.0)	4 (28.6)
Erythroblasts	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Missing	13 (92.9)	0 (0.0)	0 (0.0)	0 (0.0)	13 (92.9)
	Total	14 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	14 (100.0)
Ferritin	Low	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Normal	11 (78.6)	0 (0.0)	3 (21.4)	7 (50.0)	1 (7.1)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	4 (28.6)	8 (57.1)	2 (14.3)
γ Glutamyl Transferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	4 (28.6)	0 (0.0)	3 (21.4)	1 (7.1)	0 (0.0)
	High	9 (64.3)	0 (0.0)	5 (35.7)	3 (21.4)	1 (7.1)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	8 (57.1)	4 (28.6)	2 (14.3)
Glucose	Low	2 (14.3)	0 (0.0)	1 (7.1)	1 (7.1)	0 (0.0)
	Normal	12 (85.7)	3 (21.4)	7 (50.0)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	3 (21.4)	8 (57.1)	1 (7.1)	2 (14.3)
HDL Cholesterol	Low	2 (14.3)	2 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	11 (78.6)	6 (42.9)	4 (28.6)	0 (0.0)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	8 (57.1)	4 (28.6)	0 (0.0)	2 (14.3)
Haematocrit	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	3 (21.4)	8 (57.1)	0 (0.0)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	3 (21.4)	8 (57.1)	0 (0.0)	3 (21.4)

Table 14.3.4.4 Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline)		Visit 10		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Haemoglobin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	8 (57.1)	3 (21.4)	0 (0.0)	3 (21.4)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	8 (57.1)	3 (21.4)	0 (0.0)	3 (21.4)
Hyaluronic Acid	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	4 (28.6)	7 (50.0)	1 (7.1)
	High	2 (14.3)	0 (0.0)	0 (0.0)	1 (7.1)	1 (7.1)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	4 (28.6)	8 (57.1)	2 (14.3)
Interleukin 6	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Iron	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	1 (7.1)	7 (50.0)	3 (21.4)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	2 (14.3)	7 (50.0)	3 (21.4)	2 (14.3)
LDL Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	12 (85.7)	0 (0.0)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Lactate Dehydrogenase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	1 (7.1)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	2 (14.3)	2 (14.3)
Lymphocytes Absolute	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	4 (28.6)	5 (35.7)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	5 (35.7)	5 (35.7)	0 (0.0)	4 (28.6)

Table 14.3.4.4 Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline)		Visit 10		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Lymphocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	8 (57.1)	1 (7.1)	4 (28.6)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	8 (57.1)	2 (14.3)	4 (28.6)
Magnesium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	1 (7.1)	10 (71.4)	1 (7.1)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	1 (7.1)	10 (71.4)	1 (7.1)	2 (14.3)
Mean Corpuscular HGB Concentration	Low	3 (21.4)	2 (14.3)	0 (0.0)	0 (0.0)	1 (7.1)
	Normal	11 (78.6)	5 (35.7)	3 (21.4)	0 (0.0)	3 (21.4)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	7 (50.0)	3 (21.4)	0 (0.0)	4 (28.6)
Mean Corpuscular Haemoglobin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	8 (57.1)	2 (14.3)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	8 (57.1)	2 (14.3)	4 (28.6)
Mean Corpuscular Volume	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	7 (50.0)	1 (7.1)	4 (28.6)
	High	2 (14.3)	0 (0.0)	0 (0.0)	2 (14.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	7 (50.0)	3 (21.4)	4 (28.6)
Monocytes Absolute	Low	2 (14.3)	2 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	5 (35.7)	3 (21.4)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	7 (50.0)	3 (21.4)	0 (0.0)	4 (28.6)
Monocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	1 (7.1)	8 (57.1)	0 (0.0)	4 (28.6)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	1 (7.1)	8 (57.1)	1 (7.1)	4 (28.6)

Table 14.3.4.4 Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline)		Visit 10		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Neutrophils Absolute	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	4 (28.6)	5 (35.7)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	5 (35.7)	5 (35.7)	0 (0.0)	4 (28.6)
Neutrophils Band Form	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	14 (100.0)	0 (0.0)	3 (21.4)	0 (0.0)	11 (78.6)
	Total	14 (100.0)	0 (0.0)	3 (21.4)	0 (0.0)	11 (78.6)
Neutrophils Relative	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	1 (7.1)	7 (50.0)	1 (7.1)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	2 (14.3)	7 (50.0)	1 (7.1)	4 (28.6)
Phosphate	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	2 (14.3)	8 (57.1)	0 (0.0)	2 (14.3)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	3 (21.4)	9 (64.3)	0 (0.0)	2 (14.3)
Platelets	Low	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Normal	13 (92.9)	4 (28.6)	6 (42.9)	0 (0.0)	3 (21.4)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	4 (28.6)	6 (42.9)	0 (0.0)	4 (28.6)
Potassium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Pseudocholinesterase	Low	2 (14.3)	2 (14.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	11 (78.6)	0 (0.0)	10 (71.4)	0 (0.0)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	2 (14.3)	10 (71.4)	0 (0.0)	2 (14.3)

Table 14.3.4.4 Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline)		Visit 10		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Red Blood Cells	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	6 (42.9)	5 (35.7)	0 (0.0)	3 (21.4)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	6 (42.9)	5 (35.7)	0 (0.0)	3 (21.4)
Sodium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	10 (71.4)	0 (0.0)	2 (14.3)
	High	2 (14.3)	0 (0.0)	1 (7.1)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
Specific Gravity	Low	4 (28.6)	0 (0.0)	3 (21.4)	0 (0.0)	1 (7.1)
	Normal	7 (50.0)	0 (0.0)	7 (50.0)	0 (0.0)	0 (0.0)
	High	2 (14.3)	0 (0.0)	1 (7.1)	1 (7.1)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
Total Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	11 (78.6)	0 (0.0)	2 (14.3)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Total Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Total Protein	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	11 (78.6)	0 (0.0)	1 (7.1)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Triglycerides	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	9 (64.3)	2 (14.3)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	9 (64.3)	3 (21.4)	2 (14.3)

Table 14.3.4.4 Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline)		Visit 10		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Tumour Necrosis Factor α	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	6 (42.9)	0 (0.0)	3 (21.4)	2 (14.3)	1 (7.1)
	High	7 (50.0)	0 (0.0)	0 (0.0)	6 (42.9)	1 (7.1)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	3 (21.4)	9 (64.3)	2 (14.3)
Urea	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	10 (71.4)	0 (0.0)	2 (14.3)
	High	2 (14.3)	0 (0.0)	2 (14.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Uric Acid	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	1 (7.1)	10 (71.4)	1 (7.1)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	1 (7.1)	10 (71.4)	1 (7.1)	2 (14.3)
Urine Dipstick pH	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	11 (78.6)	0 (0.0)	1 (7.1)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
White Blood Cells	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	4 (28.6)	4 (28.6)	0 (0.0)	4 (28.6)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	5 (35.7)	5 (35.7)	0 (0.0)	4 (28.6)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: [Listing 16.2.8.1](#), [Listing 16.2.8.2](#), [Listing 16.2.8.3](#), [Listing 16.2.8.4](#) – Individual laboratory measurements

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.4, continued Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Alanine Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	16 (100.0)	0 (0.0)	9 (56.3)	6 (37.5)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	9 (56.3)	6 (37.5)	1 (6.3)
Albumin	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	11 (68.8)	1 (6.3)	1 (6.3)
	High	2 (12.5)	0 (0.0)	2 (12.5)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	13 (81.3)	1 (6.3)	1 (6.3)
Alkaline Phosphatase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Aspartate Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)
Basophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	14 (87.5)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Basophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
Calcium	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	2 (12.5)	11 (68.8)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	3 (18.8)	12 (75.0)	0 (0.0)	1 (6.3)

Table 14.3.4.4, continued Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Chloride	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	12 (75.0)	2 (12.5)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	13 (81.3)	2 (12.5)	1 (6.3)
Creatine Phosphokinase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Creatinine	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
Creatinine Clearance	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	7 (43.8)	0 (0.0)	0 (0.0)	0 (0.0)	7 (43.8)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	9 (56.3)	0 (0.0)	0 (0.0)	0 (0.0)	9 (56.3)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
Direct Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	10 (62.5)	0 (0.0)	7 (43.8)	2 (12.5)	1 (6.3)
	High	6 (37.5)	0 (0.0)	3 (18.8)	3 (18.8)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)
Eosinophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	13 (81.3)	0 (0.0)	0 (0.0)
	High	3 (18.8)	0 (0.0)	2 (12.5)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Eosinophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)

Table 14.3.4.4, continued Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Erythroblasts	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	0 (0.0)	1 (6.3)	15 (93.8)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	1 (6.3)	15 (93.8)
Ferritin	Low	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	3 (18.8)	9 (56.3)	1 (6.3)
	High	2 (12.5)	0 (0.0)	0 (0.0)	2 (12.5)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	4 (25.0)	11 (68.8)	1 (6.3)
γ Glutamyl Transferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	7 (43.8)	0 (0.0)	6 (37.5)	0 (0.0)	1 (6.3)
	High	9 (56.3)	0 (0.0)	5 (31.3)	4 (25.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	11 (68.8)	4 (25.0)	1 (6.3)
Glucose	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
HDL Cholesterol	Low	6 (37.5)	4 (25.0)	1 (6.3)	0 (0.0)	1 (6.3)
	Normal	10 (62.5)	4 (25.0)	6 (37.5)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	8 (50.0)	7 (43.8)	0 (0.0)	1 (6.3)
Haematocrit	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	3 (18.8)	9 (56.3)	0 (0.0)	1 (6.3)
	High	3 (18.8)	0 (0.0)	3 (18.8)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	3 (18.8)	12 (75.0)	0 (0.0)	1 (6.3)
Haemoglobin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	6 (37.5)	7 (43.8)	0 (0.0)	1 (6.3)
	High	2 (12.5)	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	7 (43.8)	8 (50.0)	0 (0.0)	1 (6.3)

Table 14.3.4.4, continued Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Hyaluronic Acid	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	13 (81.3)	1 (6.3)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
Interleukin 6	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Iron	Low	4 (25.0)	1 (6.3)	2 (12.5)	0 (0.0)	1 (6.3)
	Normal	7 (43.8)	0 (0.0)	6 (37.5)	1 (6.3)	0 (0.0)
	High	5 (31.3)	1 (6.3)	2 (12.5)	2 (12.5)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	2 (12.5)	10 (62.5)	3 (18.8)	1 (6.3)
LDL Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	11 (68.8)	0 (0.0)	8 (50.0)	2 (12.5)	1 (6.3)
	High	5 (31.3)	0 (0.0)	1 (6.3)	4 (25.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	9 (56.3)	6 (37.5)	1 (6.3)
Lactate Dehydrogenase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	11 (68.8)	3 (18.8)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	12 (75.0)	3 (18.8)	1 (6.3)
Lymphocytes Absolute	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	4 (25.0)	9 (56.3)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	5 (31.3)	10 (62.5)	0 (0.0)	1 (6.3)
Lymphocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	1 (6.3)	11 (68.8)	3 (18.8)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	11 (68.8)	3 (18.8)	1 (6.3)

Table 14.3.4.4, continued Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Magnesium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Mean Corpuscular HGB Concentration	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	10 (62.5)	4 (25.0)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	11 (68.8)	4 (25.0)	0 (0.0)	1 (6.3)
Mean Corpuscular Haemoglobin	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	0 (0.0)	13 (81.3)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	14 (87.5)	0 (0.0)	1 (6.3)
Mean Corpuscular Volume	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	11 (68.8)	0 (0.0)	5 (31.3)	5 (31.3)	1 (6.3)
	High	4 (25.0)	0 (0.0)	1 (6.3)	3 (18.8)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	6 (37.5)	8 (50.0)	1 (6.3)
Monocytes Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	4 (25.0)	11 (68.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	4 (25.0)	11 (68.8)	0 (0.0)	1 (6.3)
Monocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	2 (12.5)	11 (68.8)	2 (12.5)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	2 (12.5)	11 (68.8)	2 (12.5)	1 (6.3)
Neutrophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	5 (31.3)	7 (43.8)	1 (6.3)	0 (0.0)
	High	3 (18.8)	0 (0.0)	2 (12.5)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	5 (31.3)	9 (56.3)	1 (6.3)	1 (6.3)

Table 14.3.4.4, continued Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Neutrophils Band Form	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	1 (6.3)	1 (6.3)	14 (87.5)
	Total	16 (100.0)	0 (0.0)	1 (6.3)	1 (6.3)	14 (87.5)
Neutrophils Relative	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	2 (12.5)	9 (56.3)	2 (12.5)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	3 (18.8)	10 (62.5)	2 (12.5)	1 (6.3)
Phosphate	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	1 (6.3)	13 (81.3)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	13 (81.3)	1 (6.3)	1 (6.3)
Platelets	Low	4 (25.0)	3 (18.8)	0 (0.0)	0 (0.0)	1 (6.3)
	Normal	12 (75.0)	5 (31.3)	6 (37.5)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	8 (50.0)	6 (37.5)	0 (0.0)	2 (12.5)
Potassium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	14 (87.5)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Pseudocholinesterase	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	1 (6.3)	13 (81.3)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	2 (12.5)	13 (81.3)	0 (0.0)	1 (6.3)
Reactive Lymphocytes	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)

Table 14.3.4.4, continued Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Red Blood Cells	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	8 (50.0)	6 (37.5)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	8 (50.0)	6 (37.5)	1 (6.3)	1 (6.3)
Sodium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	11 (68.8)	1 (6.3)	1 (6.3)
	High	3 (18.8)	0 (0.0)	1 (6.3)	2 (12.5)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	12 (75.0)	3 (18.8)	1 (6.3)
Specific Gravity	Low	2 (12.5)	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	1 (6.3)	9 (56.3)	2 (12.5)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	2 (12.5)	10 (62.5)	3 (18.8)	1 (6.3)
Total Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	13 (81.3)	1 (6.3)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
Total Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	9 (56.3)	0 (0.0)	7 (43.8)	1 (6.3)	1 (6.3)
	High	7 (43.8)	0 (0.0)	3 (18.8)	4 (25.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)
Total Protein	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Triglycerides	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (75.0)	0 (0.0)	8 (50.0)	3 (18.8)	1 (6.3)
	High	4 (25.0)	0 (0.0)	2 (12.5)	2 (12.5)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)

Table 14.3.4.4, continued Shift tables of laboratory values (quantitative tests) - Visit 10 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Tumour Necrosis Factor α	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	8 (50.0)	0 (0.0)	5 (31.3)	3 (18.8)	0 (0.0)
	High	8 (50.0)	0 (0.0)	0 (0.0)	7 (43.8)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	5 (31.3)	10 (62.5)	1 (6.3)
Urea	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Uric Acid	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	0 (0.0)	13 (81.3)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	14 (87.5)	0 (0.0)	1 (6.3)
Urine Dipstick pH	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	14 (87.5)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
White Blood Cells	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (75.0)	5 (31.3)	6 (37.5)	1 (6.3)	0 (0.0)
	High	4 (25.0)	0 (0.0)	3 (18.8)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	5 (31.3)	9 (56.3)	1 (6.3)	1 (6.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: [Listing 16.2.8.1](#), [Listing 16.2.8.2](#), [Listing 16.2.8.3](#), [Listing 16.2.8.4](#) – Individual laboratory measurements

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.5 Shift tables of laboratory values (qualitative tests) - Visit 10 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 10 Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick Bilirubin	Normal	9 (64.3)	7 (50.0)	1 (7.1)	1 (7.1)
	Abnormal	4 (28.6)	2 (14.3)	2 (14.3)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	9 (64.3)	3 (21.4)	2 (14.3)
Urine Dipstick Glucose	Normal	13 (92.9)	12 (85.7)	0 (0.0)	1 (7.1)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	12 (85.7)	0 (0.0)	2 (14.3)
Urine Dipstick Ketones	Normal	13 (92.9)	12 (85.7)	0 (0.0)	1 (7.1)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	12 (85.7)	0 (0.0)	2 (14.3)
Urine Dipstick Nitrite	Normal	12 (85.7)	11 (78.6)	0 (0.0)	1 (7.1)
	Abnormal	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	11 (78.6)	1 (7.1)	2 (14.3)
Urine Dipstick Protein	Normal	13 (92.9)	12 (85.7)	0 (0.0)	1 (7.1)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	12 (85.7)	0 (0.0)	2 (14.3)
Urine Dipstick RBC	Normal	12 (85.7)	10 (71.4)	1 (7.1)	1 (7.1)
	Abnormal	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	11 (78.6)	1 (7.1)	2 (14.3)
Urine Dipstick Urobilinogen	Normal	12 (85.7)	10 (71.4)	1 (7.1)	1 (7.1)
	Abnormal	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	11 (78.6)	1 (7.1)	2 (14.3)

Table 14.3.4.5 Shift tables of laboratory values (qualitative tests) - Visit 10 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 10 Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick WBC	Normal	8 (57.1)	6 (42.9)	1 (7.1)	1 (7.1)
	Abnormal	5 (35.7)	3 (21.4)	2 (14.3)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	9 (64.3)	3 (21.4)	2 (14.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: [Listing 16.2.8.3](#) – Individual laboratory measurements

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.5, continued Shift tables of laboratory values (qualitative tests) - Visit 10 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 10 Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick Bilirubin	Normal	14 (87.5)	11 (68.8)	2 (12.5)	1 (6.3)
	Abnormal	2 (12.5)	1 (6.3)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	12 (75.0)	3 (18.8)	1 (6.3)
Urine Dipstick Glucose	Normal	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
Urine Dipstick Ketones	Normal	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)

Table 14.3.4.5, continued Shift tables of laboratory values (qualitative tests) - Visit 10 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 10

Parameter		Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 10	
				Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick Nitrite	Normal	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
Urine Dipstick Protein	Normal	16 (100.0)	13 (81.3)	2 (12.5)	1 (6.3)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	13 (81.3)	2 (12.5)	1 (6.3)
Urine Dipstick Protein (mg/dL)	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	0 (0.0)	16 (100.0)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	16 (100.0)
Urine Dipstick RBC	Normal	13 (81.3)	13 (81.3)	0 (0.0)	0 (0.0)
	Abnormal	3 (18.8)	2 (12.5)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	15 (93.8)	0 (0.0)	1 (6.3)
Urine Dipstick Urobilinogen	Normal	16 (100.0)	14 (87.5)	1 (6.3)	1 (6.3)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	14 (87.5)	1 (6.3)	1 (6.3)
Urine Dipstick WBC	Normal	15 (93.8)	12 (75.0)	3 (18.8)	0 (0.0)
	Abnormal	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	12 (75.0)	3 (18.8)	1 (6.3)

Table 14.3.4.5, continued Shift tables of laboratory values (qualitative tests) - Visit 10 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 10

Parameter	Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 10		Missing N=14 n (%)
			Abnormal N=14 n (%)		

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: [Listing 16.2.8.3](#) – Individual laboratory measurements

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.6 Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Visit 14		Missing N=14 n (%)
				Normal N=14 n (%)	High N=14 n (%)	
Alanine Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	14 (100.0)	0 (0.0)	7 (50.0)	5 (35.7)	2 (14.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	7 (50.0)	5 (35.7)	2 (14.3)
Albumin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	11 (78.6)	0 (0.0)	1 (7.1)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Alkaline Phosphatase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	1 (7.1)	2 (14.3)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
Aspartate Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	14 (100.0)	0 (0.0)	7 (50.0)	5 (35.7)	2 (14.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	7 (50.0)	5 (35.7)	2 (14.3)

Table 14.3.4.6 Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline)		Visit 14		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Basophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	10 (71.4)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	0 (0.0)	4 (28.6)
Basophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	0 (0.0)	3 (21.4)
	High	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	0 (0.0)	4 (28.6)
Calcium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	4 (28.6)	8 (57.1)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	4 (28.6)	8 (57.1)	0 (0.0)	2 (14.3)
Chloride	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	2 (14.3)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	2 (14.3)	2 (14.3)
Creatine Phosphokinase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	7 (50.0)	2 (14.3)	5 (35.7)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	7 (50.0)	2 (14.3)	5 (35.7)
Creatinine	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
Creatinine Clearance	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	6 (42.9)	0 (0.0)	0 (0.0)	0 (0.0)	6 (42.9)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	8 (57.1)	0 (0.0)	0 (0.0)	0 (0.0)	8 (57.1)
	Total	14 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	14 (100.0)

Table 14.3.4.6 Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline)		Visit 14		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Direct Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	7 (50.0)	2 (14.3)	3 (21.4)
	High	2 (14.3)	0 (0.0)	0 (0.0)	2 (14.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	7 (50.0)	4 (28.6)	3 (21.4)
Eosinophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	9 (64.3)	0 (0.0)	4 (28.6)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	0 (0.0)	4 (28.6)
Eosinophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	9 (64.3)	0 (0.0)	4 (28.6)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	0 (0.0)	4 (28.6)
Erythroblasts	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Missing	13 (92.9)	0 (0.0)	0 (0.0)	0 (0.0)	13 (92.9)
	Total	14 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	14 (100.0)
Ferritin	Low	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Normal	11 (78.6)	0 (0.0)	4 (28.6)	6 (42.9)	1 (7.1)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	5 (35.7)	7 (50.0)	2 (14.3)
γ Glutamyl Transferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	4 (28.6)	0 (0.0)	4 (28.6)	0 (0.0)	0 (0.0)
	High	9 (64.3)	0 (0.0)	5 (35.7)	3 (21.4)	1 (7.1)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	9 (64.3)	3 (21.4)	2 (14.3)
Glucose	Low	2 (14.3)	0 (0.0)	2 (14.3)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	1 (7.1)	7 (50.0)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	1 (7.1)	9 (64.3)	0 (0.0)	4 (28.6)

Table 14.3.4.6 Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline)		Visit 14		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
HDL Cholesterol	Low	2 (14.3)	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)
	Normal	11 (78.6)	6 (42.9)	4 (28.6)	0 (0.0)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	7 (50.0)	5 (35.7)	0 (0.0)	2 (14.3)
Haematocrit	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	3 (21.4)	6 (42.9)	0 (0.0)	4 (28.6)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	3 (21.4)	7 (50.0)	0 (0.0)	4 (28.6)
Haemoglobin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	6 (42.9)	4 (28.6)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	6 (42.9)	4 (28.6)	0 (0.0)	4 (28.6)
Hyaluronic Acid	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	4 (28.6)	7 (50.0)	1 (7.1)
	High	2 (14.3)	0 (0.0)	0 (0.0)	1 (7.1)	1 (7.1)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	4 (28.6)	8 (57.1)	2 (14.3)
Interleukin 6	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Iron	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	9 (64.3)	2 (14.3)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	1 (7.1)	9 (64.3)	2 (14.3)	2 (14.3)
LDL Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	10 (71.4)	0 (0.0)	3 (21.4)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	0 (0.0)	4 (28.6)

Table 14.3.4.6 Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline)		Visit 14		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Lactate Dehydrogenase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	9 (64.3)	2 (14.3)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	9 (64.3)	3 (21.4)	2 (14.3)
Lymphocytes Absolute	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	4 (28.6)	5 (35.7)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	5 (35.7)	5 (35.7)	0 (0.0)	4 (28.6)
Lymphocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	1 (7.1)	8 (57.1)	0 (0.0)	4 (28.6)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	1 (7.1)	8 (57.1)	1 (7.1)	4 (28.6)
Magnesium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	12 (85.7)	0 (0.0)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Mean Corpuscular HGB Concentration	Low	3 (21.4)	2 (14.3)	0 (0.0)	0 (0.0)	1 (7.1)
	Normal	11 (78.6)	5 (35.7)	3 (21.4)	0 (0.0)	3 (21.4)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	7 (50.0)	3 (21.4)	0 (0.0)	4 (28.6)
Mean Corpuscular Haemoglobin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	8 (57.1)	2 (14.3)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	8 (57.1)	2 (14.3)	4 (28.6)
Mean Corpuscular Volume	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	5 (35.7)	3 (21.4)	4 (28.6)
	High	2 (14.3)	0 (0.0)	0 (0.0)	2 (14.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	5 (35.7)	5 (35.7)	4 (28.6)

Table 14.3.4.6 Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline)		Visit 14		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Monocytes Absolute	Low	2 (14.3)	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	4 (28.6)	4 (28.6)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	5 (35.7)	5 (35.7)	0 (0.0)	4 (28.6)
Monocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	1 (7.1)	7 (50.0)	1 (7.1)	4 (28.6)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	1 (7.1)	8 (57.1)	1 (7.1)	4 (28.6)
Neutrophils Absolute	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	5 (35.7)	4 (28.6)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	6 (42.9)	4 (28.6)	0 (0.0)	4 (28.6)
Neutrophils Band Form	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	14 (100.0)	0 (0.0)	2 (14.3)	0 (0.0)	12 (85.7)
	Total	14 (100.0)	0 (0.0)	2 (14.3)	0 (0.0)	12 (85.7)
Neutrophils Relative	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	7 (50.0)	2 (14.3)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	1 (7.1)	7 (50.0)	2 (14.3)	4 (28.6)
Phosphate	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	1 (7.1)	7 (50.0)	0 (0.0)	4 (28.6)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	2 (14.3)	8 (57.1)	0 (0.0)	4 (28.6)
Platelets	Low	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Normal	13 (92.9)	4 (28.6)	5 (35.7)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	4 (28.6)	5 (35.7)	0 (0.0)	5 (35.7)

Table 14.3.4.6 Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline)		Visit 14		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Potassium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Pseudocholinesterase	Low	2 (14.3)	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Normal	11 (78.6)	1 (7.1)	7 (50.0)	0 (0.0)	3 (21.4)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	2 (14.3)	7 (50.0)	0 (0.0)	5 (35.7)
Red Blood Cells	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	6 (42.9)	4 (28.6)	0 (0.0)	4 (28.6)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	6 (42.9)	4 (28.6)	0 (0.0)	4 (28.6)
Sodium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	8 (57.1)	2 (14.3)	2 (14.3)
	High	2 (14.3)	0 (0.0)	2 (14.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	10 (71.4)	2 (14.3)	2 (14.3)
Specific Gravity	Low	4 (28.6)	1 (7.1)	1 (7.1)	0 (0.0)	2 (14.3)
	Normal	7 (50.0)	0 (0.0)	3 (21.4)	2 (14.3)	2 (14.3)
	High	2 (14.3)	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	2 (14.3)	5 (35.7)	2 (14.3)	5 (35.7)
Total Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	8 (57.1)	0 (0.0)	5 (35.7)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	8 (57.1)	1 (7.1)	5 (35.7)
Total Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)

Table 14.3.4.6 Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline)		Visit 14		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Total Protein	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	11 (78.6)	0 (0.0)	1 (7.1)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	12 (85.7)	0 (0.0)	2 (14.3)
Triglycerides	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	0 (0.0)	9 (64.3)	2 (14.3)	2 (14.3)
	High	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	9 (64.3)	3 (21.4)	2 (14.3)
Tumour Necrosis Factor α	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	6 (42.9)	0 (0.0)	1 (7.1)	4 (28.6)	1 (7.1)
	High	7 (50.0)	0 (0.0)	0 (0.0)	6 (42.9)	1 (7.1)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	1 (7.1)	11 (78.6)	2 (14.3)
Urea	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	10 (71.4)	0 (0.0)	2 (14.3)
	High	2 (14.3)	0 (0.0)	1 (7.1)	1 (7.1)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	0 (0.0)	11 (78.6)	1 (7.1)	2 (14.3)
Uric Acid	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (92.9)	1 (7.1)	10 (71.4)	1 (7.1)	1 (7.1)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	1 (7.1)	10 (71.4)	1 (7.1)	2 (14.3)
Urine Dipstick pH	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	0 (0.0)	9 (64.3)	0 (0.0)	3 (21.4)
	High	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	0 (0.0)	9 (64.3)	0 (0.0)	5 (35.7)

Table 14.3.4.6 Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline)		Visit 14		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
White Blood Cells	Low	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (85.7)	4 (28.6)	4 (28.6)	0 (0.0)	4 (28.6)
	High	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	14 (100.0)	5 (35.7)	5 (35.7)	0 (0.0)	4 (28.6)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: [Listing 16.2.8.1](#), [Listing 16.2.8.2](#), [Listing 16.2.8.3](#), [Listing 16.2.8.4](#) – Individual laboratory measurements

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.6, continued Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline)		Visit 14		
		N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Alanine Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	16 (100.0)	0 (0.0)	9 (56.3)	6 (37.5)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	9 (56.3)	6 (37.5)	1 (6.3)
Albumin	Low	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	12 (75.0)	0 (0.0)	1 (6.3)
	High	2 (12.5)	0 (0.0)	2 (12.5)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Alkaline Phosphatase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)

Table 14.3.4.6, continued Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Aspartate Aminotransferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	16 (100.0)	0 (0.0)	11 (68.8)	4 (25.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	11 (68.8)	4 (25.0)	1 (6.3)
Basophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	13 (81.3)	0 (0.0)	2 (12.5)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	0 (0.0)	2 (12.5)
Basophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	14 (87.5)	0 (0.0)	2 (12.5)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	0 (0.0)	2 (12.5)
Calcium	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	1 (6.3)	12 (75.0)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	2 (12.5)	13 (81.3)	0 (0.0)	1 (6.3)
Chloride	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	13 (81.3)	1 (6.3)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
Creatine Phosphokinase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	13 (81.3)	0 (0.0)	3 (18.8)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	13 (81.3)	0 (0.0)	3 (18.8)
Creatinine	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)

Table 14.3.4.6, continued Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Creatinine Clearance	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	7 (43.8)	0 (0.0)	0 (0.0)	0 (0.0)	7 (43.8)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	9 (56.3)	0 (0.0)	0 (0.0)	0 (0.0)	9 (56.3)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
Direct Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	10 (62.5)	0 (0.0)	5 (31.3)	4 (25.0)	1 (6.3)
	High	6 (37.5)	0 (0.0)	1 (6.3)	5 (31.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	6 (37.5)	9 (56.3)	1 (6.3)
Eosinophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	12 (75.0)	0 (0.0)	1 (6.3)
	High	3 (18.8)	0 (0.0)	2 (12.5)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	0 (0.0)	2 (12.5)
Eosinophils Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	13 (81.3)	1 (6.3)	2 (12.5)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	13 (81.3)	1 (6.3)	2 (12.5)
Erythroblasts	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
Ferritin	Low	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	2 (12.5)	10 (62.5)	1 (6.3)
	High	2 (12.5)	0 (0.0)	0 (0.0)	2 (12.5)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	3 (18.8)	12 (75.0)	1 (6.3)
γ Glutamyl Transferase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	7 (43.8)	0 (0.0)	5 (31.3)	1 (6.3)	1 (6.3)
	High	9 (56.3)	0 (0.0)	5 (31.3)	4 (25.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)

Table 14.3.4.6, continued Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Glucose	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	5 (31.3)	9 (56.3)	1 (6.3)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	5 (31.3)	9 (56.3)	1 (6.3)	1 (6.3)
HDL Cholesterol	Low	6 (37.5)	4 (25.0)	1 (6.3)	0 (0.0)	1 (6.3)
	Normal	10 (62.5)	6 (37.5)	4 (25.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	10 (62.5)	5 (31.3)	0 (0.0)	1 (6.3)
Haematocrit	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	4 (25.0)	8 (50.0)	0 (0.0)	1 (6.3)
	High	3 (18.8)	0 (0.0)	2 (12.5)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	4 (25.0)	10 (62.5)	1 (6.3)	1 (6.3)
Haemoglobin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	7 (43.8)	6 (37.5)	0 (0.0)	1 (6.3)
	High	2 (12.5)	0 (0.0)	2 (12.5)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	7 (43.8)	8 (50.0)	0 (0.0)	1 (6.3)
Hyaluronic Acid	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	11 (68.8)	3 (18.8)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	12 (75.0)	3 (18.8)	1 (6.3)
Interleukin 6	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Iron	Low	4 (25.0)	0 (0.0)	3 (18.8)	0 (0.0)	1 (6.3)
	Normal	7 (43.8)	2 (12.5)	5 (31.3)	0 (0.0)	0 (0.0)
	High	5 (31.3)	0 (0.0)	2 (12.5)	3 (18.8)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	2 (12.5)	10 (62.5)	3 (18.8)	1 (6.3)

Table 14.3.4.6, continued Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
LDL Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	11 (68.8)	0 (0.0)	10 (62.5)	0 (0.0)	1 (6.3)
	High	5 (31.3)	0 (0.0)	1 (6.3)	4 (25.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	11 (68.8)	4 (25.0)	1 (6.3)
Lactate Dehydrogenase	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	11 (68.8)	3 (18.8)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	12 (75.0)	3 (18.8)	1 (6.3)
Lymphocytes Absolute	Low	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.3)
	Normal	14 (87.5)	5 (31.3)	8 (50.0)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	5 (31.3)	9 (56.3)	0 (0.0)	2 (12.5)
Lymphocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	13 (81.3)	1 (6.3)	2 (12.5)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	13 (81.3)	1 (6.3)	2 (12.5)
Magnesium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Mean Corpuscular HGB Concentration	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	8 (50.0)	6 (37.5)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	9 (56.3)	6 (37.5)	0 (0.0)	1 (6.3)
Mean Corpuscular Haemoglobin	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	0 (0.0)	13 (81.3)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	14 (87.5)	0 (0.0)	1 (6.3)

Table 14.3.4.6, continued Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Mean Corpuscular Volume	Low	1 (6.3)	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	11 (68.8)	0 (0.0)	5 (31.3)	5 (31.3)	1 (6.3)
	High	4 (25.0)	0 (0.0)	1 (6.3)	3 (18.8)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	6 (37.5)	8 (50.0)	1 (6.3)
Monocytes Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	3 (18.8)	11 (68.8)	0 (0.0)	2 (12.5)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	3 (18.8)	11 (68.8)	0 (0.0)	2 (12.5)
Monocytes Relative	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	1 (6.3)	13 (81.3)	0 (0.0)	2 (12.5)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	13 (81.3)	0 (0.0)	2 (12.5)
Neutrophils Absolute	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	6 (37.5)	5 (31.3)	1 (6.3)	1 (6.3)
	High	3 (18.8)	0 (0.0)	2 (12.5)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	6 (37.5)	7 (43.8)	1 (6.3)	2 (12.5)
Neutrophils Band Form	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	1 (6.3)	0 (0.0)	15 (93.8)
	Total	16 (100.0)	0 (0.0)	1 (6.3)	0 (0.0)	15 (93.8)
Neutrophils Relative	Low	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	2 (12.5)	10 (62.5)	0 (0.0)	2 (12.5)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	2 (12.5)	12 (75.0)	0 (0.0)	2 (12.5)
Phosphate	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	3 (18.8)	11 (68.8)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	3 (18.8)	11 (68.8)	1 (6.3)	1 (6.3)

Table 14.3.4.6, continued Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Platelets	Low	4 (25.0)	2 (12.5)	1 (6.3)	0 (0.0)	1 (6.3)
	Normal	12 (75.0)	3 (18.8)	8 (50.0)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	5 (31.3)	9 (56.3)	0 (0.0)	2 (12.5)
Potassium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	14 (87.5)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Pseudocholinesterase	Low	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.3)
	Normal	15 (93.8)	0 (0.0)	13 (81.3)	0 (0.0)	2 (12.5)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	13 (81.3)	0 (0.0)	3 (18.8)
Reactive Lymphocytes	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	16 (100.0)
Red Blood Cells	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	8 (50.0)	6 (37.5)	0 (0.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	8 (50.0)	6 (37.5)	1 (6.3)	1 (6.3)
Sodium	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	13 (81.3)	0 (0.0)	12 (75.0)	0 (0.0)	1 (6.3)
	High	3 (18.8)	0 (0.0)	2 (12.5)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
Specific Gravity	Low	2 (12.5)	0 (0.0)	0 (0.0)	0 (0.0)	2 (12.5)
	Normal	13 (81.3)	1 (6.3)	10 (62.5)	1 (6.3)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	1 (6.3)	10 (62.5)	2 (12.5)	3 (18.8)

Table 14.3.4.6, continued Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Total Bilirubin	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	11 (68.8)	1 (6.3)	3 (18.8)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	11 (68.8)	2 (12.5)	3 (18.8)
Total Cholesterol	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	9 (56.3)	0 (0.0)	7 (43.8)	1 (6.3)	1 (6.3)
	High	7 (43.8)	0 (0.0)	3 (18.8)	4 (25.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)
Total Protein	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	14 (87.5)	1 (6.3)	1 (6.3)
Triglycerides	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (75.0)	0 (0.0)	9 (56.3)	2 (12.5)	1 (6.3)
	High	4 (25.0)	0 (0.0)	1 (6.3)	3 (18.8)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)
Tumour Necrosis Factor α	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	8 (50.0)	0 (0.0)	5 (31.3)	3 (18.8)	0 (0.0)
	High	8 (50.0)	0 (0.0)	1 (6.3)	6 (37.5)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	6 (37.5)	9 (56.3)	1 (6.3)
Urea	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
	High	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	15 (93.8)	0 (0.0)	1 (6.3)
Uric Acid	Low	1 (6.3)	0 (0.0)	1 (6.3)	0 (0.0)	0 (0.0)
	Normal	14 (87.5)	0 (0.0)	9 (56.3)	4 (25.0)	1 (6.3)
	High	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	10 (62.5)	5 (31.3)	1 (6.3)

Table 14.3.4.6, continued Shift tables of laboratory values (quantitative tests) - Visit 14 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Visit 14			
			Low N=14 n (%)	Normal N=14 n (%)	High N=14 n (%)	Missing N=14 n (%)
Urine Dipstick pH	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	15 (93.8)	0 (0.0)	12 (75.0)	1 (6.3)	2 (12.5)
	High	1 (6.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	0 (0.0)	12 (75.0)	1 (6.3)	3 (18.8)
White Blood Cells	Low	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Normal	12 (75.0)	7 (43.8)	5 (31.3)	0 (0.0)	0 (0.0)
	High	4 (25.0)	0 (0.0)	2 (12.5)	1 (6.3)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	7 (43.8)	7 (43.8)	1 (6.3)	1 (6.3)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: [Listing 16.2.8.1](#), [Listing 16.2.8.2](#), [Listing 16.2.8.3](#), [Listing 16.2.8.4](#) – Individual laboratory measurements

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.7 Shift tables of laboratory values (qualitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Visit 14		
			Normal N=14 n (%)	Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick Bilirubin	Normal	9 (64.3)	5 (35.7)	0 (0.0)	4 (28.6)
	Abnormal	4 (28.6)	2 (14.3)	2 (14.3)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	7 (50.0)	2 (14.3)	5 (35.7)
Urine Dipstick Glucose	Normal	13 (92.9)	9 (64.3)	0 (0.0)	4 (28.6)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	9 (64.3)	0 (0.0)	5 (35.7)

Table 14.3.4.7 Shift tables of laboratory values (qualitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 14	
				Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick Ketones	Normal	13 (92.9)	9 (64.3)	0 (0.0)	4 (28.6)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	9 (64.3)	0 (0.0)	5 (35.7)
Urine Dipstick Nitrite	Normal	12 (85.7)	8 (57.1)	0 (0.0)	4 (28.6)
	Abnormal	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	8 (57.1)	1 (7.1)	5 (35.7)
Urine Dipstick Protein	Normal	13 (92.9)	9 (64.3)	0 (0.0)	4 (28.6)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	9 (64.3)	0 (0.0)	5 (35.7)
Urine Dipstick RBC	Normal	12 (85.7)	8 (57.1)	0 (0.0)	4 (28.6)
	Abnormal	1 (7.1)	1 (7.1)	0 (0.0)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	9 (64.3)	0 (0.0)	5 (35.7)
Urine Dipstick Urobilinogen	Normal	12 (85.7)	7 (50.0)	1 (7.1)	4 (28.6)
	Abnormal	1 (7.1)	0 (0.0)	1 (7.1)	0 (0.0)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	7 (50.0)	2 (14.3)	5 (35.7)
Urine Dipstick WBC	Normal	8 (57.1)	5 (35.7)	0 (0.0)	3 (21.4)
	Abnormal	5 (35.7)	2 (14.3)	2 (14.3)	1 (7.1)
	Missing	1 (7.1)	0 (0.0)	0 (0.0)	1 (7.1)
	Total	14 (100.0)	7 (50.0)	2 (14.3)	5 (35.7)

Table 14.3.4.7 Shift tables of laboratory values (qualitative tests) - Visit 14 - Safety population

Treatment T

Visit 2 (Baseline) vs. Visit 14

Parameter	Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 14	
			Abnormal N=14 n (%)	Missing N=14 n (%)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: [Listing 16.2.8.3](#) – Individual laboratory measurements - Urinalysis

Program: Tables\c101-lb-03-tbl.sas

Table 14.3.4.7, continued Shift tables of laboratory values (qualitative tests) - Visit 14 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 14	
				Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick Bilirubin	Normal	14 (87.5)	8 (50.0)	3 (18.8)	3 (18.8)
	Abnormal	2 (12.5)	2 (12.5)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	10 (62.5)	3 (18.8)	3 (18.8)
Urine Dipstick Glucose	Normal	16 (100.0)	13 (81.3)	0 (0.0)	3 (18.8)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	13 (81.3)	0 (0.0)	3 (18.8)
Urine Dipstick Ketones	Normal	16 (100.0)	13 (81.3)	0 (0.0)	3 (18.8)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	13 (81.3)	0 (0.0)	3 (18.8)
Urine Dipstick Nitrite	Normal	16 (100.0)	13 (81.3)	0 (0.0)	3 (18.8)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	13 (81.3)	0 (0.0)	3 (18.8)

Table 14.3.4.7, continued Shift tables of laboratory values (qualitative tests) - Visit 14 - Safety population

Treatment R

Visit 2 (Baseline) vs. Visit 14

Parameter		Visit 2 (Baseline) N=14 n (%)	Normal N=14 n (%)	Visit 14	
				Abnormal N=14 n (%)	Missing N=14 n (%)
Urine Dipstick Protein	Normal	16 (100.0)	12 (75.0)	1 (6.3)	3 (18.8)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	12 (75.0)	1 (6.3)	3 (18.8)
Urine Dipstick Protein (mg/dL)	Normal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	16 (100.0)	0 (0.0)	0 (0.0)	16 (100.0)
	Total	16 (100.0)	0 (0.0)	0 (0.0)	16 (100.0)
Urine Dipstick RBC	Normal	13 (81.3)	11 (68.8)	0 (0.0)	2 (12.5)
	Abnormal	3 (18.8)	1 (6.3)	1 (6.3)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	12 (75.0)	1 (6.3)	3 (18.8)
Urine Dipstick Urobilinogen	Normal	16 (100.0)	13 (81.3)	1 (6.3)	2 (12.5)
	Abnormal	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	13 (81.3)	1 (6.3)	2 (12.5)
Urine Dipstick WBC	Normal	15 (93.8)	12 (75.0)	1 (6.3)	2 (12.5)
	Abnormal	1 (6.3)	0 (0.0)	0 (0.0)	1 (6.3)
	Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
	Total	16 (100.0)	12 (75.0)	1 (6.3)	3 (18.8)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: Screening assessment is considered if Visit 2 (baseline) assessment is missing

Source: [Listing 16.2.8.3](#) – Individual laboratory measurements - Urinalysis

Program: Tables\c101-lb-03-tbl.sas

14.3.5 Vital signs, electrocardiograms and other safety results

Table 14.3.5.1 Body weight summary - Safety population

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30
Screening	N	13	16	29
	Mean	78.5	80.8	79.8
	SD	24.3	12.9	18.5
	CV%	30.9	15.9	23.2
	Min	49	61	49
	Median	72.0	77.5	75.0
	Max	125	107	125
Visit 2	N	14	16	30
	Mean	77.4	81.0	79.3
	SD	23.3	12.9	18.3
	CV%	30.2	15.9	23.0
	Min	49	64	49
	Median	71.5	75.5	74.5
	Max	125	108	125
Visit 3	N	13	15	28
	Mean	77.7	81.1	79.6
	SD	24.7	12.4	18.8
	CV%	31.8	15.2	23.7
	Min	50	65	50
	Median	71.0	76.0	75.3
	Max	125	107	125
Visit 4	N	12	15	27
	Mean	79.0	80.7	79.9
	SD	24.8	13.2	18.8
	CV%	31.3	16.3	23.5
	Min	49	61	49
	Median	75.0	73.0	73.0
	Max	125	107	125
Visit 5	N	12	15	27
	Mean	79.3	80.5	79.9
	SD	25.0	14.0	19.2
	CV%	31.6	17.3	24.1
	Min	50	61	50
	Median	74.5	73.0	73.0
	Max	126	107	126

Table 14.3.5.1 Body weight summary - Safety population

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30
Visit 6	N	12	15	27
	Mean	78.7	79.8	79.3
	SD	24.7	14.0	19.1
	CV%	31.4	17.5	24.1
	Min	50	56	50
	Median	73.0	75.0	75.0
	Max	125	106	125
Visit 7	N	12	15	27
	Mean	78.3	79.5	79.0
	SD	24.8	13.2	18.8
	CV%	31.6	16.6	23.8
	Min	50	60	50
	Median	73.0	76.0	75.0
	Max	125	106	125
Visit 8	N	12	15	27
	Mean	78.3	79.0	78.7
	SD	24.5	12.9	18.6
	CV%	31.3	16.4	23.6
	Min	50	59	50
	Median	72.5	79.0	75.0
	Max	124	104	124
Visit 9	N	12	15	27
	Mean	78.0	79.7	78.9
	SD	24.6	13.5	18.8
	CV%	31.5	16.9	23.8
	Min	50	60	50
	Median	73.0	82.0	75.0
	Max	124	105	124
Visit 10	N	12	15	27
	Mean	79.1	79.4	79.2
	SD	24.8	13.1	18.7
	CV%	31.3	16.5	23.7
	Min	50	60	50
	Median	74.5	82.0	75.0
	Max	124	104	124

Table 14.3.5.1 Body weight summary - Safety population

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30
Visit 11	N	12	15	27
	Mean	77.8	78.8	78.3
	SD	24.2	13.3	18.5
	CV%	31.2	16.8	23.7
	Min	50	59	50
	Median	72.3	81.0	73.5
	Max	124	104	124
Visit 12	N	12	15	27
	Mean	78.0	79.8	79.0
	SD	23.9	13.0	18.3
	CV%	30.6	16.3	23.1
	Min	51	59	51
	Median	72.3	81.0	74.5
	Max	124	103	124
Visit 13	N	12	15	27
	Mean	77.8	80.0	79.0
	SD	24.1	13.5	18.6
	CV%	30.9	16.9	23.5
	Min	50	59	50
	Median	73.0	83.0	74.0
	Max	124	104	124
Visit 14 - Final	N	12	15	27
	Mean	78.0	79.4	78.8
	SD	23.0	13.6	18.0
	CV%	29.5	17.1	22.8
	Min	53	57	53
	Median	73.0	82.0	74.0
	Max	121	103	121

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.9.1](#) – Body weights (kg)

Program: Tables\c101-vs-tbl.sas

Table 14.3.5.2 Vital signs summary - Safety population

Systolic blood pressure (mmHg)

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30
Screening	N	13	16	29
	Mean	132.5	126.6	129.3
	SD	22.6	16.7	19.4
	CV%	17.0	13.2	15.0
	Min	105	100	100
	Median	128.0	120.0	125.0
	Max	177	155	177
Visit 2	N	14	16	30
	Mean	128.4	125.3	126.7
	SD	23.6	15.0	19.2
	CV%	18.4	12.0	15.2
	Min	103	102	102
	Median	118.5	120.0	120.0
	Max	175	155	175
Visit 3	N	13	15	28
	Mean	126.4	125.1	125.7
	SD	17.3	15.2	15.9
	CV%	13.7	12.2	12.7
	Min	105	101	101
	Median	124.0	124.0	124.0
	Max	163	150	163
Visit 4	N	12	15	27
	Mean	131.4	128.7	129.9
	SD	29.2	13.6	21.5
	CV%	22.2	10.6	16.5
	Min	93	107	93
	Median	128.5	130.0	130.0
	Max	200	150	200
Visit 5	N	12	15	27
	Mean	128.0	128.7	128.4
	SD	19.9	10.2	14.9
	CV%	15.5	7.9	11.6
	Min	94	114	94
	Median	129.0	129.0	129.0
	Max	167	149	167
Visit 6	N	12	15	27
	Mean	129.3	126.9	127.9
	SD	19.9	15.0	17.0
	CV%	15.4	11.8	13.3
	Min	103	97	97
	Median	124.5	125.0	125.0
	Max	172	160	172

Table 14.3.5.2 Vital signs summary - Safety population

Systolic blood pressure (mmHg)

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30
Visit 7	N	12	15	27
	Mean	124.0	124.6	124.3
	SD	17.1	10.8	13.6
	CV%	13.8	8.7	11.0
	Min	103	110	103
	Median	119.0	120.0	120.0
	Max	150	156	156
Visit 8	N	12	15	27
	Mean	131.5	124.8	127.8
	SD	24.8	8.8	17.7
	CV%	18.9	7.0	13.9
	Min	101	109	101
	Median	127.0	127.0	127.0
	Max	177	145	177
Visit 9	N	12	15	27
	Mean	127.3	125.5	126.3
	SD	21.6	16.0	18.3
	CV%	16.9	12.7	14.5
	Min	99	90	90
	Median	121.0	128.0	126.0
	Max	170	155	170
Visit 10	N	12	15	27
	Mean	128.4	123.9	125.9
	SD	24.9	13.5	19.1
	CV%	19.4	10.9	15.2
	Min	99	107	99
	Median	125.5	120.0	123.0
	Max	181	165	181
Visit 11	N	12	15	27
	Mean	130.1	127.4	128.6
	SD	26.3	15.7	20.7
	CV%	20.2	12.3	16.1
	Min	86	107	86
	Median	128.0	123.0	125.0
	Max	181	171	181
Visit 12	N	12	15	27
	Mean	126.3	124.8	125.5
	SD	20.4	13.0	16.3
	CV%	16.1	10.4	13.0
	Min	100	109	100
	Median	122.5	123.0	123.0
	Max	160	151	160

Table 14.3.5.2 Vital signs summary - Safety population

Systolic blood pressure (mmHg)

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30
Visit 13	N	12	15	27
	Mean	129.4	125.1	127.0
	SD	20.6	13.2	16.7
	CV%	15.9	10.6	13.1
	Min	96	108	96
	Median	130.5	120.0	123.0
	Max	160	150	160
Final	N	12	15	27
	Mean	129.4	131.9	130.8
	SD	20.0	16.0	17.6
	CV%	15.5	12.1	13.4
	Min	103	108	103
	Median	130.0	130.0	130.0
	Max	175	158	175

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.9.2](#) - Vital signs

Program: Tables\c101-vs-tbl.sas

Table 14.3.5.2, continued Vital signs summary - Safety population

Diastolic blood pressure (mmHg)

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30
Screening	N	13	16	29
	Mean	81.8	79.3	80.4
	SD	11.5	11.6	11.4
	CV%	14.1	14.7	14.2
	Min	65	50	50
	Median	82.0	80.0	80.0
	Max	100	100	100
Visit 2	N	14	16	30
	Mean	75.6	78.6	77.2
	SD	11.8	13.4	12.6
	CV%	15.6	17.1	16.3
	Min	53	57	53
	Median	77.5	80.0	80.0
	Max	100	110	110

Table 14.3.5.2, continued Vital signs summary - Safety population

Diastolic blood pressure (mmHg)

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30
Visit 3	N	13	15	28
	Mean	82.1	83.5	82.8
	SD	10.0	10.2	9.9
	CV%	12.2	12.2	12.0
	Min	68	65	65
	Median	80.0	83.0	81.0
	Max	100	100	100
Visit 4	N	12	15	27
	Mean	77.2	81.4	79.5
	SD	12.6	10.8	11.6
	CV%	16.3	13.3	14.6
	Min	61	69	61
	Median	75.0	75.0	75.0
	Max	110	100	110
Visit 5	N	12	15	27
	Mean	78.3	81.6	80.1
	SD	14.3	9.3	11.6
	CV%	18.2	11.4	14.5
	Min	60	70	60
	Median	77.5	79.0	79.0
	Max	104	100	104
Visit 6	N	12	15	27
	Mean	79.8	75.4	77.4
	SD	9.7	12.0	11.1
	CV%	12.2	15.9	14.3
	Min	61	53	53
	Median	80.0	76.0	78.0
	Max	93	93	93
Visit 7	N	12	15	27
	Mean	77.7	80.6	79.3
	SD	13.0	7.6	10.3
	CV%	16.8	9.4	12.9
	Min	60	70	60
	Median	77.5	80.0	80.0
	Max	109	93	109
Visit 8	N	12	15	27
	Mean	80.7	80.8	80.7
	SD	10.8	7.7	9.0
	CV%	13.4	9.5	11.2
	Min	69	68	68
	Median	77.5	81.0	80.0
	Max	102	90	102

Table 14.3.5.2, continued Vital signs summary - Safety population

Diastolic blood pressure (mmHg)

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30
Visit 9	N	12	15	27
	Mean	78.7	81.3	80.1
	SD	9.5	9.4	9.4
	CV%	12.1	11.6	11.7
	Min	60	60	60
	Median	77.5	81.0	80.0
	Max	99	100	100
Visit 10	N	12	15	27
	Mean	80.3	80.3	80.3
	SD	14.2	8.2	11.0
	CV%	17.7	10.3	13.8
	Min	65	68	65
	Median	74.0	80.0	80.0
	Max	106	99	106
Visit 11	N	12	15	27
	Mean	79.5	77.8	78.6
	SD	11.1	10.1	10.4
	CV%	14.0	13.0	13.2
	Min	54	57	54
	Median	80.0	78.0	80.0
	Max	91	95	95
Visit 12	N	12	15	27
	Mean	82.6	81.1	81.8
	SD	10.4	10.4	10.2
	CV%	12.6	12.8	12.5
	Min	65	59	59
	Median	82.5	80.0	80.0
	Max	101	102	102
Visit 13	N	12	15	27
	Mean	80.4	84.1	82.4
	SD	10.4	11.4	10.9
	CV%	12.9	13.5	13.2
	Min	64	63	63
	Median	84.5	80.0	83.0
	Max	92	110	110
Final	N	12	15	27
	Mean	79.3	81.3	80.4
	SD	11.5	11.8	11.5
	CV%	14.5	14.5	14.3
	Min	65	64	64
	Median	76.5	80.0	80.0
	Max	100	100	100

Table 14.3.5.2, continued Vital signs summary - Safety population

Diastolic blood pressure (mmHg)

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.9.2](#) - Vital signs

Program: Tables\c101-vs-tbl.sas

Table 14.3.5.2, continued Vital signs summary - Safety population

Heart rate (beats/min)

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30

Screening	N	13	16	29
	Mean	78.7	76.4	77.4
	SD	10.9	10.6	10.6
	CV%	13.9	13.9	13.7
	Min	62	57	57
	Median	80.0	77.5	80.0
	Max	96	97	97
Visit 2	N	14	16	30
	Mean	81.3	77.1	79.0
	SD	9.9	10.2	10.1
	CV%	12.1	13.3	12.8
	Min	68	60	60
	Median	80.0	75.5	80.0
	Max	103	100	103
Visit 3	N	13	15	28
	Mean	85.2	84.6	84.9
	SD	10.3	9.8	9.8
	CV%	12.1	11.5	11.6
	Min	70	65	65
	Median	84.0	82.0	83.0
	Max	109	100	109
Visit 4	N	12	15	27
	Mean	82.9	84.4	83.7
	SD	11.7	9.7	10.5
	CV%	14.1	11.5	12.5
	Min	66	69	66
	Median	82.5	83.0	83.0
	Max	105	104	105

Table 14.3.5.2, continued Vital signs summary - Safety population

Heart rate (beats/min)

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30
Visit 5	N	12	15	27
	Mean	85.1	87.7	86.5
	SD	13.3	10.2	11.5
	CV%	15.7	11.6	13.3
	Min	60	72	60
	Median	82.0	88.0	86.0
	Max	103	106	106
Visit 6	N	12	15	27
	Mean	85.7	84.9	85.3
	SD	13.5	13.7	13.3
	CV%	15.7	16.1	15.6
	Min	63	62	62
	Median	85.0	80.0	81.0
	Max	109	107	109
Visit 7	N	12	15	27
	Mean	79.6	88.8	84.7
	SD	13.3	9.7	12.1
	CV%	16.7	10.9	14.3
	Min	42	67	42
	Median	80.5	90.0	86.0
	Max	94	100	100
Visit 8	N	12	15	27
	Mean	86.5	92.1	89.6
	SD	8.4	14.7	12.4
	CV%	9.7	16.0	13.9
	Min	73	64	64
	Median	88.5	93.0	91.0
	Max	97	115	115
Visit 9	N	12	15	27
	Mean	84.2	89.2	87.0
	SD	8.2	12.4	10.8
	CV%	9.7	13.9	12.4
	Min	70	69	69
	Median	85.5	93.0	88.0
	Max	98	107	107
Visit 10	N	12	15	27
	Mean	87.5	88.1	87.8
	SD	11.8	13.0	12.2
	CV%	13.5	14.7	13.9
	Min	70	66	66
	Median	86.0	92.0	92.0
	Max	108	108	108

Table 14.3.5.2, continued Vital signs summary - Safety population

Heart rate (beats/min)

Time-point	Statistics	Safety population		
		T N=14	R N=16	Overall N=30
Visit 11	N	12	15	27
	Mean	87.8	85.7	86.6
	SD	12.1	13.1	12.5
	CV%	13.8	15.2	14.4
	Min	68	67	67
	Median	89.0	85.0	86.0
	Max	106	115	115
Visit 12	N	12	15	27
	Mean	91.2	89.0	90.0
	SD	13.0	15.2	14.1
	CV%	14.3	17.1	15.6
	Min	70	68	68
	Median	90.0	85.0	85.0
	Max	113	122	122
Visit 13	N	12	15	27
	Mean	92.9	87.1	89.7
	SD	10.8	13.8	12.7
	CV%	11.6	15.8	14.1
	Min	80	61	61
	Median	90.0	89.0	90.0
	Max	110	112	112
Final	N	12	15	27
	Mean	88.1	84.6	86.1
	SD	16.9	10.7	13.6
	CV%	19.2	12.7	15.8
	Min	63	64	63
	Median	80.5	86.0	85.0
	Max	121	102	121

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: Listing 16.2.9.2 - Vital signs

Program: Tables\c101-vs-tbl.sas

Table 14.3.5.3 Overall ECG interpretations summary - Safety population

Time-point Clinical interpretation	T N=14 n (%)	Safety population R N=16 n (%)	Overall N=30 n (%)
Screening	13 (92.9)	16 (100.0)	29 (96.7)
CR	0 (0.0)	0 (0.0)	0 (0.0)
N	13 (92.9)	16 (100.0)	29 (96.7)
NCR	0 (0.0)	0 (0.0)	0 (0.0)
Visit 2	14 (100.0)	16 (100.0)	30 (100.0)
CR	0 (0.0)	0 (0.0)	0 (0.0)
N	14 (100.0)	16 (100.0)	30 (100.0)
NCR	0 (0.0)	0 (0.0)	0 (0.0)
Visit 6	12 (85.7)	15 (93.8)	27 (90.0)
CR	0 (0.0)	0 (0.0)	0 (0.0)
N	12 (85.7)	15 (93.8)	27 (90.0)
NCR	0 (0.0)	0 (0.0)	0 (0.0)
Visit 10	12 (85.7)	15 (93.8)	27 (90.0)
CR	0 (0.0)	0 (0.0)	0 (0.0)
N	12 (85.7)	15 (93.8)	27 (90.0)
NCR	0 (0.0)	0 (0.0)	0 (0.0)
Final	12 (85.7)	15 (93.8)	27 (90.0)
CR	0 (0.0)	0 (0.0)	0 (0.0)
N	12 (85.7)	15 (93.8)	27 (90.0)
NCR	0 (0.0)	0 (0.0)	0 (0.0)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: N=Normal, NCR=Abnormal not clinically relevant, CR=Abnormal clinically relevant

Source: [Listing 16.2.9.3](#) – ECGs clinical interpretation

Program: Tables\c101-eg-tbl.sas

Table 14.3.5.4 ECG parameters – Safety population

Heart Rate

Time-point	Statistic	Safety population		
		T N=14	R N=16	Overall N=30
Screening	N	13	16	29
	Mean	81.2	77.0	78.9
	SD	13.3	13.1	13.1
	CV%	16.4	17.0	16.7
	Min	65	55	55
	Median	80.0	80.0	80.0
	Max	110	105	110
Visit 2	N	14	16	30
	Mean	80.9	78.0	79.4
	SD	12.7	12.2	12.3
	CV%	15.7	15.7	15.5
	Min	64	55	55
	Median	79.5	80.0	80.0
	Max	110	98	110
Visit 6	N	12	15	27
	Mean	86.8	85.5	86.1
	SD	9.8	12.1	10.9
	CV%	11.2	14.1	12.7
	Min	68	60	60
	Median	90.0	80.0	88.0
	Max	100	107	107
Visit 10	N	12	15	27
	Mean	90.5	91.6	91.1
	SD	11.2	9.4	10.0
	CV%	12.4	10.2	11.0
	Min	70	78	70
	Median	94.0	98.0	98.0
	Max	100	100	100
Final	N	12	15	27
	Mean	85.8	89.9	88.1
	SD	12.6	8.8	10.6
	CV%	14.7	9.7	12.0
	Min	60	70	60
	Median	82.5	90.0	90.0
	Max	100	100	100

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.9.4](#) ECG parameters

Program: Tables\c101-eg-tbl.sas

Table 14.3.5.4, continued ECG parameters – Safety population

PQ Interval

Time-point	Statistic	Safety population		
		T N=14	R N=16	Overall N=30
Screening	N	13	16	29
	Mean	244.6	180.0	209.0
	SD	94.9	30.1	73.6
	CV%	38.8	16.7	35.2
	Min	160	100	100
	Median	200.0	190.0	200.0
	Max	400	200	400
Visit 2	N	14	16	30
	Mean	242.1	196.9	218.0
	SD	107.3	61.9	87.6
	CV%	44.3	31.5	40.2
	Min	140	100	100
	Median	200.0	200.0	200.0
	Max	500	400	500
Visit 6	N	12	15	27
	Mean	243.3	201.5	220.1
	SD	104.0	45.5	78.4
	CV%	42.8	22.6	35.6
	Min	180	120	120
	Median	200.0	200.0	200.0
	Max	500	303	500
Visit 10	N	12	15	27
	Mean	236.7	216.6	225.5
	SD	82.6	58.0	69.3
	CV%	34.9	26.8	30.7
	Min	180	180	180
	Median	200.0	200.0	200.0
	Max	400	400	400
Final	N	12	15	27
	Mean	228.3	217.7	222.4
	SD	68.5	77.7	72.6
	CV%	30.0	35.7	32.6
	Min	180	120	120
	Median	200.0	200.0	200.0
	Max	400	404	404

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.9.4](#) ECG parameters

Program: Tables\c101-eg-tbl.sas

Table 14.3.5.4, continued ECG parameters – Safety population

QRS Interval

Time-point	Statistic	Safety population		
		T N=14	R N=16	Overall N=30
Screening	N	13	16	29
	Mean	251.5	173.8	208.6
	SD	112.5	60.1	94.4
	CV%	44.7	34.6	45.3
	Min	80	80	80
	Median	190.0	180.0	180.0
	Max	400	360	400
Visit 2	N	14	16	30
	Mean	221.4	160.0	188.7
	SD	100.9	35.0	78.6
	CV%	45.6	21.9	41.6
	Min	80	80	80
	Median	180.0	180.0	180.0
	Max	400	200	400
Visit 6	N	12	15	27
	Mean	238.3	202.9	218.6
	SD	82.4	83.0	83.1
	CV%	34.6	40.9	38.0
	Min	180	120	120
	Median	190.0	180.0	180.0
	Max	400	400	400
Visit 10	N	12	15	27
	Mean	255.8	218.7	235.2
	SD	92.8	97.2	95.3
	CV%	36.3	44.5	40.5
	Min	180	120	120
	Median	195.0	180.0	180.0
	Max	400	400	400
Final	N	12	15	27
	Mean	230.0	194.7	210.4
	SD	97.0	68.2	82.5
	CV%	42.2	35.0	39.2
	Min	120	120	120
	Median	180.0	180.0	180.0
	Max	400	400	400

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.9.4](#) ECG parameters

Program: Tables\c101-eg-tbl.sas

Table 14.3.5.4, continued ECG parameters – Safety population

QT Interval

Time-point	Statistic	Safety population		
		T N=14	R N=16	Overall N=30
Screening	N	13	16	29
	Mean	293.8	366.9	334.1
	SD	109.7	38.1	85.5
	CV%	37.4	10.4	25.6
	Min	100	300	100
	Median	360.0	360.0	360.0
	Max	400	430	430
Visit 2	N	14	16	30
	Mean	322.8	338.1	331.0
	SD	93.9	39.4	69.4
	CV%	29.1	11.6	21.0
	Min	109	260	109
	Median	360.0	335.0	360.0
	Max	400	400	400
Visit 6	N	12	15	27
	Mean	319.9	372.0	348.9
	SD	102.8	71.6	89.0
	CV%	32.1	19.3	25.5
	Min	109	300	109
	Median	360.0	360.0	360.0
	Max	400	600	600
Visit 10	N	12	15	27
	Mean	323.5	398.7	365.3
	SD	102.9	141.3	129.1
	CV%	31.8	35.4	35.4
	Min	110	300	110
	Median	360.0	360.0	360.0
	Max	400	900	900
Final	N	12	15	27
	Mean	324.8	360.7	344.7
	SD	105.0	30.3	74.1
	CV%	32.3	8.4	21.5
	Min	108	300	108
	Median	360.0	360.0	360.0
	Max	400	410	410

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: Listing 16.2.9.4 ECG parameters

Program: Tables\c101-eg-tbl.sas

Table 14.3.5.5 Abdominal echography interpretations summary - Safety population

Time point Clinical interpretation	T N=14 n (%)	Safety population R N=16 n (%)	Overall N=30 n (%)
Screening	13 (92.9)	16 (100.0)	29 (96.7)
NCR	1 (7.1)	1 (6.3)	2 (6.7)
N	11 (78.6)	15 (93.8)	26 (86.7)
CR	1 (7.1)	0 (0.0)	1 (3.3)
Visit 14 - Final	11 (78.6)	14 (87.5)	25 (83.3)
NCR	0 (0.0)	1 (6.3)	1 (3.3)
N	10 (71.4)	12 (75.0)	22 (73.3)
CR	1 (7.1)	1 (6.3)	2 (6.7)

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Note: N=Normal, NCR=Abnormal not clinically relevant, CR=Abnormal clinically relevant;

Source: [Listing 16.2.10.7](#) – Abdominal echography by FibroScan®

Program: Tables\c101-xt-tbl.sas

Table 14.3.5.6 Abdominal echography by Fibroscan® (kPa) - Safety population

Visit Name	Statistics	T	Safety population R	Overall
Screening	N	13	15	28
	Mean	11.22	8.57	9.80
	SD	6.88	4.25	5.68
	CV%	61.38	49.61	57.94
	Min	4.4	5.1	4.4
	Median	10.40	7.30	7.85
	Max	29.9	20.9	29.9
Visit 14 - Final	N	11	14	25
	Mean	8.62	8.98	8.82
	SD	4.64	6.36	5.56
	CV%	53.83	70.82	63.03
	Min	4.0	4.6	4.0
	Median	7.60	6.35	6.40
	Max	20.3	27.0	27.0

T: Ammonium chloride 500 mg tablets

R: Ammonium chloride matching placebo tablets

Source: [Listing 16.2.10.7](#) – Abdominal echography by Fibroscan®

Program: Tables\c101-xt-tbl.sas

Table 14.3.5.7 Extent of exposure to Ammonium chloride - Safety population

Statistics	T Total exposure per body weight (g/kg)
N	14
Mean	1.31
SD	0.60
CV%	45.94
Min	0.14
Median	1.40
Max	2.15

Ammonium chloride dose regimen: 3 g/day of ammonium chloride (as 500 mg tablets)

for 3 days/week followed by 4 days of wash-out, for a total duration of 12 weeks

Each visit weight is considered to calculate the extent of exposure to Ammonium chloride

T: Ammonium chloride 500 mg tablets

Source: [Listing 16.2.5.1](#) - IMP dispensation and accountability

Program: Tables\c101-da-tbl.sas

15 REFERENCE LIST

1. Jensen DM, Morgan TR, Marcellin P *et al.* Early identification of HCV genotype 1 patients responding to 24 weeks peginterferon α -2a (40 KD)/ribavirin therapy. *Hepatology* 2006; 43 (5): 954-960
2. Kaiser S, Lutze B, Hass HG *et al.* High sustained virologic response rate in HCV genotype 1 relapser patients retreated with peginterferon alfa-2a (40 KD) plus ribavirin for 72 weeks. Abstract 1860, *The 59th Annual Meeting of the American Association for the Study of Liver Diseases*, San Francisco, Oct 31- Nov 4, 2008
3. Ammonium Chloride Investigator's Brochure, Ed Nr. 3, 15th December 2009, PHF S.A., Switzerland
4. Martin WJ and GR Matzke. Treating Severe Metabolic Alkalosis. *Clin Pharm* 1982; 1(1):42-8
5. Megarbane B, Bruneel F, Bedos JP, *et al.* Ammonium Chloride Poisoning: A Misunderstood Cause of Metabolic Acidosis With Normal Anion Gap. *Intensive Care Med* 2000; 26(12):1869
6. Jung K, Hirschberg K, Faust H and R Matkowitz. A liver-function test using ¹⁵N-labelled ammonium chloride. *European J. of Nucl. Med. and Mol. Imag.* 1985 August; 11 (2-3)
7. BASF A.G. Report on the study of the acute oral toxicity, 83/44, rat/oral, 1983
8. Takasaki Y. *et al.* *Iyakuhin Kenkyu* 1990; 21 (2): 257-264
9. Arnold LL, Christenson WR, Cano M *et al.* *Fundam Appl Toxicol* 1997; 40 :247-255
10. Rusca A. Study report CRO-PK-09-218. Safety and tolerability of ammonium chloride (NH₄Cl) tablets administered at the dose of 1.5 g bid to healthy volunteers 3 consecutive days a week for 2 weeks. Cross Research S.A., Switzerland, 2009
11. Wall I and HG Tiselius. Long-term acidification of urine in patients treated for infected renal stones. *Urol Int.* 1990; 45(6):336-41
12. US Department of Health and Human services, <http://www.remm.nlm.gov/ammoniumchloride.htm> accessed on 03APR13
13. Electronic Code of Federal Regulations (e-CFR), title 21 – Food and Drugs, Part 165 – Beverages, Subpart B – Requirements for specific standardized beverages, Data as of April 1st, 2013
14. Kiassos D, Papadopoulos S, Chatzigiannakis E, Agapitos E and S Theocharis. Eversion of fulminant hepatic necrosis and encephalopathy with ammonium chloride (NH₄Cl) in winstar rats. *Hellenic Journal of Surgery* 2010;82(2):125-129
15. Zimmermann C, Ferenci P, Pifl P *et al.* Hepatic encephalopathy in thioacetamide-induced acute liver failure in rats: characterization of an improved model and study of amino acid-ergic neurotransmission. *Hepatology* 1989;9(4):594-601
16. Larsen FS, Knudsen GM, Paulson OB and H Vilstrup. Cerebral blood flow autoregulation is absent in rats with thioacetamide-induced hepatic failure. *Journal of hepatology* 1994; 21(4):491-5
17. Nelson D and J Lau J. Pathogenesis of hepatocellular damage in chronic hepatitis C virus infection. *Clin Liver Dis* 1997;1(3):515-528
18. Guideline on the clinical evaluation of direct acting antiviral agents intended for treatment of chronic hepatitis C. The European Agency for the Evaluation of Medicinal Products (EMA), guideline CPMP/EWP/30039/2008, London, 23 April 2009
19. Felver ME, Mezey E, McGuire M, *et al.* Plasma Tumor Necrosis Factor predicts decreased long-term survival in severe alcoholic Hepatitis. *Alcohol Clin Exp Res* 1990; 14:225-259
20. Hsu M, Zhang J, Flint M, Logvinoff C, Cheng-Mayer C, Rice CM and JA Mc Keating. Hepatitis C virus glycoproteins mediate pH-dependent cell entry of pseudotyped retroviral particles. *The Scripps Research Institute*, La Jolla, CA, April 14, 2003

21. Reichard O, Norkrans G, Frydén A, Braconier JH, Sönnnerborg A and O Weiland. Randomised, double-blind, placebo-controlled trial of interferon alpha-2b with and without ribavirin for chronic hepatitis C. The Swedish Study Group. *Lancet* 1998;351(9096):83-7
22. Poynard T, Marcellin P, Lee SS, Niederau C, Minuk GS, Ideo G, Bain V, Heathcote J, Zeuzem S, Trepo C and J Albrecht. Randomised trial of interferon alpha2b plus ribavirin for 48 weeks or for 24 weeks versus interferon alpha2b plus placebo for 48 weeks for treatment of chronic infection with hepatitis C virus. International Hepatitis Interventional Therapy Group (IHIT). *Lancet* 1998 Oct 31;352(9138):1426-32
23. McHutchison JG, Gordon SC, Schiff ER, Shiffman ML, Lee WM, Rustgi VK, Goodman ZD, Ling MH, Cort S, Albrecht JK. Interferon alfa-2b alone or in combination with ribavirin as initial treatment for chronic hepatitis C. Hepatitis Interventional Therapy Group. *N Engl J Med* 1998 Nov 19;339(21):1485-92
24. US department of health and human services, national institute of health, conference consensus statement. Management of hepatitis C. June 10-12, 2002
25. Loeza-del-Castillo A, Paz-Pineda F, Oviedo-Cárdenas E *et al.* AST to platelet ratio index (APRI) for the noninvasive evaluation of liver fibrosis. *Annals of Hepatology* 2008; 7(4): October-December: 350-357
26. Ahmad Khan D, Tuz Zuhra F, Ahmad Khan F *et al.* Evaluation of diagnostic accuracy of APRI for prediction of fibrosis in hepatitis C patients. *J Ayub Med Coll Abbottabad* 2008;20(4)
27. Saito H, Tada S, Nakamoto N *et al.* Efficacy of non-invasive elastomery on staging of hepatic fibrosis. *Hepatology Research* 29 (2004) 97–103
28. ICH harmonised tripartite guideline. Non-clinical safety studies for the conduct of human clinical trials for pharmaceuticals M3(R1), recommended for adoption at step 4 of the ICH process on 16 July 1997 and amended on 9 November 2000 by the ICH steering committee
29. Wai CT, Greenson JK, Fontana RJ *et al.* A simple noninvasive index can predict both significant fibrosis and cirrhosis in patients with chronic hepatitis C. *Hepatology* 2003; 38(2): 518-526
30. SAS/STAT® User's Guide, Version 9.1.3 Service Pack 4 for Windows
31. Sporea I, Şirli R, Deleanu R, Popescu A and M Cornianu. Liver Stiffness Measurement by Transient Elastography in Clinical Practice. *J Gastrointestin Liver Dis* 2008;17(4):395-399