

Report of Sub-Chronic Safety Evaluation of Oryzanol in Sprague Dawley Rats

Study No: 02/17

Volume – III

Sponsor



A. P. ORGANICS PVT. Ltd.
Dist. Sangrur,
Dhuri, Punjab, India - 148024.
PH: 01675-220700, 221100.

Study Center



Centre for Advanced Research for Pre-Clinical Toxicology
ICMR - National Institute of Nutrition
Hyderabad – 500 007, T.S., India
Phone No: +91 (40) 27197322, Fax No: +91 (40) 2701 9074
2018

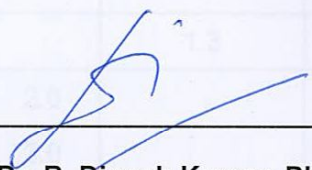
STUDY JUSTIFICATION

Cardiovascular diseases (CVDs) have now become the leading cause of mortality in India. A quarter of all mortality is attributable to CVD. Ischemic heart disease and stroke are the predominant causes and are responsible for >80% of CVD deaths. Hyperlipidemia has been ranked as one of the greatest risk factors contributing to the prevalence and severity of coronary heart diseases. To deal with such high levels, novel alternative use natural plant seeds to minimize toxic side effects in place of existing pharmaceutical agents to improve serum cholesterol levels and thus reduce the risks of atherosclerosis and heart disease.

Rice is widely consumed globally, and rice bran (RB), a coproduct of milled rice, and its oil may have cardiovascular health benefits. Recently, RB has attracted much attention because of its comprehensive nutritional and functional properties. Oryzanol is a class of nonsaponifiable lipids of rice bran oil (RBO). More specifically, oryzanol is a group of ferulic acid esters of triterpene alcohol and plant sterols. This compound is associated with decreasing plasma cholesterol, lowering serum cholesterol, decreasing platelet aggregation. Oryzanol has been attributed to the similar structures of plant sterols and γ -oryzanol to that of cholesterol suggesting that the similarity might be responsible for the hypocholesterolemic effects of RBO. These components might compete with the binding sites of cholesterol and inhibit cholesterol absorption in the intestine, causing a decrease in the cholesterol LDL and triglyceride levels.

M/s A.P. Organics Pvt. Ltd has developed Oryzanol with an intention to promote as a cholesterol lowering agent. So it becomes mandatory to undertake its efficacy and safety evaluation as per the guidelines of FSSAI and Schedule Y of DCGI.

SIGNATURE PAGE


Dr. B. Dinesh Kumar, PhD, FNAMS, FAPASc, FIPS
Deputy Director (Sr. Grade) &
Study Director
Coordinator - PCT
National Institute of Nutrition

Date

18.12.2018


Dr. Hemalatha R, M.D; FNAMS, FIUNS
Director
ICMR-National Institute of Nutrition

Date

18.12.2018

निदेशक / DIRECTOR
राष्ट्रीय पोषण संस्थान
NATIONAL INSTITUTE OF NUTRITION
भारतीय आयुर्विज्ञान अनुसंधान परिषद
Indian Council of Medical Research
जामे उस्मानिया पोस्ट, हैदराबाद-500007.
Jamai Osmania P.O., Hyderabad-500007.

Sponsor:

Dr. Varun Goyal.
Head R&D
A.P. Organics Limited

Date

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1.1 QUALITY ASSURANCE STATEMENT

As the Quality Assurance Officer (QAO) for the Study no. **02/17** entitled “**Sub-Chronic safety evaluation of Oryzanol**” and in accordance with the principles of good laboratory practices (GLP), I visited various departments/divisions involved in the study, and inspected the testing facilities and conduct of the investigations as per Standard Operating Procedures (SOPs), at different points of time during the study.

The Institutional Animal Ethics Committee (IAEC) approved to conduct the study (Appendix – III). The report outlines the methods and procedures followed by the investigators during the study. The results and inference were given on the basis of the raw data generated during the study.

During the audit of the records of various study investigations, I found that there were no major deviations from the internal time schedule submitted by the investigators of the Pre–Clinical Toxicology Unit, FDTRC, NIN to the best of my knowledge and belief, which would affect the integrity of the study except for minor amendment.

I visited the laboratories on the following dates, audited the records and the findings were reported to the management.

Audit Date	Phase audited	Date reported to Study Director	Date Reported to Management
09.03.2017	Receipt of Test compound	09.03.2017	09.03.2017
09.10.2017	Date of Receipt of animals	09.10.2017	10.04.2017
09.10.2017 to 15.10.2017	Acclimatization of animals	09.10.2017 to 15.10.2017	09.10.2017
16.10.2017	Randomization	16.10.2017	16.10.2017
16.10.2017	Urine Analysis (Pre- exposure)	16.10.2017	16.10.2017
18.10.2017 to 15.01.2018	Test material administration	18.10.2017 to 15.01.2018	18.10.2017

1.1 QUALITY ASSURANCE STATEMENT (Contd...)

Audit Date	Phase audited	Date reported to Study Director	Date Reported to Management
16.01.2018	Post-Urine analysis	16.01.2018	16.01.2018
17.01.2018	Euthanization	17.01.2018	17.01.2018
17.01.2018	Handing over Tissue samples to Pathology	17.01.2018	17.01.2018
18.01.2018 to 22.01.2018	Collecting Document and raw data from files	18.01.2018 to 22.01.2018	22.01.2018
18.01.2018	Submission of Form D to NCLAS	18.01.2018	18.01.2018



Mrs. B. R. Annapurna (Q.A.O)

18.12.2018

Date

1.2 GLP COMPLIANCE STATEMENT

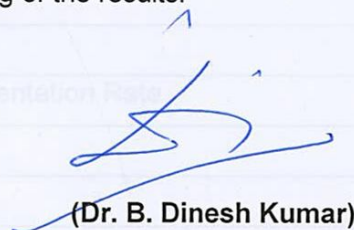
The Study (No. 02/17) was performed at Centre for advanced studies in Pre clinical toxicology centre (PCT), National Institute of Nutrition (NIN), Hyderabad a public sector institute established by Indian Council of Medical Research (ICMR), Government of India. . The study was conducted in accordance with the Principles of Good Laboratory Practices (GLP).

DECLARATION

We hereby declare that the work was performed under our supervision in accordance with the described procedures. It is assured that the reported results faithfully represent the raw data obtained during the experimental work. No circumstances have been left unreported which may have affected the quality and integrity of the data or which might have had a potential bearing on the validity and reproducibility of this study.

We accept overall responsibility for the technical conduct of the study as well as the interpretation, analysis, documentation and reporting of the results.

Date: 18.12.2018



(Dr. B. Dinesh Kumar)

Study Director & Coordinator PCT, NIN

डॉ.बी.दिनेश कुमार
Dr. B. DINESH KUMAR
वैज्ञानिक 'एफ' (उ.नि.) उप संचालक
Scientist 'F' (Dy. Director) Sr. Gr.,
खाद्य एवं औषध विषयिज्ञान अनुसंधान केन्द्र
Food & Drug Toxicology Research Centre
राष्ट्रीय पोषण संस्थान (भा.आ.अ.प.)
NATIONAL INSTITUTE OF NUTRITION
भारतीय आयुर्विज्ञान अनुसंधान परिषद
INDIAN COUNCIL OF MEDICAL RESEARCH
जामे उस्मानिया पार्क, हैदराबाद-500 007.
Jamal Osmania P.O. Hyderabad-500 007.

1.3 ABBREVIATIONS

Abbreviation	Details
ALB	Albumin
ALP	Alkaline Phosphatase
ALT	Alanine Aminotransferase
ANOVA	Analysis of Variance
AST	Aspartate Aminotransferase
BUN	Blood Urea Nitrogen
B.Wt.	Body Weight
BIL	Bilirubin
Ca	Calcium
CHOL	Cholesterol
CPCSEA	Committee for the Purpose of Control and Supervision of Experiments on Animals
CREA	Creatinine
DCGI	Drug Controller General of India
EDTA	Ethylene Diamine Tetra Acetic Acid
C	Control
Eo	Eosinophils
ESR	Erythrocyte Sedimentation Rate
F	Female
gm	Gram
GLU	Glucose
H	Hour
Hb/HGB	Hemoglobin
HCT	Hematocrit
HDL	High Density Lipoprotein
IAEC	Institutional Animals Ethics Committee
ID	Intended Dose
LED	Light Emitting Diode
Kg	Kilogram
LFT	Liver Function Tests
LP	Lipid Profile
LSD	Least Significant Difference
Lymp	Lymphocyte
M	Male
MCH	Mean Corpuscular Hemoglobin

1.3 ABBREVIATIONS (Contd...)

Abbreviation	Details
MCHC	Mean Corpuscular Hemoglobin Concentration
MCV	Mean Corpuscular Volume
MDI	Maximum daily intake
Mo	Monocytes
mg	Milligram
NIN	National Institute of Nutrition
No	Number
NOAEL	No Observed Adverse Effect Level
NP	Neutrophils
NT	Non–transgenic
PBS	Phosphate Buffered Saline
PLT	Platelet count
RBC	Red Blood Cell
RDI	Recommended Dietary Intake
RFT	Renal Function Tests
SC	Sub Cutaneous
SD	Standard Deviation
SD Rats	Sprague Dawley Rats
SOP	Standard Operating Procedure
SE	Standard Error
SPSS	Statistical Package for Social Sciences
TBILI	Total Bilirubin
TM	Test compound
TP	Total protein
TRI	Triglycerides
WBC	White Blood Cell
WHO	World Health Organization
X	Times

2.0 SUMMARY

- 2.1 Title** : Sub-Chronic toxicity evaluation of Oryzanol
- 2.2 Study Number** : 02/17
- 2.3 Objective** : To assess the Sub Chronic safety of Oryzanol in SD Rats through oral gavage administration daily for 90 days as a single dose.
- 2.4 Sponsor** : A. P. Organics PVT. LTD.
Dist. Sangrur, Dhuri, Punjab, India -148024.
PH: 01675-220700, 221100,225862
- 2.5 Study center** : Centre for Advanced Research in Pre-Clinical Toxicology, Drug Toxicology Research Centre
ICMR - National Institute Of Nutrition
Hyderabad 500 007, India.
Tel.No. +91(40) 27197322
Fax: +91(40) 2701 9074
Email: nindineshpct@gmail.com
- 2.6 Test material details**
- 2.6.1 Name of Formulation** : Oryzanol (85-95%) from rice bran oil
- 2.6.2 Appearance** : Creamish yellow colour powder
- 2.6.3 Intended use** : Anti - Hyper cholesterolemic activity
- 2.6.4 Intended Human dose** : 300 mg/adult
- 2.6.5 Route of Administration** : Oral through gavage
- 2.7 Test System details**
- 2.7.1 Test species** : Sprague Dawley Rats
- 2.7.2 Age & weight** : 6 - 8 weeks & 150-180gm

2.8 Methodology:

The study has been conducted in 40 Sprague Dawley Rats (20M+20F), approximately 6 - 8 weeks old, weighing (150-180gm), which were obtained from NCLAS, NIN, Hyderabad after approval of IAEC (NCLAS /II-IAEC /2016 /BDK / R16F).The animals have been exposed with test material through oral gavage daily once for 90 days.

2.8.1 Experimental phase:

The rats with normal health report have been conditioned for 7 days in the experimental room. The conditioned rats were randomly divided into four groups viz., **i.** Vehicle Control **ii.** 1X, **iii.** 2X and **iv.** 5X. As a part of routine examination all animals were subjected to qualitative urine analysis. This was followed by administration of test material in various concentrations (1X-5.4 mg/1ml, 2X-10.8 mg/1ml and 5X-27 mg/1ml) by oral gavage daily once for 90 days to respective groups as per SOP (Appendix – VII).

2.8.2. Test material preparation and administration

2.8.2.1 Test material preparation:

The powdered test materials were supplied by sponsor. This was further dissolved in 0.5% CMC (Carboxy Methyl Cellulose). The prepared test material was fed (1 ml/ Rat) daily for 90 days in various concentrations to the respective group of animals.

2.8.2.2 Test material administration:

2.8.2.2.1 Vehicle Control Group:

1 ml of 0.5% CMC (Carboxy Methyl Cellulose) was given followed by 15-20 g standard NIN pellet diet to each rat for 90 days.

2.8.2.2.2 Test Material Groups:

Prepared Test material was administered to various groups with various concentrations followed by 15-20gm of regular pellet diet (standard NIN pellet) to each rat daily for 90 days.

2.8.3 Study Parameters:

The animals were observed daily for mortality and physical activity. Live phase, cage side, physiological, neurological observations were monitored bi-weekly in all animals till the end of the experiment. The feed intake was quantified and recorded biweekly. Body weights were recorded biweekly. The urine analysis (qualitatively) was monitored pre and post exposure to the test material followed by collection of blood samples on 92nd day of study to evaluate clinical chemistry, hematology and serum total IgM, IgA and IgE profile and all animals were euthanized to conduct gross necropsy and histopathological observations of all vital organs.

2.9 Data retention:

The raw data, observation books, specimens, slides etc and details will be kept confidential at the archiving room for 5 years after release of final report. The excess test material provided by the sponsor will be stored under appropriate conditions till the expiry date.

2.10 Statistics:

Data was compiled and analyzed for homogeneity of variance, if distribution was normal one way ANOVA was performed otherwise non parametric statistics like Mann-Whitney test and Kruskal-Wallis test were applied to examine for any statistical differences.

2.11 RESULTS:

- No pre-terminal deaths were recorded in any group of animals throughout the study period.
- No significant treatment related effect on body weight gain; clinical signs, behavioral activity etc were observed in all animals.
- Clinical chemistry parameters were in normal range. The HDL (Good Cholesterol) levels are more in Oryzanol exposed groups than the vehicle control group.
- Hematological parameters were within normal range.
- There were no allergenicity symptoms recorded.
- The mean IgE, IgM and IgA levels of all the animals were comparable.
- There were no significant changes in organ weights.
- There were no gross necropsy observations.
- Changes of histological significance were observed only in the lungs, livers and kidneys of animals.

2.12 CONCLUSION:

There was no mortality in any group of animals which received Oryzanol powder at three dosage levels for 90 consecutive days. There was no significant difference in body weights, feed intake, and cage side activities. The clinical chemistry and hematology profile was in normal range. Serum total IgE, IgM and IgA levels were not altered in animals and were comparable with control. There were no allergenicity symptoms in the animals. Changes of histological significance were observed in the lungs, liver and kidneys of both VC and experimental animals. As these changes were observed in the vehicle control group also, it may not be possible to attribute the changes in the experimental group which received test compound.

11.0 STUDY IMPRESSION:

The feeding of Oryzanol in the maximum concentration (5x-135 mg/Kg rat /day) did not induce any abnormalities under experimental condition.

3. STUDY PERSONNEL

- 3.1 Director
Dr. Hemalatha R, M.D; FNAMS, FIUNS
ICMR - NIN.

- 3.2 Scientific personnel

- 3.2.1 Dr. B. Dinesh Kumar, Ph.D.
Scientist 'F', Pharmacologist

Study Director

- 3.2.2 Mr. K. Venkaiah, M.Sc
Scientist 'G', Statistician

Study Investigator

- 3.2.3 Dr. P. Uday kumar. M.D
Scientist 'G', Pathologist

Study Investigator

- 3.2.4 Dr. SSYH Qadri, M.V.Sc.
Scientist 'E', NCLAS

Study Investigator

- 3.2.5 Dr.N.Hari Shankar, Ph.D.
Scientist 'E', NCLAS

Study Investigator

- 3.2.6 Dr. M.V. Surekha, M.D
Scientist 'D', Pathologist

Study Investigator

3.3 Biochemistry:

Mr. N. S. Kumar Reddy. M. Sc

3.4 Statistics:

Mr. K.Dinesh, B.Sc

3.5 Archives & Histopathology:

Mrs. K. Sharadha, M.Sc

3.6 Technical Staff (Project):

1. Mrs. V. Prasanna Lakshmi, MSc
2. Ms. T. Lalitha, B. Pharm
3. Mr. V. Nagendra Babu, B.Sc
4. Mrs. L. Madhavi, B.Sc
5. Mrs. G. Sailaja, M.Sc
6. Mr. T. Srinivas, M.Sc
7. Mr. L. Parashuramulu. M.Sc
8. Mrs. H. Anusha Chauhan, M.Pharm
9. Mrs. B. Shanmukhi, M.Sc

STUDY DETAILS

4.0 INTRODUCTION

Hyperlipidemia is a highly predictive risk factor for atherosclerosis, coronary artery disease (CAD), and cerebral vascular diseases, the primary causes of mortality in the developing countries like India (**Ghatak & Asthana 1995**). The allopathic hypolipidemic drugs, although available at large in the market, their popularity has been marred by numerous side effects, severe contraindications and exuberant cost and this has further necessitated the search for alternatives (**Speight 1987**).

In this context, effective and better anti-hyperlipidemic drugs for the prevention of cardiovascular diseases, that a global interest has been generated in recent years pertaining to the beneficial nutritive effects of bioactive phytochemicals like Oryzanol, obtained from crude rice bran oil (cRBO) (**Cicero & Gaddi, 2001**).

RICE BRAN OIL

Rice is widely consumed globally, and rice bran (RB), a coproduct of milled rice, and its oil may have diverse health benefits due to its comprehensive nutritional and functional properties. One of the components, Oryzanol: is a class of nonsaponifiable lipids of rice bran oil (RBO) (**Rogers et al., 1993**). It has been purified and identified as having 10 components: cycloartenyl, 24-methylenecycloartanyl, campesteryl, Δ^7 -campestenyl, sitosteryl, Δ^7 - sitostenyl, stigmasteryl, Δ^7 -stigmasteryl, and sitostanyl and campestanly ferulates (**Xu and Godber, 1999**).

Broadly, oryzanol is a group of ferulic acid esters of triterpene alcohol and plant sterols. This compound is associated with decreasing plasma cholesterol, lowering serum cholesterol, decreasing platelet aggregation. It might compete with the binding sites of cholesterol and inhibit cholesterol absorption in the intestine, causing a decrease in the cholesterol LDL and triglyceride levels (**Hakala et al 2002**).

India is the second largest producer of paddy after China and contributes about 23 per cent of the total world production of paddy, with a huge scope for the development of functional foods and other derivatives. Therefore this project was proposed to have a systematic study of use of oryzanol as a cholesterol lowering agent by using standard efficacy models and safety studies. It becomes mandatory to generate the preclinical safety data on products and non products which are manufactured or the first time by the respective industry in rodents and non rodents as per the guidelines of FSSAI and schedule Y of Drug Controller General of India (DCGI) before it is proposed for clinical trials.

5.0 MATERIALS AND METHODS

5.1 Test system

- 5.1.1 Species and strain : Sprague Dawley Rats
- 5.1.2 Source : National Centre for Laboratory Animal Sciences
CPCSEA Registration No: 154/1999
National Institute of Nutrition, (ICMR)
Hyderabad 500 007, Andhra Pradesh
- 5.1.3 Age : 6-8weeks
- 5.1.4 Body weight : 150-180g

5.2 Husbandry Practices

5.2.1 Housing & Caging:

The animals were housed in a row in standard poly carbonated open cages with top grill having facilities for feed and drinking water in polycarbonate bottles with stainless steel sipper tubes (ad libitum supply).

5.2.2 Environmental conditions :

The animals were maintained at $21 \pm 2^{\circ}\text{C}$, with 15 – 16 air changes per hour and relative humidity between 50 – 55% with 12 –12 hour light/dark cycles. The maximum and minimum temperature and relative humidity in the experimental room were recorded daily.

5.2.3 Room sanitation:

The floor of the experimental room was swept and all work tops and floor were mopped with disinfectant solution every day throughout the study period.

5.2.4 Feed and water:

The animals were fed on sterile, pellet feed (standard composition, with macro and micronutrients; Appendix - VIII); purified water, collected through an activated charcoal filter and exposed to UV rays (Aquaguard online water filter-cum-purifier) was provided to the animals *ad libitum*.

5.3 Conditioning / Acclimatization of animals:

All animals were acclimatized for a period of 7 days to adapt experimental conditions and to get appropriate body weight gain to initiate treatment. A thorough physical examination was performed before randomization and only healthy animals were used for the study.

5.4 Randomization:

Randomization ensured that the allocation of treatment to animals/groups was independent of their characteristics and was similar in all the groups. During randomization, care was taken to ensure that base variables were homogenized and were allotted to different groups.

The need for randomization applies not only to the allocation of the animals to the different (control as well as treatment) groups but also to anything that can materially affect the recorded response.

5.5 Animal identification

Each caged animal was identified by cage label showing study title, study number, species, strain, date of important events of the study, regular animal ID, unique ID number and group name (Appendix-ix).

S.No	Group details	Sex	Unique ID No		No. of animals
			From	To	
1	Vehicle Control (VC)	M	22511001	22511005	5
		F	22512021	22512025	5
2	1X-Oryzanol	M	22521006	22521010	5
		F	22522026	22522030	5
3	2X-Oryzanol	M	22531011	22531015	5
		F	22532031	22532035	5
4	5X-Oryzanol	M	22541016	22541020	5
		F	22542036	22542040	5

5.6 Test compound Details : Appendix – IV & V

Test Compound	:	Oryzanol powder
Date of manufacture	:	NA
Expiry date	:	NA
Name of the Supplier	:	Indian Institute of Chemical Technology (IICT)
Form of dosage	:	Liquid
Route of administration	:	Oral gavage
Storage Condition	:	2° C - 8° C

5.7 Test Approvals:

The study has been conducted after obtaining approval of Institutional Animal Ethics Committee (IAEC) (NCLAS /II-IAEC /2016 /BDK / R16F) (Appendices – III).

5.8 Test species and dose calculation of test material

5.8.1 Test species:

Sprague Dawley rats were used in the present study.

5.8.2 Dose calculation of test material:

- i. The intended dose of Oryzanol for human - 300 mg / 70kg.
- ii. The exposure level in SD Rats were calculated taking into account the human intended dose and converting it on the basis of body surface area

Formulae: Test material (Oryzanol powder) =

1XTD:

- Clinical Dose = 300mg/day/adult
- Pre clinical dose (Rats) = Clinical dose X conversion factor
- = 300mg X 0.018
- = 5.4mg/200g Rats/day (or) 27 mg/Kg Rats/day

2XTD:

- 1XTD = 5.4mg/200gm of rat
- 2XTD = 5.4X2=10.8 mg/ 200g rat /day (or) 54 mg/Kg rat /day

5XTD:

- 1XTD = 5.4mg/200gm of rat
- 5XTD = 5.4X5=27 mg/ 200g rat /day (or) 135 mg/Kg rat /day

Test material (Oryzanol powder) was Calculated as per the body weights and dissolved in 1 ml of 0.5% CMC and administered to each rat once daily for 90 days.

5.9 Experimental Design:

A total of 40 rats (20 males + 20 females) were divided into four groups viz., **i.** Vehicle control, **ii.** Oryzanol-1X, **iii.** Oryzanol-2X and **iv.** Oryzanol-5X. Thus each group consisted of 5 male and 5 female rats. The prepared test material was administered once daily for 90 days through oral gavage.

All the animals were observed for pre-terminal morbidity and mortality, live phase of animals, cage side observations, physical and neurological examinations were conducted at regular intervals. The urine analysis (qualitatively) was monitored pre and post exposure to the test material. All animals were subjected to biochemistry and hematology analysis on 92nd day of exposure followed by necropsy, histopathological examination of all vital organs viz., pharynx, larynx, esophagus, abdominal aorta, brain, pituitary glands, thymus, spleen, bone marrow, kidney, pancreas, skin, heart, lung, trachea, thyroid, adrenals, sternum, liver, sciatic nerve, gastrointestinal tract, epididymis, uterus, mammary glands, testis/ovaries.

6.0 OBSERVATIONS

6.1 FUNCTIONAL OBSERVATION BATTERY

The safety assessment of the test material according to standard international guidelines included monitoring of the following parameters.

6.1.1 LIVE PHASE OF ANIMALS (SOP NO: 10/PHARM/NIN/CO1/LOP/2006/OL)

General Behavior

Observations on behavioral abnormalities of the animals viz. active, not active, partially active & hyperactive were recorded and reported bi-weekly.

Water intake

The water intake was quantitatively monitored bi-weekly.

Feed intake

The feed intake was quantified bi weekly on standard electronic balance and recorded.

Body weight

Body weights were recorded at the time of conditioning period, pre and post exposure to the Test material. The recording was done bi-weekly. The weights were recorded using standard electronic balance.

6.1.2 CAGE SIDE OBSERVATIONS: (SOP NO: 11/PHARM/NIN/CO1/CSA/2006/02)

The following physiological activities, cage side observation were monitored bi-weekly.

Home cage activity

The animals exposed to Test materials were monitored for their home cage activity viz., lying on side, resting, and alertness.

Faeces excretion

The faecal output, colour and consistency, were monitored bi-weekly.

Urine passage& Colour

Urine passage & urine colour was monitored qualitatively bi-weekly.

Behaviour while removing from cage

Behaviour of the animal while removing from cage was recorded to see if the animal was quite easily removed / runs around in the cage / oriented towards the investigator/aggressive or any vocalization.

6.1.3 PHYSICAL EXAMINATION: (SOP NO: 12/PHARM/NIN/CO1/PE/2006/OL)

Physical examinations were made periodically and the following observations were recorded:

Hair coat

The physical appearance of hair coat whether it is clean/groomed/soiled was

observed bi-weekly.

Piloerection

The animals were observed for piloerection.

Respiration character and Respiratory rate

Respiration character was observed (viz. normal, decreased, increased, shallow, deep, gasping) bi-weekly using standard procedures.

Lacrimation

The presence of eye secretions if any, (slight, moderate & severe) were recorded bi-weekly.

Salivation

The salivation (slight, excess etc.) was recorded bi-weekly.

Eye prominence & eyelid (s) closure

The appearance of eye (normal, exophthalmus, endophthalmus) and eyelid closure was also observed bi-weekly.

Convulsions

Convulsions if any were recorded immediately after the exposure to the Test material and daily during the post exposure phase.

Biting

Biting character was also recorded.

Tremors

The presence of specific tremors (body, head, impaired locomotion) if any was recorded

6. 1.4 NEUROLOGICAL EXAMINATION: (SOP No: 13/PHARM/NIN/CO1/NE/2006/OL)

The effect of Test material on neurological activity was evaluated by following parameters.

Locomotory activity

The locomotory activity was recorded bi-weekly for all the animals

Rearing activity

The rearing activity included didn't rear, rear on hind limbs with and without use of tail was observed bi-weekly for all the animals.

Static limb position

The static limb position of the animal was recorded bi-weekly.

Tail Elevation

The tail elevation included lifted while walking, occasionally lifted, tail getting injured, tail cut etc. was observed bi-weekly.

Abnormal gait

The abnormal gait viz. spastic, waddling, dragging hind limbs etc. was observed bi-weekly.

Ataxic gait

The ataxic gait includes falling frequently; walking inability etc. was observed bi-weekly.

Head position

The position of the head in the animals was recorded bi-weekly during the monitoring of weight gain.

Pinna touch response

The pinna touch response was recorded by touching with a blunt object inside pinna and the response was recorded bi-weekly

6.1.5 ALLERGENICITY: (SOP NO: 14/PHARM/NIN/CO1/A/2006/OL)

Allergenicity profile was observed by following parameters.

Erythema

Skin reactions if any were recorded bi-weekly.

Alopecia

All study animals were observed bi-weekly for hair loss.

Eye appearance

Watering and congestion of eyes were observed and recorded bi-weekly once for all animals.

6.2 CLINICAL LABORATORY INVESTIGATIONS:

6.2.1 URINE QUALITATIVE :(SOP NO: 15/PHARM/NIN/CO1/QUE/2006/OL)

The following parameters were qualitatively tested by using urineanalysis strip test in Cliniteck status analyzer (SIEMENS).

i) Before exposure to Test material and ii) on 91st day of post exposure in sub – chronic toxicity test after exposure and before euthanization (Urine collection was done for 12 hours before testing):

i) Glucose, ii) Bilirubin, iii) Ketone, iv) Specific gravity, v) Blood
vi) pH, vii) Protein, viii) Urobilinogen, ix) Nitrites and x) Leucocytes

The optical system consists of six light emitting diodes, a light guide, a mirror, a lens and a detector light from the LED's travels along with light guide and is reflected off the calibration bar, strip or cassette onto the mirror. It is then directed through an aperture on the lens from where it is focused onto the detector. The light intensity detected is converted into electrical impulses which are processed by the instrument's microprocessor. On a urine analysis strip the test tale positions strip pads in the 'read area'. The light reflected at specific wavelengths (470nm, 525nm, 565nm, 625nm, 660nm and 845nm) from the test pad is depended up on the degree of colour change in the pad and is directly related to the concentration of particular constituent in the urine.

6.2.2 Blood collection:

Blood samples were collected on 92nd day for biochemistry and hematology and immunotoxicity from the rats fasted over night.

6.2.3 CLINICAL CHEMISTRY:

Blood were collected from orbital plexus in heparin tubes and centrifuged at 3000 rpm for 10 minutes to separate the plasma for clinical chemistry analyses. Quality Control sample (Precinorm U) at two levels (level 1 and level 2) supplied by Roche were used to establish the precision and accuracy of the analyses.

Plasma Glucose, Albumin (ALB), Total protein (TP), Calcium, Lipid Profile [Cholesterol, Triglyceride (TRI)] Renal function test (Creatinine & Urea) and Liver function test [Alkaline phosphatase (ALP), Aspartate Aminotransferase (AST), Alanine Aminotransferase (ALT) and Total Bilirubin (TBILI)] were estimated using cobas c 311 analyzer supplied by Roche at Drug Toxicology Research Centre, National Institute of Nutrition, Indian Council of Medical Research. All analytical kits were purchased from Roche

6.2.4 HEMATOLOGY:

Hematological investigations included – Total White Blood Cell (WBC) count, Red Blood Cell (RBC) count, Hemoglobin (Hb/HGB), Hematocrit (HCT), Mean Corpuscular Volume (MCV), Mean Corpuscular Hemoglobin (MCH), Mean Corpuscular Hemoglobin Concentration (MCHC) and Platelet count (PLT). The blood Samples were drawn into tubes containing EDTA K2 from the orbital plexus using heparinized microhematocrit tubes and analyzed on an automated blood cell counter (ADVIA 120). These investigations were carried out using the blood samples drawn on 92nd day

The whole blood sample is mixed with ADVIA 120 BASO reagent that contains acid and surfactant. The red cells are hemolyzed and the white blood cells are then analyzed using 2 angle laser light scatter signal. Both red cells and platelets are analyzed by a single optical cytometer after appropriate dilution of the blood sample with ADVIA 120 RBC/PLT reagent. The method of sizing red cells and platelets uses the simultaneous measurement of laser light scattered at 2 different regular intervals. Hemoglobin is estimated by cyanmethemoglobin method and red cell indices are derived from mathematical calculations.

Differential leucocyte counts (Neutrophils, Lymphocytes, Monocytes & Eosinophils), Principles & procedure for these investigations are as follows.

Preparation of Peripheral Blood Smear for Differential Leukocyte count

Principle - Acidic groups of nucleic acids and proteins of cell nuclei have affinity for

basic dyes while basic groups in hemoglobin molecules have affinity for acidic dye and hence stain by eosin.

Operating procedure - A clean grease free glass slide was taken on which one drop of blood (fresh or with anticoagulant EDTA) is placed about 1 or 2 cms from one end of the slide. With the help of another slide in a slanting position at 45° angle, the drop of blood is spread on the surface of the slide and kept for air drying. After drying, the lab no. is written with diamond marker or with a lead pencil on the smear. The air dried slide is placed flat on a staining rack (two parallel glass rods) over a sink with the film side up. The smear is then flooded with Leishman's stain for 5 minutes and then diluted with buffered water (approximately 2 volumes of buffer to 1 volume of Leishman's stain) and allowed to stain for 15 minutes. The slide is then washed with tap water / distilled water and kept for air-drying.

Preparation of Peripheral Blood Smear for Differential Leukocyte count:

Principle - Acidic groups of nucleic acids and proteins of cell nuclei have affinity for basic dyes while basic groups in hemoglobin molecules have affinity for acidic dye and hence stain by eosin.

Operating procedure - A clean grease free glass slide was taken on which one drop of blood (fresh or with anticoagulant EDTA) is placed about 1 or 2 cms from one end of the slide. With the help of another slide in a slanting position at 45° angle, the drop of blood is spread on the surface of the slide and kept for air drying. After drying, the lab no. is written with diamond marker or with a lead pencil on the smear. The air dried slide is placed flat on a staining rack (two parallel glass rods) over a sink with the film side up. The smear is then flooded with Leishman's stain for 5 minutes and then diluted with buffered water (approximately 2 volumes of buffer to 1 volume of Leishman's stain) and allowed to stain for 15 minutes. The slide is then washed with tap water / distilled water and kept for air-drying.

6.2.5 IMMUNOTOXICITY:

Blood samples from the rats, were collected from orbital plexus on 92nd day. The blood samples thus collected were centrifuged at 1500 rpm for 10 minutes to separate the serum for immunoglobulin (IgM, IgA and IgE) estimation using ELISA.

ELISA Procedure:

The Enzyme Linked Immunosorbent Assay (Rat IgM, IgA and IgE ELISA quantitation sets for respected immunoglobulins, Bethyl laboratories) was used to estimate the serum total IgM, IgA and IgE in experimental SD rats. The procedure briefly consists of coating the 96 well plates with capture antibody and incubating the plates at room

temperature for one hour. After specified incubation the plates were washed and blocked with blocking solution. After serum samples and conjugated detection antibody were added, the absorbance was measured at 450nm by using Biotek Multimode Detector. Standard curve was generated for all the parameters using their respective ELISA quantification set protocols. Total serum IgM, IgA and IgE concentrations in rats fed with Oryzanol powder for 90 days were compared with vehicle control on 92nd day.

6.3 NECROPSY& HISTOPATHOLOGY

6.3.1 Organ weights:

After detailed gross necropsy examination, the organs were collected from each animal and the weights were recorded using a top loading electronic weighing machine: Liver, Spleen, Kidney, Lungs, Heart, Brain and Testes.

6.3.2 Gross changes in organs:

After the experimental period, the rats were fasted overnight (water was provided) and euthanized by using CO₂ chamber and subjected to gross necropsy and findings were recorded. External features suggesting any abnormality were also recorded. After opening the chest and abdominal cavities, an in-situ examination of organs was done. The individual organs were again examined for gross morphological changes (if any) after removal.

6.3.3 Histopathology:

The following organs and tissue samples were collected from all the animals and preserved in 10% neutral buffered formalin: Brain, spinal cord, thymus, spleen, bone marrow, kidney, skin, heart, lungs, trachea, thyroid, adrenals, sternum, liver, gastrointestinal tract, uterus with ovaries and muscle with skin except testes and pancreas which were preserved in Bouins solution. The organs were sliced adequately. After a minimum of 24 hrs fixation, they were sampled and processed by conventional methods, paraffin blocks were made and 4 µm paraffin sections were obtained which were stained with Hematoxylin and Eosin and examined under a research microscope.

7.0 STATISTICAL ANALYSIS

The Department of Statistics was responsible for the statistical analysis of the study data, and was involved in the entire study right from the planning stage.

7.1 Sample size Determination:

Sample size required for the study was determined as per the protocol of the regulatory authorities.

7.2 Study Design:

The study design takes care of 'a priori' rationale for the target difference between the treatments and the control. This was designed to detect the difference and also the power to detect such a difference taking into consideration all the available relevant information in the judgment of statistical differences observed for clinical differences. Proper measures were always taken to avoid bias particularly by applying randomization methods, local control methods and blinding of the study.

7.3 Blinding:

Utmost care was taken to maximize the degree of blindness. The investigators or the analysts who were concerned with this study did not know which treatment was given to the groups. This was taken care till the project was completed and at the end the code was decoded for the analysis.

7.4 Analyses for different Types of Response variables:

Presence/absence of a condition.

Treatment groups were compared with control by Fisher's exact or Chi-square test.

Ranked: A condition at various discrete levels.

Between group comparisons by means of Kruskal–Wallis one-way ANOVA and individual group comparisons by Mann–Whitney U test (treatment groups with control) were the method of analysis.

Continuous variable: takes any value within a given range.

Heterogeneity of variance was tested by Levene's statistic. After confirming homogeneity, one-way ANOVA was done for between group significant F-ratio. pair comparison between transgenic and non-transgenic groups were tested using Dunnett's Post-hoc analysis. were carried out. In case of heterogeneity of variance the data was subjected to Log transformation. Even after transformation if the heterogeneity persisted the distribution free methods (Non parametric methods) were used for analysis of data.

7.5 Level of Significance:

Two-tailed probability level of 0.05 was set in these experiments for rejecting the null hypothesis.

7.6 Computer package:

Statistical analysis was carried out on SPSS 15.0 windows version.

7.7 Statistical methods

Presence/absence data

Individual group comparisons : Fisher's Exact Test **2X2**

Corrected Chi-square Test

Between group comparisons : 2Xk Chi-square Test
(of k groups)

Ranked Data

Individual group comparisons : Mann-Whitney U Test
Between group comparisons : Kruskal-Wallis one-way ANOVA
(of k groups)
Relation between Variables : Spearman Rank Correlation
Coefficient
Paired Comparison : Wilcoxon matched-pair signed
rank test

Continuous Data

Test for Homogeneity of Variance : Levene's/Bartlett Test
Between group comparisons : One-way ANOVA
Individual group comparisons : Dunnett's Post Hoc Test
Relation between Variables : Pearson's Correlation Coefficient
Paired Comparison : Matched Paired t- test

When confounding effect of other variables was observed with respect to a response variable, stratification methods were applied to account for the confounding effect.

8.0 ARCHIVING:

All raw data, documentation, records, specimens, slides, protocols and final reports generated as a result of this study have been kept confidential, inventoried, and archived by the Archiving Officer in the Archives Room of the main building of NIN. The retention duration of these records and the excess test material provided by the sponsor kept under appropriate storage conditions will be 5 years after the release of the final report. The test material will be discarded one month after its expiry date.

9.0 STUDY RESULTS

9.1 PRE-TERMINAL DEATHS:

No pre-terminal deaths were recorded in animals exposed to test compound and no toxic signs and abnormal behavior were observed in the animals exposed to various dose levels. (Table – I)

9.2 FUNCTIONAL OBSERVATION BATTERY:

9.2.1 LIVE PHASE OF ANIMALS:

General Behaviour

All groups of animals were active throughout the experimental period. (Table – II).

Water intake

The water intake was found to be normal in all groups (Table –II).

Food intake

The food intake was found to be normal in all groups of animals (Table – III).

Body weight

No abnormal findings with reference to gain in body weights were observed throughout the experimental period. [Table –IV (A, B & C)]

9.2.2 CAGE SIDE OBSERVATIONS:

Cage side observations were conducted bi-weekly .The following observations was made (Table – V).

Home cage activity

The animals in all the groups were equally found sitting. No animal was found to be circling purposelessly in the cage in all the groups during the experiment. There was no abnormal activity across the groups.

Faeces colour & consistency

There were no significant abnormalities in the faecal colour in most of the animals and there were no abnormalities in faeces amount excretion during the experimental period in all the animals.

Urine Colour

There were no qualitative abnormalities in the colour during the experimental period in all the groups

Behaviour while removing from cage

100% of the animals were quiet easily removed from the cages. None of the animals showed vocalization and aggressive behavior in all the groups.

9.2.3 PHYSICAL EXAMINATION:

Physical examination was conducted twice in a week. The following observations were made (Table –VI).

Hair coat

The clean groomed hair coat was observed in all the animals in all the groups.

Piloerection

No piloerection was observed in animals from any of the groups.

Respiration rate and character

There were no significant abnormalities in respiration character and rate in all groups of animals during the experimental phase.

Lacrimation

No excessive lacrimation was observed during the experimental period in all the groups.

Salivation

No excessive salivation was observed during the experimental period in all the groups.

Eye prominence & eyelid closure

There was no eye prominence before and after exposure of the Test compound or the regular diet.

Convulsions

There were no convulsions recorded immediately after the administration of Test compound and post exposure of diet in any group of animals.

Biting

There was no aggressiveness and biting character in all the groups.

Tremors

There were no tremors in the animals before and after exposure to the Test compound.

9.2.4 NEUROLOGICAL EXAMINATION:

The neurological observations are indicated in (Table –VII).

Locomotor activity

The locomotor activity was found to be normal in all groups of animals.

Rearing activity

None of the animals was found to be rearing on hind limbs with use of tail.

Static limb position, abnormal gait

There were no abnormal limb positions, gait in all groups of animals.

Head position

Head position of all animals was normal without tilt in all groups

Pinna touch response

All animals in all groups shows normal response to pinna touch.

9.2.5 ALLERGENICITY

Allergenicity profile was evaluated by following parameters. (Table –VIII).

Erythema

No skin reaction was observed in any of the animals in all groups.

Alopecia

No hair loss was observed in all animals.

Watering and congestion of Eyes

Watering and congestion of eyes were found to be absent in all animals.

9.3 CLINICAL LABORATORY INVESTIGATIONS:

9.3.1 URINE QUALITATIVE:

Qualitative urine analysis was done before and after exposure to the Test compound. proteinuria and hematuria of mild to moderate grades were observed in both vehicle control and experimental animals. There was no significant difference in any of the other parameters.[Table – IX (A to F)].

9.3.2 CLINICAL CHEMISTRY:

The blood urea is observed to be above normal in all group of animals. Remaining biochemical parameters were within the normal range. [Table – X (A, B & C)]

9.3.3 HEMATOLOGY:

Various parameters studied were unremarkable between different groups studied except a significant decrease was observed in MCHpg parameter in 2X and 5X groups when compared to 1X and vehicle control groups. [Table – XI (A, B & C),]

9.3.4 IMMUNOTOXICITY:

The Total Serum IgA levels were comparable among the groups in male female and Sexpooled. Similarly the total serum IgM levels were comparable among males, whereas a significant decrease was noted with increasing dose of Oryzanol with the vehicle control group in female and Sexpooled. High dose of Oryzanol may cause immunological abnormality (immune response process) [Table – XII (A, B & C),]

9.4 NECROPSY & HISTOPATHOLOGY

9.4.1 Organ weights:

The weight of the kidneys were significantly decreased in 2x and 5x groups when compared with vehicle control. Except the above change all organ weights were normal in all four groups including vehicle control group [Table – XIII (A, B & C)]

9.4.2 Gross changes:

No gross changes were observed in any of the organs examined during necropsy. [Table – XIV (A &B)]

9.4.3 HISTOPATHOLOGY: [Table – XV (A & B)]

Changes of histological significance were observed only in the lungs, livers and kidneys of animals.

Chronic interstitial pneumonitis of different grades was observed in both vehicle control (VC) and experimental animals with predominance of grade II changes.

Livers of most of the animals of both experimental and VC groups of animals were normal. Focal scattered vacuolation was observed in 30% of VC animals and 10% of animals fed with 5X dose of oryzanol. Low grade microvacuolation (5-33% range) was observed in 10% each of vehicle control, 2X TD and 5X TD groups while it was observed to be more in 1X TD group (30%). Moderate degree of microvacuolation (33-66% range) was observed in 10% of both vehicle control and 2X TD groups. (Table XV)

Normal kidney histology was seen in 10% animals in VC and 1XTD groups, 20% (2xTD) and 30% of animals in the 5X groups. Mild tubular atrophy with chronic inflammation was seen in 40% of VC group, 60% of 1XTD group, 30% of 2XTd and 10% 5XTD groups. Moderate tubular atrophic changes with chronic inflammation were observed in 30% of VC group and 10% each of the remaining experimental groups. Severe tubular atrophic changes with chronic inflammation were observed in 20% each of VC and 5XTD groups, 10% in 1XTD and 30% in 2XTD groups. (Table XV)

10.0 CONCLUSIONS:

There was no mortality in any group of animals and there was no significant difference in body weights, feed intake and cage side activities. The Immunology, clinical chemistry and hematology profile was in normal range. There were no allergenicity symptoms in the test and control animals. Changes of histological significance were observed in the lungs, liver and kidneys of both VC and experimental animals. As these changes were observed in the vehicle control group also, it may not be possible to attribute the changes in the experimental group which received test compound.

11.0 STUDY IMPRESSION:

The feeding of Oryzanol in the maximum concentration (5x-135 mg/Kg rat /day) did not induce any abnormalities under experimental condition.

11 .0 SUMMARY TABLES

TABLE – I
MORTALITY OF RATS

Days of observation	VC		TD		2XTD		5X TD	
	M	F	M	F	M	F	M	F
1	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
2	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
3	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
4	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
5	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
6	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
7	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
8	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
9	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
10	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
11	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
12	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
13	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
14	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
15	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
16	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
17	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
18	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
19	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
20	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
21	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
22	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
23	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
24	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
25	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
26	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
27	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
28	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
29	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
30	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
31	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
32	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
33	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
34	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
35	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
36	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
37	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
38	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
39	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
40	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
41	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
42	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
43	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
44	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
45	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5

M – Male; F – Female

TABLE – I
MORTALITY OF RATS (cont...)

Days of observation	VC		TD		2XTD		5X TD	
	M	F	M	F	M	F	M	F
46	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
47	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
48	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
49	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
50	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
51	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
52	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
53	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
54	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
55	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
56	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
57	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
58	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
59	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
60	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
61	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
62	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
63	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
64	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
65	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
66	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
67	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
68	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
69	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
70	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
71	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
72	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
73	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
74	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
75	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
76	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
77	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
78	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
79	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
80	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
81	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
82	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
83	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
84	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
85	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
86	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
87	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
88	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
89	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5
90	0/5	0/5	0/5	0/5	0/5	0/5	0/5	0/5

M – Male; F – Female

TABLE – II
LIVE PHASE OF ANIMALS

Groups	Days	General behavior (%)		Water intake (%)		Food Intake (%)	
		Active	Not active	Adequate	Inadequate	Normal	Anorexia
VC	Baseline	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	6 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	13 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	20 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	27 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	34 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	41 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	48 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	55 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	62 nd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	70 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	76 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	83 rd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	91 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
1X Oryzanol	Baseline	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	6 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	13 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	20 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	27 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	34 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	41 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	48 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	55 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	62 nd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	70 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	76 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	83 rd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	91 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil

Values are in percentage

() No of animals

Weekly values are provided in SPSS output.

*The above observations have been made as per the SOP No.
(10/PHARM/NIN/CO1/LOP/2006/OL)

TABLE – II

LIVE PHASE OF ANIMALS (cont....)

Groups	Days	General behavior (%)		Water intake (%)		Food Intake (%)	
		Active	Not active	Adequate	Inadequate	Normal	Anorexia
2X Oryzanol	Baseline	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	6 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	13 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	20 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	27 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	34 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	41 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	48 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	55 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	62 nd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	70 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	76 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	83 rd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	91 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
5X Oryzanol	Baseline	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	6 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	13 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	20 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	27 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	34 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	41 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	48 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	55 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	62 nd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	70 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	76 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	83 rd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	91 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil

Values are in percentage

() No of animals

Weekly values are provided in SPSS output.

*The above observations have been made as per the SOP No.
(10/PHARM/NIN/CO1/LOP/2006/OL)

TABLE – III (A)
FEED INTAKE (g) –SEX POOLED

Groups / Observation Day	Test Compound Exposure period							
	1 st day	6 th day	13 th day	20 th day	27 th day	34 th day	41 st day	48 th day
VC	38.46	56.77	44.67	47.16	46.06	45.90	47.06	47.66
	± 6.946	± 9.728	± 4.974	± 6.622	± 10.022	± 9.933	± 8.306	± 6.964
	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)
1X Oryzanol	41.19	61.45	46.96	51.81	51.07	51.63	48.41	49.67
	± 6.524	± 8.112	± 5.412	± 4.215	± 6.852	± 7.198	± 4.154	± 4.840
	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)
2X Oryzanol	39.50	54.40	45.63	48.44	54.22	51.00	46.77	46.07
	± 5.751	± 10.413	± 5.638	± 8.873	± 5.626	± 6.243	± 6.525	± 6.214
	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)
5X Oryzanol	36.91	52.99	41.72	46.24	48.74	48.18	46.67	48.06
	± 9.396	± 11.623	± 7.825	± 7.283	± 4.316	± 4.851	± 6.157	± 6.203
	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)

Values are expressed as Mean ± Standard Deviation

() No of animals

Weekly values are provided in SPSS output.

TABLE – III (A)
FEED INTAKE (g) – SEX POOLED (Contd...)

Groups /Observation Day	Test compound exposure period					
	55 th day	62 nd day	70 th day	76 th day	83 rd day	91 st day
VC	51.83	45.48	62.45	41.63	44.65	58.56
	±	±	±	±	±	±
	9.364	8.674	11.017	10.901	5.494	9.276
	(10)	(10)	(10)	(10)	(10)	(10)
1X Oryzanol	57.25	49.36	61.65	42.12	45.11	67.63
	±	±	±	±	±	±
	5.241	5.266	8.977	10.109	7.976	13.419
	(10)	(10)	(10)	(10)	(10)	(10)
2X Oryzanol	53.84	49.32	63.74	44.18	47.13	64.20
	±	±	±	±	±	±
	12.948	7.428	13.268	7.767	6.414	9.763
	(10)	(10)	(10)	(10)	(10)	(10)
5X Oryzanol	53.14	46.90	61.50	37.77	45.89	61.61
	±	±	±	±	±	±
	16.118	8.459	10.278	12.895	9.519	11.639
	(10)	(10)	(10)	(10)	(10)	(10)

Values are expressed as Mean ± Standard Deviation

() No of animals

Weekly values are provided in SPSS output.

TABLE – III (B)
FEED INTAKE (g) –MALES

Groups / Observation Day	Test Compound Exposure period							
	1 st day	6 th day	13 th day	20 th day	27 th day	34 th day	41 st day	48 th day
VC	43.08	65.00	47.04	52.78	52.58 ^a	53.22 ^a	54.28	53.08
	±	±	±	±	±	±	±	±
	6.219	4.650	4.777	3.539	4.186	1.348	2.730	4.884
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
1X Oryzanol	44.56	67.56	50.98	54.76	48.58 ^a	52.58 ^{ab}	51.16	52.00
	±	±	±	±	±	±	±	±
	6.157	6.343	4.519	3.774	8.746	7.510	3.627	4.716
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
2X Oryzanol	39.44	62.72	46.42	49.72	58.42 ^b	55.26 ^{ab}	49.08	49.86
	±	±	±	±	±	±	±	±
	5.206	7.073	7.787	11.904	3.738	4.722	7.838	5.809
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
5X Oryzanol	41.94	60.82	47.20	48.46	50.52 ^a	51.06 ^b	50.36	51.72
	±	±	±	±	±	±	±	±
	7.740	7.960	4.463	6.016	2.418	1.144	5.811	6.166
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)

Superscripts with different letters are significant different at P<0.05

Values are expressed as Mean ± Standard Deviation

() No of animals

Weekly values are provided in SPSS output.

TABLE – III (B)
FEED INTAKE (g) – MALES (Contd...)

Groups /Observation Day	Test compound exposure period					
	55 th day	62 nd day	70 th day	76 th day	83 rd day	91 st day
VC	52.48	49.80	64.94	45.54	47.50	63.48
	±	±	±	±	±	±
	13.289	10.388	15.658	9.289	5.583	10.328
	(5)	(5)	(5)	(5)	(5)	(5)
1X Oryzanol	58.88	52.00	63.00	50.42	49.60	70.86
	±	±	±	±	±	±
	5.014	6.176	12.628	5.733	8.192	18.737
	(5)	(5)	(5)	(5)	(5)	(5)
2X Oryzanol	53.22	54.20	62.90	46.84	48.16	66.38
	±	±	±	±	±	±
	15.569	6.608	17.482	7.222	4.865	12.721
	(5)	(5)	(5)	(5)	(5)	(5)
5X Oryzanol	58.28	52.52	67.70	46.98	49.80	68.58
	±	±	±	±	±	±
	19.529	7.811	7.468	11.805	11.343	11.799
	(5)	(5)	(5)	(5)	(5)	(5)

Values are expressed as Mean ± Standard Deviation
weekly values are provided in SPSS output.

() No of animals

TABLE – III (C)
FEED INTAKE (g) – FEMALES

Groups / Observation Day	Test Compound Exposure period							
	1 st day	6 th day	13 th day	20 th day	27 th day	34 th day	41 st day	48 th day
VC	33.84	48.54	42.30 ^a	41.54 ^a	39.54 ^a	38.58	39.84	42.24
	±	±	±	±	±	±	±	±
	4.063	4.689	4.336	2.682	10.108	9.286	4.178	3.440
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
1X Oryzanol	37.82	55.34	42.94 ^a	48.86 ^b	53.56 ^b	50.68	45.66	47.34
	±	±	±	±	±	±	±	±
	5.428	3.808	2.255	1.993	3.692	7.610	2.601	4.110
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
2X Oryzanol	39.56	46.08	44.84 ^a	47.16 ^{ab}	50.02 ^b	46.74	44.46	42.28
	±	±	±	±	±	±	±	±
	6.878	4.570	3.055	5.597	3.627	4.475	4.584	4.149
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
5X Oryzanol	31.88	45.16	36.24 ^b	44.02 ^{ab}	46.96 ^{ab}	45.30	42.98	44.40
	±	±	±	±	±	±	±	±
	8.688	9.346	6.539	8.416	5.306	5.560	4.183	3.882
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)

Superscripts with different letters are significant different at P<0.05

Values are expressed as Mean ± Standard Deviation

() No of animals

Weekly values are provided in SPSS output.

TABLE – III (C)
FEED INTAKE (g) – FEMALES (Contd...)

Groups /Observation Day	Test compound exposure period					
	55 th day	62 nd day	70 th day	76 th day	83 rd day	91 st day
VC	51.18	41.16	59.96	37.72	41.80	53.64 ^a
	±	±	±	±	±	±
	4.434	3.838	3.523	11.952	4.054	5.139
	(5)	(5)	(5)	(5)	(5)	(5)
1X Oryzanol	55.62	46.72	60.30	33.82	40.62	64.40 ^b
	±	±	±	±	±	±
	5.479	2.611	4.159	4.982	5.061	5.292
	(5)	(5)	(5)	(5)	(5)	(5)
2X Oryzanol	54.46	44.44	64.58	41.52	46.10	62.02 ^{bc}
	±	±	±	±	±	±
	11.570	4.577	9.419	8.116	8.138	6.386
	(5)	(5)	(5)	(5)	(5)	(5)
5X Oryzanol	48.00	41.28	55.30	28.56	41.98	54.64 ^{ac}
	±	±	±	±	±	±
	11.708	4.587	9.263	4.766	6.081	6.644
	(5)	(5)	(5)	(5)	(5)	(5)

Superscripts with different letters are significant different at P<0.05

Values are expressed as Mean ± Standard Deviation

() No of animals

Weekly values are provided in SPSS output.

GRAPH – I

Feed Intake (gm)

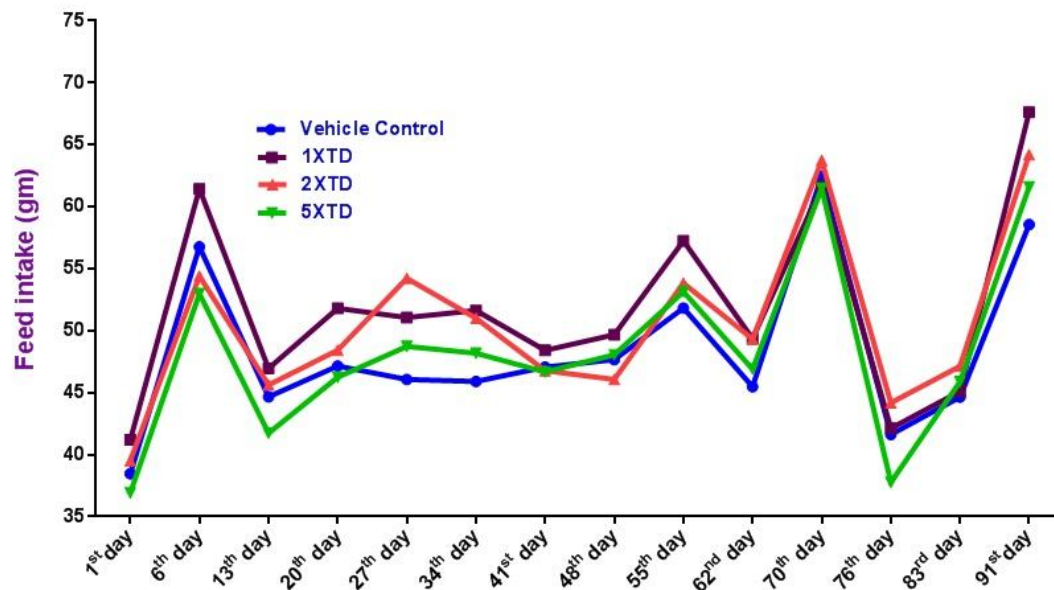


TABLE – IV (A)
BODY WEIGHT (g) –SEX POOLED

Groups / Observation Day	Test Compound Exposure period							
	Baseline	6 th day	13 th day	20 th day	27 th day	34 th day	41 st day	48 th day
VC	157.52	172.09	189.75	200.23	207.84	219.78	227.56	235.79
	±	±	±	±	±	±	±	±
	13.906 (10)	11.654 (10)	18.516 (10)	21.569 (10)	29.577 (10)	33.698 (10)	37.619 (10)	39.715 (10)
1X Oryzanol	157.55	174.49	195.62	205.91	213.74	226.05	233.92	242.52
	±	±	±	±	±	±	±	±
	12.656 (10)	13.076 (10)	16.031 (10)	18.683 (10)	22.311 (10)	26.491 (10)	28.335 (10)	29.802 (10)
2X Oryzanol	155.53	167.83	189.21	203.52	217.29	229.26	235.48	238.06
	±	±	±	±	±	±	±	±
	11.515 (10)	6.281 (10)	12.167 (10)	18.017 (10)	21.566 (10)	24.644 (10)	26.444 (10)	30.023 (10)
5X Oryzanol	158.64	167.30	181.22	190.28	199.80	208.06	217.34	223.67
	±	±	±	±	±	±	±	±
	14.504 (10)	15.874 (10)	21.682 (10)	23.206 (10)	25.052 (10)	25.928 (10)	31.814 (10)	34.954 (10)

Values are expressed as Mean ± Standard Deviation

() No of animals

Weekly values are provided in SPSS output.

TABLE – IV (A)
BODY WEIGHT (g) –SEX POOLED (Contd...)

Groups /Observation Day	Test compound exposure period					
	55 th day	62 nd day	70 th day	76 th day	83 rd day	91 st day
VC	238.01	244.68	254.25	251.64	254.67	266.20
	±	±	±	±	±	±
	40.579	41.303	46.242	44.202	44.786	48.204
	(10)	(10)	(10)	(10)	(10)	(10)
1X Oryzanol	249.14	252.73	251.35	250.32	255.82	267.09
	±	±	±	±	±	±
	26.079	31.954	30.839	37.397	35.021	38.099
	(10)	(10)	(10)	(10)	(10)	(10)
2X Oryzanol	242.77	249.74	258.90	256.13	255.00	263.81
	±	±	±	±	±	±
	31.006	34.926	42.815	33.464	31.743	37.509
	(10)	(10)	(10)	(10)	(10)	(10)
5X Oryzanol	229.71	237.34	241.73	238.51	243.35	252.89
	±	±	±	±	±	±
	37.860	40.974	42.507	41.610	43.334	45.721
	(10)	(10)	(10)	(10)	(10)	(10)

Values are expressed as Mean ± Standard Deviation

() No of animals

Weekly values are provided in SPSS output.

TABLE – IV (B)
BODY WEIGHT (g) –MALES

Groups / Observation Day	Test Compound Exposure period							
	Baseline	6 th day	13 th day	20 th day	27 th day	34 th day	41 st day	48 th day
VC	156.00	180.10	205.06	219.16	234.86	250.54	261.28	271.08
	±	±	±	±	±	±	±	±
	11.337	6.864	7.553	7.810	7.896	11.639	15.112	18.595
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
1X Oryzanol	157.98	179.10	205.30	216.86	224.64	244.44	255.74	265.72
	±	±	±	±	±	±	±	±
	13.609	16.873	16.627	20.879	27.228	25.257	22.297	24.288
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
2X Oryzanol	155.34	170.34	196.56	213.46	232.34	248.90	256.92	255.40
	±	±	±	±	±	±	±	±
	12.011	8.127	13.765	20.385	20.087	18.715	19.378	34.317
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
5X Oryzanol	159.92	176.34	198.82	209.52	218.76	228.38	244.48	253.24
	±	±	±	±	±	±	±	±
	17.770	16.614	14.701	14.394	19.315	18.632	16.465	20.265
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)

Values are expressed as Mean ± Standard Deviation

() No of animals

Weekly values are provided in SPSS output.

TABLE – IV (B)
BODY WEIGHT (g) – MALES (Contd...)

Groups /Observation Day	Test compound exposure period					
	55 th day	62 nd day	70 th day	76 th day	83 rd day	91 st day
VC	271.50	280.08	294.92	290.20	294.52	308.28
	±	±	±	±	±	±
	27.970	23.686	21.693	21.981	17.829	24.685
	(5)	(5)	(5)	(5)	(5)	(5)
1X Oryzanol	270.26	279.74	272.30	268.94	280.08	293.42
	±	±	±	±	±	±
	17.042	19.634	30.963	47.099	35.182	38.489
	(5)	(5)	(5)	(5)	(5)	(5)
2X Oryzanol	262.56	278.02	289.12	283.58	281.34	292.36
	±	±	±	±	±	±
	33.351	25.658	42.164	22.071	21.542	32.625
	(5)	(5)	(5)	(5)	(5)	(5)
5X Oryzanol	260.82	272.54	276.78	271.56	277.42	289.38
	±	±	±	±	±	±
	25.646	24.626	28.736	33.037	35.240	36.281
	(5)	(5)	(5)	(5)	(5)	(5)

Values are expressed as Mean ± Standard Deviation

() No of animals

Weekly values are provided in SPSS output.

TABLE – IV (C)
BODY WEIGHT (g) – FEMALES

Groups / Observa tion Day	Test Compound Exposure period						
	Baseli ne	6 th day	13 th day	20 th day	27 th day	34 th day	41 st day
VC	159.04	164.08 ^{ab}	174.44 ^{ad}	181.30 ^a	180.82 ^a	189.02 ^a	193.84 ^a
	±	±	±	±	±	±	±
	17.342	9.904	11.329	9.482	8.988	7.350	10.636
	(5)	(5)	(5)	(5)	(5)	(5)	(5)
1X Oryzanol	157.12	169.88 ^a	185.94 ^{bc}	194.96 ^b	202.84 ^b	207.66 ^b	212.10 ^b
	±	±	±	±	±	±	±
	13.218	6.844	8.218	7.050	9.036	9.778	10.910
	(5)	(5)	(5)	(5)	(5)	(5)	(5)
2X Oryzanol	155.72	165.32 ^{ab}	181.86 ^{cd}	193.58 ^b	202.24 ^b	209.62 ^b	214.04 ^b
	±	±	±	±	±	±	±
	12.409	2.639	2.925	8.238	8.760	7.209	6.977
	(5)	(5)	(5)	(5)	(5)	(5)	(5)
5X Oryzanol	157.36	158.26 ^b	163.62 ^a	171.04 ^a	180.84 ^a	187.74 ^a	190.20 ^a
	±	±	±	±	±	±	±
	12.387	9.308	8.200	8.890	11.848	11.540	12.833
	(5)	(5)	(5)	(5)	(5)	(5)	(5)

Superscripts with different letters are significant different at P<0.05

Values are expressed as Mean ± Standard Deviation

() No of animals

Weekly values are provided in SPSS output.

TABLE – IV (C)
BODY WEIGHT (g) – FEMALES (Contd...)

Groups /Observati on Day	Test compound exposure period						
	48 th day	55 th day	62 nd day	70 th day	76 th day	83 rd day	91 st day
VC	200.50 ^a	204.52 ^a	209.28 ^{ad}	213.58 ^{ad}	213.08 ^{ac}	214.82 ^{ac}	224.12 ^{ad}
	±	±	±	±	±	±	±
	9.470	10.897	12.019	14.338	13.992	15.003	13.857
	(5)	(5)	(5)	(5)	(5)	(5)	(5)
1X Oryzanol	219.32 ^b	228.02 ^b	225.72 ^{bc}	230.40 ^{bc}	231.70 ^b	231.56 ^b	240.76 ^{bc}
	±	±	±	±	±	±	±
	7.931	11.167	9.384	9.159	7.844	7.101	7.167
	(5)	(5)	(5)	(5)	(5)	(5)	(5)
2X Oryzanol	220.72 ^b	222.98 ^b	221.46 ^{cd}	228.68 ^{cd}	228.68 ^b	228.66 ^b	235.26 ^{cd}
	±	±	±	±	±	±	±
	9.939	8.469	9.320	7.967	12.197	8.284	7.965
	(5)	(5)	(5)	(5)	(5)	(5)	(5)
5X Oryzanol	194.10 ^a	198.60 ^a	202.14 ^a	206.68 ^a	205.46 ^c	209.28 ^c	216.40 ^a
	±	±	±	±	±	±	±
	12.346	12.158	8.563	12.978	8.570	9.014	7.634
	(5)	(5)	(5)	(5)	(5)	(5)	(5)

Superscripts with different letters are significant different at P<0.05

Values are expressed as Mean ± Standard Deviation

() No of animals

Weekly values are provided in SPSS output.

GRAPH – II
BODY WEIGHT (gm)

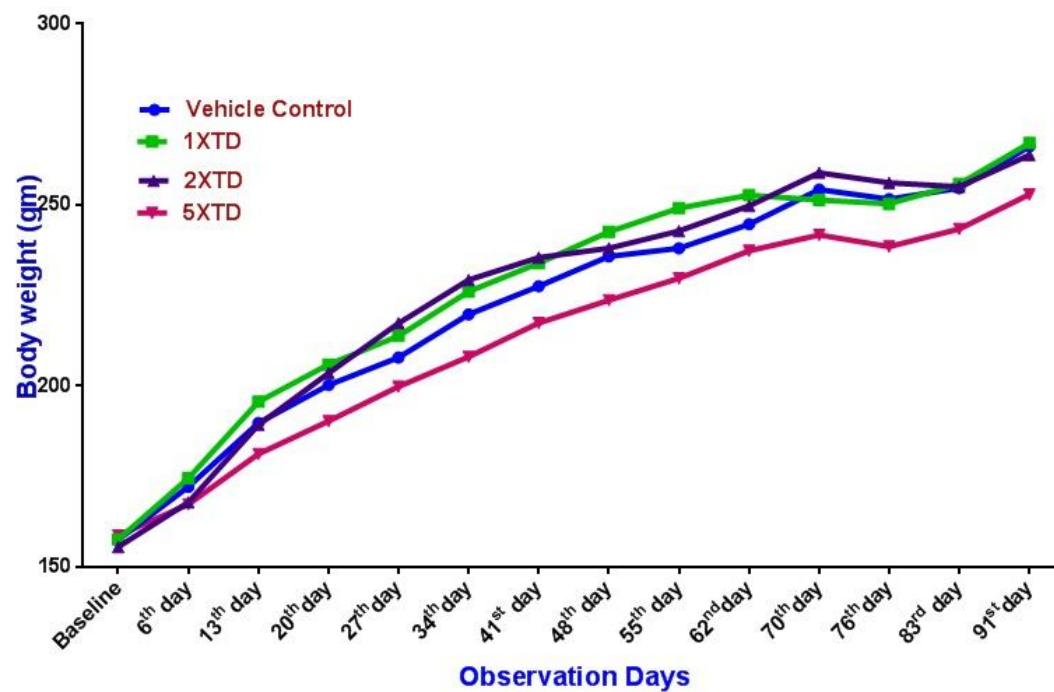


TABLE – V
CAGE SIDE OBSERVATION

Groups	Observation (Days)	Home cage activity		
		Normal	Lying on side	Alert towards investigator
VC	Baseline	100 (10)	Nil	Nil
	6 th day test compound exposure	100 (10)	Nil	Nil
	13 th day test compound exposure	100 (10)	Nil	Nil
	20 th day test compound exposure	100 (10)	Nil	Nil
	27 th day test compound exposure	100 (10)	Nil	Nil
	34 th day test compound exposure	100 (10)	Nil	Nil
	41 st day test compound exposure	100 (10)	Nil	Nil
	48 th day test compound exposure	100 (10)	Nil	Nil
	55 th day test compound exposure	100 (10)	Nil	Nil
	62 nd day test compound exposure	100 (10)	Nil	Nil
	70 th day test compound exposure	100 (10)	Nil	Nil
	76 th day test compound exposure	100 (10)	Nil	Nil
	83 rd day test compound exposure	100 (10)	Nil	Nil
	91 st day test compound exposure	100 (10)	Nil	Nil
1X Oryzanol	Baseline	100 (10)	Nil	Nil
	6 th day test compound exposure	100 (10)	Nil	Nil
	13 th day test compound exposure	100 (10)	Nil	Nil
	20 th day test compound exposure	100 (10)	Nil	Nil
	27 th day test compound exposure	100 (10)	Nil	Nil
	34 th day test compound exposure	100 (10)	Nil	Nil
	41 st day test compound exposure	100 (10)	Nil	Nil
	48 th day test compound exposure	100 (10)	Nil	Nil
	55 th day test compound exposure	100 (10)	Nil	Nil
	62 nd day test compound exposure	100 (10)	Nil	Nil
	70 th day test compound exposure	100 (10)	Nil	Nil
	76 th day test compound exposure	100 (10)	Nil	Nil
	83 rd day test compound exposure	100 (10)	Nil	Nil
	91 st day test compound exposure	100 (10)	Nil	Nil

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(11/PHARM/NIN/CO1/CAS/2006/02)

() No of animals

TABLE – V
CAGE SIDE OBSERVATION (Contd...)

Groups	Observation (Days)	Home cage activity		
		Normal	Lying on side	Alert towards investigator
2X Oryzanol	Baseline	100 (10)	Nil	Nil
	6 th day test compound exposure	100 (10)	Nil	Nil
	13 th day test compound exposure	100 (10)	Nil	Nil
	20 th day test compound exposure	100 (10)	Nil	Nil
	27 th day test compound exposure	100 (10)	Nil	Nil
	34 th day test compound exposure	100 (10)	Nil	Nil
	41 st day test compound exposure	100 (10)	Nil	Nil
	48 th day test compound exposure	100 (10)	Nil	Nil
	55 th day test compound exposure	100 (10)	Nil	Nil
	62 nd day test compound exposure	100 (10)	Nil	Nil
	70 th day test compound exposure	100 (10)	Nil	Nil
	76 th day test compound exposure	100 (10)	Nil	Nil
	83 rd day test compound exposure	100 (10)	Nil	Nil
	91 st day test compound exposure	100 (10)	Nil	Nil
5X Oryzanol	Baseline	100 (10)	Nil	Nil
	6 th day test compound exposure	100 (10)	Nil	Nil
	13 th day test compound exposure	100 (10)	Nil	Nil
	20 th day test compound exposure	100 (10)	Nil	Nil
	27 th day test compound exposure	100 (10)	Nil	Nil
	34 th day test compound exposure	100 (10)	Nil	Nil
	41 st day test compound exposure	100 (10)	Nil	Nil
	48 th day test compound exposure	100 (10)	Nil	Nil
	55 th day test compound exposure	100 (10)	Nil	Nil
	62 nd day test compound exposure	100 (10)	Nil	Nil
	70 th day test compound exposure	100 (10)	Nil	Nil
	76 th day test compound exposure	100 (10)	Nil	Nil
	83 rd day test compound exposure	100 (10)	Nil	Nil
	91 st day test compound exposure	100 (10)	Nil	Nil

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(11/PHARM/NIN/CO1/CAS/2006/02)

() No of animals

TABLE – V
CAGE SIDE OBSERVATION (Contd...)

Groups	Observation (Days)	Faeces Excretion	Faeces colour	Faeces consistency
		Present	Normal	Normal
VC	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
1 X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

Values are in percentage

() No of animals

weekly values are provided in SPSS output.

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(11/PHARM/NIN/CO1/CAS/2006/02)

TABLE – V
CAGE SIDE OBSERVATION (Contd...)

Groups	Observation (Days)	Faeces Excretion	Faeces colour	Faeces consistency
		Present	Normal	Normal
2 X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
5 X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

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The above observations have been made as per the SOP No.
(11/PHARM/NIN/CO1/CAS/2006/02)

() No of animals

TABLE – V
CAGE SIDE OBSERVATION (Contd...)

Groups	Observation (Days)	Urine output		Urine color		Behaviour while removing from cage	
		Present	Absent	Normal	Pale	Animal quiet easily removed	Aggres sive
VC	Baseline	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	6 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	13 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	20 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	27 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	34 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	41 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	48 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	55 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	62 nd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	70 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	76 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	83 rd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	91 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
1 X Oryzanol	Baseline	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	6 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	13 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	20 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	27 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	34 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	41 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	48 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	55 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	62 nd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	70 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	76 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	83 rd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	91 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(11/PHARM/NIN/CO1/CAS/2006/02)

() No of animals

TABLE – V
CAGE SIDE OBSERVATION (Contd...)

Groups	Observation (Days)	Urine output		Urine color		Behaviour while removing from cage	
		Present	Absent	Normal	Pale	Animal quiet easily removed	Aggres sive
2 X Oryzanol	Baseline	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	6 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	13 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	20 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	27 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	34 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	41 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	48 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	55 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	62 nd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	70 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	76 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	83 rd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	91 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
5 X Oryzanol	Baseline	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	6 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	13 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	20 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	27 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	34 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	41 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	48 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	55 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	62 nd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	70 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	76 th day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	83 rd day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil
	91 st day test compound	100 (10)	Nil	100 (10)	Nil	100 (10)	Nil

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(11/PHARM/NIN/CO1/CAS/2006/02)

() No of animals

TABLE – VI
PHYSICAL EXAMINATION

Groups	Observation (Days)	Hair coat	Piloerection	Respiratory Rate
		Cleanly groomed	Absent	Normal
VC	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
1 X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

Values are in percentage

weekly values are provided in SPSS output.

The above observations have been made as per the SOP No.

(12/PHARM/NIN/CO1/PE/2006/OL)

() No of animals

TABLE – VI
PHYSICAL EXAMINATION (Contd...)

Groups	Observation (Days)	Hair coat	Piloerection	Respiratory Rate
		Cleanly groomed	Absent	Normal
2X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
5X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(12/PHARM/NIN/CO1/PE/2006/OL)

() No of animals

TABLE – VI
PHYSICAL EXAMINATION (Contd...)

Groups	Observation (Days)	Respiration character	Lacrimation	Salivation
		Normal	Normal	Normal
VC	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
1X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(12/PHARM/NIN/CO1/PE/2006/OL)

() No of animals

TABLE – VI
PHYSICAL EXAMINATION (Contd...)

Groups	Observation (Days)	Respiration character	Lacrimation	Salivation
		Normal	Normal	Normal
2X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
5X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(12/PHARM/NIN/CO1/PE/2006/OL)

() No of animals

TABLE – VI
PHYSICAL EXAMINATION (Contd...)

Groups	Observation (Days)	Eye lid (s) closure	Eye Promin ence	Convu lsions	Biting	Tremors
		Eye lids open	Normal	Normal	Absent	Absent
VC	Baseline	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
1X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)

Values are in percentage

() No of animals

weekly values are provided in SPSS output.

The above observations have been made as per the SOP No.

(12/PHARM/NIN/CO1/PE/2006/OL)

TABLE – VI
PHYSICAL EXAMINATION (Contd...)

Groups	Observation (Days)	Eye lid (s) closure	Eye Promin ence	Convu lsions	Biting	Tremors
		Eye lids open	Normal	Normal	Absent	Absent
2X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
5X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)	100 (10)	100 (10)

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(12/PHARM/NIN/CO1/PE/2006/OL)

() No of animals

TABLE – VII
NEUROLOGICAL EXAMINATION

Groups	Observation (Days)	Locomotor Activity	Rearing activity	Tail elevation
		Normal	Normal	Limbs Held Normal
VC	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
1X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

Values are in percentage

() No of animals

weekly values are provided in SPSS output.

The above observations have been made as per the SOP No.
(13/PHARM/NIN/CO1/NE/2006/OL)

TABLE – VII
NEUROLOGICAL EXAMINATION

Groups	Observation (Days)	Locomotor Activity	Rearing activity	Tail elevation
		Normal	Normal	Limbs Held Normal
2X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
5X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

Values are in percentage

() No of animals

Biweekly values are provided in SPSS output.

The above observations have been made as per the SOP No.
(11/PHARM/NIN/CO1/CAS/2006/02)

TABLE – VII
NEUROLOGICAL EXAMINATION (Contd...)

Groups	Observation (Days)	Static limb position	Abnormal gait	Ataxic gait
		Normal	None	None
VC	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
1X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

Values are in percentage

() No of animals

Biweekly values are provided in SPSS output.

The above observations have been made as per the SOP No.
(13/PHARM/NIN/CO1/NE/2006/OL)

TABLE – VII
NEUROLOGICAL EXAMINATION (Contd...)

Groups	Observation (Days)	Static limb position	Abnormal gait	Ataxic gait
		Normal	None	None
2X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
5X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(13/PHARM/NIN/CO1/NE/2006/OL)

() No of animals

TABLE – VII
NEUROLOGICAL EXAMINATION (Contd...)

Groups	Observation (Days)	Head position	Pinna Touch Response
		Normal	Normal
VC	Baseline	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)
1X Oryzanol	Baseline	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(13/PHARM/NIN/CO1/NE/2006/OL)

() No of animals

TABLE – VII
NEUROLOGICAL EXAMINATION (Contd...)

Groups	Observation (Days)	Head position	Pinna Touch Response
		Normal	Normal
2X Oryzanol	Baseline	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)
5X Oryzanol	Baseline	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(13/PHARM/NIN/CO1/NE/2006/OL)

() No of animals

TABLE – VIII
ALLERGENICITY PROFILE

Groups	Observation (Days)	Erythema	Alopecia	Eye appearance
		Absent	Absent	Absent
VC	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
1X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(14/PHARM/NIN/CO1/A/2006/OL)`

() No of animals

TABLE – VIII
ALLERGENICITY PROFILE (Contd...)

Groups	Observation (Days)	Erythema	Alopecia	Eye appearance
		Absent	Absent	Absent
2X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)
5X Oryzanol	Baseline	100 (10)	100 (10)	100 (10)
	6 th day test compound exposure	100 (10)	100 (10)	100 (10)
	13 th day test compound exposure	100 (10)	100 (10)	100 (10)
	20 th day test compound exposure	100 (10)	100 (10)	100 (10)
	27 th day test compound exposure	100 (10)	100 (10)	100 (10)
	34 th day test compound exposure	100 (10)	100 (10)	100 (10)
	41 st day test compound exposure	100 (10)	100 (10)	100 (10)
	48 th day test compound exposure	100 (10)	100 (10)	100 (10)
	55 th day test compound exposure	100 (10)	100 (10)	100 (10)
	62 nd day test compound exposure	100 (10)	100 (10)	100 (10)
	70 th day test compound exposure	100 (10)	100 (10)	100 (10)
	76 th day test compound exposure	100 (10)	100 (10)	100 (10)
	83 rd day test compound exposure	100 (10)	100 (10)	100 (10)
	91 st day test compound exposure	100 (10)	100 (10)	100 (10)

Values are in percentage
weekly values are provided in SPSS output.
The above observations have been made as per the SOP No.
(14/PHARM/NIN/CO1/A/2006/OL)

() No of animals

TABLE – IX (A)
URINE EXAMINATION (Qualitative) –Sex pooled

Groups		VC		1X Oryzanol		2X Oryzanol		5X Oryzanol	
Paramet	Status	1	2	1	2	1	2	1	2
Glucose	Negative	100(10)	100(10)	100(10)	100(10)	100(10)	100(10)	100(10)	100(10)
Bilirubin	Negative	20(2)	80(8)	10(1)	80(8)	10(1)	60(6)	50(5)	70(7)
	Trace	10(1)	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Small (+)	70(7)	20(2)	90(9)	20(2)	90(9)	40(4)	50(5)	30(3)
Ketone	Negative	20(2)	70(7)	20(2)	40(4)	10(1)	60(6)	10(1)	70(7)
	Trace	70(7)	30(3)	80(8)	60(6)	80(8)	40(4)	80(8)	20(2)
	Small (+)	10(1)	Nil	Nil	Nil	10(1)	Nil	10(1)	10(1)
Blood	Negative	80(8)	50(5)	70(7)	10(1)	70(7)	20(2)	60(6)	50(5)
	Trace	20(2)	10(1)	10(1)	20(2)	20(2)	20(2)	20(2)	10(1)
	Small (+)	Nil	10(1)	20(2)	Nil	Nil	10(1)	Nil	20(2)
	Moderate (++)	Nil	30(3)	Nil	60(6)	10(1)	50(5)	20(2)	20(2)
	5	Nil	Nil	Nil	10(1)	Nil	Nil	Nil	Nil
Protein	Trace	Nil	10(1)	Nil	20(2)	Nil	Nil	10(1)	10(1)
	Small (+)	100(10)	90(9)	80(8)	50(5)	80(8)	80(8)	60(6)	40(4)
	Moderate (++)	Nil	Nil	20(2)	30(3)	20(2)	20(2)	30(3)	50(5)
Nitrites	Negative	Nil	60(6)	Nil	50(5)	30(3)	50(5)	10(1)	20(2)
	Trace	100(10)	40(4)	100(10)	50(5)	70(7)	50(5)	90(9)	80(8)
Leucocytes	Negative	100(10)	70(7)	100(10)	90(9)	100(10)	90(9)	90(9)	60(6)
	Trace	Nil	10(1)	Nil	10(1)	Nil	10(1)	10(1)	30(3)
	Small (+)	Nil	10(1)	Nil	Nil	Nil	Nil	Nil	Nil
	Large (+++)	Nil	10(1)	Nil	Nil	Nil	Nil	Nil	10(1)

Values are in percentage for glucose, bilirubin, ketone, blood, protein, nitrites and leucocytes.

Values are expressed as Mean ± Standard Deviation for Specific gravity, pH and urobilinogen.

1 – Pre exposure; 2 – Post exposure

() No of animals

The above observations have been made as per the SOP No. (15/PHARM/NIN/CO1/QUE/2006/OL)

TABLE – IX (A)
URINE EXAMINATION (Qualitative) – Sex pooled (continue..)

Groups	VC		1X Oryzanol		2X Oryzanol		5X Oryzanol	
Parameter	1	2	1	2	1	2	1	2
Specific Gravity	1.03	1.02	1.03	1.03	1.03	1.03	1.03	1.02
	±	±	±	±	±	±	±	±
	0.005	0.004	0.002	0.006	0.004	0.005	0.002	0.004
	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)
pH	6.10	5.80	6.10	6.20	5.95	6.05	6.05	5.85
	±	±	±	±	±	±	±	±
	0.658	0.258	0.568	0.483	0.599	0.599	0.438	0.337
	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)
Urobilinogen E.U/dL	0.44	0.28	0.44	0.20	0.44	0.28	0.28	0.28
	±	±	±	±	±	±	±	±
	0.386	0.253	0.386	0.000	0.386	0.253	0.253	0.253
	(10)	(10)	(10)	(10)	(10)	(10)	(10)	(10)

Values are expressed as Mean ± Standard Deviation

() No of animals

TABLE – IX (B)
URINE EXAMINATION (Qualitative) – Male

Groups		VC		1X Oryzanol		2X Oryzanol		5X Oryzanol	
Paramet	Status	1	2	1	2	1	2	1	2
Glucose	Negative	100(5)	100(5)	100(5)	100(5)	100(5)	100(5)	100(5)	100(5)
Bilirubin	Negative	40(2)	100(5)	Nil	80(4)	Nil	80(4)	60(3)	80(4)
	Trace	20(1)	Nil	Nil	Nil	Nil	Nil	Nil	Nil
	Small (+)	40(2)	Nil	100(5)	20(1)	80(4)	20(1)	40(2)	20(1)
Ketone	Negative	40(2)	100(5)	Nil	20(1)	20(1)	80(4)	20(1)	40(2)
	Trace	60(3)	Nil	100(5)	80(4)	80(4)	20(1)	60(3)	40(2)
	Small (+)	Nil	Nil	Nil	Nil	Nil	Nil	20(1)	20(1)
Blood	Negative	60(3)	40(2)	40(2)	Nil	60(3)	20(1)	40(2)	40(2)
	Trace	40(2)	20(1)	20(1)	Nil	20(1)	Nil	40(2)	20(1)
	Small (+)	Nil	20(1)	40(2)	Nil	Nil	Nil	Nil	20(1)
	Moderate (++)	Nil	20(1)	Nil	80(4)	20(1)	80(4)	20(1)	20(1)
	5	Nil	Nil	Nil	20(1)	Nil	Nil	Nil	Nil
Protein	Trace	Nil	Nil	Nil	20(1)	Nil	Nil	Nil	Nil
	Small (+)	100(5)	100(5)	60(3)	40(2)	80(4)	100(5)	80(4)	40(2)
	Moderate (++)	Nil	Nil	40(2)	40(2)	20(1)	Nil	20(1)	60(3)
Nitrites	Negative	Nil	100(5)	Nil	80(4)	40(2)	60(3)	Nil	20(1)
	Trace	100(5)	Nil	100(5)	20(1)	60(3)	40(2)	100(5)	80(4)
Leucocytes	Negative	100(5)	40(2)	100(5)	80(4)	100(5)	80(4)	100(5)	60(3)
	Trace	Nil	20(1)	Nil	20(1)	Nil	20(1)	Nil	40(2)
	Small (+)	Nil	20(1)	Nil	Nil	Nil	Nil	Nil	Nil
	Large (+++)	Nil	20(1)	Nil	Nil	Nil	Nil	Nil	Nil

Values are in percentage for glucose, bilirubin, ketone, blood, protein, nitrites and leucocytes.

Values are expressed as Mean ± Standard Deviation for Specific gravity, pH and urobilinogen.

1 – Pre exposure; 2 – Post exposure

() No of animals

The above observations have been made as per the SOP No. (15/PHARM/NIN/CO1/QUE/2006/OL)

TABLE – IX (B)
URINE EXAMINATION (Qualitative) – Male (continue..)

Groups	VC		1X Oryzanol		2X Oryzanol		5X Oryzanol	
Parameter	1	2	1	2	1	2	1	2
Specific Gravity	1.03	1.03	1.03	1.02	1.03	1.03	1.03	1.02
	±	±	±	±	±	±	±	±
	0.004	0.005	0	0.008	0.002	0.006	0.002	0.005
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
pH	5.80	5.60	6.10	6.20	5.70	5.80	5.90	5.90
	±	±	±	±	±	±	±	±
	0.274	0.224	0.548	0.447	0.447	0.274	0.224	0.418
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Urobilinogen E.U/dL	0.20	0.20	0.20	0.20	0.36	0.20	0.20	0.36
	±	±	±	±	±	±	±	±
	0	0	0	0	0.358	0	0	0.358
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)

Values are expressed as Mean ± Standard Deviation

() No of animals

TABLE – IX (C)
URINE EXAMINATION (Qualitative) – Female

Groups		VC		1X Oryzanol		2X Oryzanol		5X Oryzanol	
Paramet	Status	1	2	1	2	1	2	1	2
Glucose	Negative	100(5)	100(5)	100(5)	100(5)	100(5)	100(5)	100(5)	100(5)
Bilirubin	Negative	Nil	60(3)	20(1)	80(4)	Nil	40(2)	40(2)	60(3)
	Small (+)	100(5)	40(2)	80(4)	20(1)	100(5)	60(3)	60(3)	40(2)
Ketone	Negative	Nil	40(2)	40(2)	60(3)	Nil	40(2)	Nil	100(5)
	Trace	80(4)	60(3)	60(3)	40(2)	80(4)	60(3)	100(5)	Nil
	Small (+)	20(1)	Nil	Nil	Nil	20(1)	Nil	Nil	Nil
Blood	Negative	100(5)	60(3)	100(5)	20(1)	80(4)	20(1)	80(4)	60(3)
	Trace	Nil	Nil	Nil	40(2)	20(1)	40(2)	Nil	Nil
	Small (+)	Nil	Nil	Nil	Nil	Nil	20(1)	Nil	20(1)
	Moderate (++)	Nil	40(2)	Nil	40(2)	Nil	20(1)	20(1)	20(1)
Protein	Trace	Nil	20(1)	Nil	20(1)	Nil	Nil	20(1)	20(1)
	Small (+)	100(5)	80(4)	100(5)	60(3)	80(4)	60(3)	40(2)	40(2)
	Moderate (++)	Nil	Nil	Nil	20(1)	20(1)	40(2)	40(2)	40(2)
Nitrites	Negative	Nil	20(1)	Nil	20(1)	20(1)	40(2)	20(1)	20(1)
	Trace	100(5)	80(4)	100(5)	80(4)	80(4)	60(3)	80(4)	80(4)
Leucocytes	Negative	100(5)	100(5)	100(5)	100(5)	100(5)	100(5)	80(4)	60(3)
	Trace	Nil	Nil	Nil	Nil	Nil	Nil	20(1)	20(1)
	Large (+++)	Nil	Nil	Nil	Nil	Nil	Nil	20(1)	20(1)

Values are in percentage for glucose, bilirubin, ketone, blood, protein, nitrites and leucocytes.

Values are expressed as Mean ± Standard Deviation for Specific gravity, pH and urobilinogen.

1 – Pre exposure; 2 – Post exposure

() No of animals

The above observations have been made as per the SOP No. (15/PHARM/NIN/CO1/QUE/2006/OL)

TABLE – IX (C)
URINE EXAMINATION (Qualitative) – Female

Groups	VC		1X Oryzanol		2X Oryzanol		5X Oryzanol	
Parameter	1	2	1	2	1	2	1	2
Specific Gravity	1.03	1.02	1.03	1.03	1.03	1.03	1.03	1.02
	±	±	±	±	±	±	±	±
	0.005	0.004	0.004	0.003	0.004	0.004	0.003	0.003
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
pH	6.40	6.00	6.10	6.20	6.20	6.30	6.20	5.80
	±	±	±	±	±	±	±	±
	0.822	0	0.652	0.570	0.671	0.758	0.570	0.274
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Urobilinogen E.U/dL	0.68	0.36	0.68	0.20	0.52	0.36	0.36	0.20
	±	±	±	±	±	±	±	±
	0.438	0.358	0.438	0	0.438	0.358	0.358	0
	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)

Values are expressed as Mean ± Standard Deviation

() No of animals

1 – Pre exposure; 2 – Post exposure

TABLE – X (A)

BIOCHEMICAL PARAMETERS – Sex Pooled

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
Parameters				
Glucose (mg/dl)	91.60	91.10	91.70	90.40
	±	±	±	±
	6.484	10.939	5.677	8.884
	(10)	(10)	(10)	(10)
TP (g/dl)	6.62	7.09	6.79	6.85
	±	±	±	±
	.697	.430	.302	.367
	(10)	(10)	(10)	(10)
Lipid Profile				
Cholesterol (mg/dl)	77.39	77.19	74.31	77.29
	±	±	±	±
	14.631	11.500	11.288	14.168
	(10)	(10)	(10)	(10)
TRI (mg/dl)	36.00	31.93	34.91	30.41
	±	±	±	±
	17.622	9.540	9.010	6.342
	(10)	(10)	(10)	(10)
HDL (mg/dl)	69.41	71.39	72.91	74.73
	±	±	±	±
	12.972	12.602	7.388	12.276
	(10)	(10)	(10)	(10)
LDL (mg/dl)	11.87	11.13	11.91	10.98
	±	±	±	±
	3.993	4.242	3.129	2.604
	(10)	(10)	(10)	(10)

Values are expressed as Mean ± Standard Deviation

() No of animals

Appendix – X (A) for normal range values

TABLE – X (A)
BIOCHEMICAL PARAMETERS – Sex Pooled (Contd...)

Groups	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
Renal Function Test				
Creatinine (mg/dl)	0.38	0.54	0.42	0.46
	±	±	±	±
	.290	.165	.215	.180
	(9)	(10)	(10)	(10)
Urea (mg/dl)	42.24	38.15	37.46	34.92
	±	±	±	±
	15.499	12.671	6.497	5.041
	(10)	(10)	(10)	(10)
Liver Function Test				
ALT (U/L)	52.61	52.56	58.07	52.64
	±	±	±	±
	8.702	12.756	14.061	13.435
	(10)	(9)	(10)	(10)
AST (U/L)	112.98	121.23	125.51	115.55
	±	±	±	±
	13.262	12.405	21.718	13.705
	(10)	(9)	(10)	(10)
ALB (U/L)	3.90	3.91	3.84	3.77
	±	±	±	±
	0.522	0.414	0.238	0.146
	(10)	(10)	(10)	(10)
ALP (U/L)	108.00	95.22	94.90	91.50
	±	±	±	±
	17.689	18.438	19.081	14.010
	(10)	(9)	(10)	(10)
TBILI (mg/dl)	0.07	0.09	0.06	0.09
	±	±	±	±
	0.048	0.057	0.052	0.032
	(10)	(10)	(10)	(10)

Values are expressed as Mean ± Standard Deviation
Appendix – X (A) for normal range values

() No of animals

TABLE – X (B)
BIOCHEMICAL PARAMETERS – Males

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
Parameters				
Glucose (mg/dl)	95.80	92.00	89.40	83.40
	±	±	±	±
	6.099	15.620	5.367	6.348
	(5)	(5)	(5)	(5)
TP (g/dl)	6.45	6.91	6.70	6.91
	±	±	±	±
	0.812	0.288	0.312	0.285
	(5)	(5)	(5)	(5)
Lipid Profile				
Cholesterol (mg/dl)	81.10	73.08	71.92	72.48
	±	±	±	±
	13.854	14.794	7.089	6.377
	(5)	(5)	(5)	(5)
TRI (mg/dl)	48.80	34.26	34.94	28.86
	±	±	±	±
	16.655	13.432	9.377	7.521
	(5)	(5)	(5)	(5)
HDL (mg/dl)	66.34	60.76	68.88	69.62
	±	±	±	±
	8.433	5.327	4.799	4.550
	(5)	(5)	(5)	(5)
LDL (mg/dl)	15.23	13.92	14.54	12.99
	±	±	±	±
	1.270	4.244	1.585	1.210
	(5)	(5)	(5)	(5)

Values are expressed as Mean ± Standard Deviation
Appendix – X (A) for normal range values

() No of animals

TABLE – X (B)
BIOCHEMICAL PARAMETERS – Males (Contd...)

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
Renal Function Test				
Creatinine (mg/dl)	0.48	0.57	0.51	0.49
	±	±	±	±
	0.328	0.232	0.157	0.120
	(4)	(5)	(5)	(5)
Urea (mg/dl)	52.76	42.98	40.62	35.08
	±	±	±	±
	15.452	16.176	7.620	5.416
	(5)	(5)	(5)	(5)
Liver Function Test				
ALT (U/L)	59.98	63.03	67.84	63.82
	±	±	±	±
	3.068	12.252	9.550	8.248
	(5)	(4)	(5)	(5)
AST (U/L)	118.66	122.13	124.42	122.72
	±	±	±	±
	7.451	9.816	12.469	8.649
	(5)	(4)	(5)	(5)
ALB (U/L)	3.79	3.77	3.71	3.74
	±	±	±	±
	0.599	0.433	0.255	0.185
	(5)	(5)	(5)	(5)
ALP (U/L)	109.20	108.00	103.60	99.80
	±	±	±	±
	16.917	11.165	14.484	12.988
	(5)	(4)	(5)	(5)
TBILI (mg/dl)	0.08	0.08	0.04	0.10
	±	±	±	±
	0.045	0.084	0.055	0
	(5)	(5)	(5)	(5)

Values are expressed as Mean ± Standard Deviation
Appendix – X (A) for normal range values

() No of animals

TABLE – X (C)

BIOCHEMICAL PARAMETERS – Females

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
Parameters				
Glucose (mg/dl)	87.40 ^a	90.20 ^{ac}	94.00 ^{bc}	97.40 ^b
	±	±	±	±
	3.647	4.817	5.523	3.847
	(5)	(5)	(5)	(5)
TP (g/dl)	6.79	7.27	6.87	6.79
	±	±	±	±
	.601	.504	.297	.462
	(5)	(5)	(5)	(5)
Lipid Profile				
Cholesterol (mg/dl)	73.68	81.30	76.70	82.10
	±	±	±	±
	15.978	6.042	14.905	18.791
	(5)	(5)	(5)	(5)
TRI (mg/dl)	23.20 ^a	29.60 ^{ab}	34.88 ^b	31.96 ^b
	±	±	±	±
	3.421	3.284	9.733	5.283
	(5)	(5)	(5)	(5)
HDL (mg/dl)	72.48	82.02	76.94	79.84
	±	±	±	±
	16.850	6.817	7.692	15.908
	(5)	(5)	(5)	(5)
LDL (mg/dl)	8.51	8.35	9.28	8.97
	±	±	±	±
	2.445	1.763	1.497	1.921
	(5)	(5)	(5)	(5)

Values are expressed as Mean ± Standard Deviation
Appendix – X (A) for normal range values

() No of animals

TABLE – X (C)
BIOCHEMICAL PARAMETERS – Females (Contd...)

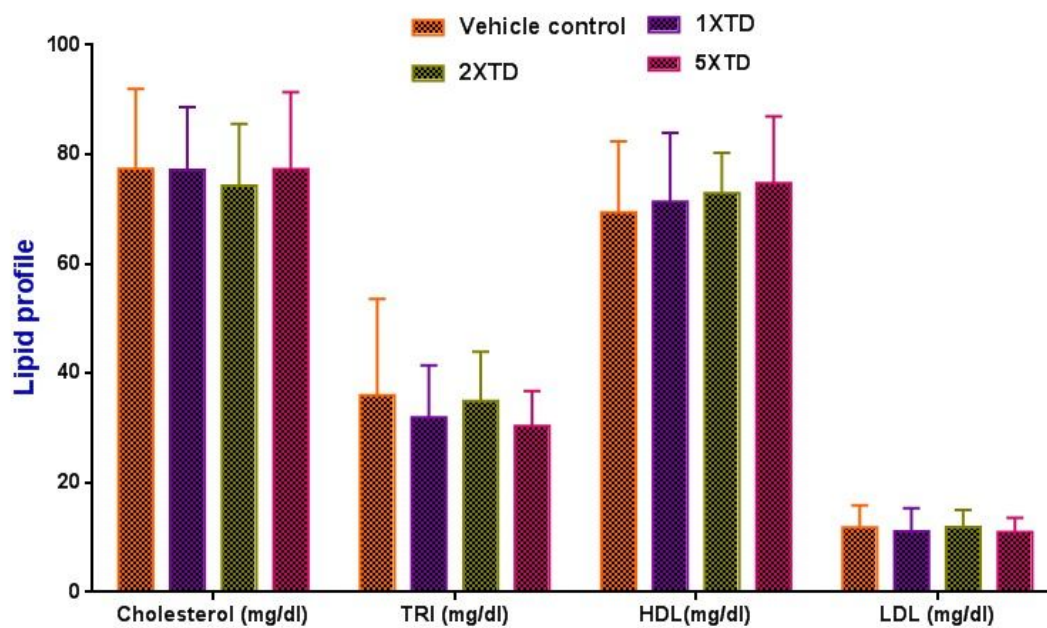
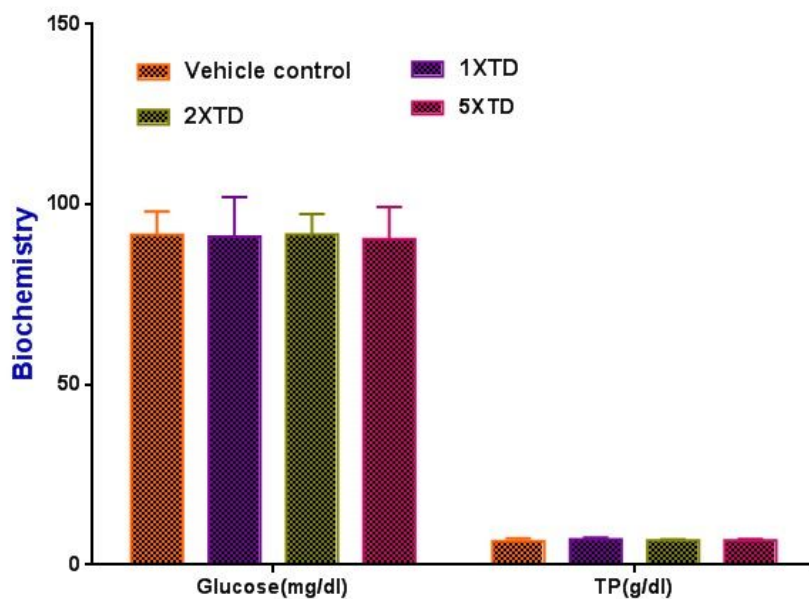
Groups	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
Renal Function Test				
Creatinine (mg/dl)	0.31	0.51	0.33	0.42
	±	±	±	±
	0.267	0.069	0.245	0.236
	(5)	(5)	(5)	(5)
Urea (mg/dl)	31.72	33.32	34.30	34.76
	±	±	±	±
	5.008	6.423	3.455	5.271
	(5)	(5)	(5)	(5)
Liver Function Test				
ALT (U/L)	45.24	44.18	48.30	41.46
	±	±	±	±
	5.017	3.944	10.725	5.058
	(5)	(5)	(5)	(5)
AST (U/L)	107.30	120.52	126.60	108.38
	±	±	±	±
	16.110	15.299	30.048	14.809
	(5)	(5)	(5)	(5)
ALB (U/L)	4.01	4.05	3.97	3.80
	±	±	±	±
	0.474	0.382	0.137	0.105
	(5)	(5)	(5)	(5)
ALP (U/L)	106.80	85.00	86.20	83.20
	±	±	±	±
	20.352	17.103	20.499	10.035
	(5)	(5)	(5)	(5)
TBILI (mg/dl)	0.06	0.10	0.08	0.08
	±	±	±	±
	0.055	0.000	0.045	0.045
	(5)	(5)	(5)	(5)

Values are expressed as Mean ± Standard Deviation
Appendix – X (A) for normal range values

() No of animals

GRAPH – III

BIOCHEMICAL PARAMETERS



GRAPH – III

BIOCHEMICAL PARAMETERS (Contd....)

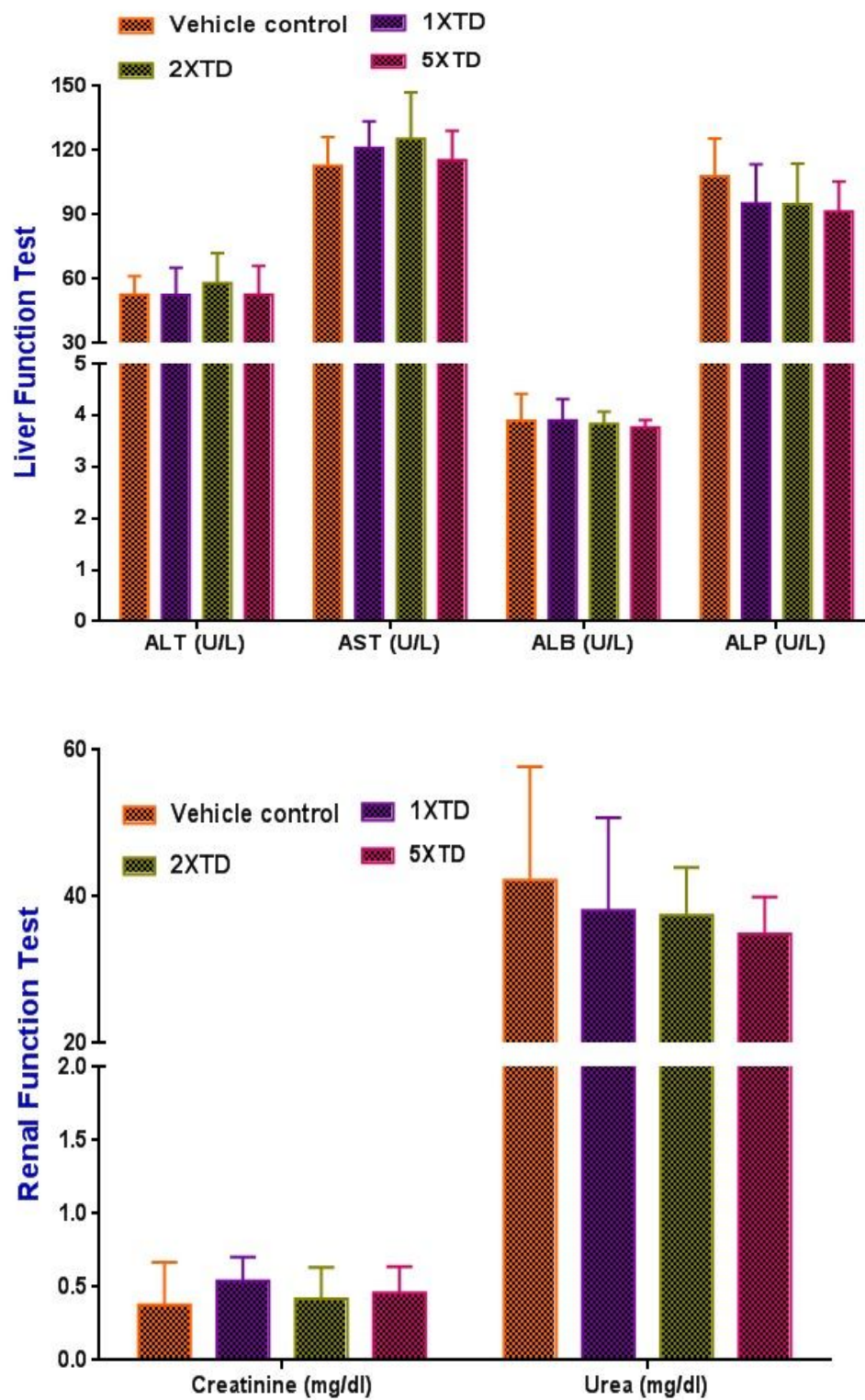


TABLE – XI (A)
HEMATOLOGY - Sex Pooled

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
WBC (10E³/mm³)	7.80 ± 1.954 (10)	7.77 ± 2.229 (10)	8.08 ± 1.611 (10)	7.20 ± 1.426 (10)
RBC (10E⁶/mm³)	8.49 ± 0.545 (10)	8.55 ± 0.627 (10)	8.85 ± 0.525 (10)	8.76 ± 0.604 (10)
Hb/HGB) (g/dl)	16.35 ± 0.763 (10)	16.33 ± 1.312 (10)	16.47 ± 0.733 (10)	16.35 ± 0.701 (10)
HCT (%)	48.63 ± 2.409 (10)	48.60 ± 3.398 (10)	48.80 ± 1.818 (10)	48.12 ± 2.214 (10)
MCV (µm3)	57.37 ± 1.711 (10)	56.88 ± 1.574 (10)	55.28 ± 2.629 (10)	55.08 ± 2.673 (10)
MCH (pg)	19.29 ^a ± 0.428 (10)	19.07 ^{ab} ± 0.462 (10)	18.65 ^b ± 0.495 (10)	18.72 ^b ± 0.680 (10)
MCHC (g/dl)	33.63 ± 0.678 (10)	33.58 ± 0.728 (10)	33.75 ± 0.834 (10)	33.99 ± 0.834 (10)

Superscripts with different letters are significant different at P<0.05

Values are expressed as Mean ± Standard Deviation

() No of animals

Appendix – X (B) for normal range values

TABLE – XI (A)
HEMATOLOGY - SEX POOLED (Contd...)

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
PLT (10E³/mm³)	990.40 ± 209.407 (10)	1036.50 ± 184.247 (10)	981.70 ± 128.395 (10)	928.20 ± 203.285 (10)
Neutrophils (%)	20.80 ± 5.224 (10)	22.50 ± 8.935 (10)	22.50 ± 4.503 (10)	23.70 ± 6.993 (10)
Lymphocytes (%)	74.00 ± 4.922 (10)	72.10 ± 8.825 (10)	72.20 ± 4.662 (10)	71.00 ± 7.789 (10)
Monocytes (%)	3.20 ± 0.789 (10)	3.50 ± 0.527 (10)	3.30 ± 0.675 (10)	3.30 ± 1.160 (10)
Eosinophils (%)	2.00 ± 0.471 (10)	1.90 ± 0.316 (10)	2.00 ± 0.667 (10)	2.00 ± 0.471 (10)

Values are expressed as Mean ± Standard Deviation
Appendix – X (B) for normal range values

() No of animals

TABLE – XI (B)
HEMATOLOGY - Males

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
WBC (10E³/mm³)	9.20 ± 1.345 (5)	6.50 ± 2.068 (5)	7.85 ± 1.630 (5)	7.47 ± 1.667 (5)
RBC (10E⁶/mm³)	8.24 ± 0.531 (5)	8.25 ± 0.765 (5)	8.56 ± 0.617 (5)	8.62 ± 0.820 (5)
Hb/HGB) (g/dl)	16.02 ± 0.753 (5)	15.62 ± 1.502 (5)	16.22 ± 0.915 (5)	16.36 ± 0.934 (5)
HCT (%)	48.06 ± 2.470 (5)	47.28 ± 4.346 (5)	48.80 ± 2.070 (5)	48.72 ± 3.034 (5)
MCV (µm³)	58.36 ± 1.474 (5)	57.35 ± 1.361 (5)	57.11 ± 1.925 (5)	56.65 ± 2.238 (5)
MCH (pg)	19.46 ± 0.428 (5)	18.92 ± 0.295 (5)	19.00 ± 0.367 (5)	19.04 ± 0.770 (5)
MCHC (g/dl)	33.35 ± 0.697 (5)	33.03 ± 0.593 (5)	33.22 ± 0.520 (5)	33.59 ± 0.420 (5)

Values are expressed as Mean ± Standard Deviation

() No of animals

Appendix – X (B) for normal range values

TABLE – XI (B)

HEMATOLOGY - Males (Contd...)

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
PLT (10E³/mm³)	1002.60	1016.80	952.20	886.00
	±	±	±	±
	196.410	258.150	92.427	225.794
	(5)	(5)	(5)	(5)
Neutrophils (%)	21.80	25.80	25.20	27.00
	±	±	±	±
	5.020	10.330	4.712	6.124
	(5)	(5)	(5)	(5)
Lymphocytes (%)	73.40	68.80	69.20	67.20
	±	±	±	±
	4.219	10.232	4.207	6.979
	(5)	(5)	(5)	(5)
Monocytes (%)	3.00	3.40	3.40	3.80
	±	±	±	±
	0.707	0.548	0.548	0.837
	(5)	(5)	(5)	(5)
Eosinophils (%)	1.80	2.00	2.20	2.00
	±	±	±	±
	0.447	0	0.837	0.707
	(5)	(5)	(5)	(5)

Values are expressed as Mean ± Standard Deviation

() No of animals

Appendix – X (B) for normal range values

TABLE – XI (C)
HEMATOLOGY – FEMALES

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
WBC (10E³/mm³)	6.41 ± 1.388 (5)	9.03 ± 1.706 (5)	8.31 ± 1.746 (5)	6.93 ± 1.274 (5)
RBC (10E⁶/mm³)	8.73 ± 0.487 (5)	8.85 ± 0.264 (5)	9.13 ± 0.183 (5)	8.89 ± 0.322 (5)
Hb/HGB) (g/dl)	16.68 ± 0.687 (5)	17.04 ± 0.598 (5)	16.72 ± 0.466 (5)	16.34 ± 0.483 (5)
HCT (%)	49.20 ± 2.479 (5)	49.92 ± 1.653 (5)	48.80 ± 1.776 (5)	47.52 ± 0.963 (5)
MCV (µm3)	56.38 ± 1.402 (5)	56.41 ± 1.781 (5)	53.44 ± 1.852 (5)	53.51 ± 2.211 (5)
MCH (pg)	19.12 ^a ± 0.396 (5)	19.22 ^a ± 0.581 (5)	18.30 ^b ± 0.332 (5)	18.40 ^b ± 0.436 (5)
MCHC (g/dl)	33.92 ± 0.587 (5)	34.13 ± 0.291 (5)	34.28 ± 0.773 (5)	34.39 ± 0.994 (5)

Superscripts with different letters are significant different at P<0.05

Values are expressed as Mean ± Standard Deviation

() No of animals

Appendix – X (B) for normal range values

TABLE – XI (C)

HEMATOLOGY – FEMALES (Contd...)

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
PLT (10E³/mm³)	978.20	1056.20	1011.20	970.40
	±	±	±	±
	244.370	93.644	162.400	193.766
	(5)	(5)	(5)	(5)
Neutrophils (%)	19.80	19.20	19.80	20.40
	±	±	±	±
	5.805	6.760	2.280	6.731
	(5)	(5)	(5)	(5)
Lymphocytes (%)	74.60	75.40	75.20	74.80
	±	±	±	±
	5.983	6.580	2.950	7.190
	(5)	(5)	(5)	(5)
Monocytes (%)	3.40	3.60	3.20	2.80
	±	±	±	±
	0.894	0.548	0.837	1.304
	(5)	(5)	(5)	(5)
Eosinophils (%)	2.20	1.80	1.80	2.00
	±	±	±	±
	0.447	0.447	0.447	0
	(5)	(5)	(5)	(5)

Values are expressed as Mean ± Standard Deviation

() No of animals

Appendix – X (B) for normal range values

GRAPH – IV

HEMATOLOGY PARAMETERS

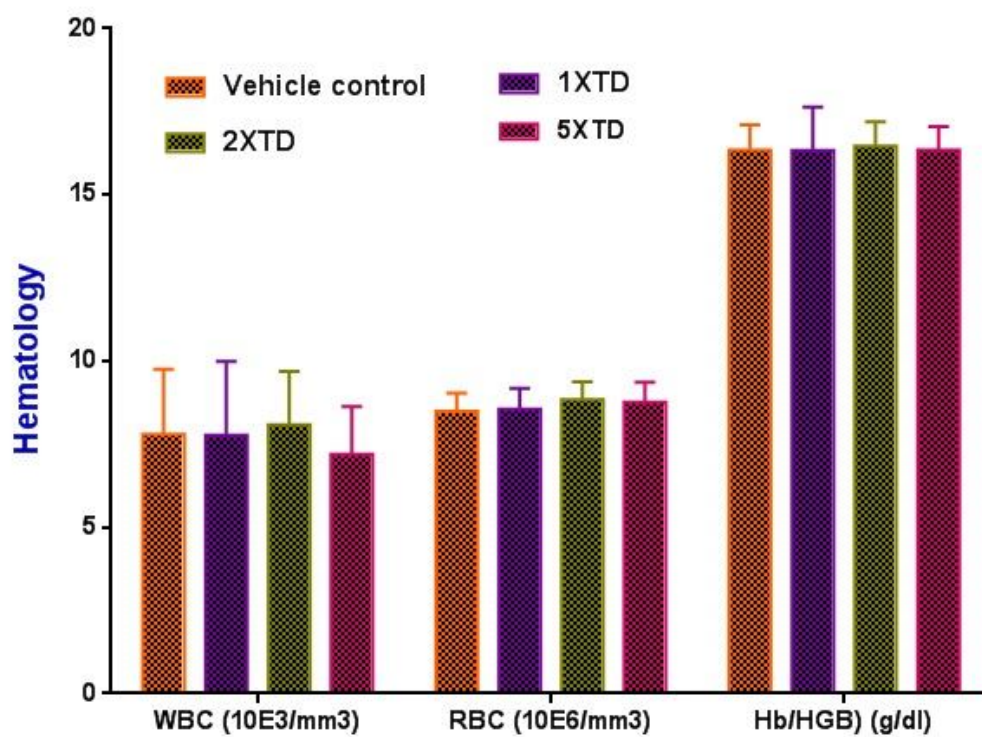


TABLE – XII
TOTAL SERUM IMMUNOGLOBULINS

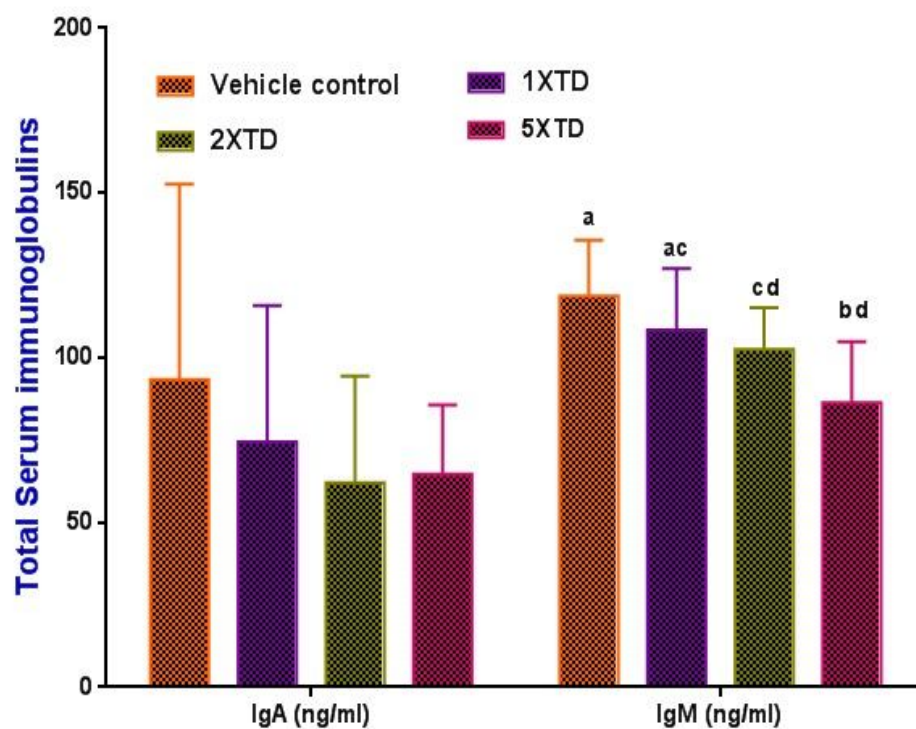
Groups	Vehicle Control	1X Oryzanol	2X Oryzanol	5X Oryzanol
Parameters				
Sex pooled				
IgA (ng/ml)	93.30	74.44	62.04	64.73
	±	±	±	±
	59.381	41.352	32.389	20.986
	(10)	(10)	(10)	(10)
IgM (ng/ml)	118.64 ^a	108.40 ^{a,c}	102.47 ^c	86.30 ^b
	±	±	±	±
	17.085	18.717	12.757	18.535
	(10)	(10)	(10)	(10)
IgE (ng/ml)	Detection levels are below 1% of serum Immunoglobulins			
Male				
IgA (ng/ml)	52.88	70.13	63.66	60.42
	±	±	±	±
	13.953	28.929	43.694	19.286
	(5)	(5)	(5)	(5)
IgM (ng/ml)	113.25	107.86	105.70	92.77
	±	±	±	±
	14.057	23.060	13.204	17.715
	(5)	(5)	(5)	(5)
IgE (ng/ml)	Detection levels are below 1% of serum Immunoglobulins			
Female				
IgA (ng/ml)	133.73	78.75	60.42	69.05
	±	±	±	±
	60.438	54.443	21.086	23.926
	(5)	(5)	(5)	(5)
IgM (ng/ml)	124.03 ^a	108.94 ^{a,c}	99.23 ^{c,d}	79.83 ^{b,d}
	±	±	±	±
	19.659	15.991	12.870	18.829
	(5)	(5)	(5)	(5)
IgE (ng/ml)	Detection levels are below 1% of serum Immunoglobulins			

Values are expressed as Mean ± Standard Deviation () No of animals

Superscripts with different letters are significant different at P<0.05

GRAPH – V

TOTAL SERUM IMMUNOGLOBULINS



Superscripts with different letters are significant different at P<0.05

TABLE – XIII (A)

ORGAN WEIGHTS (g/100g body weight) – SEXPOOLED

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
Brain	0.66 ± 0.103 (10)	0.63 ± 0.086 (10)	0.64 ± 0.098 (10)	0.65 ± 0.098 (10)
Heart	0.38 ± 0.035 (10)	0.38 ± 0.034 (10)	0.39 ± 0.042 (10)	0.39 ± 0.033 (10)
Lungs	0.65 ± 0.147 (10)	0.65 ± 0.196 (10)	0.68 ± 0.144 (10)	0.69 ± 0.155 (10)
Liver	2.68 ± 0.191 (10)	2.63 ± 0.216 (10)	2.64 ± 0.134 (10)	2.62 ± 0.098 (10)
Spleen	0.22 ± 0.023 (10)	0.22 ± 0.023 (10)	0.23 ± 0.032 (10)	0.22 ± 0.036 (10)
Kidney (L & R)	0.65 ^a ± 0.044 (10)	0.63 ^a ± 0.038 (10)	0.69 ^b ± 0.055 (10)	0.66 ^{ab} ± 0.035 (10)
Testis	1.32 ± 0.175 (5)	1.44 ± 0.066 (5)	1.43 ± 0.165 (5)	1.30 ± 0.275 (5)

Superscripts with different letters are significant different at P<0.05

Values are expressed as Mean ± Standard Deviation

() No of animals

TABLE – XIII (B)
ORGAN WEIGHTS (g/100g body weight) – MALES

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
Brain	0.57 ± 0.039 (5)	0.57 ± 0.084 (5)	0.59 ± 0.079 (5)	0.57 ± 0.048 (5)
Heart	0.36 ± 0.027 (5)	0.36 ± 0.043 (5)	0.38 ± 0.026 (5)	0.37 ± 0.036 (5)
Lungs	0.54 ± 0.025 (5)	0.51 ± 0.126 (5)	0.67 ± 0.154 (5)	0.61 ± 0.140 (5)
Liver	2.68 ± 0.118 (5)	2.67 ± 0.289 (5)	2.61 ± 0.108 (5)	2.61 ± 0.136 (5)
Spleen	0.20 ± 0.018 (5)	0.21 ± 0.024 (5)	0.20 ± 0.009 (5)	0.19 ± 0.017 (5)
Kidney (L & R)	0.66 ± 0.043 (5)	0.66 ± 0.019 (5)	0.68 ± 0.056 (5)	0.66 ± 0.040 (5)
Testis	1.32 ± 0.175 (5)	1.44 ± 0.066 (5)	1.43 ± 0.165 (5)	1.30 ± 0.275 (5)

Values are expressed as Mean ± Standard Deviation

() No of animals

TABLE – XIII (C)
ORGAN WEIGHTS (g/100g body weight) – FEMALES

Groups Exposure	VC	1X Oryzanol	2X Oryzanol	5X Oryzanol
Brain	0.75 ± 0.048 (5)	0.69 ± 0.032 (5)	0.69 ± 0.094 (5)	0.73 ± 0.056 (5)
Heart	0.40 ± 0.028 (5)	0.39 ± 0.017 (5)	0.41 ± 0.052 (5)	0.40 ± 0.019 (5)
Lungs	0.76 ± 0.129 (5)	0.79 ± 0.152 (5)	0.70 ± 0.150 (5)	0.78 ± 0.124 (5)
Liver	2.67 ± 0.261 (5)	2.60 ± 0.136 (5)	2.66 ± 0.164 (5)	2.63 ± 0.052 (5)
Spleen	0.23 ^a ± 0.018 (5)	0.23 ^a ± 0.020 (5)	0.26 ^b ± 0.017 (5)	0.25 ^{ab} ± 0.018 (5)
Kidney (L & R)	0.64 ^a ± 0.049 (5)	0.60 ^a ± 0.022 (5)	0.71 ^b ± 0.056 (5)	0.65 ^{ab} ± 0.033 (5)

Superscripts with different letters are significant different at P<0.05

Values are expressed as Mean ± Standard Deviation

() No of animals

GRAPH – VI
ORGAN WEIGHTS (g/100 g body weight)

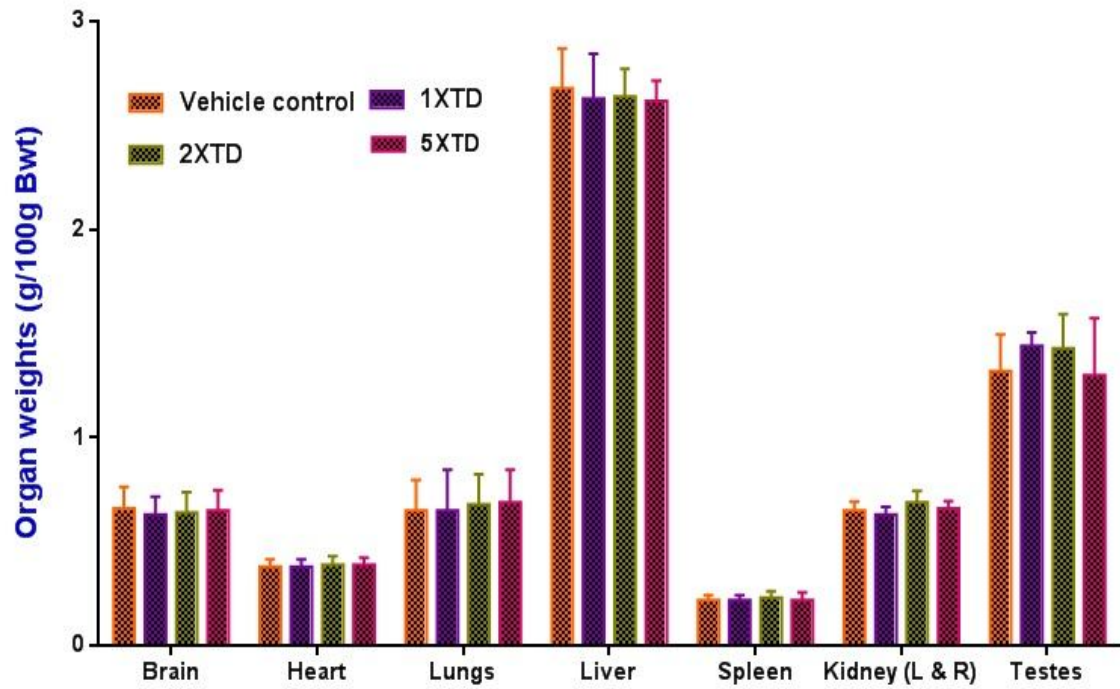


TABLE – XIV
NECROPSY FINDINGS

DOSAGE	VC		1X Oryzanol		2X Oryzanol		5X Oryzanol	
Sex	M	F	M	F	M	F	M	F
No. of Animals	5	5	5	5	5	5	5	5
No. of dead during treatment	0	0	0	0	0	0	0	0
No. of moribund and sacrificed	0	0	0	0	0	0	0	0
No. of finally sacrificed	5	5	5	5	5	5	5	5
No. of examined for gross pathology	5	5	5	5	5	5	5	5
No. of showing gross pathology	0	0	0	0	0	0	0	0
Visceral organ pathology	5	5	5	5	5	5	5	5

TABLE – XV
HISTOPATHOLOGICAL OBSERVATIONS

S. No	ORGANS	CODE	DIAGNOSIS	Control	TD	2 XTD	5XTD
				(% of animals)			
1	Brain	1	Normal	100(10)	100(10)	100(10)	100(10)
2	Heart	1	Normal	100(10)	100(10)	100(10)	100(10)
3	Lungs	2	Chronic interstitial pneumonitis grade I (CIPn-I)	10(1)	10(1)	40(4)	10(1)
		3	Chronic interstitial pneumonitis grade II (CIPn-II)	50(5)	60(6)	40(4)	50(5)
		4	Chronic interstitial pneumonitis grade III (CIPn-III)	30(3)	30(3)	10(1)	40(4)
		6	CIPn-II with Abscesses	10(1)	Nil	Nil	Nil
		7	CIPn-III with granulomatous	Nil	Nil	10(1)	Nil
4	Liver	1	Normal	50(5)	60(6)	80(8)	70(7)
		4	Focal vacuolation	30(3)	Nil	Nil	10(1)
		5	Paracytic cyst (PC)	Nil	10(1)	Nil	10(1)
		7	Micro Vacuolation in 5-33% Liver	10(1)	30(3)	10(1)	10(1)
		8	Micro Vacuolation in 33-66% Liver	10(1)	Nil	10(1)	Nil
5	Spleen	1	Normal	100(10)	100(10)	100(10)	100(10)
6	Kidneys	1	Normal	10(1)	10(1)	30(3)	20(2)
		3	Focal interstitial nephritis	Nil	10(1)	Nil	10(1)
		4	Tubular Atrophy with chronic inflammation-Mid	40(4)	60(6)	30(3)	10(1)
		5	Tubular Atrophy with chronic inflammation-Moderate	30(3)	10(1)	10(1)	40(4)
		6	Tubular Atrophy with chronic inflammation-Severe	20(2)	10(1)	30(3)	20(2)
7	Urinary Bladder	1	Normal	100(10)	100(10)	100(10)	100(10)
		2	Multiple foci of chronic inflammation	Nil	Nil	Nil	90(9)

Values are in percentage

() No of animals

Refer [Appendix – X] for Histopathology codes.

TABLE – XV
HISTOPATHOLOGICAL OBSERVATIONS (contd...)

S. No	ORGANS	CODE	DIAGNOSIS	Control	TD	2XTD	5XTD
				(% of animals)			
8	Testes & epididymis	1	Normal	100(5)	100(5)	100(5)	80 (4)
9		2	Atrophic	Nil	Nil	Nil	20 (1)
10	Prostate & Seminal vesicle	1	Normal	100(5)	100(5)	100(5)	100(5)
11	Uterus & Ovaries	1	Normal	100(5)	100(5)	100(5)	100(5)
12	Pancreas	1	Normal	100(10)	100(10)	100(10)	100(10)
13	Spinal cord	1	Normal	100(10)	100(10)	100(10)	100(10)
14	Trachea	1	Normal	Nil	10(1)	Nil	Nil
		2	Tracheitis	100(10)	90(9)	100(10)	100(10)
15	Oesophagus	1	Normal	100(10)	100(10)	100(10)	100(10)
16	Thymus	1	Normal	100(9)	100(9)	100(10)	100(10)
17	Aorta	1	Normal	100(10)	100(10)	100(10)	100(10)
18	Adrenals	1	Normal	100(10)	100(10)	100(10)	100(10)
19	Stomach	1	Normal	100(10)	100(10)	100(10)	100(10)
20	Small Intestine	1	Normal	100(10)	100(10)	100(10)	100(10)
21	Colon	1	Normal	100(10)	100(10)	100(10)	100(10)
22	Rectum	1	Normal	100(10)	100(10)	100(10)	100(10)
23	Skin/Muscle	1	Normal	100(10)	100(10)	100(10)	100(10)
24	Sternum	1	Normal	100(10)	100(10)	100(10)	100(10)
25	Bone Marrow	1	Normal	100(10)	100(10)	100(10)	100(10)
26	Adipose Tissue	1	Normal	100(10)	100(10)	100(10)	100(10)

Values are in percentage

() No of animals

Refer [Appendix – X] for Histopathology codes.

12.0 APPENDICES

APPENDIX – I

LETTER FROM SPONSOR



A.P. ORGANICS LIMITED

Saron Road, DHURI - 148 024 (Pb.) India

Ph.: 01675- 220700, 221100, 225862, Fax. 01675-228204
(An ISO 9001:2008 and HACCP Certified Company)

The Director,
National Institute of Nutrition,
Hyderabad.

Dated : 19-07-2014.

Kind Attention.

Dr. B. Dinesh Kumar,
Deputy Director.

Sub: Regarding conduction of Efficacy, Safety and Clinical trials for Oryzanol extracted from Rice Bran oil.

Dear Sir,

The company A.P.Organics Limited is part of Ricela Health Foods Limited (a national award winning company and India's largest processor of refined rice bran oil). The chairman of the company Dr. A. R. Sharma is currently the global President of International Rice Bran Oil Promotion Council. Apart from producing good quality rice bran oil other vision of the company is to add value to the byproducts generated during the processing of rice bran and oil.

In this regard with guidance of IICT, Hyderabad, the company has developed Oryzanol from refined rice bran oil (with 75-80% purity, a natural antioxidant efficient for cholesterol management) which has to tested for efficacy, safety and clinical studies. The project is in collaboration with BIRAC (earlier with DBT). As NIN is the premier institute of India in this field, the company would like to associate with NIN for undertaking the trials.

Hereby the company request NIN to give approval and to design a protocol for conduction of Pre Clinical- Efficacy and Safety trials followed by Clinical studies.

The company will look forward for your consent and valuable guidance.

Regards,

Varun Goyal, Head (R&D),

A.P.Organics Limited,

Dhuri-148024,

Dist. Sangrur, Punjab.

Tel: 01675-228900/ Mob: +91-9815162850.

 nlocking the health secrets, hidden in Rice Bran

E-mail: apsolvex@ricela.com

visit us at: www.ricela.com

Regd. Office : IInd Floor, Jewel Plaza, College Road,
Civil Lines, Opp. Sita Ram's, Ludhiana, Punjab.

APPENDIX – II
CONSENT LETTER

Website : www.ninindia.org
Fax : 91-40-27019074
E-mail : dirnin_hyd@yahoo.co.in

Phone : Off. 91-40-27018083
Res. 91-40-27171307



राष्ट्रीय पोषण संस्थान
NATIONAL INSTITUTE OF NUTRITION
भारतीय आयुर्विज्ञान अनुसंधान परिषद
Indian Council of Medical Research
जामे उस्मानिया, हैदराबाद - ५०० ००७
Jamai-Osmania P.O. Hyderabad - 500 007, AP

डॉ. कल्पगम पोलासा, पि हेच.डि, एम् बि ए
वैज्ञानिक 'एफ', एवं प्रमुख, एफ.डी.टी.आर.सी
प्रभारी निदेशक

Dr. Kalpagam Polasa, Ph.D, MBA
Scientist 'F' & Head, FDTRC
Director Incharge

Ref: D/NIN/PCT/09/14/
15th September, 2014

Dear Mr. Varun Goyal

Thank you for the visit to our Institute and propose to undertake the collaborative project titled "Pre clinical Efficacy and Safety evaluation of Oryzanol", A.P.Organics Ltd., Dhuri, Punjab as Public Private Partnership program at our Centre.

The project will be undertaken with funding source from BIPP of DBT - **Biotechnology Industry Research Assistance Council (BIRAC)**. The experimental work will be carried out after obtaining approvals from Institutional Animal Ethical Committee (IAEC), signing MOU and release of grants. I am nominating my colleague Dr. B. Dinesh Kumar, Scientist 'E' & Group Leader - PCT as Study Director to coordinate all activities related to this program. Please find enclosed the minutes of meeting held on 8th September, 2014 at NIN.

The detailed protocol along with budget will be released after receiving the payment of Rs. 50,000/-. The mode of payment should be through cheque or Demand Draft payable in the name of Director, National Institute of Nutrition at any Nationalised bank in Hyderabad or through E-Transfer with information to us (enclosure - I). If you undertake the experimental investigation with us, then the protocol charges will be adjusted at the end of study program.

Thanking you

Yours sincerely


(Kalpagam Polasa)

To
Mr. Varun Goyal
A.P.Organics Ltd.,
Saron Road,
Dhuri(Punjab)
Phone No: 01675-228900

C.C to

1. Dr R. B. N. Prasad, Chief Scientist & Head, Centre for Lipid Research, CSIR-IICT Hyderabad
2. Dr. B. Dinesh Kumar, Scientist 'E' & Group Leader-PCT, NIN (ICMR), Hyderabad

APPENDIX – III
IAEC APPROVAL

Email: nclas123@yahoo.com
Website: www.ninindia.org

Telephone 91-40-27197201/ 205 /207
Fax 91-40-27003317
Mobile 91-9849178671



राष्ट्रीय प्रयोगशाला पशु विज्ञान केन्द्र
NATIONAL CENTRE FOR LABORATORY ANIMAL SCIENCES
(Regd.No. 154/GO/RBI/SL/99/CPCSEA)
NATIONAL INSTITUTE OF NUTRITION
(Indian Council of Medical Research)
Jamai-Osmania PO, Hyderabad - 500 007, Telangana State

Dr. P. SURESH
Director In-Charge, NARF-BR
Scientist 'G', Head NCLAS &
Member Secretary, IAEC

NCLAS/IAEC/01/2017/R07
Date: 10th July, 2017

To
Dr. B. Dinesh Kumar
Principal Investigator
Scientist 'F', Deputy Director (Sr. Gr)
HOD Drug Toxicology Division
NIN, Hyderabad

Dear Dr. B. Dinesh Kumar,

This is to inform you that the Institutional Animal Ethics Committee has **approved for renewal** of your project entitled "**Pre-Clinical efficacy and safety evaluation of Oryzanol**". The study number is : R07/2017/P3F/III-IAEC/2014/BDK/SD-16M+16F/SD-20M+20F/G. Pig/36M, please refer the same number when making correspondence related to this project.

The necessary forms for indenting animals are available in NCLAS office

Yours faithfully

(Dr. P. Suresh)

APPENDIX – IV
CERTIFICATE OF ANALYSIS



सीएसआईआर-भारतीय रासायनिक प्रौद्योगिकी संस्थान
हैदराबाद - 500 007. भारत
CSIR - Indian Institute of Chemical Technology
Hyderabad - 500 007. INDIA
(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद)
(COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH)



Ref: IICTLSTD\IND\63

दिनांक / Dated
January 18, 2017

Dr. B. V. S. K. Rao
Principal Technical Officer
Lipid Science and Technology Division

Dr. B. Dinesh Kumar
Scientist 'E' (Deputy Director) &
Co-ordinator – PCT
Food and Drug Toxicology Research Centre (FDTRC)
National Institute of Nutrition (NIN)
Indian Council of Medical Research (ICMR)
Jamia-Osmania P.O., Hyderabad – 500007

Dear Dr. Dinesh Kumar,

I am herewith providing the composition of the Oryzanol sample received
from M/s A. P. Organics Ltd., Dhuri

Composition of Oryzanol sample received on 10-01-2017 from
M/s A.P. Organics Ltd

Component	Wt. %
Neutral Lipids (like triglycerides, steryl esters, hydrocarbons)	5.5
Oryzanol	92
Polar lipids (like phytosterols and partial glycerides)	2.5

With regards

Yours sincerely,

[B.V.S.K. Rao]

Tel (O): 91-40-27191848

Telefax: 91-40-27193370

Email: raobvsk@gmail.com

bhamidipati@iict.res.in

Copy to:

Sri Varun Goyal
A.P. Organics Ltd.,
Saron Road
Dhuri – 148 024
Punjab State

TARNAKA, UPPAL ROAD, HYDERABAD - 500 007. Telangana State, INDIA

दूरभाष / TELEPHONE: 27160123 (18 लाइन / 18 Lines)

www.iictindia.org निदेशक / Director : Fax : 91-40-27160387 व.प्र.नि / COA : Fax : 91-40-27193198

APPENDIX – V (A)

TEST MATERIAL DETAILS

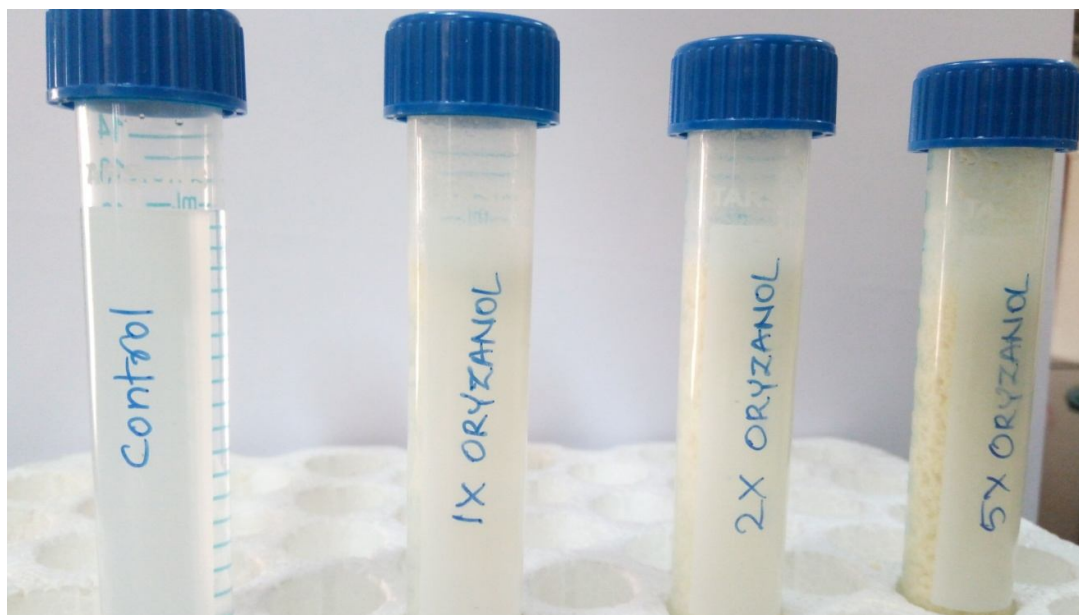
1.	Name of the Test material	:	Oryzanol powder
2.	Name of the supplier/sponsor	:	sponsor A.P. ORGANICS PVT. LTD. Dhuri-148024, Dist. Sangrur, Punjab. Email: varun.goyal82@gmail.com Supplier Indian institute of Chemical Technology (CSIR-IICT)Hyderabad
5.	Indication and usage	:	For Hypolipidimic activity
6.	Intended human Intake (ID)	:	300mg/day/adult
7.	Physical appearance	:	Oryzanol powder – Creamish white colour powder
8.	Supplied as	:	The test compound provided in a wide mouth Tarson plastic bottle with a lid and it was labeled with Test material name.
9.	Storage	:	The Test material should be stored at Cool & dry place i.e. (2° C - 8° C) temperature

APPENDIX – V (B)
TEST COMPOUND DETAILS (PHOTOGRAPHS)

Test Compound Receipt



Test Compound Reconstitution to various concentrations



APPENDIX – VI

STUDY DESIGN

S.No.	Group Details	No. of Animals /sex	Dose (mg/kg rat)	Study Period (days)#
1	Control	10(5M + 5F)	-	90
2	Oryzanol powder - 1XTD	10(5M + 5F)	27 mg	
3	Oryzanol powder - 2XTD	10(5M + 5F)	54 mg	
4	Oryzanol powder - 5XTD	10(5M + 5F)	135 mg	
# Excluding conditioning period				

APPENDIX – VII

SOP for Test material Preparation & Administration

- As per the protocol, calculate the required amount of test material to be given to different group of animals.
- Obtain the required amount of test material from the custodian after filling the 'Form– B'.
- Weigh 5gms CMC and mix with 400 ml diluents (HPLC grade water) and stir it well on magnetic stirrer and kept it for overnight and the next day make upto 1000 ml with diluents and label it as 0.5% CMC.
- Weigh the required amount of test compound according to the animal body weight and mix with 15ml of diluent (0.5% CMC solution) to each test material (in each bottle) and Sonicate it for 10-15 minutes and label it separately with the group names.
- The strength of the solution is maintained at
 1. 1 X ID - 5.4 mg /1ml/ 200gm Rat
 2. 2 X ID - 10.8mg /1ml /200gm Rat
 3. 5 X ID - 27 mg /1ml/ 200gm Rat
- Remove the animal from the cage and restrain it carefully.
- Mix each material well by vortexing before loading into syringe.
- Draw 1ml suspension into 2ml syringe with oral gavage (gauge No.18) and administer to rat by carefully inserting the needle in the mouth and proceeding via oesophagus.
- After administration monitor the animal for some time.
- Replace the Rat into its respective cage.
- The above procedure is followed for all the animals of each group daily once for 90 days.

APPENDIX – VIII

DIET COMPOSITION FOR RAT / MOUSE

S.No.	Materials	Percentage
1	Wheat flour	22.5 %
2	Roasted Bengal gram flour	60 %
3	Skim Milk Powder	5 %
4	Casein	4 %
5	Refined Oil	4 %
6	Salt Mixture with starch	4 %
7	Vitamin & Choline mixture with starch	0.5 %

Scale of diet per mouse:

Water and diet were provided *ad libitum*

SALT MIXTURE COMPOSITION FOR RAT / MOUSE

S.No.	Minerals	Per 100 Kg diet (g.)
1	Dicalcium Phosphate (CaHPO_4)	1250.00
2	Calcium carbonate (CaCO_3)	555.00
3	Sodium Chloride (NaCl)	300.00
4	Magnesium sulphate ($\text{Mg SO}_4 \cdot 7\text{H}_2\text{O}$)	229.00
5	Ferrous Sulphate ($\text{Fe SO}_4 \cdot 7\text{H}_2\text{O}$)	108.00
6	Manganese sulphate ($\text{MnSO}_4 \cdot \text{H}_2\text{O}$)	16.04
7	Potassium Iodide (KI)	1.00
8	Zinc sulphate ($\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$)	2.192
9	Copper sulphate ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$)	1.908
10	Cobalt Chloride ($\text{CoCl}_2 \cdot 6\text{H}_2\text{O}$)	0.012

All minerals together : 2463.15

Starch : 1536.85

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4000–00 g.

=====

i.e., 4.0 kg for 100 kg of diet

APPENDIX – VIII

VITAMIN MIXTURE COMPOSITION (Contd...)

S.No.	Minerals	Per 100 Kg diet (g.)
1	(dl) – α Tocopherol Acetate 50% Dry Powder (E)	12.0 g
2	Menadione (K)	0.15 g
3	Thiamine (B ₁)	1.2 g
4	Riboflavin (B ₂)	0.5 g
5	Pyridoxine (B ₆)	0.6 g
6	Niacin	1.0 g
7	Pantothenic Acid (Calcium Salt)	1.2 g
8	Cyanocobalamine (B ₁₂)	0.5 mg
9	Folic Acid	0.1 g
10	Para amino Benzoic Acid (PABA)	10.0 g
11	Biotin	40.0 mg
12	Inositol	10.0 g
13	Choline Chloride	100.0 g

Total vitamins put together

Starch add to make up : 500.000 g

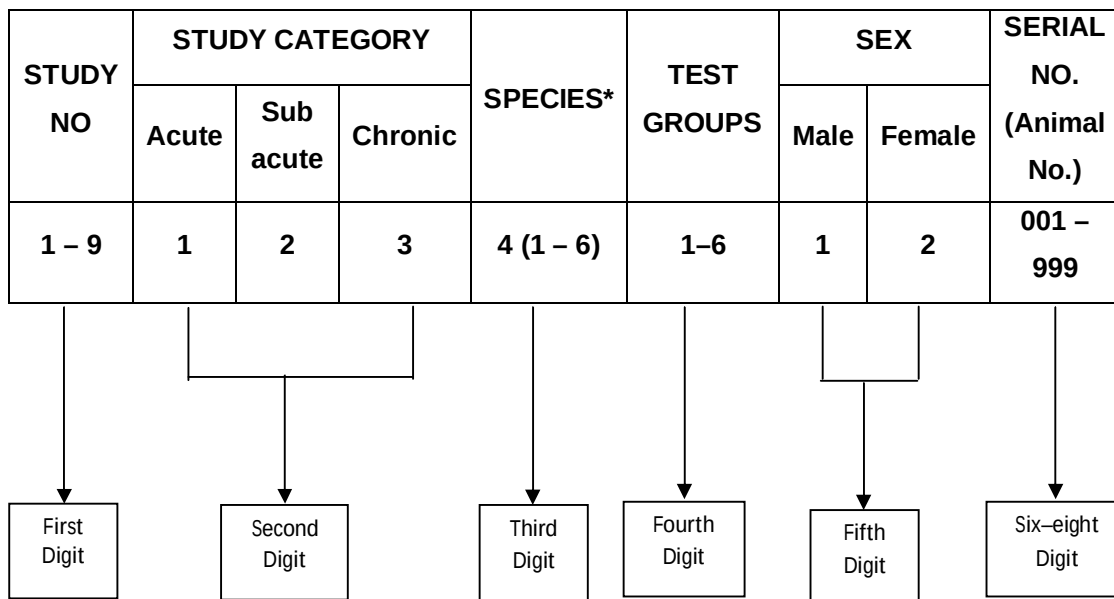
i.e. 500 g of vitamin mixture is used for every 100 kg of the diet prepared.

Photographes of NIN Standard Pellet Diet



APPENDIX – IX

CODE SEQUENCE PROCEDURE



*

Species name	Code
Mice	1
Monkey	2
Newzeland mice	3
Guinea pigs	4
Rat	5
Rabbit	6

APPENDIX – X (A)

LABORATORY ANIMALS BIOCHEMICAL & HAEMATOLOGICAL PARAMETERS STANDARD NORMAL RANGE VALUES

CLINICAL BIOCHEMISTRY REFERENCE VALUES

S.No	PARAMETER	SPECIES					
		MOUSE		RAT		MONKEY	
		MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
1	GLUCOSE (mg/dl)	80-160	80-150	70-125	70-120	42-80	67-91
		63-176*		50-135*		60-90*	
2	BUN (mg/dl)	15-45	15-40	10-16	10-19	14-32.5	16.4-27.5
		14-28*		5-29*		18-28*	
3	CREATININE (mg/dl)	0.3-0.8	0.2-0.6	0.5-0.8	0.5-0.8	0.9-1.75	0.8-1.1
4	TOTAL PROTEIN (g/dl)	5.0-7.4	4.8-7.0	5.6-7.1	5.5-7.3	5.85-7.60	6.6-7.8
		4.0-8.6*		4.7-8.2*		7.5-8.7*	
5	ALBUMIN (g/dl)	3.5-5.0	3.4-5.0	3.9-4.9	4.0-5.2	2.5-4.45	3.65-4.8
		2.5-4.8*		2.7-5.1*		2.4-3.4*	
6	AST (SGOT) (IU/L)	70-400	70-400	60-300	80-250	39.5-67.5	32.5-51.5
		23-48*		46-81*		34-56*	
7	ALT (SGPT) (IU/L)	25-200	25-100	25-55	25-50	17-102.5	14.5-48
		2-24*		18-30*		21-39*	
8	ALP (IU/L)	30-80	40-100	85-245	60-110	-	-
		10-28*		57-128*		15-35*	
9	CALCIUM (mg/dl)	8.5-11.5	8.5-11.5	8.5-10.5	8.5-10.2	9.2-10.2	8.8-10.3
		-		-		-	

Reference:

Mouse & Rat → Clinical Pathology of Laboratory Animals

Monkey → Normative haematologic and serum biochemical values for adult and infant monkeys (*Macaca mulatta*) in controlled lab environment (Journal of Toxicology and Environment Health 42:53-72, 1994).

* NIN Laboratory Manual.

APPENDIX – X (B)

LABORATORY ANIMALS BIOCHEMICAL & HAEMATOLOGICAL PARAMETERS

STANDARD NORMAL RANGE VALUES (Contd...)

HAEMATOLOGY NORMAL RANGES IN ANIMALS

Species Name	Mouse	Rat Wistar	Rat SD	Guinea pig	NZW Rabbit	Goat	Sheep
WBC (10E3/mm3)	3–13	3–9	3–9	3–12	3–8	8–20	4–14
RBC (10E6/mm3)	7–10	5–9	5–9	5–6	4–7	13–20	9–16
HGB (g/dl)	12—15	11—16	11—16	12—15	10—15	8–12	9—15
HCT (%)	37–47	33–45	33–45	35–53	27–46	23–38	26–44
MCV (µm3)	42–59	43–63	43–63	70–97	59–75	14–24	22–35
MCH (pg)	14–18	16–20	16–20	25–28	20–25	6—10	8—12
MCHC (g/dl)	31–35	31–36	31–36	29–34	31–35	32–38	33–37
PLT (10E3/mm3)	766– 1657	493– 1124	493– 1124	154– 639	137– 558	197– 876	247– 765
Neutro (%)	7—31	4—27	4—27	14–56	17–40	25–52	10—49
Lympho (%)	60–95	69–95	69–95	41–78	57–81	39–66	37–72
Mono (%)	0–4	0–4	0–4	0–5	0–6	1—8	0–7
Eosino (%)	0–6	0–5	0–5	0–9	0–7	0–10	0–8
Baso (%)	0–0	0–1	0–1	0–1	2—10	0–2	0–2

APPENDIX – XI
HISTOPATHOLOGY CODES

1	<u>Brain</u>	
	Normal	1
	Perivascular round cell collection (PVRCC)	2
	Inflammatory foci	3
	Choroids plexus hyperplasia	4
2	<u>Heart</u>	
	Normal	1
	Focal myocarditis	2
3	<u>Lungs</u>	
	Normal	1
	Chronic interstitial pneumonitis grade I (CIPn – I)	2
	Chronic interstitial pneumonitis grade II (CIPn – II)	3
	Chronic interstitial pneumonitis grade III (CIPn – III)	4
	Anthracotic pigment	5
	CIPn – II with Abscesses	6
	CIPn – III with granulomatous reaction	7
4	<u>Liver</u>	
	Normal	1
	Occasional focus of necrosis / focal lobular inflammation	2
	Periportal inflammation / inflammatory cell infiltrates	3
	Focal vacuolation	4
	Paracytic cyst (PC)	5
	Perivascular round cell collections (PVRCC)/Perivascular inflammation in 40%	6
	Micro vacuolation in 5-33% liver	7
	Micro vacuolation in 33-66% liver	8
	Micro vacuolation in >66% liver	9
5	<u>Spleen</u>	
	Normal	1
	Mild hyperplasia	2
6	<u>Kidneys</u>	
	Normal	1
	Occasional focal tubular necrosis / lymphocyte collection	2
	Focal interstitial nephritis	3
	Tubular Atrophy with chronic inflammation-Mild	4
	Tubular Atrophy with chronic inflammation -Moderate	5
	Tubular Atrophy with chronic inflammation -Severe	6

APPENDIX – XI
HISTOPATHOLOGY CODES (Contd...)

7	<u>Urinary Bladder</u>	
	Normal	1
	Multiple foci of chronic inflammation	2
8	<u>Pancreas</u>	
	Normal	1
9	<u>Testes</u>	
	Normal	1
	Juvenile - No spermatogenesis	2
	Atrophic	3
10	<u>Epidydimis</u>	
	Normal	1
11	<u>Prostate</u>	
	Normal	1
12	<u>Seminal vesicle</u>	
	Normal	1
13	<u>Uterus</u>	
	Normal	1
14	<u>Ovaries</u>	
	Normal	1
15	<u>Spinal cord</u>	
	Normal	1
	Inflammatory foci	2
16	<u>Thymus</u>	
	Normal	1
	Hyperplasia	2
17	<u>Aorta</u>	
	Normal	1
18	<u>Adrenals</u>	
	Normal	1
19	<u>Sciatic Nerve</u>	
	Normal	1
	Inflammatory foci	2

APPENDIX – XI

HISTOPATHOLOGY CODES (Contd...)

20	<u>Trachea</u>	
	Normal	1
	Tracheitis	2
21	<u>Thyroid</u>	
	Normal	1
22	<u>Oesophagus</u>	
	Normal	1
23	<u>Stomach</u>	
	Normal	1
24	<u>Small Intestine</u>	
	Normal	1
25	<u>Large Intestine</u>	
	Normal	1
26	<u>Rectum</u>	
	Normal	1
27	<u>Injection site / Skin/Muscle</u>	
	Normal	1
	Focal inflammation	2
	Lymph nodes in intermuscular plane	3
28	<u>Sternum</u>	
	Normal	1
29	<u>Bone Marrow</u>	
	Normal	1
	Hypoplasia	2
30	<u>Adipose tissue</u>	
	Normal	1
31	<u>Not available</u>	99
	<u>Not retrievable / Not palpable / Autolytic changes</u>	999

APPENDIX –XII

REFERENCES

1. Schedule 'Y' of Drugs & Cosmetics Act, 1940 and Rules, 1945.
2. Conversion factor to mice [Paget.G.E. & Barnes.J.M. (1964) Evaluation of Drug Activities: Pharmacometrics Ed. Laurence.D.R & Bocharach.A.L., Vol.1. Academic Press, New York].
3. Revised RDA for Indians 2010, National Institute of Nutrition.

13.0 SPSS OUT PUT

Live Phase

General Behaviour											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	General behaviour	Active	10	100	10	100	10	100	10	100
	6th day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	13th day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	20th day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	27th day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	34th day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	41st day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	48th day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	55th day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	70th day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	76th day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100
	91st day of TC Exposure	General behaviour	Active	10	100	10	100	10	100	10	100

Water Intake											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Water intake	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100

83rd day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100
91st day of TC Exposure	Water intake	Normal	10	100	10	100	10	100	10	100

Feed Intake Sexpooled

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
1st day of TC Exposure	VC	10	38.46	6.946	2.1964	33.491	43.429	27.1	53.3
	1XOryzanol	10	41.19	6.524	2.0630	36.523	45.857	32.8	51.6
	2XOryzanol	10	39.50	5.751	1.8187	35.386	43.614	33.5	50.8
	5XOryzanol	10	36.91	9.396	2.9713	30.188	43.632	17.9	53.5
	Total	40	39.02	7.173	1.1341	36.721	41.309	17.9	53.5
6th day of TC Exposure	VC	10	56.77	9.728	3.0764	49.811	63.729	43.6	70.8
	1XOryzanol	10	61.45	8.112	2.5653	55.647	67.253	51.9	74.4
	2XOryzanol	10	54.40	10.413	3.2929	46.951	61.849	39.4	74.2
	5XOryzanol	10	52.99	11.623	3.6756	44.675	61.305	31.4	74.3
	Total	40	56.40	10.189	1.6110	53.144	59.661	31.4	74.4
13th day of TC Exposure	VC	10	44.67	4.974	1.5729	41.112	48.228	37.3	54.0
	1XOryzanol	10	46.96	5.412	1.7115	43.088	50.832	39.5	55.8
	2XOryzanol	10	45.63	5.638	1.7830	41.597	49.663	32.9	52.8
	5XOryzanol	10	41.72	7.825	2.4744	36.123	47.317	27.4	53.3
	Total	40	44.75	6.143	.9714	42.780	46.710	27.4	55.8
20th day of TC Exposure	VC	10	47.16	6.622	2.0942	42.423	51.897	37.9	58.6
	1XOryzanol	10	51.81	4.215	1.3329	48.795	54.825	46.9	57.8
	2XOryzanol	10	48.44	8.873	2.8058	42.093	54.787	29.1	58.6
	5XOryzanol	10	46.24	7.283	2.3031	41.030	51.450	35.3	55.8
	Total	40	48.41	7.014	1.1091	46.169	50.656	29.1	58.6
27th day of TC Exposure	VC	10	46.06	10.022	3.1691	38.891	53.229	22.2	55.4
	1XOryzanol	10	51.07	6.852	2.1667	46.169	55.971	37.6	58.6
	2XOryzanol	10	54.22	5.626	1.7793	50.195	58.245	45.0	63.0
	5XOryzanol	10	48.74	4.316	1.3650	45.652	51.828	42.6	54.6
	Total	40	50.02	7.407	1.1711	47.654	52.391	22.2	63.0
34th day of TC Exposure	VC	10	45.90	9.933	3.1412	38.794	53.006	22.8	54.7
	1XOryzanol	10	51.63	7.198	2.2763	46.481	56.779	43.2	63.7
	2XOryzanol	10	51.00	6.243	1.9741	46.534	55.466	42.7	59.0
	5XOryzanol	10	48.18	4.851	1.5341	44.710	51.650	39.0	52.0
	Total	40	49.18	7.386	1.1679	46.815	51.540	22.8	63.7
41st day of TC Exposure	VC	10	47.06	8.306	2.6266	41.118	53.002	33.6	57.9
	1XOryzanol	10	48.41	4.154	1.3136	45.439	51.381	42.1	55.4
	2XOryzanol	10	46.77	6.525	2.0633	42.102	51.438	37.6	58.2
	5XOryzanol	10	46.67	6.157	1.9471	42.265	51.075	38.6	57.0
	Total	40	47.23	6.243	.9871	45.231	49.224	33.6	58.2
48th day of TC Exposure	VC	10	47.66	6.964	2.2023	42.678	52.642	38.0	58.9
	1XOryzanol	10	49.67	4.840	1.5306	46.208	53.132	41.4	57.0
	2XOryzanol	10	46.07	6.214	1.9649	41.625	50.515	39.2	56.0

	5XOryzanol	10	48.06	6.203	1.9616	43.622	52.498	41.1	59.1
	Total	40	47.87	6.006	.9496	45.944	49.786	38.0	59.1
55th day of TC Exposure	VC	10	51.83	9.364	2.9612	45.131	58.529	33.0	66.5
	1XOryzanol	10	57.25	5.241	1.6573	53.501	60.999	48.3	62.5
	2XOryzanol	10	53.84	12.948	4.0947	44.577	63.103	31.6	67.5
	5XOryzanol	10	53.14	16.118	5.0969	41.610	64.670	24.5	71.0
	Total	40	54.02	11.372	1.7981	50.378	57.652	24.5	71.0
62nd day of TC Exposure	VC	10	45.48	8.674	2.7430	39.275	51.685	34.7	59.9
	1XOryzanol	10	49.36	5.266	1.6651	45.593	53.127	42.4	56.7
	2XOryzanol	10	49.32	7.428	2.3491	44.006	54.634	39.2	62.9
	5XOryzanol	10	46.90	8.459	2.6751	40.849	52.951	36.4	62.0
	Total	40	47.77	7.471	1.1812	45.376	50.154	34.7	62.9
70th day of TC Exposure	VC	10	62.45	11.017	3.4839	54.569	70.331	37.2	75.5
	1XOryzanol	10	61.65	8.977	2.8387	55.228	68.072	40.6	70.4
	2XOryzanol	10	63.74	13.268	4.1958	54.249	73.231	40.7	80.0
	5XOryzanol	10	61.50	10.278	3.2502	54.148	68.852	40.5	74.8
	Total	40	62.34	10.603	1.6764	58.944	65.726	37.2	80.0
76th day of TC Exposure	VC	10	41.63	10.901	3.4472	33.832	49.428	21.3	57.7
	1XOryzanol	10	42.12	10.109	3.1966	34.889	49.351	28.1	58.0
	2XOryzanol	10	44.18	7.767	2.4561	38.624	49.736	30.5	58.2
	5XOryzanol	10	37.77	12.895	4.0777	28.545	46.995	23.0	62.5
	Total	40	41.43	10.431	1.6493	38.089	44.761	21.3	62.5
83rd day of TC Exposure	VC	10	44.65	5.494	1.7373	40.720	48.580	37.1	53.7
	1XOryzanol	10	45.11	7.976	2.5221	39.405	50.815	34.2	61.8
	2XOryzanol	10	47.13	6.414	2.0282	42.542	51.718	35.1	57.9
	5XOryzanol	10	45.89	9.519	3.0101	39.081	52.699	37.6	65.3
	Total	40	45.70	7.277	1.1506	43.368	48.022	34.2	65.3
91st day of TC Exposure	VC	10	58.56	9.276	2.9333	51.924	65.196	47.0	72.5
	1XOryzanol	10	67.63	13.419	4.2434	58.031	77.229	42.0	90.6
	2XOryzanol	10	64.20	9.763	3.0874	57.216	71.184	44.4	76.0
	5XOryzanol	10	61.61	11.639	3.6807	53.284	69.936	49.5	82.2
	Total	40	63.00	11.229	1.7754	59.409	66.591	42.0	90.6

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
1st day of TC Exposure	.321	3	36	.810
6th day of TC Exposure	.255	3	36	.857
13th day of TC Exposure	.588	3	36	.627
20th day of TC Exposure	1.625	3	36	.201
27th day of TC Exposure	1.061	3	36	.378
34th day of TC Exposure	1.227	3	36	.314
41st day of TC Exposure	2.682	3	36	.061
48th day of TC Exposure	1.011	3	36	.399
55th day of TC Exposure	2.349	3	36	.089
62nd day of TC Exposure	.759	3	36	.525
70th day of TC Exposure	.697	3	36	.560
76th day of TC Exposure	1.189	3	36	.328
83rd day of TC Exposure	1.219	3	36	.317
91st day of TC Exposure	.671	3	36	.575

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
1st day of TC Exposure	Between Groups	97.049	3	32.350	.610	.613
	Within Groups	1909.482	36	53.041		
	Total	2006.531	39			
6th day of TC Exposure	Between Groups	412.675	3	137.558	1.362	.270
	Within Groups	3635.875	36	100.997		
	Total	4048.550	39			
13th day of TC Exposure	Between Groups	148.457	3	49.486	1.346	.275
	Within Groups	1323.442	36	36.762		
	Total	1471.899	39			
20th day of TC Exposure	Between Groups	178.323	3	59.441	1.229	.313
	Within Groups	1740.501	36	48.347		
	Total	1918.824	39			
27th day of TC Exposure	Between Groups	360.625	3	120.208	2.433	.081
	Within Groups	1778.985	36	49.416		
	Total	2139.610	39			
34th day of TC Exposure	Between Groups	210.733	3	70.244	1.319	.283
	Within Groups	1916.917	36	53.248		
	Total	2127.650	39			
41st day of TC Exposure	Between Groups	19.465	3	6.488	.156	.925
	Within Groups	1500.555	36	41.682		
	Total	1520.020	39			
48th day of TC Exposure	Between Groups	65.601	3	21.867	.587	.627
	Within Groups	1341.170	36	37.255		
	Total	1406.771	39			
55th day of TC Exposure	Between Groups	160.357	3	53.452	.394	.758
	Within Groups	4883.374	36	135.649		
	Total	5043.731	39			
62nd day of TC Exposure	Between Groups	109.315	3	36.438	.635	.598
	Within Groups	2067.396	36	57.428		
	Total	2176.711	39			
70th day of TC Exposure	Between Groups	31.537	3	10.512	.087	.967
	Within Groups	4352.774	36	120.910		
	Total	4384.311	39			
76th day of TC Exposure	Between Groups	214.741	3	71.580	.640	.594
	Within Groups	4028.534	36	111.904		
	Total	4243.275	39			
83rd day of TC Exposure	Between Groups	35.315	3	11.772	.209	.890
	Within Groups	2029.804	36	56.383		
	Total	2065.119	39			
91st day of TC Exposure	Between Groups	445.226	3	148.409	1.195	.326
	Within Groups	4472.134	36	124.226		
	Total	4917.360	39			

Post Hoc Tests

Multiple Comparisons							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
1st day of TC Exposure	VC	1XOryzanol	-2.7300	3.2570	.407	-9.336	3.876
		2XOryzanol	-1.0400	3.2570	.751	-7.646	5.566
		5XOryzanol	1.5500	3.2570	.637	-5.056	8.156
	1XOryzanol	VC	2.7300	3.2570	.407	-3.876	9.336
		2XOryzanol	1.6900	3.2570	.607	-4.916	8.296
		5XOryzanol	4.2800	3.2570	.197	-2.326	10.886
	2XOryzanol	VC	1.0400	3.2570	.751	-5.566	7.646
		1XOryzanol	-1.6900	3.2570	.607	-8.296	4.916
		5XOryzanol	2.5900	3.2570	.432	-4.016	9.196
	5XOryzanol	VC	-1.5500	3.2570	.637	-8.156	5.056
		1XOryzanol	-4.2800	3.2570	.197	-10.886	2.326
		2XOryzanol	-2.5900	3.2570	.432	-9.196	4.016
6th day of TC Exposure	VC	1XOryzanol	-4.6800	4.4944	.305	-13.795	4.435
		2XOryzanol	2.3700	4.4944	.601	-6.745	11.485
		5XOryzanol	3.7800	4.4944	.406	-5.335	12.895
	1XOryzanol	VC	4.6800	4.4944	.305	-4.435	13.795
		2XOryzanol	7.0500	4.4944	.125	-2.065	16.165
		5XOryzanol	8.4600	4.4944	.068	-.655	17.575
	2XOryzanol	VC	-2.3700	4.4944	.601	-11.485	6.745
		1XOryzanol	-7.0500	4.4944	.125	-16.165	2.065
		5XOryzanol	1.4100	4.4944	.756	-7.705	10.525
	5XOryzanol	VC	-3.7800	4.4944	.406	-12.895	5.335
		1XOryzanol	-8.4600	4.4944	.068	-17.575	.655
		2XOryzanol	-1.4100	4.4944	.756	-10.525	7.705
13th day of TC Exposure	VC	1XOryzanol	-2.2900	2.7115	.404	-7.789	3.209
		2XOryzanol	-.9600	2.7115	.725	-6.459	4.539
		5XOryzanol	2.9500	2.7115	.284	-2.549	8.449
	1XOryzanol	VC	2.2900	2.7115	.404	-3.209	7.789
		2XOryzanol	1.3300	2.7115	.627	-4.169	6.829
		5XOryzanol	5.2400	2.7115	.061	-.259	10.739
	2XOryzanol	VC	.9600	2.7115	.725	-4.539	6.459
		1XOryzanol	-1.3300	2.7115	.627	-6.829	4.169
		5XOryzanol	3.9100	2.7115	.158	-1.589	9.409
	5XOryzanol	VC	-2.9500	2.7115	.284	-8.449	2.549
		1XOryzanol	-5.2400	2.7115	.061	-10.739	.259
		2XOryzanol	-3.9100	2.7115	.158	-9.409	1.589
20th day of TC Exposure	VC	1XOryzanol	-4.6500	3.1096	.144	-10.957	1.657
		2XOryzanol	-1.2800	3.1096	.683	-7.587	5.027
		5XOryzanol	.9200	3.1096	.769	-5.387	7.227
	1XOryzanol	VC	4.6500	3.1096	.144	-1.657	10.957
		2XOryzanol	3.3700	3.1096	.286	-2.937	9.677

		5XOryzanol	5.5700	3.1096	.082	-.737	11.877
	2XOryzanol	VC	1.2800	3.1096	.683	-5.027	7.587
		1XOryzanol	-3.3700	3.1096	.286	-9.677	2.937
		5XOryzanol	2.2000	3.1096	.484	-4.107	8.507
	5XOryzanol	VC	-.9200	3.1096	.769	-7.227	5.387
		1XOryzanol	-5.5700	3.1096	.082	-11.877	.737
		2XOryzanol	-2.2000	3.1096	.484	-8.507	4.107
27th day of TC Exposure	VC	1XOryzanol	-5.0100	3.1438	.120	-11.386	1.366
		2XOryzanol	-8.1600*	3.1438	.014	-14.536	-1.784
		5XOryzanol	-2.6800	3.1438	.400	-9.056	3.696
	1XOryzanol	VC	5.0100	3.1438	.120	-1.366	11.386
		2XOryzanol	-3.1500	3.1438	.323	-9.526	3.226
		5XOryzanol	2.3300	3.1438	.463	-4.046	8.706
	2XOryzanol	VC	8.1600*	3.1438	.014	1.784	14.536
		1XOryzanol	3.1500	3.1438	.323	-3.226	9.526
		5XOryzanol	5.4800	3.1438	.090	-.896	11.856
	5XOryzanol	VC	2.6800	3.1438	.400	-3.696	9.056
		1XOryzanol	-2.3300	3.1438	.463	-8.706	4.046
		2XOryzanol	-5.4800	3.1438	.090	-11.856	.896
34th day of TC Exposure	VC	1XOryzanol	-5.7300	3.2634	.088	-12.348	.888
		2XOryzanol	-5.1000	3.2634	.127	-11.718	1.518
		5XOryzanol	-2.2800	3.2634	.489	-8.898	4.338
	1XOryzanol	VC	5.7300	3.2634	.088	-.888	12.348
		2XOryzanol	.6300	3.2634	.848	-5.988	7.248
		5XOryzanol	3.4500	3.2634	.297	-3.168	10.068
	2XOryzanol	VC	5.1000	3.2634	.127	-1.518	11.718
		1XOryzanol	-.6300	3.2634	.848	-7.248	5.988
		5XOryzanol	2.8200	3.2634	.393	-3.798	9.438
	5XOryzanol	VC	2.2800	3.2634	.489	-4.338	8.898
		1XOryzanol	-3.4500	3.2634	.297	-10.068	3.168
		2XOryzanol	-2.8200	3.2634	.393	-9.438	3.798
41st day of TC Exposure	VC	1XOryzanol	-1.3500	2.8873	.643	-7.206	4.506
		2XOryzanol	.2900	2.8873	.921	-5.566	6.146
		5XOryzanol	.3900	2.8873	.893	-5.466	6.246
	1XOryzanol	VC	1.3500	2.8873	.643	-4.506	7.206
		2XOryzanol	1.6400	2.8873	.574	-4.216	7.496
		5XOryzanol	1.7400	2.8873	.551	-4.116	7.596
	2XOryzanol	VC	-.2900	2.8873	.921	-6.146	5.566
		1XOryzanol	-1.6400	2.8873	.574	-7.496	4.216
		5XOryzanol	.1000	2.8873	.973	-5.756	5.956
	5XOryzanol	VC	-.3900	2.8873	.893	-6.246	5.466
		1XOryzanol	-1.7400	2.8873	.551	-7.596	4.116
		2XOryzanol	-.1000	2.8873	.973	-5.956	5.756
48th day of TC Exposure	VC	1XOryzanol	-2.0100	2.7296	.466	-7.546	3.526
		2XOryzanol	1.5900	2.7296	.564	-3.946	7.126
		5XOryzanol	-.4000	2.7296	.884	-5.936	5.136
	1XOryzanol	VC	2.0100	2.7296	.466	-3.526	7.546
		2XOryzanol	3.6000	2.7296	.196	-1.936	9.136

		5XOryzanol	1.6100	2.7296	.559	-3.926	7.146
	2XOryzanol	VC	-1.5900	2.7296	.564	-7.126	3.946
		1XOryzanol	-3.6000	2.7296	.196	-9.136	1.936
		5XOryzanol	-1.9900	2.7296	.471	-7.526	3.546
	5XOryzanol	VC	.4000	2.7296	.884	-5.136	5.936
		1XOryzanol	-1.6100	2.7296	.559	-7.146	3.926
		2XOryzanol	1.9900	2.7296	.471	-3.546	7.526
55th day of TC Exposure	VC	1XOryzanol	-5.4200	5.2086	.305	-15.984	5.144
		2XOryzanol	-2.0100	5.2086	.702	-12.574	8.554
		5XOryzanol	-1.3100	5.2086	.803	-11.874	9.254
	1XOryzanol	VC	5.4200	5.2086	.305	-5.144	15.984
		2XOryzanol	3.4100	5.2086	.517	-7.154	13.974
		5XOryzanol	4.1100	5.2086	.435	-6.454	14.674
	2XOryzanol	VC	2.0100	5.2086	.702	-8.554	12.574
		1XOryzanol	-3.4100	5.2086	.517	-13.974	7.154
		5XOryzanol	.7000	5.2086	.894	-9.864	11.264
	5XOryzanol	VC	1.3100	5.2086	.803	-9.254	11.874
		1XOryzanol	-4.1100	5.2086	.435	-14.674	6.454
		2XOryzanol	-.7000	5.2086	.894	-11.264	9.864
62nd day of TC Exposure	VC	1XOryzanol	-3.8800	3.3890	.260	-10.753	2.993
		2XOryzanol	-3.8400	3.3890	.265	-10.713	3.033
		5XOryzanol	-1.4200	3.3890	.678	-8.293	5.453
	1XOryzanol	VC	3.8800	3.3890	.260	-2.993	10.753
		2XOryzanol	.0400	3.3890	.991	-6.833	6.913
		5XOryzanol	2.4600	3.3890	.473	-4.413	9.333
	2XOryzanol	VC	3.8400	3.3890	.265	-3.033	10.713
		1XOryzanol	-.0400	3.3890	.991	-6.913	6.833
		5XOryzanol	2.4200	3.3890	.480	-4.453	9.293
	5XOryzanol	VC	1.4200	3.3890	.678	-5.453	8.293
		1XOryzanol	-2.4600	3.3890	.473	-9.333	4.413
		2XOryzanol	-2.4200	3.3890	.480	-9.293	4.453
70th day of TC Exposure	VC	1XOryzanol	.8000	4.9175	.872	-9.173	10.773
		2XOryzanol	-1.2900	4.9175	.795	-11.263	8.683
		5XOryzanol	.9500	4.9175	.848	-9.023	10.923
	1XOryzanol	VC	-.8000	4.9175	.872	-10.773	9.173
		2XOryzanol	-2.0900	4.9175	.673	-12.063	7.883
		5XOryzanol	.1500	4.9175	.976	-9.823	10.123
	2XOryzanol	VC	1.2900	4.9175	.795	-8.683	11.263
		1XOryzanol	2.0900	4.9175	.673	-7.883	12.063
		5XOryzanol	2.2400	4.9175	.651	-7.733	12.213
	5XOryzanol	VC	-.9500	4.9175	.848	-10.923	9.023
		1XOryzanol	-.1500	4.9175	.976	-10.123	9.823
		2XOryzanol	-2.2400	4.9175	.651	-12.213	7.733
76th day of TC Exposure	VC	1XOryzanol	-.4900	4.7308	.918	-10.085	9.105
		2XOryzanol	-2.5500	4.7308	.593	-12.145	7.045
		5XOryzanol	3.8600	4.7308	.420	-5.735	13.455
	1XOryzanol	VC	.4900	4.7308	.918	-9.105	10.085
		2XOryzanol	-2.0600	4.7308	.666	-11.655	7.535

83rd day of TC Exposure	2XOryzanol	5XOryzanol	4.3500	4.7308	.364	-5.245	13.945
		VC	2.5500	4.7308	.593	-7.045	12.145
	5XOryzanol	1XOryzanol	2.0600	4.7308	.666	-7.535	11.655
		5XOryzanol	6.4100	4.7308	.184	-3.185	16.005
	VC	1XOryzanol	-3.8600	4.7308	.420	-13.455	5.735
		5XOryzanol	-4.3500	4.7308	.364	-13.945	5.245
	1XOryzanol	2XOryzanol	-6.4100	4.7308	.184	-16.005	3.185
		5XOryzanol	-1.2400	3.3581	.892	-7.270	6.350
	VC	2XOryzanol	-2.4800	3.3581	.465	-9.290	4.330
		5XOryzanol	-1.2400	3.3581	.714	-8.050	5.570
	2XOryzanol	1XOryzanol	.4600	3.3581	.892	-6.350	7.270
		5XOryzanol	-2.0200	3.3581	.551	-8.830	4.790
	VC	1XOryzanol	2.0200	3.3581	.551	-4.790	8.830
		5XOryzanol	-1.2400	3.3581	.714	-5.570	8.050
	5XOryzanol	1XOryzanol	1.2400	3.3581	.714	-5.570	8.050
		5XOryzanol	.7800	3.3581	.818	-6.030	7.590
	VC	1XOryzanol	-1.2400	3.3581	.714	-8.050	5.570
		5XOryzanol	-3.0500	4.9845	.077	-19.179	1.039
91st day of TC Exposure	1XOryzanol	2XOryzanol	-5.6400	4.9845	.265	-15.749	4.469
		5XOryzanol	-3.0500	4.9845	.544	-13.159	7.059
	VC	1XOryzanol	9.0700	4.9845	.077	-1.039	19.179
		5XOryzanol	3.4300	4.9845	.496	-6.679	13.539
	2XOryzanol	1XOryzanol	6.0200	4.9845	.235	-4.089	16.129
		5XOryzanol	5.6400	4.9845	.265	-4.469	15.749
	VC	1XOryzanol	-3.4300	4.9845	.496	-13.539	6.679
		5XOryzanol	2.5900	4.9845	.607	-7.519	12.699
	5XOryzanol	1XOryzanol	3.0500	4.9845	.544	-7.059	13.159
		5XOryzanol	-6.0200	4.9845	.235	-16.129	4.089
	VC	1XOryzanol	-2.5900	4.9845	.607	-12.699	7.519
		5XOryzanol	3.0500	4.9845	.544	-7.059	13.159

*. The mean difference is significant at the 0.05 level.

Oneway**Sex = MALE**

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
1st day of TC Exposure	VC	5	43.08	6.219	2.7813	35.358	50.802	37.6	53.3
	1XOryzanol	5	44.56	6.157	2.7533	36.916	52.204	38.4	51.6
	2XOryzanol	5	39.44	5.206	2.3280	32.976	45.904	34.3	46.3
	5XOryzanol	5	41.94	7.740	3.4614	32.329	51.551	33.9	53.5
	Total	20	42.26	6.175	1.3807	39.365	45.145	33.9	53.5
6th day of	VC	5	65.00	4.650	2.0797	59.226	70.774	60.6	70.8

TC Exposure	1XOryzanol	5	67.56	6.343	2.8367	59.684	75.436	58.8	74.4
	2XOryzanol	5	62.72	7.073	3.1633	53.937	71.503	57.0	74.2
	5XOryzanol	5	60.82	7.960	3.5600	50.936	70.704	54.6	74.3
	Total	20	64.03	6.602	1.4762	60.935	67.115	54.6	74.4
13th day of TC Exposure	VC	5	47.04	4.777	2.1365	41.108	52.972	41.5	54.0
	1XOryzanol	5	50.98	4.519	2.0210	45.369	56.591	45.3	55.8
	2XOryzanol	5	46.42	7.787	3.4824	36.751	56.089	32.9	52.8
	5XOryzanol	5	47.20	4.463	1.9960	41.658	52.742	41.3	53.3
	Total	20	47.91	5.428	1.2137	45.370	50.450	32.9	55.8
20th day of TC Exposure	VC	5	52.78	3.539	1.5825	48.386	57.174	49.2	58.6
	1XOryzanol	5	54.76	3.774	1.6878	50.074	59.446	49.1	57.8
	2XOryzanol	5	49.72	11.904	5.3237	34.939	64.501	29.1	58.6
	5XOryzanol	5	48.46	6.016	2.6905	40.990	55.930	37.8	51.7
	Total	20	51.43	7.041	1.5744	48.135	54.725	29.1	58.6
27th day of TC Exposure	VC	5	52.58	4.186	1.8720	47.382	57.778	45.4	55.4
	1XOryzanol	5	48.58	8.746	3.9113	37.720	59.440	37.6	58.4
	2XOryzanol	5	58.42	3.738	1.6716	53.779	63.061	52.6	63.0
	5XOryzanol	5	50.52	2.418	1.0814	47.518	53.522	48.7	54.6
	Total	20	52.53	6.186	1.3832	49.630	55.420	37.6	63.0
34th day of TC Exposure	VC	5	53.22	1.348	.6028	51.546	54.894	51.4	54.7
	1XOryzanol	5	52.58	7.510	3.3588	43.255	61.905	43.4	63.7
	2XOryzanol	5	55.26	4.722	2.1115	49.397	61.123	48.9	59.0
	5XOryzanol	5	51.06	1.144	.5115	49.640	52.480	49.5	52.0
	Total	20	53.03	4.429	.9904	50.957	55.103	43.4	63.7
41st day of TC Exposure	VC	5	54.28	2.730	1.2208	50.890	57.670	50.5	57.9
	1XOryzanol	5	51.16	3.627	1.6219	46.657	55.663	45.6	55.4
	2XOryzanol	5	49.08	7.838	3.5053	39.348	58.812	37.6	58.2
	5XOryzanol	5	50.36	5.811	2.5986	43.145	57.575	41.3	57.0
	Total	20	51.22	5.315	1.1884	48.733	53.707	37.6	58.2
48th day of TC Exposure	VC	5	53.08	4.884	2.1844	47.015	59.145	45.6	58.9
	1XOryzanol	5	52.00	4.716	2.1093	46.144	57.856	45.1	57.0
	2XOryzanol	5	49.86	5.809	2.5978	42.647	57.073	40.5	56.0
	5XOryzanol	5	51.72	6.166	2.7576	44.064	59.376	45.5	59.1
	Total	20	51.67	5.121	1.1452	49.268	54.062	40.5	59.1
55th day of TC Exposure	VC	5	52.48	13.289	5.9428	35.980	68.980	33.0	66.5
	1XOryzanol	5	58.88	5.014	2.2422	52.655	65.105	50.3	62.5
	2XOryzanol	5	53.22	15.569	6.9629	33.888	72.552	31.6	67.5
	5XOryzanol	5	58.28	19.529	8.7336	34.032	82.528	24.5	71.0
	Total	20	55.72	13.511	3.0212	49.392	62.038	24.5	71.0
62nd day of TC Exposure	VC	5	49.80	10.388	4.6456	36.902	62.698	34.7	59.9
	1XOryzanol	5	52.00	6.176	2.7621	44.331	59.669	42.4	56.7
	2XOryzanol	5	54.20	6.608	2.9553	45.995	62.405	45.7	62.9
	5XOryzanol	5	52.52	7.811	3.4932	42.821	62.219	43.8	62.0
	Total	20	52.13	7.442	1.6641	48.647	55.613	34.7	62.9
70th day of TC Exposure	VC	5	64.94	15.658	7.0026	45.498	84.382	37.2	75.5
	1XOryzanol	5	63.00	12.628	5.6473	47.321	78.679	40.6	70.4
	2XOryzanol	5	62.90	17.482	7.8182	41.193	84.607	40.7	77.2
	5XOryzanol	5	67.70	7.468	3.3399	58.427	76.973	55.6	74.8

76th day of TC Exposure	Total	20	64.64	12.855	2.8746	58.618	70.652	37.2	77.2
	VC	5	45.54	9.289	4.1541	34.006	57.074	34.6	57.7
	1XOryzanol	5	50.42	5.733	2.5639	43.302	57.538	43.2	58.0
	2XOryzanol	5	46.84	7.222	3.2300	37.872	55.808	41.5	58.2
	5XOryzanol	5	46.98	11.805	5.2793	32.322	61.638	30.2	62.5
83rd day of TC Exposure	Total	20	47.45	8.297	1.8553	43.562	51.328	30.2	62.5
	VC	5	47.50	5.583	2.4966	40.568	54.432	41.0	53.7
	1XOryzanol	5	49.60	8.192	3.6635	39.429	59.771	40.2	61.8
	2XOryzanol	5	48.16	4.865	2.1759	42.119	54.201	41.8	53.1
	5XOryzanol	5	49.80	11.343	5.0728	35.716	63.884	37.6	65.3
91st day of TC Exposure	Total	20	48.77	7.331	1.6392	45.334	52.196	37.6	65.3
	VC	5	63.48	10.328	4.6187	50.656	76.304	48.3	72.5
	1XOryzanol	5	70.86	18.737	8.3794	47.595	94.125	42.0	90.6
	2XOryzanol	5	66.38	12.721	5.6888	50.585	82.175	44.4	76.0
	5XOryzanol	5	68.58	11.799	5.2769	53.929	83.231	49.9	82.2
	Total	20	67.33	12.945	2.8946	61.267	73.383	42.0	90.6
a. Sex = MALE									

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
1st day of TC Exposure	.364	3	16	.780
6th day of TC Exposure	.208	3	16	.890
13th day of TC Exposure	.456	3	16	.716
20th day of TC Exposure	1.772	3	16	.193
27th day of TC Exposure	4.788	3	16	.014
34th day of TC Exposure	3.841	3	16	.030
41st day of TC Exposure	1.728	3	16	.202
48th day of TC Exposure	.278	3	16	.840
55th day of TC Exposure	1.730	3	16	.201
62nd day of TC Exposure	.890	3	16	.468
70th day of TC Exposure	1.823	3	16	.184
76th day of TC Exposure	.688	3	16	.572
83rd day of TC Exposure	1.806	3	16	.187
91st day of TC Exposure	.708	3	16	.561
a. Sex = MALE				

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
1st day of TC Exposure	Between Groups	70.085	3	23.362	.571	.642
	Within Groups	654.344	16	40.897		
	Total	724.430	19			
6th day of TC Exposure	Between Groups	127.109	3	42.370	.967	.432
	Within Groups	701.028	16	43.814		
	Total	828.137	19			
13th day of TC Exposure	Between Groups	64.530	3	21.510	.695	.568

	Within Groups	495.208	16	30.951		
	Total	559.738	19			
20th day of TC Exposure	Between Groups	123.282	3	41.094	.803	.510
	Within Groups	818.660	16	51.166		
	Total	941.942	19			
27th day of TC Exposure	Between Groups	271.686	3	90.562	3.182	.053
	Within Groups	455.332	16	28.458		
	Total	727.018	19			
34th day of TC Exposure	Between Groups	45.462	3	15.154	.741	.543
	Within Groups	327.300	16	20.456		
	Total	372.762	19			
41st day of TC Exposure	Between Groups	73.432	3	24.477	.845	.489
	Within Groups	463.220	16	28.951		
	Total	536.652	19			
48th day of TC Exposure	Between Groups	26.878	3	8.959	.304	.822
	Within Groups	471.468	16	29.467		
	Total	498.346	19			
55th day of TC Exposure	Between Groups	166.434	3	55.478	.269	.847
	Within Groups	3302.032	16	206.377		
	Total	3468.466	19			
62nd day of TC Exposure	Between Groups	49.414	3	16.471	.263	.851
	Within Groups	1002.948	16	62.684		
	Total	1052.362	19			
70th day of TC Exposure	Between Groups	75.854	3	25.285	.132	.940
	Within Groups	3064.152	16	191.510		
	Total	3140.006	19			
76th day of TC Exposure	Between Groups	65.310	3	21.770	.280	.839
	Within Groups	1242.680	16	77.668		
	Total	1307.990	19			
83rd day of TC Exposure	Between Groups	18.674	3	6.225	.099	.959
	Within Groups	1002.432	16	62.652		
	Total	1021.106	19			
91st day of TC Exposure	Between Groups	148.742	3	49.581	.261	.852
	Within Groups	3035.076	16	189.692		
	Total	3183.818	19			
a. Sex = MALE						

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
1st day of TC Exposure	VC	1XOryzanol	-1.4800	4.0446	.719	-10.054	7.094
		2XOryzanol	3.6400	4.0446	.381	-4.934	12.214
		5XOryzanol	1.1400	4.0446	.782	-7.434	9.714
	1XOryzanol	VC	1.4800	4.0446	.719	-7.094	10.054

		2XOryzanol	5.1200	4.0446	.224	-3.454	13.694
		5XOryzanol	2.6200	4.0446	.526	-5.954	11.194
	2XOryzanol	VC	-3.6400	4.0446	.381	-12.214	4.934
		1XOryzanol	-5.1200	4.0446	.224	-13.694	3.454
		5XOryzanol	-2.5000	4.0446	.545	-11.074	6.074
	5XOryzanol	VC	-1.1400	4.0446	.782	-9.714	7.434
		1XOryzanol	-2.6200	4.0446	.526	-11.194	5.954
		2XOryzanol	2.5000	4.0446	.545	-6.074	11.074
6th day of TC Exposure	VC	1XOryzanol	-2.5600	4.1864	.549	-11.435	6.315
		2XOryzanol	2.2800	4.1864	.594	-6.595	11.155
		5XOryzanol	4.1800	4.1864	.333	-4.695	13.055
	1XOryzanol	VC	2.5600	4.1864	.549	-6.315	11.435
		2XOryzanol	4.8400	4.1864	.265	-4.035	13.715
		5XOryzanol	6.7400	4.1864	.127	-2.135	15.615
	2XOryzanol	VC	-2.2800	4.1864	.594	-11.155	6.595
		1XOryzanol	-4.8400	4.1864	.265	-13.715	4.035
		5XOryzanol	1.9000	4.1864	.656	-6.975	10.775
	5XOryzanol	VC	-4.1800	4.1864	.333	-13.055	4.695
		1XOryzanol	-6.7400	4.1864	.127	-15.615	2.135
		2XOryzanol	-1.9000	4.1864	.656	-10.775	6.975
13th day of TC Exposure	VC	1XOryzanol	-3.9400	3.5186	.279	-11.399	3.519
		2XOryzanol	.6200	3.5186	.862	-6.839	8.079
		5XOryzanol	-.1600	3.5186	.964	-7.619	7.299
	1XOryzanol	VC	3.9400	3.5186	.279	-3.519	11.399
		2XOryzanol	4.5600	3.5186	.213	-2.899	12.019
		5XOryzanol	3.7800	3.5186	.299	-3.679	11.239
	2XOryzanol	VC	-.6200	3.5186	.862	-8.079	6.839
		1XOryzanol	-4.5600	3.5186	.213	-12.019	2.899
		5XOryzanol	-.7800	3.5186	.827	-8.239	6.679
	5XOryzanol	VC	.1600	3.5186	.964	-7.299	7.619
		1XOryzanol	-3.7800	3.5186	.299	-11.239	3.679
		2XOryzanol	.7800	3.5186	.827	-6.679	8.239
20th day of TC Exposure	VC	1XOryzanol	-1.9800	4.5240	.667	-11.570	7.610
		2XOryzanol	3.0600	4.5240	.508	-6.530	12.650
		5XOryzanol	4.3200	4.5240	.354	-5.270	13.910
	1XOryzanol	VC	1.9800	4.5240	.667	-7.610	11.570
		2XOryzanol	5.0400	4.5240	.282	-4.550	14.630
		5XOryzanol	6.3000	4.5240	.183	-3.290	15.890
	2XOryzanol	VC	-3.0600	4.5240	.508	-12.650	6.530
		1XOryzanol	-5.0400	4.5240	.282	-14.630	4.550
		5XOryzanol	1.2600	4.5240	.784	-8.330	10.850
	5XOryzanol	VC	-4.3200	4.5240	.354	-13.910	5.270
		1XOryzanol	-6.3000	4.5240	.183	-15.890	3.290
		2XOryzanol	-1.2600	4.5240	.784	-10.850	8.330
27th day of TC Exposure	VC	1XOryzanol	4.0000	3.3739	.253	-3.152	11.152
		2XOryzanol	-5.8400	3.3739	.103	-12.992	1.312
		5XOryzanol	2.0600	3.3739	.550	-5.092	9.212
	1XOryzanol	VC	-4.0000	3.3739	.253	-11.152	3.152

		2XOryzanol	-9.8400*	3.3739	.010	-16.992	-2.688
		5XOryzanol	-1.9400	3.3739	.573	-9.092	5.212
	2XOryzanol	VC	5.8400	3.3739	.103	-1.312	12.992
		1XOryzanol	9.8400*	3.3739	.010	2.688	16.992
		5XOryzanol	7.9000*	3.3739	.032	.748	15.052
	5XOryzanol	VC	-2.0600	3.3739	.550	-9.212	5.092
		1XOryzanol	1.9400	3.3739	.573	-5.212	9.092
		2XOryzanol	-7.9000*	3.3739	.032	-15.052	-.748
34th day of TC Exposure	VC	1XOryzanol	.6400	2.8605	.826	-5.424	6.704
		2XOryzanol	-2.0400	2.8605	.486	-8.104	4.024
		5XOryzanol	2.1600	2.8605	.461	-3.904	8.224
	1XOryzanol	VC	-.6400	2.8605	.826	-6.704	5.424
		2XOryzanol	-2.6800	2.8605	.363	-8.744	3.384
		5XOryzanol	1.5200	2.8605	.602	-4.544	7.584
	2XOryzanol	VC	2.0400	2.8605	.486	-4.024	8.104
		1XOryzanol	2.6800	2.8605	.363	-3.384	8.744
		5XOryzanol	4.2000	2.8605	.161	-1.864	10.264
	5XOryzanol	VC	-2.1600	2.8605	.461	-8.224	3.904
		1XOryzanol	-1.5200	2.8605	.602	-7.584	4.544
		2XOryzanol	-4.2000	2.8605	.161	-10.264	1.864
41st day of TC Exposure	VC	1XOryzanol	3.1200	3.4030	.373	-4.094	10.334
		2XOryzanol	5.2000	3.4030	.146	-2.014	12.414
		5XOryzanol	3.9200	3.4030	.266	-3.294	11.134
	1XOryzanol	VC	-3.1200	3.4030	.373	-10.334	4.094
		2XOryzanol	2.0800	3.4030	.550	-5.134	9.294
		5XOryzanol	.8000	3.4030	.817	-6.414	8.014
	2XOryzanol	VC	-5.2000	3.4030	.146	-12.414	2.014
		1XOryzanol	-2.0800	3.4030	.550	-9.294	5.134
		5XOryzanol	-1.2800	3.4030	.712	-8.494	5.934
	5XOryzanol	VC	-3.9200	3.4030	.266	-11.134	3.294
		1XOryzanol	-.8000	3.4030	.817	-8.014	6.414
		2XOryzanol	1.2800	3.4030	.712	-5.934	8.494
48th day of TC Exposure	VC	1XOryzanol	1.0800	3.4332	.757	-6.198	8.358
		2XOryzanol	3.2200	3.4332	.362	-4.058	10.498
		5XOryzanol	1.3600	3.4332	.697	-5.918	8.638
	1XOryzanol	VC	-1.0800	3.4332	.757	-8.358	6.198
		2XOryzanol	2.1400	3.4332	.542	-5.138	9.418
		5XOryzanol	.2800	3.4332	.936	-6.998	7.558
	2XOryzanol	VC	-3.2200	3.4332	.362	-10.498	4.058
		1XOryzanol	-2.1400	3.4332	.542	-9.418	5.138
		5XOryzanol	-1.8600	3.4332	.595	-9.138	5.418
	5XOryzanol	VC	-1.3600	3.4332	.697	-8.638	5.918
		1XOryzanol	-.2800	3.4332	.936	-7.558	6.998
		2XOryzanol	1.8600	3.4332	.595	-5.418	9.138
55th day of TC Exposure	VC	1XOryzanol	-6.4000	9.0857	.491	-25.661	12.861
		2XOryzanol	-.7400	9.0857	.936	-20.001	18.521
		5XOryzanol	-5.8000	9.0857	.532	-25.061	13.461
	1XOryzanol	VC	6.4000	9.0857	.491	-12.861	25.661

		2XOryzanol	5.6600	9.0857	.542	-13.601	24.921
		5XOryzanol	.6000	9.0857	.948	-18.661	19.861
	2XOryzanol	VC	.7400	9.0857	.936	-18.521	20.001
		1XOryzanol	-5.6600	9.0857	.542	-24.921	13.601
		5XOryzanol	-5.0600	9.0857	.585	-24.321	14.201
	5XOryzanol	VC	5.8000	9.0857	.532	-13.461	25.061
		1XOryzanol	-.6000	9.0857	.948	-19.861	18.661
		2XOryzanol	5.0600	9.0857	.585	-14.201	24.321
62nd day of TC Exposure	VC	1XOryzanol	-2.2000	5.0074	.666	-12.815	8.415
		2XOryzanol	-4.4000	5.0074	.393	-15.015	6.215
		5XOryzanol	-2.7200	5.0074	.594	-13.335	7.895
	1XOryzanol	VC	2.2000	5.0074	.666	-8.415	12.815
		2XOryzanol	-2.2000	5.0074	.666	-12.815	8.415
		5XOryzanol	-.5200	5.0074	.919	-11.135	10.095
	2XOryzanol	VC	4.4000	5.0074	.393	-6.215	15.015
		1XOryzanol	2.2000	5.0074	.666	-8.415	12.815
		5XOryzanol	1.6800	5.0074	.742	-8.935	12.295
	5XOryzanol	VC	2.7200	5.0074	.594	-7.895	13.335
		1XOryzanol	.5200	5.0074	.919	-10.095	11.135
		2XOryzanol	-1.6800	5.0074	.742	-12.295	8.935
70th day of TC Exposure	VC	1XOryzanol	1.9400	8.7524	.827	-16.614	20.494
		2XOryzanol	2.0400	8.7524	.819	-16.514	20.594
		5XOryzanol	-2.7600	8.7524	.757	-21.314	15.794
	1XOryzanol	VC	-1.9400	8.7524	.827	-20.494	16.614
		2XOryzanol	.1000	8.7524	.991	-18.454	18.654
		5XOryzanol	-4.7000	8.7524	.599	-23.254	13.854
	2XOryzanol	VC	-2.0400	8.7524	.819	-20.594	16.514
		1XOryzanol	-.1000	8.7524	.991	-18.654	18.454
		5XOryzanol	-4.8000	8.7524	.591	-23.354	13.754
	5XOryzanol	VC	2.7600	8.7524	.757	-15.794	21.314
		1XOryzanol	4.7000	8.7524	.599	-13.854	23.254
		2XOryzanol	4.8000	8.7524	.591	-13.754	23.354
76th day of TC Exposure	VC	1XOryzanol	-4.8800	5.5738	.394	-16.696	6.936
		2XOryzanol	-1.3000	5.5738	.819	-13.116	10.516
		5XOryzanol	-1.4400	5.5738	.799	-13.256	10.376
	1XOryzanol	VC	4.8800	5.5738	.394	-6.936	16.696
		2XOryzanol	3.5800	5.5738	.530	-8.236	15.396
		5XOryzanol	3.4400	5.5738	.546	-8.376	15.256
	2XOryzanol	VC	1.3000	5.5738	.819	-10.516	13.116
		1XOryzanol	-3.5800	5.5738	.530	-15.396	8.236
		5XOryzanol	-.1400	5.5738	.980	-11.956	11.676
	5XOryzanol	VC	1.4400	5.5738	.799	-10.376	13.256
		1XOryzanol	-3.4400	5.5738	.546	-15.256	8.376
		2XOryzanol	.1400	5.5738	.980	-11.676	11.956
83rd day of TC Exposure	VC	1XOryzanol	-2.1000	5.0061	.680	-12.712	8.512
		2XOryzanol	-.6600	5.0061	.897	-11.272	9.952
		5XOryzanol	-2.3000	5.0061	.652	-12.912	8.312
	1XOryzanol	VC	2.1000	5.0061	.680	-8.512	12.712

91st day of TC Exposure		2XOryzanol	1.4400	5.0061	.777	-9.172	12.052
		5XOryzanol	-.2000	5.0061	.969	-10.812	10.412
	2XOryzanol	VC	.6600	5.0061	.897	-9.952	11.272
		1XOryzanol	-1.4400	5.0061	.777	-12.052	9.172
		5XOryzanol	-1.6400	5.0061	.747	-12.252	8.972
	5XOryzanol	VC	2.3000	5.0061	.652	-8.312	12.912
		1XOryzanol	.2000	5.0061	.969	-10.412	10.812
		2XOryzanol	1.6400	5.0061	.747	-8.972	12.252
	VC	1XOryzanol	-7.3800	8.7107	.409	-25.846	11.086
		2XOryzanol	-2.9000	8.7107	.744	-21.366	15.566
		5XOryzanol	-5.1000	8.7107	.566	-23.566	13.366
	1XOryzanol	VC	7.3800	8.7107	.409	-11.086	25.846
		2XOryzanol	4.4800	8.7107	.614	-13.986	22.946
		5XOryzanol	2.2800	8.7107	.797	-16.186	20.746
	2XOryzanol	VC	2.9000	8.7107	.744	-15.566	21.366
		1XOryzanol	-4.4800	8.7107	.614	-22.946	13.986
		5XOryzanol	-2.2000	8.7107	.804	-20.666	16.266
	5XOryzanol	VC	5.1000	8.7107	.566	-13.366	23.566
		1XOryzanol	-2.2800	8.7107	.797	-20.746	16.186
		2XOryzanol	2.2000	8.7107	.804	-16.266	20.666

*. The mean difference is significant at the 0.05 level.
a. Sex = MALE

Sex = MALE
Kruskal-Wallis Test

Ranks ^a			
Testgroup		N	Mean Rank
34th day of TC Exposure	VC	5	12.20
	1XOryzanol	5	9.90
	2XOryzanol	5	12.70
	5XOryzanol	5	7.20
	Total	20	
a. Sex = MALE			

Test Statistics ^{a,b,c}	
	34th day of TC Exposure
Chi-Square	2.716
df	3
Asymp. Sig.	.438
a. Sex = MALE	
b. Kruskal Wallis Test	
c. Grouping Variable: Testgroup	

Sex = MALE

Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
34th day of TC Exposure	VC	5	6.00	30.00
	1XOryzanol	5	5.00	25.00
	Total	10		
a. Sex = MALE				

Test Statistics ^{a,b}	
	34th day of TC Exposure
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.522
Asymp. Sig. (2-tailed)	.602
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = MALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = MALE

Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
34th day of TC Exposure	VC	5	4.80	24.00
	2XOryzanol	5	6.20	31.00
	Total	10		
a. Sex = MALE				

Test Statistics ^{a,b}	
	34th day of TC Exposure
Mann-Whitney U	9.000
Wilcoxon W	24.000
Z	-.731
Asymp. Sig. (2-tailed)	.465
Exact Sig. [2*(1-tailed Sig.)]	.548 ^c
a. Sex = MALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = MALE

Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
34th day of TC Exposure	VC	5	7.40	37.00
	5XOryzanol	5	3.60	18.00
	Total	10		
a. Sex = MALE				

Test Statistics ^{a,b}	
	34th day of TC Exposure
Mann-Whitney U	3.000
Wilcoxon W	18.000
Z	-1.991
Asymp. Sig. (2-tailed)	.047
Exact Sig. [2*(1-tailed Sig.)]	.056 ^c
a. Sex = MALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = MALE
Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
34th day of TC Exposure	1XOryzanol	5	4.90	24.50
	2XOryzanol	5	6.10	30.50
	Total	10		
a. Sex = MALE				

Test Statistics ^{a,b}	
	34th day of TC Exposure
Mann-Whitney U	9.500
Wilcoxon W	24.500
Z	-.629
Asymp. Sig. (2-tailed)	.530
Exact Sig. [2*(1-tailed Sig.)]	.548 ^c
a. Sex = MALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = MALE
Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
34th day of TC Exposure	1XOryzanol	5	6.00	30.00
	5XOryzanol	5	5.00	25.00
	Total	10		
a. Sex = MALE				

Test Statistics ^{a,b}	
	34th day of TC Exposure
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.524
Asymp. Sig. (2-tailed)	.600
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = MALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = MALE
Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
34th day of TC Exposure	2XOryzanol	5	6.40	32.00
	5XOryzanol	5	4.60	23.00
	Total	10		
a. Sex = MALE				

Test Statistics ^{a,b}	
	34th day of TC Exposure
Mann-Whitney U	8.000
Wilcoxon W	23.000
Z	-.943
Asymp. Sig. (2-tailed)	.346
Exact Sig. [2*(1-tailed Sig.)]	.421 ^c
a. Sex = MALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Oneway
Sex = FEMALE

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
1st day of TC Exposure	VC	5	33.84	4.063	1.8170	28.795	38.885	27.1	37.4
	1XOryzanol	5	37.82	5.428	2.4276	31.080	44.560	32.8	46.9
	2XOryzanol	5	39.56	6.878	3.0761	31.019	48.101	33.5	50.8
	5XOryzanol	5	31.88	8.688	3.8854	21.092	42.668	17.9	40.1
	Total	20	35.78	6.736	1.5063	32.622	38.928	17.9	50.8
6th day of TC Exposure	VC	5	48.54	4.689	2.0970	42.718	54.362	43.6	56.2
	1XOryzanol	5	55.34	3.808	1.7031	50.611	60.069	51.9	60.6
	2XOryzanol	5	46.08	4.570	2.0439	40.405	51.755	39.4	50.5
	5XOryzanol	5	45.16	9.346	4.1795	33.556	56.764	31.4	56.7
	Total	20	48.78	6.868	1.5358	45.566	51.994	31.4	60.6
13th day of TC Exposure	VC	5	42.30	4.336	1.9391	36.916	47.684	37.3	47.4
	1XOryzanol	5	42.94	2.255	1.0083	40.141	45.739	39.5	45.2
	2XOryzanol	5	44.84	3.055	1.3662	41.047	48.633	41.5	48.4
	5XOryzanol	5	36.24	6.539	2.9245	28.120	44.360	27.4	42.6
	Total	20	41.58	5.188	1.1602	39.152	44.008	27.4	48.4
20th day of TC Exposure	VC	5	41.54	2.682	1.1994	38.210	44.870	37.9	44.3
	1XOryzanol	5	48.86	1.993	.8914	46.385	51.335	46.9	51.9
	2XOryzanol	5	47.16	5.597	2.5029	40.211	54.109	39.0	53.5
	5XOryzanol	5	44.02	8.416	3.7640	33.570	54.470	35.3	55.8
	Total	20	45.40	5.679	1.2698	42.737	48.053	35.3	55.8
27th day of TC Exposure	VC	5	39.54	10.108	4.5205	26.989	52.091	22.2	47.2
	1XOryzanol	5	53.56	3.692	1.6512	48.975	58.145	48.8	58.6
	2XOryzanol	5	50.02	3.627	1.6222	45.516	54.524	45.0	52.8
	5XOryzanol	5	46.96	5.306	2.3729	40.372	53.548	42.6	54.1
	Total	20	47.52	7.821	1.7488	43.860	51.180	22.2	58.6
34th day of TC Exposure	VC	5	38.58	9.286	4.1530	27.049	50.111	22.8	46.3
	1XOryzanol	5	50.68	7.610	3.4034	41.231	60.129	43.2	59.5
	2XOryzanol	5	46.74	4.475	2.0011	41.184	52.296	42.7	53.3
	5XOryzanol	5	45.30	5.560	2.4864	38.397	52.203	39.0	51.8
	Total	20	45.33	7.818	1.7481	41.666	48.984	22.8	59.5
41st day of TC Exposure	VC	5	39.84	4.178	1.8683	34.653	45.027	33.6	45.2
	1XOryzanol	5	45.66	2.601	1.1630	42.431	48.889	42.1	49.4
	2XOryzanol	5	44.46	4.584	2.0500	38.768	50.152	39.2	51.7
	5XOryzanol	5	42.98	4.183	1.8707	37.786	48.174	38.6	47.7
	Total	20	43.24	4.266	.9539	41.238	45.232	33.6	51.7
48th day of TC Exposure	VC	5	42.24	3.440	1.5384	37.969	46.511	38.0	46.7
	1XOryzanol	5	47.34	4.110	1.8381	42.237	52.443	41.4	52.4
	2XOryzanol	5	42.28	4.149	1.8556	37.128	47.432	39.2	49.1
	5XOryzanol	5	44.40	3.882	1.7361	39.580	49.220	41.1	51.1
	Total	20	44.07	4.173	.9331	42.112	46.018	38.0	52.4
55th day of TC	VC	5	51.18	4.434	1.9828	45.675	56.685	43.7	55.0
	1XOryzanol	5	55.62	5.479	2.4502	48.817	62.423	48.3	60.9

Exposure	2XOryzanol	5	54.46	11.570	5.1744	40.094	68.826	35.2	63.8
	5XOryzanol	5	48.00	11.708	5.2360	33.462	62.538	27.7	57.7
	Total	20	52.32	8.765	1.9599	48.213	56.417	27.7	63.8
62nd day of TC Exposure	VC	5	41.16	3.838	1.7163	36.395	45.925	35.7	46.3
	1XOryzanol	5	46.72	2.611	1.1676	43.478	49.962	44.4	50.3
	2XOryzanol	5	44.44	4.577	2.0471	38.756	50.124	39.2	49.6
	5XOryzanol	5	41.28	4.587	2.0512	35.585	46.975	36.4	47.1
	Total	20	43.40	4.366	.9763	41.357	45.443	35.7	50.3
70th day of TC Exposure	VC	5	59.96	3.523	1.5756	55.585	64.335	55.8	64.9
	1XOryzanol	5	60.30	4.159	1.8601	55.136	65.464	56.0	66.6
	2XOryzanol	5	64.58	9.419	4.2123	52.885	76.275	55.9	80.0
	5XOryzanol	5	55.30	9.263	4.1426	43.798	66.802	40.5	63.4
	Total	20	60.04	7.372	1.6485	56.585	63.485	40.5	80.0
76th day of TC Exposure	VC	5	37.72	11.952	5.3453	22.879	52.561	21.3	50.9
	1XOryzanol	5	33.82	4.982	2.2279	27.634	40.006	28.1	38.5
	2XOryzanol	5	41.52	8.116	3.6298	31.442	51.598	30.5	51.8
	5XOryzanol	5	28.56	4.766	2.1313	22.642	34.478	23.0	35.1
	Total	20	35.41	8.843	1.9773	31.266	39.544	21.3	51.8
83rd day of TC Exposure	VC	5	41.80	4.054	1.8130	36.766	46.834	37.1	45.8
	1XOryzanol	5	40.62	5.061	2.2635	34.336	46.904	34.2	45.9
	2XOryzanol	5	46.10	8.138	3.6396	35.995	56.205	35.1	57.9
	5XOryzanol	5	41.98	6.081	2.7194	34.430	49.530	37.6	52.5
	Total	20	42.63	5.925	1.3249	39.852	45.398	34.2	57.9
91st day of TC Exposure	VC	5	53.64	5.139	2.2984	47.259	60.021	47.0	59.5
	1XOryzanol	5	64.40	5.292	2.3664	57.830	70.970	58.7	73.0
	2XOryzanol	5	62.02	6.386	2.8558	54.091	69.949	55.8	71.2
	5XOryzanol	5	54.64	6.644	2.9713	46.390	62.890	49.5	66.0
	Total	20	58.68	7.201	1.6103	55.305	62.045	47.0	73.0
a. Sex = FEMALE									

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
1st day of TC Exposure	.674	3	16	.580
6th day of TC Exposure	1.192	3	16	.344
13th day of TC Exposure	2.618	3	16	.087
20th day of TC Exposure	5.885	3	16	.007
27th day of TC Exposure	1.449	3	16	.266
34th day of TC Exposure	.792	3	16	.516
41st day of TC Exposure	.618	3	16	.614
48th day of TC Exposure	.048	3	16	.985
55th day of TC Exposure	1.167	3	16	.353
62nd day of TC Exposure	.823	3	16	.500
70th day of TC Exposure	1.028	3	16	.406
76th day of TC Exposure	2.929	3	16	.066
83rd day of TC Exposure	.243	3	16	.865
91st day of TC Exposure	.158	3	16	.923
a. Sex = FEMALE				

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
1st day of TC Exposure	Between Groups	187.118	3	62.373	1.478	.258
	Within Groups	675.080	16	42.193		
	Total	862.198	19			
6th day of TC Exposure	Between Groups	317.428	3	105.809	2.925	.066
	Within Groups	578.884	16	36.180		
	Total	896.312	19			
13th day of TC Exposure	Between Groups	207.556	3	69.185	3.642	.036
	Within Groups	303.916	16	18.995		
	Total	511.472	19			
20th day of TC Exposure	Between Groups	159.366	3	53.122	1.875	.175
	Within Groups	453.304	16	28.332		
	Total	612.670	19			
27th day of TC Exposure	Between Groups	533.628	3	177.876	4.529	.018
	Within Groups	628.464	16	39.279		
	Total	1162.092	19			
34th day of TC Exposure	Between Groups	380.870	3	126.957	2.603	.088
	Within Groups	780.348	16	48.772		
	Total	1161.218	19			
41st day of TC Exposure	Between Groups	94.862	3	31.621	2.016	.152
	Within Groups	250.904	16	15.682		
	Total	345.766	19			
48th day of TC Exposure	Between Groups	86.774	3	28.925	1.896	.171
	Within Groups	244.052	16	15.253		
	Total	330.826	19			
55th day of TC Exposure	Between Groups	177.158	3	59.052	.737	.545
	Within Groups	1282.508	16	80.157		
	Total	1459.666	19			
62nd day of TC Exposure	Between Groups	108.080	3	36.027	2.268	.120
	Within Groups	254.140	16	15.884		
	Total	362.220	19			
70th day of TC Exposure	Between Groups	215.766	3	71.922	1.409	.277
	Within Groups	816.940	16	51.059		
	Total	1032.706	19			
76th day of TC Exposure	Between Groups	460.594	3	153.531	2.396	.106
	Within Groups	1025.076	16	64.067		
	Total	1485.670	19			
83rd day of TC Exposure	Between Groups	85.962	3	28.654	.789	.518
	Within Groups	581.056	16	36.316		
	Total	667.018	19			
91st day of TC Exposure	Between Groups	427.986	3	142.662	4.096	.025
	Within Groups	557.332	16	34.833		
	Total	985.318	19			
a. Sex = FEMALE						

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
1st day of TC Exposure	VC	1XOryzanol	-3.9800	4.1082	.347	-12.689	4.729
		2XOryzanol	-5.7200	4.1082	.183	-14.429	2.989
		5XOryzanol	1.9600	4.1082	.640	-6.749	10.669
	1XOryzanol	VC	3.9800	4.1082	.347	-4.729	12.689
		2XOryzanol	-1.7400	4.1082	.678	-10.449	6.969
		5XOryzanol	5.9400	4.1082	.168	-2.769	14.649
	2XOryzanol	VC	5.7200	4.1082	.183	-2.989	14.429
		1XOryzanol	1.7400	4.1082	.678	-6.969	10.449
		5XOryzanol	7.6800	4.1082	.080	-1.029	16.389
	5XOryzanol	VC	-1.9600	4.1082	.640	-10.669	6.749
		1XOryzanol	-5.9400	4.1082	.168	-14.649	2.769
		2XOryzanol	-7.6800	4.1082	.080	-16.389	1.029
6th day of TC Exposure	VC	1XOryzanol	-6.8000	3.8042	.093	-14.865	1.265
		2XOryzanol	2.4600	3.8042	.527	-5.605	10.525
		5XOryzanol	3.3800	3.8042	.387	-4.685	11.445
	1XOryzanol	VC	6.8000	3.8042	.093	-1.265	14.865
		2XOryzanol	9.2600*	3.8042	.027	1.195	17.325
		5XOryzanol	10.1800*	3.8042	.017	2.115	18.245
	2XOryzanol	VC	-2.4600	3.8042	.527	-10.525	5.605
		1XOryzanol	-9.2600*	3.8042	.027	-17.325	-1.195
		5XOryzanol	.9200	3.8042	.812	-7.145	8.985
	5XOryzanol	VC	-3.3800	3.8042	.387	-11.445	4.685
		1XOryzanol	-10.1800*	3.8042	.017	-18.245	-2.115
		2XOryzanol	-.9200	3.8042	.812	-8.985	7.145
13th day of TC Exposure	VC	1XOryzanol	-.6400	2.7564	.819	-6.483	5.203
		2XOryzanol	-2.5400	2.7564	.370	-8.383	3.303
		5XOryzanol	6.0600*	2.7564	.043	.217	11.903
	1XOryzanol	VC	.6400	2.7564	.819	-5.203	6.483
		2XOryzanol	-1.9000	2.7564	.501	-7.743	3.943
		5XOryzanol	6.7000*	2.7564	.027	.857	12.543
	2XOryzanol	VC	2.5400	2.7564	.370	-3.303	8.383
		1XOryzanol	1.9000	2.7564	.501	-3.943	7.743
		5XOryzanol	8.6000*	2.7564	.007	2.757	14.443
	5XOryzanol	VC	-6.0600*	2.7564	.043	-11.903	-.217
		1XOryzanol	-6.7000*	2.7564	.027	-12.543	-.857
		2XOryzanol	-8.6000*	2.7564	.007	-14.443	-2.757
20th day of TC Exposure	VC	1XOryzanol	-7.3200*	3.3664	.045	-14.456	-.184
		2XOryzanol	-5.6200	3.3664	.114	-12.756	1.516
		5XOryzanol	-2.4800	3.3664	.472	-9.616	4.656
	1XOryzanol	VC	7.3200*	3.3664	.045	.184	14.456

		2XOryzanol	1.7000	3.3664	.620	-5.436	8.836
		5XOryzanol	4.8400	3.3664	.170	-2.296	11.976
	2XOryzanol	VC	5.6200	3.3664	.114	-1.516	12.756
		1XOryzanol	-1.7000	3.3664	.620	-8.836	5.436
		5XOryzanol	3.1400	3.3664	.365	-3.996	10.276
	5XOryzanol	VC	2.4800	3.3664	.472	-4.656	9.616
		1XOryzanol	-4.8400	3.3664	.170	-11.976	2.296
		2XOryzanol	-3.1400	3.3664	.365	-10.276	3.996
27th day of TC Exposure	VC	1XOryzanol	-14.0200 ⁺	3.9638	.003	-22.423	-5.617
		2XOryzanol	-10.4800 ⁺	3.9638	.018	-18.883	-2.077
		5XOryzanol	-7.4200	3.9638	.080	-15.823	.983
	1XOryzanol	VC	14.0200 ⁺	3.9638	.003	5.617	22.423
		2XOryzanol	3.5400	3.9638	.385	-4.863	11.943
		5XOryzanol	6.6000	3.9638	.115	-1.803	15.003
	2XOryzanol	VC	10.4800 ⁺	3.9638	.018	2.077	18.883
		1XOryzanol	-3.5400	3.9638	.385	-11.943	4.863
		5XOryzanol	3.0600	3.9638	.451	-5.343	11.463
	5XOryzanol	VC	7.4200	3.9638	.080	-.983	15.823
		1XOryzanol	-6.6000	3.9638	.115	-15.003	1.803
		2XOryzanol	-3.0600	3.9638	.451	-11.463	5.343
34th day of TC Exposure	VC	1XOryzanol	-12.1000 ⁺	4.4169	.015	-21.463	-2.737
		2XOryzanol	-8.1600	4.4169	.083	-17.523	1.203
		5XOryzanol	-6.7200	4.4169	.148	-16.083	2.643
	1XOryzanol	VC	12.1000 ⁺	4.4169	.015	2.737	21.463
		2XOryzanol	3.9400	4.4169	.386	-5.423	13.303
		5XOryzanol	5.3800	4.4169	.241	-3.983	14.743
	2XOryzanol	VC	8.1600	4.4169	.083	-1.203	17.523
		1XOryzanol	-3.9400	4.4169	.386	-13.303	5.423
		5XOryzanol	1.4400	4.4169	.749	-7.923	10.803
	5XOryzanol	VC	6.7200	4.4169	.148	-2.643	16.083
		1XOryzanol	-5.3800	4.4169	.241	-14.743	3.983
		2XOryzanol	-1.4400	4.4169	.749	-10.803	7.923
41st day of TC Exposure	VC	1XOryzanol	-5.8200 ⁺	2.5045	.034	-11.129	-.511
		2XOryzanol	-4.6200	2.5045	.084	-9.929	.689
		5XOryzanol	-3.1400	2.5045	.228	-8.449	2.169
	1XOryzanol	VC	5.8200 ⁺	2.5045	.034	.511	11.129
		2XOryzanol	1.2000	2.5045	.638	-4.109	6.509
		5XOryzanol	2.6800	2.5045	.300	-2.629	7.989
	2XOryzanol	VC	4.6200	2.5045	.084	-.689	9.929
		1XOryzanol	-1.2000	2.5045	.638	-6.509	4.109
		5XOryzanol	1.4800	2.5045	.563	-3.829	6.789
	5XOryzanol	VC	3.1400	2.5045	.228	-2.169	8.449
		1XOryzanol	-2.6800	2.5045	.300	-7.989	2.629
		2XOryzanol	-1.4800	2.5045	.563	-6.789	3.829
48th day of TC Exposure	VC	1XOryzanol	-5.1000	2.4701	.056	-10.336	.136
		2XOryzanol	-.0400	2.4701	.987	-5.276	5.196
		5XOryzanol	-2.1600	2.4701	.395	-7.396	3.076
	1XOryzanol	VC	5.1000	2.4701	.056	-.136	10.336

		2XOryzanol	5.0600	2.4701	.057	-.176	10.296
		5XOryzanol	2.9400	2.4701	.251	-2.296	8.176
	2XOryzanol	VC	.0400	2.4701	.987	-5.196	5.276
		1XOryzanol	-5.0600	2.4701	.057	-10.296	.176
		5XOryzanol	-2.1200	2.4701	.403	-7.356	3.116
	5XOryzanol	VC	2.1600	2.4701	.395	-3.076	7.396
		1XOryzanol	-2.9400	2.4701	.251	-8.176	2.296
		2XOryzanol	2.1200	2.4701	.403	-3.116	7.356
55th day of TC Exposure	VC	1XOryzanol	-4.4400	5.6624	.444	-16.444	7.564
		2XOryzanol	-3.2800	5.6624	.570	-15.284	8.724
		5XOryzanol	3.1800	5.6624	.582	-8.824	15.184
	1XOryzanol	VC	4.4400	5.6624	.444	-7.564	16.444
		2XOryzanol	1.1600	5.6624	.840	-10.844	13.164
		5XOryzanol	7.6200	5.6624	.197	-4.384	19.624
	2XOryzanol	VC	3.2800	5.6624	.570	-8.724	15.284
		1XOryzanol	-1.1600	5.6624	.840	-13.164	10.844
		5XOryzanol	6.4600	5.6624	.271	-5.544	18.464
	5XOryzanol	VC	-3.1800	5.6624	.582	-15.184	8.824
		1XOryzanol	-7.6200	5.6624	.197	-19.624	4.384
		2XOryzanol	-6.4600	5.6624	.271	-18.464	5.544
62nd day of TC Exposure	VC	1XOryzanol	-5.5600*	2.5206	.042	-10.903	-.217
		2XOryzanol	-3.2800	2.5206	.212	-8.623	2.063
		5XOryzanol	-.1200	2.5206	.963	-5.463	5.223
	1XOryzanol	VC	5.5600*	2.5206	.042	.217	10.903
		2XOryzanol	2.2800	2.5206	.379	-3.063	7.623
		5XOryzanol	5.4400*	2.5206	.046	.097	10.783
	2XOryzanol	VC	3.2800	2.5206	.212	-2.063	8.623
		1XOryzanol	-2.2800	2.5206	.379	-7.623	3.063
		5XOryzanol	3.1600	2.5206	.228	-2.183	8.503
	5XOryzanol	VC	.1200	2.5206	.963	-5.223	5.463
		1XOryzanol	-5.4400*	2.5206	.046	-10.783	-.097
		2XOryzanol	-3.1600	2.5206	.228	-8.503	2.183
70th day of TC Exposure	VC	1XOryzanol	-.3400	4.5192	.941	-9.920	9.240
		2XOryzanol	-4.6200	4.5192	.322	-14.200	4.960
		5XOryzanol	4.6600	4.5192	.318	-4.920	14.240
	1XOryzanol	VC	.3400	4.5192	.941	-9.240	9.920
		2XOryzanol	-4.2800	4.5192	.358	-13.860	5.300
		5XOryzanol	5.0000	4.5192	.285	-4.580	14.580
	2XOryzanol	VC	4.6200	4.5192	.322	-4.960	14.200
		1XOryzanol	4.2800	4.5192	.358	-5.300	13.860
		5XOryzanol	9.2800	4.5192	.057	-.300	18.860
	5XOryzanol	VC	-4.6600	4.5192	.318	-14.240	4.920
		1XOryzanol	-5.0000	4.5192	.285	-14.580	4.580
		2XOryzanol	-9.2800	4.5192	.057	-18.860	.300
76th day of TC Exposure	VC	1XOryzanol	3.9000	5.0623	.452	-6.832	14.632
		2XOryzanol	-3.8000	5.0623	.464	-14.532	6.932
		5XOryzanol	9.1600	5.0623	.089	-1.572	19.892
	1XOryzanol	VC	-3.9000	5.0623	.452	-14.632	6.832

83rd day of TC Exposure		2XOryzanol	-7.7000	5.0623	.148	-18.432	3.032
		5XOryzanol	5.2600	5.0623	.314	-5.472	15.992
	2XOryzanol	VC	3.8000	5.0623	.464	-6.932	14.532
		1XOryzanol	7.7000	5.0623	.148	-3.032	18.432
		5XOryzanol	12.9600*	5.0623	.021	2.228	23.692
	5XOryzanol	VC	-9.1600	5.0623	.089	-19.892	1.572
		1XOryzanol	-5.2600	5.0623	.314	-15.992	5.472
		2XOryzanol	-12.9600*	5.0623	.021	-23.692	-2.228
	VC	1XOryzanol	1.1800	3.8114	.761	-6.900	9.260
		2XOryzanol	-4.3000	3.8114	.276	-12.380	3.780
		5XOryzanol	-.1800	3.8114	.963	-8.260	7.900
	1XOryzanol	VC	-1.1800	3.8114	.761	-9.260	6.900
		2XOryzanol	-5.4800	3.8114	.170	-13.560	2.600
		5XOryzanol	-1.3600	3.8114	.726	-9.440	6.720
	2XOryzanol	VC	4.3000	3.8114	.276	-3.780	12.380
		1XOryzanol	5.4800	3.8114	.170	-2.600	13.560
		5XOryzanol	4.1200	3.8114	.296	-3.960	12.200
	5XOryzanol	VC	.1800	3.8114	.963	-7.900	8.260
		1XOryzanol	1.3600	3.8114	.726	-6.720	9.440
		2XOryzanol	-4.1200	3.8114	.296	-12.200	3.960
	VC	1XOryzanol	-10.7600*	3.7327	.011	-18.673	-2.847
		2XOryzanol	-8.3800*	3.7327	.039	-16.293	-.467
		5XOryzanol	-1.0000	3.7327	.792	-8.913	6.913
	1XOryzanol	VC	10.7600*	3.7327	.011	2.847	18.673
91st day of TC Exposure		2XOryzanol	2.3800	3.7327	.533	-5.533	10.293
		5XOryzanol	9.7600*	3.7327	.019	1.847	17.673
	2XOryzanol	VC	8.3800*	3.7327	.039	.467	16.293
		1XOryzanol	-2.3800	3.7327	.533	-10.293	5.533
		5XOryzanol	7.3800	3.7327	.066	-.533	15.293
	5XOryzanol	VC	1.0000	3.7327	.792	-6.913	8.913
		1XOryzanol	-9.7600*	3.7327	.019	-17.673	-1.847
		2XOryzanol	-7.3800	3.7327	.066	-15.293	.533
	*. The mean difference is significant at the 0.05 level.						
	a. Sex = FEMALE						

Sex = FEMALE**Kruskal-Wallis Test**

Ranks ^a			
Testgroup		N	Mean Rank
20th day of TC Exposure	VC	5	6.20
	1XOryzanol	5	13.90
	2XOryzanol	5	12.60
	5XOryzanol	5	9.30
	Total	20	
a. Sex = FEMALE			

Test Statistics ^{a,b,c}	
	20th day of TC Exposure
Chi-Square	5.132
df	3
Asymp. Sig.	.162
a. Sex = FEMALE	
b. Kruskal Wallis Test	
c. Grouping Variable: Testgroup	

Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
20th day of TC Exposure	VC	5	3.00	15.00
	1XOryzanol	5	8.00	40.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	20th day of TC Exposure
Mann-Whitney U	0.000
Wilcoxon W	15.000
Z	-2.611
Asymp. Sig. (2-tailed)	.009
Exact Sig. [2*(1-tailed Sig.)]	.008 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
20th day of TC Exposure	VC	5	3.80	19.00
	2XOryzanol	5	7.20	36.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	20th day of TC Exposure
Mann-Whitney U	4.000
Wilcoxon W	19.000
Z	-1.776
Asymp. Sig. (2-tailed)	.076
Exact Sig. [2*(1-tailed Sig.)]	.095 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
20th day of TC Exposure	VC	5	5.40	27.00
	5XOryzanol	5	5.60	28.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	20th day of TC Exposure
Mann-Whitney U	12.000
Wilcoxon W	27.000
Z	-.104
Asymp. Sig. (2-tailed)	.917
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
20th day of TC Exposure	1XOryzanol	5	5.60	28.00
	2XOryzanol	5	5.40	27.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	20th day of TC Exposure
Mann-Whitney U	12.000
Wilcoxon W	27.000
Z	-.104
Asymp. Sig. (2-tailed)	.917
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
20th day of TC Exposure	1XOryzanol	5	6.30	31.50
	5XOryzanol	5	4.70	23.50
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	20th day of TC Exposure
Mann-Whitney U	8.500
Wilcoxon W	23.500
Z	-.838
Asymp. Sig. (2-tailed)	.402
Exact Sig. [2*(1-tailed Sig.)]	.421 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
20th day of TC Exposure	2XOryzanol	5	6.00	30.00
	5XOryzanol	5	5.00	25.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	20th day of TC Exposure
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.522
Asymp. Sig. (2-tailed)	.602
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Cage Side

Home Cage Activity											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Home cage activity	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100

91st day of TC Exposure	Home cage activity	Normal	10	100	10	100	10	100	10	100	10	100
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Feaces Excretion											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Feaces Excretion	Present	10	100	10	100	10	100	10	100

FEACES COLOUR											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Feaces colour	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100

70th day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100
76th day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100
83rd day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100
91st day of TC Exposure	Feaces colour	Normal	10	100	10	100	10	100	10	100

FEACES CONSISTENCY											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Obs Days	Baseline	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Feaces consistency	Normal	10	100	10	100	10	100	10	100

URINE OUTPUT											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Urine output	Present	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100

48th day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100
55th day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100
62nd day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100
70th day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100
76th day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100
83rd day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100
91st day of TC Exposure	Urine output	Present	10	100	10	100	10	100	10	100

URINE COLOUR											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Urine colour	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Urine colour	Normal	10	100	10	100	10	100	10	100

BEHAVIOUR WHILE REMOVING FROM THE CAGE											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Obs Days	Baseline	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100

13th day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
20th day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
27th day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
34th day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
41st day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
48th day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
55th day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
62nd day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
70th day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
76th day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
83rd day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100
91st day of TC Exposure	Behaviour while removing from the cage	Animal is quiet & is easily removed	10	100	10	100	10	100	10	100

Physical Examination

Hair coat											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
	TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100

34th day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
41st day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
48th day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
55th day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
62nd day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
70th day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
76th day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
83rd day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100
91st day of TC Exposure	Hair coat	Cleanly groomed	10	100	10	100	10	100	10	100

Piloerection										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Observation Days	Baseline	Absent	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Absent	10	100	10	100	10	100	10	100

Respiration Rate											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Obs Days	Baseline	Respiration Rate	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100

20th day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100
27th day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100
34th day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100
41st day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100
48th day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100
55th day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100
62nd day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100
70th day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100
76th day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100
83rd day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100
91st day of TC Exposure	Respiration Rate	Normal	10	100	10	100	10	100	10	100

Respiration Character											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Obs Days	Baseline	Respiration Character	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100
91st day of TC Exposure	Respiration Character	Normal	10	100	10	100	10	100	10	100	

Lacrimation											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation	Baseline	Normal	10	100	10	100	10	100	10	100	

Days	6th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Normal	10	100	10	100	10	100	10	100

Salivation										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Observation Days	Baseline	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Normal	10	100	10	100	10	100	10	100

Eye Lid(s)/Closure											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Eye lid (s)closure	Eye lids open	10	100	10	100	10	100	10	100

Eye Prominence											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Obs Days	Baseline	Eye Prominence	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Eye Prominence	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Eye Prominence	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Eye Prominence	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Eye Prominence	Normal	10	100	10	100	10	100	10	100

34th day of TC Exposure	Eye Prominance	Normal	10	100	10	100	10	100	10	100
41st day of TC Exposure	Eye Prominance	Normal	10	100	10	100	10	100	10	100
48th day of TC Exposure	Eye Prominance	Normal	10	100	10	100	10	100	10	100
55th day of TC Exposure	Eye Prominance	Normal	10	100	10	100	10	100	10	100
62nd day of TC Exposure	Eye Prominance	Normal	10	100	10	100	10	100	10	100
70th day of TC Exposure	Eye Prominance	Normal	10	100	10	100	10	100	10	100
76th day of TC Exposure	Eye Prominance	Normal	10	100	10	100	10	100	10	100
83rd day of TC Exposure	Eye Prominance	Normal	10	100	10	100	10	100	10	100
91st day of TC Exposure	Eye Prominance	Normal	10	100	10	100	10	100	10	100

Convulsions										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Observation Days	Baseline	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Normal	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Normal	10	100	10	100	10	100	10	100

Biting habit										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Observation Days	Baseline	Biting habit	Absent	10	100	10	100	10	100	100
	6th day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	100
	13th day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	100

20th day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	10	100
27th day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	10	100
34th day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	10	100
41st day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	10	100
48th day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	10	100
55th day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	10	100
62nd day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	10	100
70th day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	10	100
76th day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	10	100
83rd day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	10	100
91st day of TC Exposure	Biting habit	Absent	10	100	10	100	10	100	10	100

Tremors										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Observation Days	Baseline	Absent	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Absent	10	100	10	100	10	100	10	100

Neurological Examination

Locomotor Activity										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%

Observation Days	Baseline	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Locomotor activity	Normal	10	100	10	100	10	100	10	100

Rearingactivity											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Rearing activity	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Rearing activity	Normal	10	100	10	100	10	100	10	100

Tailelevation											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Obs Days	Baseline	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Tail elevation	Limbs Held Normal	10	100	10	100	10	100	10	100

Static limb position											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Static limb position	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100

55th day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100
62nd day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100
70th day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100
76th day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100
83rd day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100
91st day of TC Exposure	Static limb position	Normal	10	100	10	100	10	100	10	100

Abnormal gait											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Abnormal gait	Limbs Held Normal	10	100	10	100	10	100	10	100

Ataxic gait											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Ataxic gait	Normal	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100

13th day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100
20th day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100
27th day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100
34th day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100
41st day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100
48th day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100
55th day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100
62nd day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100
70th day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100
76th day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100
83rd day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100
91st day of TC Exposure	Ataxic gait	Normal	10	100	10	100	10	100	10	100

Head position											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Head position	None	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100
83rd day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100	
91st day of TC Exposure	Head position	None	10	100	10	100	10	100	10	100	

Pinna touch response											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Pinna touch response	None	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Pinna touch response	None	10	100	10	100	10	100	10	100

Allergenicity

Erythema										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Observation Days	Baseline	Absent	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Absent	10	100	10	100	10	100	10	100

83rd day of TC Exposure	Absent	10	100	10	100	10	100	10	100
91st day of TC Exposure	Absent	10	100	10	100	10	100	10	100

Alopecia										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Observation Days	Baseline	Absent	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	48th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	55th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	62nd day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	70th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	76th day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	83rd day of TC Exposure	Absent	10	100	10	100	10	100	10	100
	91st day of TC Exposure	Absent	10	100	10	100	10	100	10	100

Eye appearance											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Observation Days	Baseline	Eye appearance	Absent	10	100	10	100	10	100	10	100
	6th day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100
	13th day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100
	20th day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100
	27th day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100
	34th day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100
	41st day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100

48th day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100
55th day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100
62nd day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100
70th day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100
76th day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100
83rd day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100
91st day of TC Exposure	Eye appearance	Absent	10	100	10	100	10	100	10	100

Urine exposure = Pre exposure, Sex = MALE

Glucose ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Glucose g/dL (%)	Negative	5	100	5	100	5	100	5	100
a. Urine exposure = Pre exposure, Sex = MALE											

Urine exposure = Pre exposure, Sex = MALE

Bilirubin ^a										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Negative	2	40			1	20	3	60
		Trace	1	20						
		Small (+)	2	40	5	100	4	80	2	40
a. Urine exposure = Pre exposure, Sex = MALE										

Urine exposure = Pre exposure, Sex = MALE

Ketone ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Ketone mg/dL	Negative	2	40			1	20	1	20
			Trace	3	60	5	100	4	80	3	60
			Small (+)						1	20	
a. Urine exposure = Pre exposure, Sex = MALE											

Urine exposure = Pre exposure, Sex = MALE

Blood ^a										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Negative	3	60	2	40	3	60	2	40
		Trace	2	40	1	20	1	20	2	40
		Small (+)			2	40				
		Moderate (++)					1	20	1	20
a. Urine exposure = Pre exposure, Sex = MALE										

Urine exposure = Pre exposure, Sex = MALE

Protein ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Protein mg/dl	Small (+)	5	100	3	60	4	80	4	80
			Moderate (++)			2	40	1	20	1	20
a. Urine exposure = Pre exposure, Sex = MALE											

Urine exposure = Pre exposure, Sex = MALE

Nitrates ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Nitrates	Negative					2	40		
			Trace	5	100	5	100	3	60	5	100
a. Urine exposure = Pre exposure, Sex = MALE											

Urine exposure = Pre exposure, Sex = MALE

Leucocytes ^a										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Negative	5	100	5	100	5	100	5	100
a. Urine exposure = Pre exposure, Sex = MALE										

Urine exposure = Pre exposure, Sex = FEMALE

Glucose ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Glucose g/dL (%)	Negative	5	100	5	100	5	100	5	100
a. Urine exposure = Pre exposure, Sex = FEMALE											

Urine exposure = Pre exposure, Sex = FEMALE

Bilirubin ^a										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Negative			1	20			2	40
		Small (+)	5	100	4	80	5	100	3	60
a. Urine exposure = Pre exposure, Sex = FEMALE										

Urine exposure = Pre exposure, Sex = FEMALE

Ketone ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Ketone mg/dL	Negative			2	40				
			Trace	4	80	3	60	4	80	5	100
			Small (+)	1	20			1	20		
a. Urine exposure = Pre exposure, Sex = FEMALE											

Urine exposure = Pre exposure, Sex = FEMALE

Blood ^a										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Negative	5	100	5	100	4	80	4	80
		Trace					1	20		
		Moderate (++)							1	20
a. Urine exposure = Pre exposure, Sex = FEMALE										

Urine exposure = Pre exposure, Sex = FEMALE

Protein ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Protein mg/dl	Trace								
			Small (+)	5	100	5	100	4	80	2	40
			Moderate (++)					1	20	2	40
a. Urine exposure = Pre exposure, Sex = FEMALE											

Urine exposure = Pre exposure, Sex = FEMALE

Nitrates ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Nitrates	Negative	5	100	5	100	1	20	1	20
			Trace					4	80	4	80
a. Urine exposure = Pre exposure, Sex = FEMALE											

Urine exposure = Pre exposure, Sex = FEMALE

Leucocytes ^a										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Urine exposure	Pre exposure	Negative	5	100	5	100	5	100	4	80
		Trace							1	20
a. Urine exposure = Pre exposure, Sex = FEMALE										

Urine exposure = Post exposure, Sex = MALE

Glucose ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Glucose g/dL (%)	Negative	5	100	5	100	5	100	5	100
a. Urine exposure = Post exposure, Sex = MALE											

Urine exposure = Post exposure, Sex = MALE

Bilirubin ^a										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Negative	5	100	4	80	4	80	4	80
		Small (+)			1	20	1	20	1	20
a. Urine exposure = Post exposure, Sex = MALE										

Urine exposure = Post exposure, Sex = MALE

Ketone ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Ketone mg/dL	Negative	5	100	1	20	4	80	2	40
			Trace			4	80	1	20	2	40
			Small (+)							1	20
a. Urine exposure = Post exposure, Sex = MALE											

Urine exposure = Post exposure, Sex = MALE

Blood ^a										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Negative	2	40			1	20	2	40
		Trace	1	20					1	20
		Small (+)	1	20					1	20
		Moderate (++)	1	20	4	80	4	80	1	20
		5			1	20				
a. Urine exposure = Post exposure, Sex = MALE										

Urine exposure = Post exposure, Sex = MALE

Protein ^a													
				Test group									
				VC		1XOryzanol		2XOryzanol		5XOryzanol			
				N	%	N	%	N	%	N	%		
Urine exposure	Post exposure	Protein mg/dl	Trace	5	100	1	20	5	100	2	40		
			Small (+)			2	40					3	60
			Moderate (++)			2	40						
a. Urine exposure = Post exposure, Sex = MALE													

Urine exposure = Post exposure, Sex = MALE

Nitrates ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Nitrates	Negative	5	100	4	80	3	60	1	20
			Trace			1	20	2	40	4	80
a. Urine exposure = Post exposure, Sex = MALE											

Urine exposure = Post exposure, Sex = MALE

Leucocytes ^a										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Negative	2	40	4	80	4	80	3	60
		Trace	1	20	1	20	1	20	2	40
		Small (+)	1	20						
		Large (+++)	1	20						
a. Urine exposure = Post exposure, Sex = MALE										

Urine exposure = Post exposure, Sex = FEMALE

Glucose ^a									
		Test group							
		VC		1XOryzanol		2XOryzanol		5XOryzanol	
		N	%	N	%	N	%	N	%

Urine exposure	Post exposure	Glucose g/dL (%)	Negative	5	100	5	100	5	100	5	100
a. Urine exposure = Post exposure, Sex = FEMALE											

Urine exposure = Post exposure, Sex = FEMALE

Bilirubin ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Negative		3	60	4	80	2	40	3	60
		Small (+)		2	40	1	20	3	60	2	40
a. Urine exposure = Post exposure, Sex = FEMALE											

Urine exposure = Post exposure, Sex = FEMALE

Ketone ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Ketone mg/dL	Negative	2	40	3	60	2	40	5	100
			Trace	3	60	2	40	3	60		
a. Urine exposure = Post exposure, Sex = FEMALE											

Urine exposure = Post exposure, Sex = FEMALE

Blood ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Negative		3	60	1	20	1	20	3	60
		Trace				2	40	2	40		
		Small (+)						1	20	1	20
		Moderate (++)		2	40	2	40	1	20	1	20
a. Urine exposure = Post exposure, Sex = FEMALE											

Urine exposure = Post exposure, Sex = FEMALE

Protein ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Protein mg/dl	Trace	1	20	1	20			1	20
			Small (+)	4	80	3	60	3	60	2	40
			Moderate (++)			1	20	2	40	2	40
a. Urine exposure = Post exposure, Sex = FEMALE											

Urine exposure = Post exposure, Sex = FEMALE

Nitrates ^a											
				Test group							
				VC		1XOryzanol		2XOryzanol		5XOryzanol	
				N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Nitrates	Negative	1	20	1	20	2	40	1	20
			Trace	4	80	4	80	3	60	4	80
a. Urine exposure = Post exposure, Sex = FEMALE											

Urine exposure = Post exposure, Sex = FEMALE

Leucocytes ^a										
			Test group							
			VC		1XOryzanol		2XOryzanol		5XOryzanol	
			N	%	N	%	N	%	N	%
Urine exposure	Post exposure	Negative	5	100	5	100	5	100	3	60
		Trace							1	20
		Large (+++)							1	20
a. Urine exposure = Post exposure, Sex = FEMALE										

Oneway**Urine exposure = Pre exposure, Sex = MALE**

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Specific Gravity	VC	5	1.027	.004	.002000	1.02145	1.03255	1.020	1.030
	1XOryzanol	5	1.025	.000	0.000000	1.02500	1.02500	1.025	1.025
	2XOryzanol	5	1.029	.002	.001000	1.02622	1.03178	1.025	1.030
	5XOryzanol	5	1.026	.002	.001000	1.02322	1.02878	1.025	1.030
	Total	20	1.027	.003	.000656	1.02538	1.02812	1.020	1.030
PH	VC	5	5.800	.274	.1225	5.460	6.140	5.5	6.0
	1XOryzanol	5	6.100	.548	.2449	5.420	6.780	5.5	7.0
	2XOryzanol	5	5.700	.447	.2000	5.145	6.255	5.5	6.5
	5XOryzanol	5	5.900	.224	.1000	5.622	6.178	5.5	6.0
	Total	20	5.875	.393	.0879	5.691	6.059	5.5	7.0
Urobilinogen E.U./dL	VC	5	0.200	.000	.0000	.200	.200	.2	.2
	1XOryzanol	5	0.200	.000	.0000	.200	.200	.2	.2
	2XOryzanol	5	0.360	.358	.1600	-.084	.804	.2	1.0
	5XOryzanol	5	0.200	.000	.0000	.200	.200	.2	.2
	Total	20	0.240	.179	.0400	.156	.324	.2	1.0
a. Urine exposure = Pre exposure, Sex = MALE									

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
Specific Gravity	Between Groups	.000	3	.000	1.944	.163
	Within Groups	.000	16	.000		
	Total	.000	19			
PH	Between Groups	.437	3	.146	.933	.447
	Within Groups	2.500	16	.156		
	Total	2.938	19			
Urobilinogen E.U./dL	Between Groups	.096	3	.032	1.000	.418
	Within Groups	.512	16	.032		
	Total	.608	19			

a. Urine exposure = Pre exposure, Sex = MALE

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Specific Gravity	VC	1XOryzanol	.002000	.001732	.265	-.00167	.00567
		2XOryzanol	-.002000	.001732	.265	-.00567	.00167
		5XOryzanol	.001000	.001732	.572	-.00267	.00467
	1XOryzanol	VC	-.002000	.001732	.265	-.00567	.00167
		2XOryzanol	-.004000*	.001732	.035	-.00767	-.00033
		5XOryzanol	-.001000	.001732	.572	-.00467	.00267
	2XOryzanol	VC	.002000	.001732	.265	-.00167	.00567
		1XOryzanol	.004000*	.001732	.035	.00033	.00767
		5XOryzanol	.003000	.001732	.102	-.00067	.00667
	5XOryzanol	VC	-.001000	.001732	.572	-.00467	.00267
		1XOryzanol	.001000	.001732	.572	-.00267	.00467
		2XOryzanol	-.003000	.001732	.102	-.00667	.00067
PH	VC	1XOryzanol	-.3000	.2500	.248	-.830	.230
		2XOryzanol	.1000	.2500	.694	-.430	.630
		5XOryzanol	-.1000	.2500	.694	-.630	.430
	1XOryzanol	VC	.3000	.2500	.248	-.230	.830
		2XOryzanol	.4000	.2500	.129	-.130	.930
		5XOryzanol	.2000	.2500	.435	-.330	.730
	2XOryzanol	VC	-.1000	.2500	.694	-.630	.430
		1XOryzanol	-.4000	.2500	.129	-.930	.130
		5XOryzanol	-.2000	.2500	.435	-.730	.330
	5XOryzanol	VC	.1000	.2500	.694	-.430	.630
		1XOryzanol	-.2000	.2500	.435	-.730	.330
		2XOryzanol	.2000	.2500	.435	-.330	.730
Urobilinogen E.U./dL	VC	1XOryzanol	0.0000	.1131	1.000	-.240	.240
		2XOryzanol	-.1600	.1131	.176	-.400	.080
		5XOryzanol	0.0000	.1131	1.000	-.240	.240

1XOryzanol	VC	0.0000	.1131	1.000	-.240	.240
	2XOryzanol	-.1600	.1131	.176	-.400	.080
	5XOryzanol	0.0000	.1131	1.000	-.240	.240
2XOryzanol	VC	.1600	.1131	.176	-.080	.400
	1XOryzanol	.1600	.1131	.176	-.080	.400
	5XOryzanol	.1600	.1131	.176	-.080	.400
5XOryzanol	VC	0.0000	.1131	1.000	-.240	.240
	1XOryzanol	0.0000	.1131	1.000	-.240	.240
	2XOryzanol	-.1600	.1131	.176	-.400	.080

*. The mean difference is significant at the 0.05 level.
a. Urine exposure = Pre exposure, Sex = MALE

Urine exposure = Pre exposure, Sex = MALE

Kruskal-Wallis Test

Ranks ^a			
Test group		N	Mean Rank
Specific Gravity	VC	5	11.50
	1XOryzanol	5	7.00
	2XOryzanol	5	14.60
	5XOryzanol	5	8.90
	Total	20	

a. Urine exposure = Pre exposure, Sex = MALE

Test Statistics ^{a,b,c}	
	Specific Gravity
Chi-Square	6.041
df	3
Asymp. Sig.	.110

a. Urine exposure = Pre exposure, Sex = MALE
b. Kruskal Wallis Test
c. Grouping Variable: Test group

Urine exposure = Pre exposure, Sex = MALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Specific Gravity	VC	5	6.50	32.50
	1XOryzanol	5	4.50	22.50
	Total	10		

a. Urine exposure = Pre exposure, Sex = MALE

Test Statistics ^{a,b}	
	Specific Gravity
Mann-Whitney U	7.500
Wilcoxon W	22.500
Z	-1.195
Asymp. Sig. (2-tailed)	.232
Exact Sig. [2*(1-tailed Sig.)]	.310 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Pre exposure, Sex = MALE
Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Specific Gravity VC	5	4.90	24.50
2XOryzanol	5	6.10	30.50
Total	10		
a. Urine exposure = Pre exposure, Sex = MALE			

Test Statistics ^{a,b}	
	Specific Gravity
Mann-Whitney U	9.500
Wilcoxon W	24.500
Z	-.775
Asymp. Sig. (2-tailed)	.439
Exact Sig. [2*(1-tailed Sig.)]	.548 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Pre exposure, Sex = MALE
Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Specific Gravity VC	5	6.10	30.50
5XOryzanol	5	4.90	24.50
Total	10		
a. Urine exposure = Pre exposure, Sex = MALE			

Test Statistics ^{a,b}	
	Specific Gravity
Mann-Whitney U	9.500
Wilcoxon W	24.500
Z	-.693
Asymp. Sig. (2-tailed)	.488
Exact Sig. [2*(1-tailed Sig.)]	.548 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Pre exposure, Sex = MALE
Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Specific Gravity 1XOryzanol	5	3.50	17.50
2XOryzanol	5	7.50	37.50
Total	10		
a. Urine exposure = Pre exposure, Sex = MALE			

Test Statistics ^{a,b}	
	Specific Gravity
Mann-Whitney U	2.500
Wilcoxon W	17.500
Z	-2.449
Asymp. Sig. (2-tailed)	.014
Exact Sig. [2*(1-tailed Sig.)]	.032 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Pre exposure, Sex = MALE
Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Specific Gravity 1XOryzanol	5	5.00	25.00
5XOryzanol	5	6.00	30.00
Total	10		
a. Urine exposure = Pre exposure, Sex = MALE			

Test Statistics ^{a,b}	
	Specific Gravity
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Pre exposure, Sex = MALE
Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Specific Gravity 2XOryzanol	5	7.00	35.00
5XOryzanol	5	4.00	20.00
Total	10		
a. Urine exposure = Pre exposure, Sex = MALE			

Test Statistics ^{a,b}	
	Specific Gravity
Mann-Whitney U	5.000
Wilcoxon W	20.000
Z	-1.800
Asymp. Sig. (2-tailed)	.072
Exact Sig. [2*(1-tailed Sig.)]	.151 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Pre exposure, Sex = MALE
Kruskal-Wallis Test

Ranks ^a		
Test group	N	Mean Rank
Urobilinogen E.U./dL VC	5	10.00
1XOryzanol	5	10.00
2XOryzanol	5	12.00
5XOryzanol	5	10.00
Total	20	
a. Urine exposure = Pre exposure, Sex = MALE		

Test Statistics ^{a,b,c}	
	Urobilinogen E.U./dL
Chi-Square	3.000
df	3
Asymp. Sig.	.392
a. Urine exposure = Pre exposure, Sex = MALE	
b. Kruskal Wallis Test	
c. Grouping Variable: Test group	

Urine exposure = Pre exposure, Sex = MALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL	VC	5	5.50	27.50
	1XOryzanol	5	5.50	27.50
	Total	10		
a. Urine exposure = Pre exposure, Sex = MALE				

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	12.500
Wilcoxon W	27.500
Z	0.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Pre exposure, Sex = MALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL	VC	5	5.00	25.00
	2XOryzanol	5	6.00	30.00
	Total	10		
a. Urine exposure = Pre exposure, Sex = MALE				

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Pre exposure, Sex = MALE
Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL VC	5	5.50	27.50
5XOryzanol	5	5.50	27.50
Total	10		
a. Urine exposure = Pre exposure, Sex = MALE			

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	12.500
Wilcoxon W	27.500
Z	0.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Pre exposure, Sex = MALE
Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL 1XOryzanol	5	5.00	25.00
2XOryzanol	5	6.00	30.00
Total	10		
a. Urine exposure = Pre exposure, Sex = MALE			

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Pre exposure, Sex = MALE

Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL 1XOryzanol	5	5.50	27.50
5XOryzanol	5	5.50	27.50
Total	10		
a. Urine exposure = Pre exposure, Sex = MALE			

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	12.500
Wilcoxon W	27.500
Z	0.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Pre exposure, Sex = MALE

Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL 2XOryzanol	5	6.00	30.00
5XOryzanol	5	5.00	25.00
Total	10		
a. Urine exposure = Pre exposure, Sex = MALE			

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Pre exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Oneway

Urine exposure = Pre exposure, Sex = FEMALE

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Specific Gravity	VC	5	1.025	.005	.002236	1.01879	1.03121	1.020	1.030
	1XOryzanol	5	1.025	.004	.001581	1.02061	1.02939	1.020	1.030
	2XOryzanol	5	1.026	.004	.001871	1.02081	1.03119	1.020	1.030
	5XOryzanol	5	1.027	.003	.001225	1.02360	1.03040	1.025	1.030
	Total	20	1.026	.004	.000833	1.02401	1.02749	1.020	1.030
PH	VC	5	6.400	.822	.3674	5.380	7.420	5.5	7.5
	1XOryzanol	5	6.100	.652	.2915	5.291	6.909	5.5	7.0
	2XOryzanol	5	6.200	.671	.3000	5.367	7.033	5.5	7.0
	5XOryzanol	5	6.200	.570	.2550	5.492	6.908	5.5	7.0
	Total	20	6.225	.638	.1427	5.926	6.524	5.5	7.5
Urobilinogen E.U./dL	VC	5	0.680	.438	.1960	.136	1.224	.2	1.0
	1XOryzanol	5	0.680	.438	.1960	.136	1.224	.2	1.0
	2XOryzanol	5	0.520	.438	.1960	-.024	1.064	.2	1.0
	5XOryzanol	5	0.360	.358	.1600	-.084	.804	.2	1.0
	Total	20	0.560	.408	.0913	.369	.751	.2	1.0

a. Urine exposure = Pre exposure, Sex = FEMALE

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
Specific Gravity	.899	3	16	.463
PH	.615	3	16	.615
Urobilinogen E.U./dL	1.185	3	16	.347
a. Urine exposure = Pre exposure, Sex = FEMALE				

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
Specific Gravity	Between Groups	.000	3	.000	.293	.830
	Within Groups	.000	16	.000		
	Total	.000	19			
PH	Between Groups	.238	3	.079	.169	.916
	Within Groups	7.500	16	.469		
	Total	7.738	19			
Urobilinogen E.U./dL	Between Groups	.352	3	.117	.667	.585
	Within Groups	2.816	16	.176		
	Total	3.168	19			
a. Urine exposure = Pre exposure, Sex = FEMALE						

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Specific Gravity	VC	1XOryzanol	0.000000	.002500	1.000	-.00530	.00530
		2XOryzanol	-.001000	.002500	.694	-.00630	.00430
		5XOryzanol	-.002000	.002500	.435	-.00730	.00330
	1XOryzanol	VC	0.000000	.002500	1.000	-.00530	.00530
		2XOryzanol	-.001000	.002500	.694	-.00630	.00430
		5XOryzanol	-.002000	.002500	.435	-.00730	.00330
	2XOryzanol	VC	.001000	.002500	.694	-.00430	.00630
		1XOryzanol	.001000	.002500	.694	-.00430	.00630
		5XOryzanol	-.001000	.002500	.694	-.00630	.00430
	5XOryzanol	VC	.002000	.002500	.435	-.00330	.00730
		1XOryzanol	.002000	.002500	.435	-.00330	.00730
		2XOryzanol	.001000	.002500	.694	-.00430	.00630
PH	VC	1XOryzanol	.3000	.4330	.498	-.618	1.218
		2XOryzanol	.2000	.4330	.650	-.718	1.118
		5XOryzanol	.2000	.4330	.650	-.718	1.118
	1XOryzanol	VC	-.3000	.4330	.498	-1.218	.618
		2XOryzanol	-.1000	.4330	.820	-1.018	.818
		5XOryzanol	-.1000	.4330	.820	-1.018	.818
	2XOryzanol	VC	-.2000	.4330	.650	-1.118	.718
		1XOryzanol	.1000	.4330	.820	-.818	1.018
		5XOryzanol	0.0000	.4330	1.000	-.918	.918
	5XOryzanol	VC	-.2000	.4330	.650	-1.118	.718
		1XOryzanol	.1000	.4330	.820	-.818	1.018
		2XOryzanol	0.0000	.4330	1.000	-.918	.918
Urobilinogen E.U./dL	VC	1XOryzanol	.0000	.2653	1.000	-.562	.562
		2XOryzanol	.1600	.2653	.555	-.402	.722
		5XOryzanol	.3200	.2653	.245	-.242	.882

1XOryzanol	VC	.0000	.2653	1.000	-.562	.562
	2XOryzanol	.1600	.2653	.555	-.402	.722
	5XOryzanol	.3200	.2653	.245	-.242	.882
2XOryzanol	VC	-.1600	.2653	.555	-.722	.402
	1XOryzanol	-.1600	.2653	.555	-.722	.402
	5XOryzanol	.1600	.2653	.555	-.402	.722
5XOryzanol	VC	-.3200	.2653	.245	-.882	.242
	1XOryzanol	-.3200	.2653	.245	-.882	.242
	2XOryzanol	-.1600	.2653	.555	-.722	.402

a. Urine exposure = Pre exposure, Sex = FEMALE

Oneway**Urine exposure = Post exposure, Sex = MALE**

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Specific Gravity	VC	5	1.03	.005	.002236	1.01879	1.03121	1.020	1.030
	1XOryzanol	5	1.02	.008	.003674	1.01380	1.03420	1.010	1.030
	2XOryzanol	5	1.03	.006	.002739	1.01740	1.03260	1.015	1.030
	5XOryzanol	5	1.02	.005	.002449	1.01720	1.03080	1.020	1.030
	Total	20	1.02	.006	.001303	1.02177	1.02723	1.010	1.030
PH	VC	5	5.60	.224	.1000	5.322	5.878	5.5	6.0
	1XOryzanol	5	6.20	.447	.2000	5.645	6.755	6.0	7.0
	2XOryzanol	5	5.80	.274	.1225	5.460	6.140	5.5	6.0
	5XOryzanol	5	5.90	.418	.1871	5.381	6.419	5.5	6.5
	Total	20	5.88	.393	.0879	5.691	6.059	5.5	7.0
Urobilinogen E. U./dL	VC	5	0.20	.000	.0000	.200	.200	.2	.2
	1XOryzanol	5	0.20	.000	.0000	.200	.200	.2	.2
	2XOryzanol	5	0.20	.000	.0000	.200	.200	.2	.2
	5XOryzanol	5	0.36	.358	.1600	-.084	.804	.2	1.0
	Total	20	0.24	.179	.0400	.156	.324	.2	1.0

a. Urine exposure = Post exposure, Sex = MALE

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
Specific Gravity	.226	3	16	.877
PH	.838	3	16	.493
Urobilinogen E.U./dL	7.111	3	16	.003

a. Urine exposure = Post exposure, Sex = MALE

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
Specific Gravity	Between Groups	.000	3	.000	.042	.988
	Within Groups	.001	16	.000		
	Total	.001	19			
PH	Between Groups	.938	3	.313	2.500	.097
	Within Groups	2.000	16	.125		
	Total	2.938	19			
Urobilinogen E.U./dL	Between Groups	.096	3	.032	1.000	.418
	Within Groups	.512	16	.032		
	Total	.608	19			

a. Urine exposure = Post exposure, Sex = MALE

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Specific Gravity	VC	1XOryzanol	.001000	.004000	.806	-.00748	.00948
		2XOryzanol	0.000000	.004000	1.000	-.00848	.00848
		5XOryzanol	.001000	.004000	.806	-.00748	.00948
	1XOryzanol	VC	-.001000	.004000	.806	-.00948	.00748
		2XOryzanol	-.001000	.004000	.806	-.00948	.00748
		5XOryzanol	0.000000	.004000	1.000	-.00848	.00848
	2XOryzanol	VC	0.000000	.004000	1.000	-.00848	.00848
		1XOryzanol	.001000	.004000	.806	-.00748	.00948
		5XOryzanol	.001000	.004000	.806	-.00748	.00948
	5XOryzanol	VC	-.001000	.004000	.806	-.00948	.00748
		1XOryzanol	0.000000	.004000	1.000	-.00848	.00848
		2XOryzanol	-.001000	.004000	.806	-.00948	.00748
PH	VC	1XOryzanol	-.6000*	.2236	.016	-1.074	-.126
		2XOryzanol	-.2000	.2236	.384	-.674	.274
		5XOryzanol	-.3000	.2236	.198	-.774	.174
	1XOryzanol	VC	.6000*	.2236	.016	.126	1.074
		2XOryzanol	.4000	.2236	.093	-.074	.874
		5XOryzanol	.3000	.2236	.198	-.174	.774
	2XOryzanol	VC	.2000	.2236	.384	-.274	.674
		1XOryzanol	-.4000	.2236	.093	-.874	.074
		5XOryzanol	-.1000	.2236	.661	-.574	.374
	5XOryzanol	VC	.3000	.2236	.198	-.174	.774
		1XOryzanol	-.3000	.2236	.198	-.774	.174
		2XOryzanol	.1000	.2236	.661	-.374	.574
Urobilinogen E.U./dL	VC	1XOryzanol	0.0000	.1131	1.000	-.240	.240
		2XOryzanol	0.0000	.1131	1.000	-.240	.240
		5XOryzanol	-.1600	.1131	.176	-.400	.080

1XOryzanol	VC	0.0000	.1131	1.000	-.240	.240
	2XOryzanol	0.0000	.1131	1.000	-.240	.240
	5XOryzanol	-.1600	.1131	.176	-.400	.080
2XOryzanol	VC	0.0000	.1131	1.000	-.240	.240
	1XOryzanol	0.0000	.1131	1.000	-.240	.240
	5XOryzanol	-.1600	.1131	.176	-.400	.080
5XOryzanol	VC	.1600	.1131	.176	-.080	.400
	1XOryzanol	.1600	.1131	.176	-.080	.400
	2XOryzanol	.1600	.1131	.176	-.080	.400

*. The mean difference is significant at the 0.05 level.
a. Urine exposure = Post exposure, Sex = MALE

Urine exposure = Post exposure, Sex = MALE

Kruskal-Wallis Test

Ranks ^a		
Test group	N	Mean Rank
Urobilinogen E.U./dL VC	5	10.00
1XOryzanol	5	10.00
2XOryzanol	5	10.00
5XOryzanol	5	12.00
Total	20	

a. Urine exposure = Post exposure, Sex = MALE

Test Statistics ^{a,b,c}	
	Urobilinogen E.U./dL
Chi-Square	3.000
df	3
Asymp. Sig.	.392

a. Urine exposure = Post exposure, Sex = MALE
b. Kruskal Wallis Test
c. Grouping Variable: Test group

Urine exposure = Post exposure, Sex = MALE

Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL VC	5	5.50	27.50
1XOryzanol	5	5.50	27.50
Total	10		

a. Urine exposure = Post exposure, Sex = MALE

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	12.500
Wilcoxon W	27.500
Z	0.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Urine exposure = Post exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = MALE

Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL VC	5	5.50	27.50
2XOryzanol	5	5.50	27.50
Total	10		
a. Urine exposure = Post exposure, Sex = MALE			

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	12.500
Wilcoxon W	27.500
Z	0.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Urine exposure = Post exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = MALE

Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL VC	5	5.00	25.00
5XOryzanol	5	6.00	30.00
Total	10		
a. Urine exposure = Post exposure, Sex = MALE			

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Post exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = MALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL	1XOryzanol	5	5.50	27.50
	2XOryzanol	5	5.50	27.50
	Total	10		
a. Urine exposure = Post exposure, Sex = MALE				

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	12.500
Wilcoxon W	27.500
Z	0.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Urine exposure = Post exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = MALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL	1XOryzanol	5	5.00	25.00
	5XOryzanol	5	6.00	30.00
	Total	10		
a. Urine exposure = Post exposure, Sex = MALE				

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Post exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = MALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL	2XOryzanol	5	5.00	25.00
	5XOryzanol	5	6.00	30.00
	Total	10		
a. Urine exposure = Post exposure, Sex = MALE				

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Post exposure, Sex = MALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Oneway

Urine exposure = Post exposure, Sex = FEMALE

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Specific Gravity	VC	5	1.02	.004	.001871	1.01881	1.02919	1.020	1.030
	1XOryzanol	5	1.03	.003	.001225	1.02360	1.03040	1.025	1.030
	2XOryzanol	5	1.03	.004	.001581	1.02061	1.02939	1.020	1.030
	5XOryzanol	5	1.02	.003	.001225	1.01960	1.02640	1.020	1.025

	Total	20	1.02	.003	.000767	1.02314	1.02636	1.020	1.030
PH	VC	5	6.00	.000	0.0000	6.000	6.000	6.0	6.0
	1XOryzanol	5	6.20	.570	.2550	5.492	6.908	5.5	7.0
	2XOryzanol	5	6.30	.758	.3391	5.358	7.242	5.5	7.5
	5XOryzanol	5	5.80	.274	.1225	5.460	6.140	5.5	6.0
	Total	20	6.08	.494	.1105	5.844	6.306	5.5	7.5
Urobilinogen E.U./dL	VC	5	0.36	.358	.1600	-.084	.804	.2	1.0
	1XOryzanol	5	0.20	.000	.0000	.200	.200	.2	.2
	2XOryzanol	5	0.36	.358	.1600	-.084	.804	.2	1.0
	5XOryzanol	5	0.20	.000	.0000	.200	.200	.2	.2
	Total	20	0.28	.246	.0551	.165	.395	.2	1.0

a. Urine exposure = Post exposure, Sex = FEMALE

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
Specific Gravity	.396	3	16	.758
PH	4.471	3	16	.018
Urobilinogen E.U./dL	4.741	3	16	.015

a. Urine exposure = Post exposure, Sex = FEMALE

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
Specific Gravity	Between Groups	.000	3	.000	1.296	.310
	Within Groups	.000	16	.000		
	Total	.000	19			
PH	Between Groups	.738	3	.246	1.009	.415
	Within Groups	3.900	16	.244		
	Total	4.638	19			
Urobilinogen E.U./dL	Between Groups	.128	3	.043	.667	.585
	Within Groups	1.024	16	.064		
	Total	1.152	19			

a. Urine exposure = Post exposure, Sex = FEMALE

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Specific Gravity	VC	1XOryzanol	-.003000	.002121	.176	-.00750	.00150
		2XOryzanol	-.001000	.002121	.644	-.00550	.00350
		5XOryzanol	.001000	.002121	.644	-.00350	.00550
	1XOryzanol	VC	.003000	.002121	.176	-.00150	.00750

		2XOryzanol	.002000	.002121	.360	-.00250	.00650
		5XOryzanol	.004000	.002121	.078	-.00050	.00850
	2XOryzanol	VC	.001000	.002121	.644	-.00350	.00550
		1XOryzanol	-.002000	.002121	.360	-.00650	.00250
	5XOryzanol	5XOryzanol	.002000	.002121	.360	-.00250	.00650
		VC	-.001000	.002121	.644	-.00550	.00350
		1XOryzanol	-.004000	.002121	.078	-.00850	.00050
		2XOryzanol	-.002000	.002121	.360	-.00650	.00250
PH	VC	1XOryzanol	-.2000	.3122	.531	-.862	.462
		2XOryzanol	-.3000	.3122	.351	-.962	.362
		5XOryzanol	.2000	.3122	.531	-.462	.862
	1XOryzanol	VC	.2000	.3122	.531	-.462	.862
		2XOryzanol	-.1000	.3122	.753	-.762	.562
		5XOryzanol	.4000	.3122	.218	-.262	1.062
	2XOryzanol	VC	.3000	.3122	.351	-.362	.962
		1XOryzanol	.1000	.3122	.753	-.562	.762
		5XOryzanol	.5000	.3122	.129	-.162	1.162
	5XOryzanol	VC	-.2000	.3122	.531	-.862	.462
		1XOryzanol	-.4000	.3122	.218	-1.062	.262
		2XOryzanol	-.5000	.3122	.129	-1.162	.162
Urobilinogen E.U./dL	VC	1XOryzanol	.1600	.1600	.332	-.179	.499
		2XOryzanol	0.0000	.1600	1.000	-.339	.339
		5XOryzanol	.1600	.1600	.332	-.179	.499
	1XOryzanol	VC	-.1600	.1600	.332	-.499	.179
		2XOryzanol	-.1600	.1600	.332	-.499	.179
		5XOryzanol	0.0000	.1600	1.000	-.339	.339
	2XOryzanol	VC	0.0000	.1600	1.000	-.339	.339
		1XOryzanol	.1600	.1600	.332	-.179	.499
		5XOryzanol	.1600	.1600	.332	-.179	.499
	5XOryzanol	VC	-.1600	.1600	.332	-.499	.179
		1XOryzanol	0.0000	.1600	1.000	-.339	.339
		2XOryzanol	-.1600	.1600	.332	-.499	.179

a. Urine exposure = Post exposure, Sex = FEMALE

Urine exposure = Post exposure, Sex = FEMALE**Kruskal-Wallis Test**

Ranks ^a			
Test group		N	Mean Rank
PH	VC	5	10.50
	1XOryzanol	5	12.00
	2XOryzanol	5	12.20
	5XOryzanol	5	7.30
	Total	20	
a. Urine exposure = Post exposure, Sex = FEMALE			

Test Statistics ^{a,b,c}	
	PH
Chi-Square	2.829
df	3
Asymp. Sig.	.419
a. Urine exposure = Post exposure, Sex = FEMALE	
b. Kruskal Wallis Test	
c. Grouping Variable: Test group	

Urine exposure = Post exposure, Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
PH	VC	5	5.00	25.00
	1XOryzanol	5	6.00	30.00
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	PH
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.643
Asymp. Sig. (2-tailed)	.521
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Post exposure, Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
PH	VC	5	5.00	25.00
	2XOryzanol	5	6.00	30.00
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	PH
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.643
Asymp. Sig. (2-tailed)	.521
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c

a. Urine exposure = Post exposure, Sex = FEMALE
b. Grouping Variable: Test group
c. Not corrected for ties.

Urine exposure = Post exposure, Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
PH	VC	5	6.50	32.50
	5XOryzanol	5	4.50	22.50
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	PH
Mann-Whitney U	7.500
Wilcoxon W	22.500
Z	-1.500
Asymp. Sig. (2-tailed)	.134
Exact Sig. [2*(1-tailed Sig.)]	.310 ^c
a. Urine exposure = Post exposure, Sex = FEMALE b. Grouping Variable: Test group c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
PH	1XOryzanol	5	5.40	27.00
	2XOryzanol	5	5.60	28.00
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	PH
Mann-Whitney U	12.000
Wilcoxon W	27.000
Z	-.108
Asymp. Sig. (2-tailed)	.914
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Urine exposure = Post exposure, Sex = FEMALE b. Grouping Variable: Test group c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
PH	1XOryzanol	5	6.60	33.00
	5XOryzanol	5	4.40	22.00
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	PH
Mann-Whitney U	7.000
Wilcoxon W	22.000
Z	-1.243
Asymp. Sig. (2-tailed)	.214
Exact Sig. [2*(1-tailed Sig.)]	.310 ^c
a. Urine exposure = Post exposure, Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
PH	2XOryzanol	5	6.60	33.00
	5XOryzanol	5	4.40	22.00
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	PH
Mann-Whitney U	7.000
Wilcoxon W	22.000
Z	-1.243
Asymp. Sig. (2-tailed)	.214
Exact Sig. [2*(1-tailed Sig.)]	.310 ^c
a. Urine exposure = Post exposure, Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = FEMALE

Kruskal-Wallis Test

Ranks ^a			
Test group		N	Mean Rank
Urobilinogen E.U./dL	VC	5	11.50
	1XOryzanol	5	9.50
	2XOryzanol	5	11.50
	5XOryzanol	5	9.50
	Total	20	
a. Urine exposure = Post exposure, Sex = FEMALE			

Test Statistics ^{a,b,c}	
	Urobilinogen E.U./dL
Chi-Square	2.111
df	3
Asymp. Sig.	.550
a. Urine exposure = Post exposure, Sex = FEMALE	
b. Kruskal Wallis Test	
c. Grouping Variable: Test group	

Urine exposure = Post exposure, Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL	VC	5	6.00	30.00
	1XOryzanol	5	5.00	25.00
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Post exposure, Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL	VC	5	5.50	27.50
	2XOryzanol	5	5.50	27.50
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	12.500
Wilcoxon W	27.500
Z	0.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Urine exposure = Post exposure, Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL	VC	5	6.00	30.00
	5XOryzanol	5	5.00	25.00
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Post exposure, Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL	1XOryzanol	5	5.00	25.00
	2XOryzanol	5	6.00	30.00
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Post exposure, Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = FEMALE

Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL	1XOryzanol	5	5.50	27.50
	5XOryzanol	5	5.50	27.50
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	12.500
Wilcoxon W	27.500
Z	0.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Urine exposure = Post exposure, Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Urine exposure = Post exposure, Sex = FEMALE**Mann-Whitney Test**

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Urobilinogen E.U./dL	2XOryzanol	5	6.00	30.00
	5XOryzanol	5	5.00	25.00
	Total	10		
a. Urine exposure = Post exposure, Sex = FEMALE				

Test Statistics ^{a,b}	
	Urobilinogen E.U./dL
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Urine exposure = Post exposure, Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

BIO CHEMISTRY**Sexpooled**

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Glucose	VC	10	91.60	6.484	2.050	86.96	96.24	83	104
	1XOryzanol	10	91.10	10.939	3.459	83.27	98.93	65	105
	2xOryzanol	10	91.70	5.677	1.795	87.64	95.76	80	100
	5xOryzanol	10	90.40	8.884	2.810	84.04	96.76	74	103
	Total	40	91.20	7.952	1.257	88.66	93.74	65	105
HDL C3	VC	10	69.410	12.9715	4.1020	60.131	78.689	50.3	95.4
	1XOryzanol	10	71.390	12.6022	3.9852	62.375	80.405	54.2	86.3
	2xOryzanol	10	72.910	7.3877	2.3362	67.625	78.195	64.7	84.7
	5xOryzanol	10	74.730	12.2758	3.8820	65.948	83.512	55.6	100.1
	Total	40	72.110	11.2595	1.7803	68.509	75.711	50.3	100.1
TP2	VC	10	6.6160	.69712	.22045	6.1173	7.1147	5.28	7.48
	1XOryzanol	10	7.0880	.42993	.13596	6.7804	7.3956	6.51	7.80
	2xOryzanol	10	6.7850	.30182	.09544	6.5691	7.0009	6.31	7.30
	5xOryzanol	10	6.8460	.36725	.11613	6.5833	7.1087	6.32	7.54
	Total	40	6.8338	.48614	.07687	6.6783	6.9892	5.28	7.80
CHO2I	VC	10	77.390	14.6312	4.6268	66.923	87.857	58.6	100.3

	1XOryzanol	10	77.190	11.5005	3.6368	68.963	85.417	53.9	89.6
	2xOryzanol	10	74.310	11.2881	3.5696	66.235	82.385	50.5	86.1
	5xOryzanol	10	77.290	14.1675	4.4802	67.155	87.425	52.9	105.1
	Total	40	76.545	12.5443	1.9834	72.533	80.557	50.5	105.1
BILT3	VC	10	.070	.0483	.0153	.035	.105	0.0	.1
	1XOryzanol	10	.090	.0568	.0180	.049	.131	0.0	.2
	2xOryzanol	10	.060	.0516	.0163	.023	.097	0.0	.1
	5xOryzanol	10	.090	.0316	.0100	.067	.113	0.0	.1
	Total	40	.078	.0480	.0076	.062	.093	0.0	.2
UREA	VC	10	42.240	15.4993	4.9013	31.152	53.328	25.9	71.8
	1XOryzanol	10	38.150	12.6710	4.0069	29.086	47.214	24.2	68.0
	2xOryzanol	10	37.460	6.4965	2.0544	32.813	42.107	32.0	50.6
	5xOryzanol	10	34.920	5.0411	1.5941	31.314	38.526	28.7	43.4
	Total	40	38.193	10.7320	1.6969	34.760	41.625	24.2	71.8
TRIGL	VC	10	36.000	17.6217	5.5725	23.394	48.606	20.1	75.4
	1XOryzanol	10	31.930	9.5401	3.0168	25.105	38.755	17.8	54.3
	2xOryzanol	10	34.910	9.0104	2.8493	28.464	41.356	23.2	50.3
	5xOryzanol	10	30.410	6.3417	2.0054	25.873	34.947	21.0	41.3
	Total	40	33.313	11.2176	1.7737	29.725	36.900	17.8	75.4
ALB2	VC	10	3.9010	.52197	.16506	3.5276	4.2744	3.29	4.84
	1XOryzanol	10	3.9100	.41374	.13083	3.6140	4.2060	3.32	4.50
	2xOryzanol	10	3.8380	.23776	.07519	3.6679	4.0081	3.40	4.12
	5xOryzanol	10	3.7700	.14644	.04631	3.6652	3.8748	3.51	3.99
	Total	40	3.8548	.35159	.05559	3.7423	3.9672	3.29	4.84
ASTL	VC	10	112.980	13.2615	4.1937	103.493	122.467	93.8	128.4
	1XOryzanol	9	121.233	12.4046	4.1349	111.698	130.768	103.2	142.4
	2xOryzanol	10	125.510	21.7184	6.8680	109.974	141.046	103.2	178.6
	5xOryzanol	10	115.550	13.7053	4.3340	105.746	125.354	94.3	134.3
	Total	39	118.756	15.9748	2.5580	113.578	123.935	93.8	178.6
ALTL	VC	10	52.610	8.7019	2.7518	46.385	58.835	39.2	64.7
	1XOryzanol	9	52.556	12.7560	4.2520	42.750	62.361	38.3	73.0
	2xOryzanol	10	58.070	14.0611	4.4465	48.011	68.129	39.6	83.8
	5xOryzanol	10	52.640	13.4346	4.2484	43.029	62.251	35.5	75.4
	Total	39	54.005	12.1496	1.9455	50.067	57.944	35.5	83.8
ALP2L	VC	10	108.00	17.689	5.594	95.35	120.65	83	142
	1XOryzanol	9	95.22	18.438	6.146	81.05	109.39	58	123
	2xOryzanol	10	94.90	19.081	6.034	81.25	108.55	68	125
	5xOryzanol	10	91.50	14.010	4.430	81.48	101.52	67	120
	Total	39	97.46	17.885	2.864	91.66	103.26	58	142
CREJ2	VC	9	.3822	.28969	.09656	.1595	.6049	0.00	.71
	1XOryzanol	10	.5400	.16472	.05209	.4222	.6578	.33	.92
	2xOryzanol	10	.4220	.21483	.06793	.2683	.5757	0.00	.72
	5xOryzanol	10	.4570	.18043	.05706	.3279	.5861	0.00	.62
	Total	39	.4521	.21487	.03441	.3824	.5217	0.00	.92

LDLC3	VC	10	11.8686	3.99300	1.26270	9.0122	14.7250	6.19	17.01
	1xOryzanol	10	11.1341	4.24204	1.34145	8.0995	14.1687	6.57	20.88
	2xOryzanol	10	11.9073	3.12910	.98951	9.6689	14.1457	7.35	16.62
	5xOryzanol	10	10.9794	2.60425	.82354	9.1165	12.8424	6.19	15.08
	Total	40	11.4724	3.44051	.54399	10.3720	12.5727	6.19	20.88

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Glucose	.921	3	36	.441
HDLC3	.969	3	36	.418
TP2	3.797	3	36	.018
CHO2I	.394	3	36	.758
BILT3	2.315	3	36	.092
UREAL	3.435	3	36	.027
TRIGL	2.768	3	36	.056
ALB2	3.488	3	36	.025
ASTL	.586	3	35	.629
ALTL	.971	3	35	.417
ALP2L	.403	3	35	.751
CREJ2	2.367	3	35	.087
LDLC3	.855	3	36	.473

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Glucose	Between Groups	10.600	3	3.533	.052	.984
	Within Groups	2455.800	36	68.217		
	Total	2466.400	39			
HDLC3	Between Groups	153.128	3	51.043	.384	.765
	Within Groups	4791.168	36	133.088		
	Total	4944.296	39			
TP2	Between Groups	1.146	3	.382	1.704	.184
	Within Groups	8.071	36	.224		
	Total	9.217	39			
CHO2I	Between Groups	66.803	3	22.268	.132	.940
	Within Groups	6070.256	36	168.618		
	Total	6137.059	39			
BILT3	Between Groups	.007	3	.002	.976	.415
	Within Groups	.083	36	.002		
	Total	.090	39			
UREAL	Between Groups	276.299	3	92.100	.787	.509
	Within Groups	4215.589	36	117.100		
	Total	4491.888	39			
TRIGL	Between Groups	201.105	3	67.035	.513	.676
	Within Groups	4706.479	36	130.736		

	Total	4907.584	39			
	Between Groups	.127	3	.042	.323	.808
	Within Groups	4.694	36	.130		
ALB2	Total	4.821	39			
	Between Groups	947.806	3	315.935	1.264	.302
	Within Groups	8749.530	35	249.987		
ASTL	Total	9697.336	38			
	Between Groups	222.243	3	74.081	.481	.697
	Within Groups	5387.076	35	153.916		
ALTL	Total	5609.319	38			
	Between Groups	1576.737	3	525.579	1.739	.177
	Within Groups	10578.956	35	302.256		
ALP2L	Total	12155.692	38			
	Between Groups	.131	3	.044	.938	.433
	Within Groups	1.624	35	.046		
CREJ2	Total	1.754	38			
	Between Groups	7.036	3	2.345	.186	.905
	Within Groups	454.611	36	12.628		
LDLC3	Total	461.647	39			

Post Hoc Tests

Multiple Comparisons							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Glucose	VC	1XOryzanol	.500	3.694	.893	-6.99	7.99
		2xOryzanol	-.100	3.694	.979	-7.59	7.39
		5xOryzanol	1.200	3.694	.747	-6.29	8.69
	1XOryzanol	VC	-.500	3.694	.893	-7.99	6.99
		2xOryzanol	-.600	3.694	.872	-8.09	6.89
		5xOryzanol	.700	3.694	.851	-6.79	8.19
	2xOryzanol	VC	.100	3.694	.979	-7.39	7.59
		1XOryzanol	.600	3.694	.872	-6.89	8.09
		5xOryzanol	1.300	3.694	.727	-6.19	8.79
	5xOryzanol	VC	-1.200	3.694	.747	-8.69	6.29
		1XOryzanol	-.700	3.694	.851	-8.19	6.79
		2xOryzanol	-1.300	3.694	.727	-8.79	6.19
HDLC3	VC	1XOryzanol	-1.9800	5.1592	.703	-12.443	8.483
		2xOryzanol	-3.5000	5.1592	.502	-13.963	6.963
		5xOryzanol	-5.3200	5.1592	.309	-15.783	5.143
	1XOryzanol	VC	1.9800	5.1592	.703	-8.483	12.443
		2xOryzanol	-1.5200	5.1592	.770	-11.983	8.943
		5xOryzanol	-3.3400	5.1592	.521	-13.803	7.123

		VC	3.5000	5.1592	.502	-6.963	13.963
		1XOryzanol	1.5200	5.1592	.770	-8.943	11.983
	2xOryzanol	5xOryzanol	-1.8200	5.1592	.726	-12.283	8.643
		VC	5.3200	5.1592	.309	-5.143	15.783
		1XOryzanol	3.3400	5.1592	.521	-7.123	13.803
	5xOryzanol	2xOryzanol	1.8200	5.1592	.726	-8.643	12.283
		1XOryzanol	-.47200*	.21175	.032	-.9015	-.0425
		2xOryzanol	-.16900	.21175	.430	-.5985	.2605
	VC	5xOryzanol	-.23000	.21175	.285	-.6595	.1995
		VC	.47200*	.21175	.032	.0425	.9015
		2xOryzanol	.30300	.21175	.161	-.1265	.7325
	1XOryzanol	5xOryzanol	.24200	.21175	.261	-.1875	.6715
		VC	.16900	.21175	.430	-.2605	.5985
		1XOryzanol	-.30300	.21175	.161	-.7325	.1265
	2xOryzanol	5xOryzanol	-.06100	.21175	.775	-.4905	.3685
		VC	.23000	.21175	.285	-.1995	.6595
		1XOryzanol	-.24200	.21175	.261	-.6715	.1875
TP2	5xOryzanol	2xOryzanol	.06100	.21175	.775	-.3685	.4905
		1XOryzanol	.2000	5.8072	.973	-11.578	11.978
		2xOryzanol	3.0800	5.8072	.599	-8.698	14.858
	VC	5xOryzanol	.1000	5.8072	.986	-11.678	11.878
		VC	-.2000	5.8072	.973	-11.978	11.578
		2xOryzanol	2.8800	5.8072	.623	-8.898	14.658
	1XOryzanol	5xOryzanol	-.1000	5.8072	.986	-11.878	11.678
		VC	-3.0800	5.8072	.599	-14.858	8.698
		1XOryzanol	-2.8800	5.8072	.623	-14.658	8.898
	2xOryzanol	5xOryzanol	-2.9800	5.8072	.611	-14.758	8.798
		VC	-.1000	5.8072	.986	-11.878	11.678
		1XOryzanol	.1000	5.8072	.986	-11.678	11.878
CHO2I	5xOryzanol	2xOryzanol	2.9800	5.8072	.611	-8.798	14.758
		1XOryzanol	-.0200	.0215	.358	-.064	.024
		2xOryzanol	.0100	.0215	.644	-.034	.054
	VC	5xOryzanol	-.0200	.0215	.358	-.064	.024
		VC	.0200	.0215	.358	-.024	.064
		2xOryzanol	.0300	.0215	.171	-.014	.074
	1XOryzanol	5xOryzanol	0.0000	.0215	1.00 0	-.044	.044
		VC	-.0100	.0215	.644	-.054	.034
		1XOryzanol	-.0300	.0215	.171	-.074	.014
	2xOryzanol	5xOryzanol	-.0300	.0215	.171	-.074	.014
		VC	.0200	.0215	.358	-.024	.064
		1XOryzanol	0.0000	.0215	1.00 0	-.044	.044
BILT3	5xOryzanol	2xOryzanol	.0300	.0215	.171	-.014	.074
UREAL	VC	1XOryzanol	4.0900	4.8394	.404	-5.725	13.905

		2xOryzanol	4.7800	4.8394	.330	-5.035	14.595	
		5xOryzanol	7.3200	4.8394	.139	-2.495	17.135	
		VC	-4.0900	4.8394	.404	-13.905	5.725	
		2xOryzanol	.6900	4.8394	.887	-9.125	10.505	
	1XOryzanol	5xOryzanol	3.2300	4.8394	.509	-6.585	13.045	
		VC	-4.7800	4.8394	.330	-14.595	5.035	
		1XOryzanol	-.6900	4.8394	.887	-10.505	9.125	
	2xOryzanol	5xOryzanol	2.5400	4.8394	.603	-7.275	12.355	
		VC	-7.3200	4.8394	.139	-17.135	2.495	
		1XOryzanol	-3.2300	4.8394	.509	-13.045	6.585	
	5xOryzanol	2xOryzanol	-2.5400	4.8394	.603	-12.355	7.275	
			1XOryzanol	4.0700	5.1134	.431	-6.301	14.441
		2xOryzanol	1.0900	5.1134	.832	-9.281	11.461	
VC		5xOryzanol	5.5900	5.1134	.282	-4.781	15.961	
		VC	-4.0700	5.1134	.431	-14.441	6.301	
		2xOryzanol	-2.9800	5.1134	.564	-13.351	7.391	
1XOryzanol		5xOryzanol	1.5200	5.1134	.768	-8.851	11.891	
		VC	-1.0900	5.1134	.832	-11.461	9.281	
		1XOryzanol	2.9800	5.1134	.564	-7.391	13.351	
2xOryzanol		5xOryzanol	4.5000	5.1134	.385	-5.871	14.871	
		VC	-5.5900	5.1134	.282	-15.961	4.781	
		1XOryzanol	-1.5200	5.1134	.768	-11.891	8.851	
5xOryzanol		2xOryzanol	-4.5000	5.1134	.385	-14.871	5.871	
		1XOryzanol	-.00900	.16149	.956	-.3365	.3185	
		2xOryzanol	.06300	.16149	.699	-.2645	.3905	
	VC	5xOryzanol	.13100	.16149	.423	-.1965	.4585	
		VC	.00900	.16149	.956	-.3185	.3365	
		2xOryzanol	.07200	.16149	.658	-.2555	.3995	
	1XOryzanol	5xOryzanol	.14000	.16149	.392	-.1875	.4675	
		VC	-.06300	.16149	.699	-.3905	.2645	
		1XOryzanol	-.07200	.16149	.658	-.3995	.2555	
	2xOryzanol	5xOryzanol	.06800	.16149	.676	-.2595	.3955	
		VC	-.13100	.16149	.423	-.4585	.1965	
		1XOryzanol	-.14000	.16149	.392	-.4675	.1875	
	5xOryzanol	2xOryzanol	-.06800	.16149	.676	-.3955	.2595	
		1XOryzanol	-8.2533	7.2646	.264	-23.001	6.495	
		2xOryzanol	-12.5300	7.0709	.085	-26.885	1.825	
	VC	5xOryzanol	-2.5700	7.0709	.718	-16.925	11.785	
		VC	8.2533	7.2646	.264	-6.495	23.001	
		2xOryzanol	-4.2767	7.2646	.560	-19.025	10.471	
	1XOryzanol	5xOryzanol	5.6833	7.2646	.439	-9.065	20.431	
		VC	12.5300	7.0709	.085	-1.825	26.885	
		1XOryzanol	4.2767	7.2646	.560	-10.471	19.025	
	2xOryzanol	5xOryzanol	9.9600	7.0709	.168	-4.395	24.315	
			1XOryzanol	9.9600	7.0709	.168	-4.395	24.315
			2xOryzanol	9.9600	7.0709	.168	-4.395	24.315
			1XOryzanol	9.9600	7.0709	.168	-4.395	24.315
		2xOryzanol	9.9600	7.0709	.168	-4.395	24.315	
		1XOryzanol	9.9600	7.0709	.168	-4.395	24.315	
		2xOryzanol	9.9600	7.0709	.168	-4.395	24.315	
		1XOryzanol	9.9600	7.0709	.168	-4.395	24.315	
		2xOryzanol	9.9600	7.0709	.168	-4.395	24.315	
		1XOryzanol	9.9600	7.0709	.168	-4.395	24.315	
		2xOryzanol	9.9600	7.0709	.168	-4.395	24.315	
		1XOryzanol	9.9600	7.0709	.168	-4.395	24.315	
		2xOryzanol	9.9600	7.0709	.168	-4.395	24.315	

		VC	2.5700	7.0709	.718	-11.785	16.925
		1XOryzanol	-5.6833	7.2646	.439	-20.431	9.065
	5xOryzanol	2xOryzanol	-9.9600	7.0709	.168	-24.315	4.395
		1XOryzanol	.0544	5.7003	.992	-11.518	11.627
		2xOryzanol	-5.4600	5.5483	.332	-16.724	5.804
	VC	5xOryzanol	-.0300	5.5483	.996	-11.294	11.234
		VC	-.0544	5.7003	.992	-11.627	11.518
		2xOryzanol	-5.5144	5.7003	.340	-17.087	6.058
	1XOryzanol	5xOryzanol	-.0844	5.7003	.988	-11.657	11.488
		VC	5.4600	5.5483	.332	-5.804	16.724
		1XOryzanol	5.5144	5.7003	.340	-6.058	17.087
	2xOryzanol	5xOryzanol	5.4300	5.5483	.334	-5.834	16.694
		VC	.0300	5.5483	.996	-11.234	11.294
		1XOryzanol	.0844	5.7003	.988	-11.488	11.657
ALTL	5xOryzanol	2xOryzanol	-5.4300	5.5483	.334	-16.694	5.834
		1XOryzanol	12.778	7.988	.119	-3.44	28.99
		2xOryzanol	13.100	7.775	.101	-2.68	28.88
	VC	5xOryzanol	16.500*	7.775	.041	.72	32.28
		VC	-12.778	7.988	.119	-28.99	3.44
		2xOryzanol	.322	7.988	.968	-15.89	16.54
	1XOryzanol	5xOryzanol	3.722	7.988	.644	-12.49	19.94
		VC	-13.100	7.775	.101	-28.88	2.68
		1XOryzanol	-.322	7.988	.968	-16.54	15.89
	2xOryzanol	5xOryzanol	3.400	7.775	.665	-12.38	19.18
		VC	-16.500*	7.775	.041	-32.28	-.72
		1XOryzanol	-3.722	7.988	.644	-19.94	12.49
ALP2L	5xOryzanol	2xOryzanol	-3.400	7.775	.665	-19.18	12.38
		1XOryzanol	-.15778	.09897	.120	-.3587	.0431
		2xOryzanol	-.03978	.09897	.690	-.2407	.1611
	VC	5xOryzanol	-.07478	.09897	.455	-.2757	.1261
		VC	.15778	.09897	.120	-.0431	.3587
		2xOryzanol	.11800	.09633	.229	-.0776	.3136
	1XOryzanol	5xOryzanol	.08300	.09633	.395	-.1126	.2786
		VC	.03978	.09897	.690	-.1611	.2407
		1XOryzanol	-.11800	.09633	.229	-.3136	.0776
	2xOryzanol	5xOryzanol	-.03500	.09633	.719	-.2306	.1606
		VC	.07478	.09897	.455	-.1261	.2757
		1XOryzanol	-.08300	.09633	.395	-.2786	.1126
CREJ2	5xOryzanol	2xOryzanol	.03500	.09633	.719	-.1606	.2306
		1XOryzanol	.73454	1.58922	.647	-2.4885	3.9576
		2xOryzanol	-.03866	1.58922	.981	-3.2617	3.1844
	VC	5xOryzanol	.88918	1.58922	.579	-2.3339	4.1123
		VC	-.73454	1.58922	.647	-3.9576	2.4885
LDLC3	1XOryzanol	2xOryzanol	-.77320	1.58922	.630	-3.9963	2.4499

	5xOryzanol	.15464	1.58922	.923	-3.0684	3.3777
	VC	.03866	1.58922	.981	-3.1844	3.2617
	1XOryzanol	.77320	1.58922	.630	-2.4499	3.9963
2xOryzanol	5xOryzanol	.92784	1.58922	.563	-2.2952	4.1509
	VC	-.88918	1.58922	.579	-4.1123	2.3339
	1XOryzanol	-.15464	1.58922	.923	-3.3777	3.0684
5xOryzanol	2xOryzanol	-.92784	1.58922	.563	-4.1509	2.2952

*. The mean difference is significant at the 0.05 level.

Kruskal-Wallis Test

Ranks			
Testgroup		N	Mean Rank
TP2	VC	10	16.75
	1XOryzanol	10	25.90
	2xOryzanol	10	18.85
	5xOryzanol	10	20.50
	Total	40	

Test Statistics ^{a,b}	
	TP2
Chi-Square	3.363
df	3
Asymp. Sig.	.339
a. Kruskal Wallis Test	
b. Grouping Variable: Testgroup	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
TP2	VC	10	8.55	85.50
	1XOryzanol	10	12.45	124.50
	Total	20		

Test Statistics ^a	
	TP2
Mann-Whitney U	30.500
Wilcoxon W	85.500
Z	-1.476
Asymp. Sig. (2-tailed)	.140
Exact Sig. [2*(1-tailed Sig.)]	.143 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
TP2	VC	10	9.80	98.00
	2xOryzanol	10	11.20	112.00
	Total	20		

Test Statistics ^a	
	TP2
Mann-Whitney U	43.000
Wilcoxon W	98.000
Z	-.529
Asymp. Sig. (2-tailed)	.597
Exact Sig. [2*(1-tailed Sig.)]	.631 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
TP2	VC	10	9.40	94.00
	5xOryzanol	10	11.60	116.00
	Total	20		

Test Statistics ^a	
	TP2
Mann-Whitney U	39.000
Wilcoxon W	94.000
Z	-.832
Asymp. Sig. (2-tailed)	.406
Exact Sig. [2*(1-tailed Sig.)]	.436 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
TP2	1xOryzanol	10	12.50	125.00
	2xOryzanol	10	8.50	85.00
	Total	20		

Test Statistics ^a	
	TP2
Mann-Whitney U	30.000
Wilcoxon W	85.000
Z	-1.512
Asymp. Sig. (2-tailed)	.130
Exact Sig. [2*(1-tailed Sig.)]	.143 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
TP2	1XOryzanol	10	11.95	119.50
	5xOryzanol	10	9.05	90.50
	Total	20		

Test Statistics ^a	
	TP2
Mann-Whitney U	35.500
Wilcoxon W	90.500
Z	-1.097
Asymp. Sig. (2-tailed)	.273
Exact Sig. [2*(1-tailed Sig.)]	.280 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
TP2	2xOryzanol	10	10.15	101.50
	5xOryzanol	10	10.85	108.50
	Total	20		

Test Statistics ^a	
	TP2
Mann-Whitney U	46.500
Wilcoxon W	101.500
Z	-.265
Asymp. Sig. (2-tailed)	.791
Exact Sig. [2*(1-tailed Sig.)]	.796 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Kruskal-Wallis Test

Ranks		
Testgroup	N	Mean Rank
VC	10	22.55
1XOryzanol	10	19.35
UREAL 2xOryzanol	10	22.10
5xOryzanol	10	18.00
Total	40	

Test Statistics ^{a,b}	
	UREAL
Chi-Square	1.049
df	3
Asymp. Sig.	.789
a. Kruskal Wallis Test	
b. Grouping Variable: Testgroup	

Mann-Whitney Test

Ranks			
Testgroup	N	Mean Rank	Sum of Ranks
VC	10	11.40	114.00
UREAL 1XOryzanol	10	9.60	96.00
Total	20		

Test Statistics ^a	
	UREAL
Mann-Whitney U	41.000
Wilcoxon W	96.000
Z	-.680
Asymp. Sig. (2-tailed)	.496
Exact Sig. [2*(1-tailed Sig.)]	.529 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks			
Testgroup	N	Mean Rank	Sum of Ranks
VC	10	10.75	107.50
UREAL 2xOryzanol	10	10.25	102.50
Total	20		

Test Statistics ^a	
	UREAL
Mann-Whitney U	47.500
Wilcoxon W	102.500
Z	-.189
Asymp. Sig. (2-tailed)	.850
Exact Sig. [2*(1-tailed Sig.)]	.853 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
UREAL	VC	10	11.40	114.00
	5xOryzanol	10	9.60	96.00
	Total	20		

Test Statistics ^a	
	UREAL
Mann-Whitney U	41.000
Wilcoxon W	96.000
Z	-.680
Asymp. Sig. (2-tailed)	.496
Exact Sig. [2*(1-tailed Sig.)]	.529 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
UREAL	1XOryzanol	10	9.95	99.50
	2xOryzanol	10	11.05	110.50
	Total	20		

Test Statistics ^a	
	UREAL
Mann-Whitney U	44.500
Wilcoxon W	99.500
Z	-.416
Asymp. Sig. (2-tailed)	.677
Exact Sig. [2*(1-tailed Sig.)]	.684 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
UREAL	1XOryzanol	10	10.80	108.00
	5xOryzanol	10	10.20	102.00
	Total	20		

Test Statistics ^a	
	UREAL
Mann-Whitney U	47.000
Wilcoxon W	102.000
Z	-.227
Asymp. Sig. (2-tailed)	.820
Exact Sig. [2*(1-tailed Sig.)]	.853 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
UREAL	2xOryzanol	10	11.80	118.00
	5xOryzanol	10	9.20	92.00
	Total	20		

Test Statistics ^a	
	UREAL
Mann-Whitney U	37.000
Wilcoxon W	92.000
Z	-.983
Asymp. Sig. (2-tailed)	.326
Exact Sig. [2*(1-tailed Sig.)]	.353 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Kruskal-Wallis Test

Ranks			
Testgroup		N	Mean Rank
ALB2	VC	10	19.45
	1XOryzanol	10	22.20
	2xOryzanol	10	21.95
	5xOryzanol	10	18.40
	Total	40	

Test Statistics ^{a,b}	
	ALB2
Chi-Square	.769
df	3
Asymp. Sig.	.857
a. Kruskal Wallis Test	
b. Grouping Variable: Testgroup	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
ALB2	VC	10	10.10	101.00
	1XOryzanol	10	10.90	109.00
	Total	20		

Test Statistics ^a	
	ALB2
Mann-Whitney U	46.000
Wilcoxon W	101.000
Z	-.302
Asymp. Sig. (2-tailed)	.762
Exact Sig. [2*(1-tailed Sig.)]	.796 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
ALB2	VC	10	10.05	100.50
	2xOryzanol	10	10.95	109.50
	Total	20		

Test Statistics ^a	
	ALB2
Mann-Whitney U	45.500
Wilcoxon W	100.500
Z	-.340
Asymp. Sig. (2-tailed)	.734
Exact Sig. [2*(1-tailed Sig.)]	.739 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
ALB2	VC	10	10.30	103.00
	5xOryzanol	10	10.70	107.00
	Total	20		

Test Statistics ^a	
	ALB2
Mann-Whitney U	48.000
Wilcoxon W	103.000
Z	-.151
Asymp. Sig. (2-tailed)	.880
Exact Sig. [2*(1-tailed Sig.)]	.912 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
ALB2	1XOryzanol	10	10.80	108.00
	2xOryzanol	10	10.20	102.00
	Total	20		

Test Statistics ^a	
	ALB2
Mann-Whitney U	47.000
Wilcoxon W	102.000
Z	-.227
Asymp. Sig. (2-tailed)	.820
Exact Sig. [2*(1-tailed Sig.)]	.853 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
ALB2	1XOryzanol	10	11.50	115.00
	5xOryzanol	10	9.50	95.00
	Total	20		

Test Statistics ^a	
	ALB2
Mann-Whitney U	40.000
Wilcoxon W	95.000
Z	-.757
Asymp. Sig. (2-tailed)	.449
Exact Sig. [2*(1-tailed Sig.)]	.481 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
ALB2	2xOryzanol	10	11.80	118.00
	5xOryzanol	10	9.20	92.00
	Total	20		

Test Statistics ^a	
	ALB2
Mann-Whitney U	37.000
Wilcoxon W	92.000
Z	-.983
Asymp. Sig. (2-tailed)	.325
Exact Sig. [2*(1-tailed Sig.)]	.353 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Oryzanol Sex = Male

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Glucose	VC	5	95.80	6.099	2.728	88.23	103.37	88	104
	1XOryzanol	5	92.00	15.620	6.986	72.60	111.40	65	105
	2xOryzanol	5	89.40	5.367	2.400	82.74	96.06	80	93
	5xOryzanol	5	83.40	6.348	2.839	75.52	91.28	74	91
	Total	20	90.15	9.756	2.182	85.58	94.72	65	105
HDL3	VC	5	66.34	8.433	3.7713	55.869	76.811	56.4	78.7
	1XOryzanol	5	60.76	5.327	2.3824	54.146	67.374	54.2	67.5
	2xOryzanol	5	68.88	4.799	2.1460	62.922	74.838	64.7	75.8
	5xOryzanol	5	69.62	4.550	2.0350	63.970	75.270	65.8	76.5
	Total	20	66.40	6.548	1.4641	63.336	69.464	54.2	78.7
TP2	VC	5	6.45	0.812	.36329	5.4374	7.4546	5.28	7.46

	1XOryzanol	5	6.91	0.288	.12865	6.5528	7.2672	6.51	7.29
	2xOryzanol	5	6.70	0.312	.13941	6.3089	7.0831	6.31	7.15
	5xOryzanol	5	6.91	0.285	.12734	6.5524	7.2596	6.45	7.13
	Total	20	6.74	0.482	.10770	6.5141	6.9649	5.28	7.46
CHO2I	VC	5	81.10	13.854	6.1959	63.897	98.303	64.6	100.3
	1XOryzanol	5	73.08	14.794	6.6160	54.711	91.449	53.9	89.6
	2xOryzanol	5	71.92	7.089	3.1704	63.118	80.722	61.8	80.7
	5xOryzanol	5	72.48	6.377	2.8517	64.562	80.398	63.9	80.3
	Total	20	74.65	10.974	2.4538	69.509	79.781	53.9	100.3
BILT3	VC	5	0.08	0.045	.0200	.024	.136	0.0	.1
	1XOryzanol	5	0.08	0.084	.0374	-.024	.184	0.0	.2
	2xOryzanol	5	0.04	0.055	.0245	-.028	.108	0.0	.1
	5xOryzanol	5	0.10	0.000	.0000	.100	.100	.1	.1
	Total	20	0.08	0.055	.0123	.049	.101	0.0	.2
UREA	VC	5	52.76	15.452	6.9102	33.574	71.946	35.7	71.8
	1XOryzanol	5	42.98	16.176	7.2343	22.894	63.066	28.6	68.0
	2xOryzanol	5	40.62	7.620	3.4077	31.159	50.081	34.8	50.6
	5xOryzanol	5	35.08	5.416	2.4221	28.355	41.805	28.7	40.7
	Total	20	42.86	12.915	2.8879	36.816	48.904	28.6	71.8
TRIGL	VC	5	48.80	16.655	7.4482	28.120	69.480	34.1	75.4
	1XOryzanol	5	34.26	13.432	6.0070	17.582	50.938	17.8	54.3
	2xOryzanol	5	34.94	9.377	4.1936	23.297	46.583	25.4	45.9
	5xOryzanol	5	28.86	7.521	3.3636	19.521	38.199	21.0	41.3
	Total	20	36.72	13.560	3.0322	30.369	43.061	17.8	75.4
ALB2	VC	5	3.79	0.599	.26779	3.0485	4.5355	3.29	4.78
	1XOryzanol	5	3.77	0.433	.19374	3.2281	4.3039	3.32	4.40
	2xOryzanol	5	3.71	0.255	.11387	3.3899	4.0221	3.40	4.07
	5xOryzanol	5	3.74	0.185	.08292	3.5058	3.9662	3.51	3.97
	Total	20	3.75	0.370	.08276	3.5768	3.9232	3.29	4.78
ASTL	VC	5	118.6 6	7.451	3.3324	109.408	127.912	109.1	128.4
	1XOryzanol	4	122.1 3	9.816	4.9082	106.505	137.745	112.8	135.7
	2xOryzanol	5	124.4 2	12.469	5.5762	108.938	139.902	109.2	140.7
	5xOryzanol	5	122.7 2	8.649	3.8681	111.980	133.460	113.1	134.3
	Total	19	121.9 7	9.189	2.1082	117.545	126.403	109.1	140.7
ALT L	VC	5	59.98	3.068	1.3720	56.171	63.789	57.1	64.7
	1XOryzanol	4	63.03	12.252	6.1260	43.529	82.521	45.9	73.0
	2xOryzanol	5	67.84	9.550	4.2709	55.982	79.698	60.2	83.8
	5xOryzanol	5	63.82	8.248	3.6887	53.579	74.061	52.4	75.4
	Total	19	63.70	8.438	1.9359	59.633	67.767	45.9	83.8
ALP2L	VC	5	109.2 0	16.917	7.566	88.19	130.21	83	125
	1XOryzanol	4	108.0 0	11.165	5.583	90.23	125.77	96	123

	2xOryzanol	5	103.60	14.484	6.478	85.62	121.58	87	125
	5xOryzanol	5	99.80	12.988	5.809	83.67	115.93	84	120
	Total	19	105.00	13.544	3.107	98.47	111.53	83	125
CREJ2	VC	4	0.48	0.328	.16378	-.0437	.9987	0.00	.71
	1xOryzanol	5	0.57	0.232	.10370	.2841	.8599	.33	.92
	2xOryzanol	5	0.51	0.157	.07021	.3151	.7049	.33	.72
	5xOryzanol	5	0.49	0.120	.05361	.3432	.6408	.33	.62
	Total	19	0.51	0.200	.04581	.4185	.6110	0.00	.92
LDLC3	VC	5	15.23	1.270	.56818	13.6545	16.8096	13.53	17.01
	1xOryzanol	5	13.92	4.244	1.89789	8.6482	19.1870	10.82	20.88
	2xOryzanol	5	14.54	1.585	.70865	12.5686	16.5037	13.14	16.62
	5xOryzanol	5	12.99	1.210	.54124	11.4870	14.4925	11.98	15.08
	Total	20	14.17	2.384	.53309	13.0531	15.2847	10.82	20.88
a. Sex = Male									

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
Glucose	1.592	3	16	.230
HDLC3	.610	3	16	.618
TP2	2.196	3	16	.128
CHO2I	2.219	3	16	.125
BILT3	5.490	3	16	.009
UREAL	2.811	3	16	.073
TRIGL	.798	3	16	.513
ALB2	1.839	3	16	.181
ASTL	.516	3	15	.677
ALTL	1.123	3	15	.371
ALP2L	.270	3	15	.846
CREJ2	1.471	3	15	.262
LDLC3	4.123	3	16	.024
a. Sex = Male				

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
Glucose	Between Groups	407.350	3	135.783	1.550	.240
	Within Groups	1401.200	16	87.575		
	Total	1808.550	19			
HDLC3	Between Groups	241.660	3	80.553	2.250	.122
	Within Groups	572.900	16	35.806		
	Total	814.560	19			
TP2	Between Groups	.724	3	.241	1.048	.398
	Within Groups	3.684	16	.230		

	Total	4.408	19			
	Between Groups	281.146	3	93.715	.747	.540
	Within Groups	2006.884	16	125.430		
CHO2I	Total	2288.030	19			
	Between Groups	.010	3	.003	1.056	.395
	Within Groups	.048	16	.003		
BILT3	Total	.058	19			
	Between Groups	817.852	3	272.617	1.855	.178
	Within Groups	2351.276	16	146.955		
UREAL	Total	3169.128	19			
	Between Groups	1084.630	3	361.543	2.401	.106
	Within Groups	2409.216	16	150.576		
TRIGL	Total	3493.846	19			
	Between Groups	.021	3	.007	.043	.988
	Within Groups	2.582	16	.161		
ALB2	Total	2.603	19			
	Between Groups	87.701	3	29.234	.306	.821
	Within Groups	1432.316	15	95.488		
ASTL	Total	1520.017	18			
	Between Groups	156.784	3	52.261	.697	.568
	Within Groups	1124.916	15	74.994		
ALTL	Total	1281.700	18			
	Between Groups	269.200	3	89.733	.444	.725
	Within Groups	3032.800	15	202.187		
ALP2L	Total	3302.000	18			
	Between Groups	.025	3	.008	.178	.910
	Within Groups	.693	15	.046		
CREJ2	Total	.718	18			
	Between Groups	13.593	3	4.531	.768	.529
	Within Groups	94.399	16	5.900		
LDLC3	Total	107.992	19			

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
					Lower Bound	Upper Bound	
Glucose	VC	1xOryzanol	3.800	5.919	.530	-8.75	16.35
		2xOryzanol	6.400	5.919	.296	-6.15	18.95
		5xOryzanol	12.400	5.919	.052	-.15	24.95
	VC	1xOryzanol	-3.800	5.919	.530	-16.35	8.75
		2xOryzanol	2.600	5.919	.666	-9.95	15.15
		5xOryzanol	8.600	5.919	.166	-3.95	21.15
	1xOryzanol	5xOryzanol					

		VC	-6.400	5.919	.296	-18.95	6.15
		1XOryzanol	-2.600	5.919	.666	-15.15	9.95
		2xOryzanol 5xOryzanol	6.000	5.919	.326	-6.55	18.55
	5xOryzanol	VC	-12.400	5.919	.052	-24.95	.15
		1XOryzanol	-8.600	5.919	.166	-21.15	3.95
		2xOryzanol	-6.000	5.919	.326	-18.55	6.55
HDLC3		1XOryzanol	5.5800	3.7845	.160	-2.443	13.603
		2xOryzanol	-2.5400	3.7845	.512	-10.563	5.483
		5xOryzanol	-3.2800	3.7845	.399	-11.303	4.743
	VC	VC	-5.5800	3.7845	.160	-13.603	2.443
		2xOryzanol	-8.1200*	3.7845	.048	-16.143	-.097
		5xOryzanol	-8.8600*	3.7845	.033	-16.883	-.837
	1XOryzanol	VC	2.5400	3.7845	.512	-5.483	10.563
		1XOryzanol	8.1200*	3.7845	.048	.097	16.143
		2xOryzanol 5xOryzanol	-.7400	3.7845	.847	-8.763	7.283
	2xOryzanol	VC	3.2800	3.7845	.399	-4.743	11.303
		1XOryzanol	8.8600*	3.7845	.033	.837	16.883
		5xOryzanol	.7400	3.7845	.847	-7.283	8.763
	5xOryzanol	1XOryzanol	-.46400	.30346	.146	-1.1073	.1793
		2xOryzanol	-.25000	.30346	.422	-.8933	.3933
		5xOryzanol	-.46000	.30346	.149	-1.1033	.1833
TP2	VC	VC	.46400	.30346	.146	-.1793	1.1073
		2xOryzanol	.21400	.30346	.491	-.4293	.8573
		5xOryzanol	.00400	.30346	.990	-.6393	.6473
	1XOryzanol	VC	.25000	.30346	.422	-.3933	.8933
		1XOryzanol	-.21400	.30346	.491	-.8573	.4293
		5xOryzanol	-.21000	.30346	.499	-.8533	.4333
	2xOryzanol	VC	.46000	.30346	.149	-.1833	1.1033
		1XOryzanol	-.00400	.30346	.990	-.6473	.6393
		5xOryzanol	.21000	.30346	.499	-.4333	.8533
	5xOryzanol	1XOryzanol	8.0200	7.0832	.274	-6.996	23.036
		2xOryzanol	9.1800	7.0832	.213	-5.836	24.196
		5xOryzanol	8.6200	7.0832	.241	-6.396	23.636
	VC	VC	-8.0200	7.0832	.274	-23.036	6.996
		2xOryzanol	1.1600	7.0832	.872	-13.856	16.176
		5xOryzanol	.6000	7.0832	.934	-14.416	15.616
CHO2I	1XOryzanol	VC	-9.1800	7.0832	.213	-24.196	5.836
		1XOryzanol	-1.1600	7.0832	.872	-16.176	13.856
		5xOryzanol	-.5600	7.0832	.938	-15.576	14.456
	2xOryzanol	VC	-8.6200	7.0832	.241	-23.636	6.396
		1XOryzanol	-.6000	7.0832	.934	-15.616	14.416
		5xOryzanol	.5600	7.0832	.938	-14.456	15.576
	5xOryzanol	1XOryzanol	0.0000	.0346	1.000	-.073	.073
		2xOryzanol	.0400	.0346	.265	-.033	.113
		VC					
	BILT3	VC					
		1XOryzanol					
		2xOryzanol					

		5xOryzanol		-.0200	.0346	.572	-.093	.053	
		VC		0.0000	.0346	1.00 0	-.073	.073	
		2xOryzanol		.0400	.0346	.265	-.033	.113	
	1XOryzanol	5xOryzanol		-.0200	.0346	.572	-.093	.053	
		VC		-.0400	.0346	.265	-.113	.033	
	2xOryzanol	1XOryzanol		-.0400	.0346	.265	-.113	.033	
		5xOryzanol		-.0600	.0346	.102	-.133	.013	
		VC		.0200	.0346	.572	-.053	.093	
		1XOryzanol		.0200	.0346	.572	-.053	.093	
	5xOryzanol	2xOryzanol		.0600	.0346	.102	-.013	.133	
UREAL	VC	1XOryzanol		9.7800	7.6669	.220	-6.473	26.033	
		2xOryzanol		12.1400	7.6669	.133	-4.113	28.393	
		5xOryzanol		17.6800*	7.6669	.035	1.427	33.933	
		VC		-9.7800	7.6669	.220	-26.033	6.473	
	1XOryzanol	2xOryzanol		2.3600	7.6669	.762	-13.893	18.613	
		5xOryzanol		7.9000	7.6669	.318	-8.353	24.153	
		VC		-12.1400	7.6669	.133	-28.393	4.113	
		1XOryzanol		-2.3600	7.6669	.762	-18.613	13.893	
	2xOryzanol	5xOryzanol		5.5400	7.6669	.480	-10.713	21.793	
		VC		-17.6800*	7.6669	.035	-33.933	-1.427	
		1XOryzanol		-7.9000	7.6669	.318	-24.153	8.353	
		5xOryzanol	2xOryzanol		-5.5400	7.6669	.480	-21.793	10.713
	TRIGL	VC	1XOryzanol		14.5400	7.7608	.079	-1.912	30.992
			2xOryzanol		13.8600	7.7608	.093	-2.592	30.312
5xOryzanol				19.9400*	7.7608	.021	3.488	36.392	
VC				-14.5400	7.7608	.079	-30.992	1.912	
1XOryzanol		2xOryzanol		-.6800	7.7608	.931	-17.132	15.772	
		5xOryzanol		5.4000	7.7608	.497	-11.052	21.852	
		VC		-13.8600	7.7608	.093	-30.312	2.592	
		1XOryzanol		.6800	7.7608	.931	-15.772	17.132	
2xOryzanol		5xOryzanol		6.0800	7.7608	.445	-10.372	22.532	
		VC		-19.9400*	7.7608	.021	-36.392	-3.488	
		1XOryzanol		-5.4000	7.7608	.497	-21.852	11.052	
		5xOryzanol	2xOryzanol		-6.0800	7.7608	.445	-22.532	10.372
ALB2		VC	1XOryzanol		.02600	.25406	.920	-.5126	.5646
			2xOryzanol		.08600	.25406	.739	-.4526	.6246
	5xOryzanol			.05600	.25406	.828	-.4826	.5946	
	VC			-.02600	.25406	.920	-.5646	.5126	
	1XOryzanol	2xOryzanol		.06000	.25406	.816	-.4786	.5986	
		5xOryzanol		.03000	.25406	.907	-.5086	.5686	
		VC		-.08600	.25406	.739	-.6246	.4526	
		1XOryzanol		-.06000	.25406	.816	-.5986	.4786	
	2xOryzanol	5xOryzanol		-.03000	.25406	.907	-.5686	.5086	
		5xOryzanol	VC		-.05600	.25406	.828	-.5946	.4826

		1XOryzanol	-.03000	.25406	.907	-.5686	.5086
		2xOryzanol	.03000	.25406	.907	-.5086	.5686
		1XOryzanol	-3.4650	6.5551	.605	-17.437	10.507
		2xOryzanol	-5.7600	6.1802	.366	-18.933	7.413
	VC	5xOryzanol	-4.0600	6.1802	.521	-17.233	9.113
		VC	3.4650	6.5551	.605	-10.507	17.437
		2xOryzanol	-2.2950	6.5551	.731	-16.267	11.677
	1XOryzanol	5xOryzanol	-.5950	6.5551	.929	-14.567	13.377
		VC	5.7600	6.1802	.366	-7.413	18.933
		1XOryzanol	2.2950	6.5551	.731	-11.677	16.267
	2xOryzanol	5xOryzanol	1.7000	6.1802	.787	-11.473	14.873
		VC	4.0600	6.1802	.521	-9.113	17.233
		1XOryzanol	.5950	6.5551	.929	-13.377	14.567
ASTL	5xOryzanol	2xOryzanol	-1.7000	6.1802	.787	-14.873	11.473
		1XOryzanol	-3.0450	5.8093	.608	-15.427	9.337
		2xOryzanol	-7.8600	5.4770	.172	-19.534	3.814
	VC	5xOryzanol	-3.8400	5.4770	.494	-15.514	7.834
		VC	3.0450	5.8093	.608	-9.337	15.427
		2xOryzanol	-4.8150	5.8093	.420	-17.197	7.567
	1XOryzanol	5xOryzanol	-.7950	5.8093	.893	-13.177	11.587
		VC	7.8600	5.4770	.172	-3.814	19.534
		1XOryzanol	4.8150	5.8093	.420	-7.567	17.197
	2xOryzanol	5xOryzanol	4.0200	5.4770	.474	-7.654	15.694
		VC	3.8400	5.4770	.494	-7.834	15.514
		1XOryzanol	.7950	5.8093	.893	-11.587	13.177
ALTL	5xOryzanol	2xOryzanol	-4.0200	5.4770	.474	-15.694	7.654
		1XOryzanol	1.200	9.539	.902	-19.13	21.53
		2xOryzanol	5.600	8.993	.543	-13.57	24.77
	VC	5xOryzanol	9.400	8.993	.312	-9.77	28.57
		VC	-1.200	9.539	.902	-21.53	19.13
		2xOryzanol	4.400	9.539	.651	-15.93	24.73
	1XOryzanol	5xOryzanol	8.200	9.539	.404	-12.13	28.53
		VC	-5.600	8.993	.543	-24.77	13.57
		1XOryzanol	-4.400	9.539	.651	-24.73	15.93
	2xOryzanol	5xOryzanol	3.800	8.993	.679	-15.37	22.97
		VC	-9.400	8.993	.312	-28.57	9.77
		1XOryzanol	-8.200	9.539	.404	-28.53	12.13
ALP2L	5xOryzanol	2xOryzanol	-3.800	8.993	.679	-22.97	15.37
		1XOryzanol	-.09450	.14419	.522	-.4018	.2128
		2xOryzanol	-.03250	.14419	.825	-.3398	.2748
	VC	5xOryzanol	-.01450	.14419	.921	-.3218	.2928
		VC	.09450	.14419	.522	-.2128	.4018
		2xOryzanol	.06200	.13594	.655	-.2278	.3518
CREJ2	1XOryzanol	5xOryzanol	.08000	.13594	.565	-.2098	.3698

	2xOryzanol	VC	.03250	.14419	.825	-.2748	.3398	
		1XOryzanol	-.06200	.13594	.655	-.3518	.2278	
		5xOryzanol	.01800	.13594	.896	-.2718	.3078	
		VC	.01450	.14419	.921	-.2928	.3218	
		1XOryzanol	-.08000	.13594	.565	-.3698	.2098	
	5xOryzanol	2xOryzanol	-.01800	.13594	.896	-.3078	.2718	
		1XOryzanol	1.31444	1.53622	.405	-1.9422	4.5711	
	LDLC3	VC	2xOryzanol	.69588	1.53622	.657	-2.5608	3.9525
			5xOryzanol	2.24228	1.53622	.164	-1.0144	5.4989
			VC	-1.31444	1.53622	.405	-4.5711	1.9422
2xOryzanol			-.61856	1.53622	.693	-3.8752	2.6381	
5xOryzanol			.92784	1.53622	.554	-2.3288	4.1845	
1XOryzanol		VC	-.69588	1.53622	.657	-3.9525	2.5608	
		1XOryzanol	.61856	1.53622	.693	-2.6381	3.8752	
		2xOryzanol	5xOryzanol	1.54640	1.53622	.329	-1.7102	4.8030
			VC	-2.24228	1.53622	.164	-5.4989	1.0144
		5xOryzanol	1XOryzanol	-.92784	1.53622	.554	-4.1845	2.3288
2xOryzanol			-1.54640	1.53622	.329	-4.8030	1.7102	

*. The mean difference is significant at the 0.05 level.

a. Sex = Male

Sex = Male
Kruskal-Wallis Test

Ranks ^a		
Testgroup	N	Mean Rank
VC	5	11.10
1XOryzanol	5	10.60
2xOryzanol	5	7.30
5xOryzanol	5	13.00
Total	20	
a. Sex = Male		

Test Statistics ^{a,b,c}	
	BILT3
Chi-Square	3.441
df	3
Asymp. Sig.	.329
a. Sex = Male	
b. Kruskal Wallis Test	
c. Grouping Variable: Testgroup	

Sex = Male
Mann-Whitney Test

Ranks ^a			
Testgroup	N	Mean Rank	Sum of Ranks
VC	5	5.60	28.00
BILT3 1xOryzanol	5	5.40	27.00
Total	10		
a. Sex = Male			

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	12.000
Wilcoxon W	27.000
Z	-.120
Asymp. Sig. (2-tailed)	.905
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Sex = Male	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a			
Testgroup	N	Mean Rank	Sum of Ranks
VC	5	6.50	32.50
BILT3 2xOryzanol	5	4.50	22.50
Total	10		
a. Sex = Male			

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	7.500
Wilcoxon W	22.500
Z	-1.225
Asymp. Sig. (2-tailed)	.221
Exact Sig. [2*(1-tailed Sig.)]	.310 ^c
a. Sex = Male	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a			
Testgroup	N	Mean Rank	Sum of Ranks
VC	5	5.00	25.00
BILT3 5xOryzanol	5	6.00	30.00
Total	10		
a. Sex = Male			

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = Male	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
BILT3	1XOryzanol	5	6.20	31.00
	2xOryzanol	5	4.80	24.00
	Total	10		
a. Sex = Male				

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	9.000
Wilcoxon W	24.000
Z	-.808
Asymp. Sig. (2-tailed)	.419
Exact Sig. [2*(1-tailed Sig.)]	.548 ^c
a. Sex = Male	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
BILT3	1XOryzanol	5	5.00	25.00
	5xOryzanol	5	6.00	30.00
	Total	10		
a. Sex = Male				

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.645
Asymp. Sig. (2-tailed)	.519

Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = Male	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
BILT3	2xOryzanol	5	4.00	20.00
	5xOryzanol	5	7.00	35.00
	Total	10		
a. Sex = Male				

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	5.000
Wilcoxon W	20.000
Z	-1.964
Asymp. Sig. (2-tailed)	.050
Exact Sig. [2*(1-tailed Sig.)]	.151 ^c
a. Sex = Male	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = Male Kruskal-Wallis Test

Ranks ^a			
Testgroup		N	Mean Rank
LDLC3	VC	5	14.40
	1xOryzanol	5	7.90
	2xOryzanol	5	12.60
	5xOryzanol	5	7.10
	Total	20	
a. Sex = Male			

Test Statistics ^{a,b,c}	
	LDLC3
Chi-Square	5.449
df	3
Asymp. Sig.	.142
a. Sex = Male	
b. Kruskal Wallis Test	
c. Grouping Variable: Testgroup	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
LDLC3	VC	5	6.60	33.00
	1XOryzanol	5	4.40	22.00
	Total	10		
a. Sex = Male				

Test Statistics ^{a,b}	
	LDLC3
Mann-Whitney U	7.000
Wilcoxon W	22.000
Z	-1.152
Asymp. Sig. (2-tailed)	.249
Exact Sig. [2*(1-tailed Sig.)]	.310 ^c
a. Sex = Male	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
LDLC3	VC	5	6.20	31.00
	2xOryzanol	5	4.80	24.00
	Total	10		
a. Sex = Male				

Test Statistics ^{a,b}	
	LDLC3
Mann-Whitney U	9.000
Wilcoxon W	24.000
Z	-.742
Asymp. Sig. (2-tailed)	.458
Exact Sig. [2*(1-tailed Sig.)]	.548 ^c
a. Sex = Male	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
LDLC3	VC	5	7.60	38.00
	5xOryzanol	5	3.40	17.00
	Total	10		
a. Sex = Male				

Test Statistics ^{a,b}	
	LDLC3
Mann-Whitney U	2.000
Wilcoxon W	17.000
Z	-2.207
Asymp. Sig. (2-tailed)	.027
Exact Sig. [2*(1-tailed Sig.)]	.032 ^c
a. Sex = Male	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
LDLC3	1XOryzanol	5	4.60	23.00
	2xOryzanol	5	6.40	32.00
	Total	10		
a. Sex = Male				

Test Statistics ^{a,b}	
	LDLC3
Mann-Whitney U	8.000
Wilcoxon W	23.000
Z	-.943
Asymp. Sig. (2-tailed)	.346
Exact Sig. [2*(1-tailed Sig.)]	.421 ^c
a. Sex = Male	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
LDLC3	1XOryzanol	5	4.90	24.50
	5xOryzanol	5	6.10	30.50
	Total	10		
a. Sex = Male				

Test Statistics ^{a,b}	
	LDLC3
Mann-Whitney U	9.500
Wilcoxon W	24.500
Z	-.631
Asymp. Sig. (2-tailed)	.528

Exact Sig. [2*(1-tailed Sig.)]	.548 ^c
a. Sex = Male b. Grouping Variable: Testgroup c. Not corrected for ties.	

Ranks ^a				
	Testgroup	N	Mean Rank	Sum of Ranks
LDLC3	2xOryzanol	5	7.40	37.00
	5xOryzanol	5	3.60	18.00
	Total	10		
a. Sex = Male				

Test Statistics ^{a,b}	
	LDLC3
Mann-Whitney U	3.000
Wilcoxon W	18.000
Z	-1.997
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.056 ^c
a. Sex = Male b. Grouping Variable: Testgroup c. Not corrected for ties.	

Oryzanol Sex = Female

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Glucose	VC	5	87.40	3.647	1.631	82.87	91.93	83	91
	1XOryzanol	5	90.20	4.817	2.154	84.22	96.18	82	94
	2xOryzanol	5	94.00	5.523	2.470	87.14	100.86	85	100
	5xOryzanol	5	97.40	3.847	1.720	92.62	102.18	93	103
	Total	20	92.25	5.684	1.271	89.59	94.91	82	103
HDL3	VC	5	72.48	16.850	7.5354	51.558	93.402	50.3	95.4
	1XOryzanol	5	82.02	6.817	3.0485	73.556	90.484	70.2	86.3
	2xOryzanol	5	76.94	7.692	3.4401	67.389	86.491	67.9	84.7
	5xOryzanol	5	79.84	15.908	7.1145	60.087	99.593	55.6	100.1
	Total	20	77.82	12.195	2.7269	72.113	83.527	50.3	100.1
TP2	VC	5	6.79	0.601	.26882	6.0396	7.5324	6.05	7.48
	1XOryzanol	5	7.27	0.504	.22536	6.6403	7.8917	6.73	7.80
	2xOryzanol	5	6.87	0.297	.13265	6.5057	7.2423	6.52	7.30
	5xOryzanol	5	6.79	0.462	.20658	6.2124	7.3596	6.32	7.54
	Total	20	6.93	0.484	.10826	6.7014	7.1546	6.05	7.80

CHO2I	VC	5	73.68	15.978	7.1457	53.840	93.520	58.6	100.2
	1XOryzanol	5	81.30	6.042	2.7019	73.798	88.802	74.3	87.2
	2xOryzanol	5	76.70	14.905	6.6657	58.193	95.207	50.5	86.1
	5xOryzanol	5	82.10	18.791	8.4037	58.767	105.433	52.9	105.1
	Total	20	78.45	13.964	3.1223	71.910	84.980	50.5	105.1
BILT3	VC	5	0.06	0.055	.0245	-.008	.128	0.0	.1
	1XOryzanol	5	0.10	0.000	.0000	.100	.100	.1	.1
	2xOryzanol	5	0.08	0.045	.0200	.024	.136	0.0	.1
	5xOryzanol	5	0.08	0.045	.0200	.024	.136	0.0	.1
	Total	20	0.08	0.041	.0092	.061	.099	0.0	.1
UREAL	VC	5	31.72	5.008	2.2397	25.502	37.938	25.9	39.4
	1XOryzanol	5	33.32	6.423	2.8724	25.345	41.295	24.2	41.8
	2xOryzanol	5	34.30	3.455	1.5450	30.010	38.590	32.0	40.4
	5xOryzanol	5	34.76	5.271	2.3572	28.215	41.305	30.6	43.4
	Total	20	33.53	4.874	1.0898	31.244	35.806	24.2	43.4
TRIGL	VC	5	23.20	3.421	1.5297	18.953	27.447	20.1	28.5
	1XOryzanol	5	29.60	3.284	1.4687	25.522	33.678	24.8	32.7
	2xOryzanol	5	34.88	9.733	4.3529	22.795	46.965	23.2	50.3
	5xOryzanol	5	31.96	5.283	2.3628	25.400	38.520	27.2	40.7
	Total	20	29.91	7.074	1.5817	26.599	33.221	20.1	50.3
ALB2	VC	5	4.01	0.474	.21201	3.4214	4.5986	3.71	4.84
	1XOryzanol	5	4.05	0.382	.17066	3.5802	4.5278	3.61	4.50
	2xOryzanol	5	3.97	0.137	.06132	3.7998	4.1402	3.82	4.12
	5xOryzanol	5	3.80	0.105	.04686	3.6739	3.9341	3.74	3.99
	Total	20	3.96	0.306	.06843	3.8163	4.1027	3.61	4.84
ASTL	VC	5	107.30	16.110	7.2045	87.297	127.303	93.8	127.6
	1XOryzanol	5	120.52	15.299	6.8417	101.524	139.516	103.2	142.4
	2xOryzanol	5	126.60	30.048	13.4377	89.291	163.909	103.2	178.6
	5xOryzanol	5	108.38	14.809	6.6226	89.993	126.767	94.3	132.3
	Total	20	115.70	20.253	4.5288	106.221	125.179	93.8	178.6
ALTl	VC	5	45.24	5.017	2.2438	39.010	51.470	39.2	52.7
	1XOryzanol	5	44.18	3.944	1.7636	39.283	49.077	38.3	47.8
	2xOryzanol	5	48.30	10.725	4.7964	34.983	61.617	39.6	65.7
	5xOryzanol	5	41.46	5.058	2.2622	35.179	47.741	35.5	48.6
	Total	20	44.80	6.670	1.4914	41.673	47.917	35.5	65.7
ALP2L	VC	5	106.80	20.352	9.102	81.53	132.07	93	142
	1XOryzanol	5	85.00	17.103	7.649	63.76	106.24	58	100
	2xOryzanol	5	86.20	20.499	9.167	60.75	111.65	68	120
	5xOryzanol	5	83.20	10.035	4.488	70.74	95.66	67	94
	Total	20	90.30	18.846	4.214	81.48	99.12	58	142
CREJ2	VC	5	0.31	0.267	.11919	-.0249	.6369	0.00	.52
	1XOryzanol	5	0.51	0.069	.03072	.4227	.5933	.39	.56
	2xOryzanol	5	0.33	0.245	.10939	.0303	.6377	0.00	.56
	5xOryzanol	5	0.42	0.236	.10566	.1286	.7154	0.00	.54

	Total	20	0.39	0.217	.04843	.2911	.4939	0.00	.56
	VC	5	8.51	2.445	1.09347	5.4692	11.5412	6.19	12.37
	1XOryzanol	5	8.35	1.763	.78851	6.1613	10.5398	6.57	10.44
	2xOryzanol	5	9.28	1.497	.66961	7.4193	11.1375	7.35	10.82
	5xOryzanol	5	8.97	1.921	.85926	6.5834	11.3548	6.19	11.21
LDLC3	Total	20	8.78	1.818	.40654	7.9249	9.6267	6.19	12.37

a. Sex = Female

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
Glucose	.066	3	16	.977
HDLC3	.980	3	16	.427
TP2	1.541	3	16	.242
CHO2I	.504	3	16	.685
BILT3	5.197	3	16	.011
UREAL	.391	3	16	.761
TRIGL	.857	3	16	.483
ALB2	2.734	3	16	.078
ASTL	.799	3	16	.513
ALTL	2.156	3	16	.133
ALP2L	.586	3	16	.633
CREJ2	3.669	3	16	.035
LDLC3	.399	3	16	.755

a. Sex = Female

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
Glucose	Between Groups	286.550	3	95.517	4.671	.016
	Within Groups	327.200	16	20.450		
	Total	613.750	19			
HDLC3	Between Groups	255.052	3	85.017	.529	.669
	Within Groups	2570.520	16	160.658		
	Total	2825.572	19			
TP2	Between Groups	.787	3	.262	1.145	.361
	Within Groups	3.666	16	.229		
	Total	4.454	19			
CHO2I	Between Groups	236.301	3	78.767	.363	.780
	Within Groups	3468.328	16	216.771		
	Total	3704.630	19			
BILT3	Between Groups	.004	3	.001	.762	.532
	Within Groups	.028	16	.002		
	Total	.032	19			
UREAL	Between Groups	27.130	3	9.043	.341	.796
	Within Groups	424.208	16	26.513		

	Total	451.338	19			
	Between Groups	370.118	3	123.373	3.400	.044
	Within Groups	580.540	16	36.284		
TRIGL	Total	950.658	19			
	Between Groups	.179	3	.060	.596	.627
	Within Groups	1.601	16	.100		
ALB2	Total	1.779	19			
	Between Groups	1330.924	3	443.641	1.098	.379
	Within Groups	6462.896	16	403.931		
ASTL	Total	7793.820	19			
	Between Groups	119.918	3	39.973	.882	.471
	Within Groups	725.352	16	45.335		
ALTL	Total	845.270	19			
	Between Groups	1837.800	3	612.600	1.996	.155
	Within Groups	4910.400	16	306.900		
ALP2L	Total	6748.200	19			
	Between Groups	.126	3	.042	.875	.475
	Within Groups	.766	16	.048		
CREJ2	Total	.891	19			
	Between Groups	2.720	3	.907	.241	.866
	Within Groups	60.083	16	3.755		
LDLC3	Total	62.803	19			
a. Sex = Female						

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Glucose	VC	1XOryzanol	-2.800	2.860	.342	-8.86	3.26
		2xOryzanol	-6.600*	2.860	.035	-12.66	-.54
		5xOryzanol	-10.000*	2.860	.003	-16.06	-3.94
	VC	1XOryzanol	2.800	2.860	.342	-3.26	8.86
		2xOryzanol	-3.800	2.860	.203	-9.86	2.26
		5xOryzanol	-7.200*	2.860	.023	-13.26	-1.14
	1XOryzanol	VC	6.600*	2.860	.035	.54	12.66
		1XOryzanol	3.800	2.860	.203	-2.26	9.86
		2xOryzanol	-3.400	2.860	.252	-9.46	2.66
	2xOryzanol	VC	10.000*	2.860	.003	3.94	16.06
		1XOryzanol	7.200*	2.860	.023	1.14	13.26
		5xOryzanol	3.400	2.860	.252	-2.66	9.46
HDLC3	VC	1XOryzanol	-9.5400	8.0164	.251	-26.534	7.454
		2xOryzanol	-4.4600	8.0164	.586	-21.454	12.534

		5xOryzanol	-7.3600	8.0164	.372	-24.354	9.634
		VC	9.5400	8.0164	.251	-7.454	26.534
		2xOryzanol	5.0800	8.0164	.535	-11.914	22.074
	1xOryzanol	5xOryzanol	2.1800	8.0164	.789	-14.814	19.174
		VC	4.4600	8.0164	.586	-12.534	21.454
		1xOryzanol	-5.0800	8.0164	.535	-22.074	11.914
	2xOryzanol	5xOryzanol	-2.9000	8.0164	.722	-19.894	14.094
		VC	7.3600	8.0164	.372	-9.634	24.354
		1xOryzanol	-2.1800	8.0164	.789	-19.174	14.814
	5xOryzanol	2xOryzanol	2.9000	8.0164	.722	-14.094	19.894
TP2		1xOryzanol	-.48000	.30276	.132	-1.1218	.1618
		2xOryzanol	-.08800	.30276	.775	-.7298	.5538
		5xOryzanol	0.00000	.30276	1.000	-.6418	.6418
	VC	VC	.48000	.30276	.132	-.1618	1.1218
		2xOryzanol	.39200	.30276	.214	-.2498	1.0338
	1xOryzanol	5xOryzanol	.48000	.30276	.132	-.1618	1.1218
		VC	.08800	.30276	.775	-.5538	.7298
		1xOryzanol	-.39200	.30276	.214	-1.0338	.2498
	2xOryzanol	5xOryzanol	.08800	.30276	.775	-.5538	.7298
		VC	0.00000	.30276	1.000	-.6418	.6418
CHO2I		1xOryzanol	-.48000	.30276	.132	-1.1218	.1618
	5xOryzanol	2xOryzanol	-.08800	.30276	.775	-.7298	.5538
		1xOryzanol	-7.6200	9.3117	.425	-27.360	12.120
		2xOryzanol	-3.0200	9.3117	.750	-22.760	16.720
	VC	5xOryzanol	-8.4200	9.3117	.379	-28.160	11.320
		VC	7.6200	9.3117	.425	-12.120	27.360
		2xOryzanol	4.6000	9.3117	.628	-15.140	24.340
	1xOryzanol	5xOryzanol	-.8000	9.3117	.933	-20.540	18.940
		VC	3.0200	9.3117	.750	-16.720	22.760
		1xOryzanol	-4.6000	9.3117	.628	-24.340	15.140
BILT3	2xOryzanol	5xOryzanol	-5.4000	9.3117	.570	-25.140	14.340
		VC	8.4200	9.3117	.379	-11.320	28.160
		1xOryzanol	.8000	9.3117	.933	-18.940	20.540
	5xOryzanol	2xOryzanol	5.4000	9.3117	.570	-14.340	25.140
		1xOryzanol	-.0400	.0265	.150	-.096	.016
		2xOryzanol	-.0200	.0265	.461	-.076	.036
	VC	5xOryzanol	-.0200	.0265	.461	-.076	.036
		VC	.0400	.0265	.150	-.016	.096
		2xOryzanol	.0200	.0265	.461	-.036	.076
	1xOryzanol	5xOryzanol	.0200	.0265	.461	-.036	.076
		VC	.0200	.0265	.461	-.036	.076
		1xOryzanol	-.0200	.0265	.461	-.076	.036
		5xOryzanol	0.0000	.0265	1.000	-.056	.056
	2xOryzanol				0		

		VC	.0200	.0265	.461	-.036	.076
		1XOryzanol	-.0200	.0265	.461	-.076	.036
		2xOryzanol			1.00		
	5xOryzanol		0.0000	.0265	0	-.056	.056
		1XOryzanol	-1.6000	3.2566	.630	-8.504	5.304
		2xOryzanol	-2.5800	3.2566	.440	-9.484	4.324
	VC	5xOryzanol	-3.0400	3.2566	.364	-9.944	3.864
		VC	1.6000	3.2566	.630	-5.304	8.504
		2xOryzanol	-.9800	3.2566	.767	-7.884	5.924
	1XOryzanol	5xOryzanol	-1.4400	3.2566	.664	-8.344	5.464
		VC	2.5800	3.2566	.440	-4.324	9.484
		1XOryzanol	.9800	3.2566	.767	-5.924	7.884
	2xOryzanol	5xOryzanol	-.4600	3.2566	.889	-7.364	6.444
		VC	3.0400	3.2566	.364	-3.864	9.944
		1XOryzanol	1.4400	3.2566	.664	-5.464	8.344
UREAL	5xOryzanol	2xOryzanol	.4600	3.2566	.889	-6.444	7.364
		1XOryzanol	-6.4000	3.8097	.112	-14.476	1.676
		2xOryzanol	-11.6800*	3.8097	.007	-19.756	-3.604
	VC	5xOryzanol	-8.7600*	3.8097	.035	-16.836	-.684
		VC	6.4000	3.8097	.112	-1.676	14.476
		2xOryzanol	-5.2800	3.8097	.185	-13.356	2.796
	1XOryzanol	5xOryzanol	-2.3600	3.8097	.544	-10.436	5.716
		VC	11.6800*	3.8097	.007	3.604	19.756
		1XOryzanol	5.2800	3.8097	.185	-2.796	13.356
	2xOryzanol	5xOryzanol	2.9200	3.8097	.455	-5.156	10.996
		VC	8.7600*	3.8097	.035	.684	16.836
		1XOryzanol	2.3600	3.8097	.544	-5.716	10.436
TRIGL	5xOryzanol	2xOryzanol	-2.9200	3.8097	.455	-10.996	5.156
		1XOryzanol	-.04400	.20004	.829	-.4681	.3801
		2xOryzanol	.04000	.20004	.844	-.3841	.4641
	VC	5xOryzanol	.20600	.20004	.318	-.2181	.6301
		VC	.04400	.20004	.829	-.3801	.4681
		2xOryzanol	.08400	.20004	.680	-.3401	.5081
	1XOryzanol	5xOryzanol	.25000	.20004	.229	-.1741	.6741
		VC	-.04000	.20004	.844	-.4641	.3841
		1XOryzanol	-.08400	.20004	.680	-.5081	.3401
	2xOryzanol	5xOryzanol	.16600	.20004	.419	-.2581	.5901
		VC	-.20600	.20004	.318	-.6301	.2181
		1XOryzanol	-.25000	.20004	.229	-.6741	.1741
ALB2	5xOryzanol	2xOryzanol	-.16600	.20004	.419	-.5901	.2581
		1XOryzanol	-13.2200	12.7111	.314	-40.166	13.726
		2xOryzanol	-19.3000	12.7111	.148	-46.246	7.646
	VC	5xOryzanol	-1.0800	12.7111	.933	-28.026	25.866
		VC	13.2200	12.7111	.314	-13.726	40.166
ASTL	1XOryzanol	2xOryzanol	-6.0800	12.7111	.639	-33.026	20.866

		5xOryzanol	12.1400	12.7111	.354	-14.806	39.086
		VC	19.3000	12.7111	.148	-7.646	46.246
		1XOryzanol	6.0800	12.7111	.639	-20.866	33.026
	2xOryzanol	5xOryzanol	18.2200	12.7111	.171	-8.726	45.166
		VC	1.0800	12.7111	.933	-25.866	28.026
	5xOryzanol	1XOryzanol	-12.1400	12.7111	.354	-39.086	14.806
		2xOryzanol	-18.2200	12.7111	.171	-45.166	8.726
		1XOryzanol	1.0600	4.2584	.807	-7.967	10.087
		2xOryzanol	-3.0600	4.2584	.483	-12.087	5.967
		5xOryzanol	3.7800	4.2584	.388	-5.247	12.807
ALTL	VC	VC	-1.0600	4.2584	.807	-10.087	7.967
		2xOryzanol	-4.1200	4.2584	.348	-13.147	4.907
	1XOryzanol	5xOryzanol	2.7200	4.2584	.532	-6.307	11.747
		VC	3.0600	4.2584	.483	-5.967	12.087
	2xOryzanol	1XOryzanol	4.1200	4.2584	.348	-4.907	13.147
		5xOryzanol	6.8400	4.2584	.128	-2.187	15.867
		VC	-3.7800	4.2584	.388	-12.807	5.247
		1XOryzanol	-2.7200	4.2584	.532	-11.747	6.307
	5xOryzanol	2xOryzanol	-6.8400	4.2584	.128	-15.867	2.187
		1XOryzanol	21.800	11.080	.067	-1.69	45.29
ALP2L	VC	2xOryzanol	20.600	11.080	.081	-2.89	44.09
		5xOryzanol	23.600*	11.080	.049	.11	47.09
	1XOryzanol	VC	-21.800	11.080	.067	-45.29	1.69
		2xOryzanol	-1.200	11.080	.915	-24.69	22.29
	2xOryzanol	5xOryzanol	1.800	11.080	.873	-21.69	25.29
		VC	-20.600	11.080	.081	-44.09	2.89
		1XOryzanol	1.200	11.080	.915	-22.29	24.69
		5xOryzanol	3.000	11.080	.790	-20.49	26.49
	5xOryzanol	VC	-23.600*	11.080	.049	-47.09	-.11
		1XOryzanol	-1.800	11.080	.873	-25.29	21.69
CREJ2	VC	2xOryzanol	-3.000	11.080	.790	-26.49	20.49
		1XOryzanol	-20.200	.13835	.164	-4.953	.0913
	1XOryzanol	2xOryzanol	-.02800	.13835	.842	-.3213	.2653
		5xOryzanol	-.11600	.13835	.414	-.4093	.1773
	2xOryzanol	VC	.20200	.13835	.164	-.0913	.4953
		2xOryzanol	.17400	.13835	.227	-.1193	.4673
		5xOryzanol	.08600	.13835	.543	-.2073	.3793
		VC	.02800	.13835	.842	-.2653	.3213
	5xOryzanol	1XOryzanol	-.17400	.13835	.227	-.4673	.1193
		2xOryzanol	-.08800	.13835	.534	-.3813	.2053
LDLC3	VC	VC	.11600	.13835	.414	-.1773	.4093
		1XOryzanol	-.08600	.13835	.543	-.3793	.2073
		2xOryzanol	.08800	.13835	.534	-.2053	.3813
		1XOryzanol	.15464	1.22559	.901	-2.4435	2.7528

	2xOryzanol	-.77320	1.22559	.537	-3.3713	1.8249
	5xOryzanol	-.46392	1.22559	.710	-3.0621	2.1342
	VC	-.15464	1.22559	.901	-2.7528	2.4435
	2xOryzanol	-.92784	1.22559	.460	-3.5260	1.6703
1XOryzanol	5xOryzanol	-.61856	1.22559	.621	-3.2167	1.9796
	VC	.77320	1.22559	.537	-1.8249	3.3713
	1XOryzanol	.92784	1.22559	.460	-1.6703	3.5260
2xOryzanol	5xOryzanol	.30928	1.22559	.804	-2.2889	2.9074
	VC	.46392	1.22559	.710	-2.1342	3.0621
	1XOryzanol	.61856	1.22559	.621	-1.9796	3.2167
5xOryzanol	2xOryzanol	-.30928	1.22559	.804	-2.9074	2.2889

*. The mean difference is significant at the 0.05 level.

a. Sex = Female

Sex = Female Kruskal-Wallis Test

Ranks ^a			
Testgroup		N	Mean Rank
BILT3	VC	5	8.50
	1XOryzanol	5	12.50
	2xOryzanol	5	10.50
	5xOryzanol	5	10.50
	Total	20	

a. Sex = Female

Test Statistics ^{a,b,c}	
	BILT3
Chi-Square	2.375
df	3
Asymp. Sig.	.498

a. Sex = Female
b. Kruskal Wallis Test
c. Grouping Variable: Testgroup

Sex = Female Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
BILT3	VC	5	4.50	22.50
	1XOryzanol	5	6.50	32.50
	Total	10		

a. Sex = Female

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	7.500
Wilcoxon W	22.500
Z	-1.500
Asymp. Sig. (2-tailed)	.134
Exact Sig. [2*(1-tailed Sig.)]	.310 ^c
a. Sex = Female	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
BILT3	VC	5	5.00	25.00
	2xOryzanol	5	6.00	30.00
	Total	10		
a. Sex = Female				

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = Female	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
BILT3	VC	5	5.00	25.00
	5xOryzanol	5	6.00	30.00
	Total	10		
a. Sex = Female				

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = Female	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
BILT3	1XOryzanol	5	6.00	30.00
	2xOryzanol	5	5.00	25.00
	Total	10		
a. Sex = Female				

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = Female	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
BILT3	1XOryzanol	5	6.00	30.00
	5xOryzanol	5	5.00	25.00
	Total	10		
a. Sex = Female				

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = Female	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
BILT3	2xOryzanol	5	5.50	27.50
	5xOryzanol	5	5.50	27.50
	Total	10		
a. Sex = Female				

Test Statistics ^{a,b}	
	BILT3
Mann-Whitney U	12.500
Wilcoxon W	27.500
Z	0.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Sex = Female	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a			
Testgroup		N	Mean Rank
CREJ2	VC	5	7.30
	1XOryzanol	5	13.50
	2xOryzanol	5	10.10
	5xOryzanol	5	11.10
	Total	20	
a. Sex = Female			

Test Statistics ^{a,b,c}	
	CREJ2
Chi-Square	2.851
df	3
Asymp. Sig.	.415
a. Sex = Female	
b. Kruskal Wallis Test	
c. Grouping Variable: Testgroup	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
CREJ2	VC	5	3.90	19.50
	1XOryzanol	5	7.10	35.50
	Total	10		
a. Sex = Female				

Test Statistics ^{a,b}	
	CREJ2
Mann-Whitney U	4.500
Wilcoxon W	19.500
Z	-1.676
Asymp. Sig. (2-tailed)	.094
Exact Sig. [2*(1-tailed Sig.)]	.095 ^c
a. Sex = Female	

b. Grouping Variable: Testgroup

c. Not corrected for ties.

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
CREJ2	VC	5	5.10	25.50
	2xOryzanol	5	5.90	29.50
	Total	10		
a. Sex = Female				

Test Statistics ^{a,b}	
	CREJ2
Mann-Whitney U	10.500
Wilcoxon W	25.500
Z	-.419
Asymp. Sig. (2-tailed)	.675
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = Female	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
CREJ2	VC	5	4.30	21.50
	5xOryzanol	5	6.70	33.50
	Total	10		
a. Sex = Female				

Test Statistics ^{a,b}	
	CREJ2
Mann-Whitney U	6.500
Wilcoxon W	21.500
Z	-1.269
Asymp. Sig. (2-tailed)	.205
Exact Sig. [2*(1-tailed Sig.)]	.222 ^c
a. Sex = Female	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
CREJ2	1xOryzanol	5	6.30	31.50
	2xOryzanol	5	4.70	23.50
	Total	10		
a. Sex = Female				

Test Statistics ^{a,b}	
	CREJ2
Mann-Whitney U	8.500
Wilcoxon W	23.500
Z	-.843
Asymp. Sig. (2-tailed)	.399
Exact Sig. [2*(1-tailed Sig.)]	.421 ^c
a. Sex = Female	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
CREJ2	1xOryzanol	5	6.10	30.50
	5xOryzanol	5	4.90	24.50
	Total	10		
a. Sex = Female				

Test Statistics ^{a,b}	
	CREJ2
Mann-Whitney U	9.500
Wilcoxon W	24.500
Z	-.631
Asymp. Sig. (2-tailed)	.528
Exact Sig. [2*(1-tailed Sig.)]	.548 ^c
a. Sex = Female	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
CREJ2	2xOryzanol	5	5.50	27.50
	5xOryzanol	5	5.50	27.50
	Total	10		
a. Sex = Female				

Test Statistics ^{a,b}	
	CREJ2
Mann-Whitney U	12.500
Wilcoxon W	27.500
Z	0.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Sex = Female	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Hematology**Sexpooled****Oneway**

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
WBC10E3mm3	VC	10	7.80	1.954	.61779	6.4055	9.2005	5.43	10.56
	1XOryzanol	10	7.77	2.229	.70477	6.1707	9.3593	4.81	11.11
	2XOryzanol	10	8.08	1.611	.50937	6.9247	9.2293	6.15	10.55
	5XOryzanol	10	7.20	1.426	.45110	6.1805	8.2215	5.38	9.36
	Total	40	7.71	1.789	.28281	7.1395	8.2835	4.81	11.11
RBC10E6mm3	VC	10	8.49	0.545	.17233	8.0962	8.8758	7.61	9.52
	1XOryzanol	10	8.55	0.627	.19831	8.1004	8.9976	7.05	9.16
	2XOryzanol	10	8.85	0.525	.16589	8.4707	9.2213	7.74	9.41
	5XOryzanol	10	8.76	0.604	.19090	8.3251	9.1889	7.31	9.47
	Total	40	8.66	0.574	.09071	8.4760	8.8430	7.05	9.52
HGBgdl	VC	10	16.35	0.763	.24141	15.8039	16.8961	15.20	17.70
	1XOryzanol	10	16.33	1.312	.41501	15.3912	17.2688	13.30	17.60
	2XOryzanol	10	16.47	0.733	.23192	15.9454	16.9946	14.90	17.30
	5XOryzanol	10	16.35	0.701	.22174	15.8484	16.8516	14.80	17.30
	Total	40	16.38	0.879	.13899	16.0939	16.6561	13.30	17.70
HCT	VC	10	48.63	2.409	.76188	46.9065	50.3535	44.60	53.00
	1XOryzanol	10	48.60	3.398	1.07445	46.1694	51.0306	40.00	51.80
	2XOryzanol	10	48.80	1.818	.57504	47.4992	50.1008	45.70	50.70
	5XOryzanol	10	48.12	2.214	.70029	46.5358	49.7042	43.40	50.90
	Total	40	48.54	2.442	.38613	47.7565	49.3185	40.00	53.00
MCV	VC	10	57.37	1.711	.54094	56.1483	58.5957	54.60	59.41
	1XOryzanol	10	56.88	1.574	.49768	55.7540	58.0057	54.86	59.54
	2XOryzanol	10	55.28	2.629	.83143	53.3979	57.1596	50.83	59.04
	5XOryzanol	10	55.08	2.673	.84512	53.1693	56.9929	50.00	59.37
	Total	40	56.15	2.345	.37072	55.4031	56.9028	50.00	59.54
MCHpg	VC	10	19.29	0.428	.13536	18.9838	19.5962	18.60	19.90
	1XOryzanol	10	19.07	0.462	.14610	18.7395	19.4005	18.60	19.90
	2XOryzanol	10	18.65	0.495	.15652	18.2959	19.0041	18.00	19.40
	5XOryzanol	10	18.72	0.680	.21489	18.2339	19.2061	17.70	20.20
	Total	40	18.93	0.569	.09004	18.7504	19.1146	17.70	20.20
MCHCgdl	VC	10	33.63	0.678	.21455	33.1461	34.1168	32.62	34.77
	1XOryzanol	10	33.58	0.728	.23027	33.0627	34.1045	32.62	34.65
	2XOryzanol	10	33.75	0.834	.26360	33.1535	34.3461	32.60	35.37
	5XOryzanol	10	33.99	0.834	.26365	33.3946	34.5874	33.20	35.50
	Total	40	33.74	0.758	.11988	33.4965	33.9814	32.60	35.50
PLT10E3mm3	VC	10	990.40	209.407	66.220	840.60	1140.20	633	1308
	1XOryzanol	10	1036.50	184.247	58.264	904.70	1168.30	812	1398

	2XOryzanol	10	981.70	128.395	40.602	889.85	1073.55	780	1171
	5XOryzanol	10	928.20	203.285	64.284	782.78	1073.62	494	1130
	Total	40	984.20	181.138	28.641	926.27	1042.13	494	1398
Neutrophils	VC	10	20.80	5.224	1.652	17.06	24.54	13	26
	1XOryzanol	10	22.50	8.935	2.825	16.11	28.89	13	39
	2XOryzanol	10	22.50	4.503	1.424	19.28	25.72	16	33
	5XOryzanol	10	23.70	6.993	2.211	18.70	28.70	12	36
	Total	40	22.38	6.464	1.022	20.31	24.44	12	39
Lymphocytes	VC	10	74.00	4.922	1.556	70.48	77.52	69	82
	1XOryzanol	10	72.10	8.825	2.791	65.79	78.41	56	82
	2XOryzanol	10	72.20	4.662	1.474	68.87	75.53	62	80
	5XOryzanol	10	71.00	7.789	2.463	65.43	76.57	58	84
	Total	40	72.33	6.615	1.046	70.21	74.44	56	84
Monocytes	VC	10	3.20	0.789	.249	2.64	3.76	2	4
	1XOryzanol	10	3.50	0.527	.167	3.12	3.88	3	4
	2XOryzanol	10	3.30	0.675	.213	2.82	3.78	2	4
	5XOryzanol	10	3.30	1.160	.367	2.47	4.13	2	5
	Total	40	3.33	0.797	.126	3.07	3.58	2	5
Eosinophils	VC	10	2.00	0.471	.149	1.66	2.34	1	3
	1XOryzanol	10	1.90	0.316	.100	1.67	2.13	1	2
	2XOryzanol	10	2.00	0.667	.211	1.52	2.48	1	3
	5XOryzanol	10	2.00	0.471	.149	1.66	2.34	1	3
	Total	40	1.98	0.480	.076	1.82	2.13	1	3
Basophils	VC	10	0.00	0.000	0.000	0.00	0.00	0	0
	1XOryzanol	10	0.00	0.000	0.000	0.00	0.00	0	0
	2XOryzanol	10	0.00	0.000	0.000	0.00	0.00	0	0
	5XOryzanol	10	0.00	0.000	0.000	0.00	0.00	0	0
	Total	40	0.00	0.000	0.000	0.00	0.00	0	0

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
WBC10E3mm3	.887	3	36	.457
RBC10E6mm3	.015	3	36	.998
HGBgdl	1.484	3	36	.235
HCT	.585	3	36	.629
MCV	.944	3	36	.430
MCHpg	.370	3	36	.775
MCHCgdl	.104	3	36	.957
PLT10E3mm3	.400	3	36	.754
Neutrophils	2.632	3	36	.065
Lymphocytes	2.250	3	36	.099
Monocytes	2.823	3	36	.052
Eosinophils	.628	3	36	.602
Basophils		3		

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
WBC10E3mm3	Between Groups	4.054	3	1.351	.403	.752
	Within Groups	120.718	36	3.353		
	Total	124.773	39			
RBC10E6mm3	Between Groups	.866	3	.289	.868	.466
	Within Groups	11.969	36	.332		
	Total	12.835	39			
HGBgdl	Between Groups	.123	3	.041	.049	.985
	Within Groups	30.012	36	.834		
	Total	30.135	39			
HCT	Between Groups	2.557	3	.852	.133	.940
	Within Groups	230.037	36	6.390		
	Total	232.594	39			
MCV	Between Groups	39.276	3	13.092	2.691	.061
	Within Groups	175.124	36	4.865		
	Total	214.399	39			
MCHpg	Between Groups	2.717	3	.906	3.283	.032
	Within Groups	9.931	36	.276		
	Total	12.648	39			
MCHCgdl	Between Groups	.994	3	.331	.557	.647
	Within Groups	21.425	36	.595		
	Total	22.418	39			
PLT10E3mm3	Between Groups	59159.800	3	19719.933	.582	.631
	Within Groups	1220474.600	36	33902.072		
	Total	1279634.400	39			
Neutrophils	Between Groups	42.675	3	14.225	.323	.809
	Within Groups	1586.700	36	44.075		
	Total	1629.375	39			
Lymphocytes	Between Groups	46.275	3	15.425	.334	.801
	Within Groups	1660.500	36	46.125		
	Total	1706.775	39			
Monocytes	Between Groups	.475	3	.158	.235	.872
	Within Groups	24.300	36	.675		
	Total	24.775	39			
Eosinophils	Between Groups	.075	3	.025	.101	.959
	Within Groups	8.900	36	.247		
	Total	8.975	39			
Basophils	Between Groups	0.000	3	0.000		
	Within Groups	0.000	36	0.000		
	Total	0.000	39			

Post Hoc Tests

Multiple Comparisons							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
WBC10E3mm3	VC	1XOryzanol	.03800	.81894	.963	-1.6229	1.6989
		2XOryzanol	-.27400	.81894	.740	-1.9349	1.3869
		5XOryzanol	.60200	.81894	.467	-1.0589	2.2629
	1XOryzanol	VC	-.03800	.81894	.963	-1.6989	1.6229
		2XOryzanol	-.31200	.81894	.705	-1.9729	1.3489
		5XOryzanol	.56400	.81894	.495	-1.0969	2.2249
	2XOryzanol	VC	.27400	.81894	.740	-1.3869	1.9349
		1XOryzanol	.31200	.81894	.705	-1.3489	1.9729
		5XOryzanol	.87600	.81894	.292	-.7849	2.5369
	5XOryzanol	VC	-.60200	.81894	.467	-2.2629	1.0589
		1XOryzanol	-.56400	.81894	.495	-2.2249	1.0969
		2XOryzanol	-.87600	.81894	.292	-2.5369	.7849
RBC10E6mm3	VC	1XOryzanol	-.06300	.25786	.808	-.5860	.4600
		2XOryzanol	-.36000	.25786	.171	-.8830	.1630
		5XOryzanol	-.27100	.25786	.300	-.7940	.2520
	1XOryzanol	VC	.06300	.25786	.808	-.4600	.5860
		2XOryzanol	-.29700	.25786	.257	-.8200	.2260
		5XOryzanol	-.20800	.25786	.425	-.7310	.3150
	2XOryzanol	VC	.36000	.25786	.171	-.1630	.8830
		1XOryzanol	.29700	.25786	.257	-.2260	.8200
		5XOryzanol	.08900	.25786	.732	-.4340	.6120
	5XOryzanol	VC	.27100	.25786	.300	-.2520	.7940
		1XOryzanol	.20800	.25786	.425	-.3150	.7310
		2XOryzanol	-.08900	.25786	.732	-.6120	.4340
HGBgdl	VC	1XOryzanol	.02000	.40833	.961	-.8081	.8481
		2XOryzanol	-.12000	.40833	.771	-.9481	.7081
		5XOryzanol	0.00000	.40833	1.000	-.8281	.8281
	1XOryzanol	VC	-.02000	.40833	.961	-.8481	.8081
		2XOryzanol	-.14000	.40833	.734	-.9681	.6881
		5XOryzanol	-.02000	.40833	.961	-.8481	.8081
	2XOryzanol	VC	.12000	.40833	.771	-.7081	.9481
		1XOryzanol	.14000	.40833	.734	-.6881	.9681
		5XOryzanol	.12000	.40833	.771	-.7081	.9481
	5XOryzanol	VC	0.00000	.40833	1.000	-.8281	.8281
		1XOryzanol	.02000	.40833	.961	-.8081	.8481
		2XOryzanol	-.12000	.40833	.771	-.9481	.7081
HCT	VC	1XOryzanol	.03000	1.13048	.979	-2.2627	2.3227
		2XOryzanol	-.17000	1.13048	.881	-2.4627	2.1227

		5XOryzanol	.51000	1.13048	.655	-1.7827	2.8027
		1XOryzanol VC	-.03000	1.13048	.979	-2.3227	2.2627
		2XOryzanol	-.20000	1.13048	.861	-2.4927	2.0927
		5XOryzanol	.48000	1.13048	.674	-1.8127	2.7727
		2XOryzanol VC	.17000	1.13048	.881	-2.1227	2.4627
		1XOryzanol	.20000	1.13048	.861	-2.0927	2.4927
		5XOryzanol	.68000	1.13048	.551	-1.6127	2.9727
		5XOryzanol VC	-.51000	1.13048	.655	-2.8027	1.7827
		1XOryzanol	-.48000	1.13048	.674	-2.7727	1.8127
		2XOryzanol	-.68000	1.13048	.551	-2.9727	1.6127
MCV	VC	1XOryzanol	.49211	.98636	.621	-1.5083	2.4925
		2XOryzanol	2.09322*	.98636	.041	.0928	4.0937
		5XOryzanol	2.29091*	.98636	.026	.2905	4.2913
	1XOryzanol VC	VC	-.49211	.98636	.621	-2.4925	1.5083
		2XOryzanol	1.60110	.98636	.113	-.3993	3.6015
		5XOryzanol	1.79880	.98636	.077	-.2016	3.7992
	2XOryzanol VC	VC	-2.09322*	.98636	.041	-4.0937	-.0928
		1XOryzanol	-1.60110	.98636	.113	-3.6015	.3993
		5XOryzanol	.19770	.98636	.842	-1.8027	2.1981
	5XOryzanol VC	VC	-2.29091*	.98636	.026	-4.2913	-.2905
		1XOryzanol	-1.79880	.98636	.077	-3.7992	.2016
		2XOryzanol	-.19770	.98636	.842	-2.1981	1.8027
MCHpg	VC	1XOryzanol	.22000	.23489	.355	-.2564	.6964
		2XOryzanol	.64000*	.23489	.010	.1636	1.1164
		5XOryzanol	.57000*	.23489	.020	.0936	1.0464
	1XOryzanol VC	VC	-.22000	.23489	.355	-.6964	.2564
		2XOryzanol	.42000	.23489	.082	-.0564	.8964
		5XOryzanol	.35000	.23489	.145	-.1264	.8264
	2XOryzanol VC	VC	-.64000*	.23489	.010	-1.1164	-.1636
		1XOryzanol	-.42000	.23489	.082	-.8964	.0564
		5XOryzanol	-.07000	.23489	.767	-.5464	.4064
	5XOryzanol VC	VC	-.57000*	.23489	.020	-1.0464	-.0936
		1XOryzanol	-.35000	.23489	.145	-.8264	.1264
		2XOryzanol	.07000	.23489	.767	-.4064	.5464
MCHCgdl	VC	1XOryzanol	.04786	.34500	.890	-.6518	.7476
		2XOryzanol	-.11834	.34500	.734	-.8180	.5814
		5XOryzanol	-.35960	.34500	.304	-1.0593	.3401
	1XOryzanol VC	VC	-.04786	.34500	.890	-.7476	.6518
		2XOryzanol	-.16620	.34500	.633	-.8659	.5335
		5XOryzanol	-.40745	.34500	.245	-1.1071	.2922
	2XOryzanol VC	VC	.11834	.34500	.734	-.5814	.8180
		1XOryzanol	.16620	.34500	.633	-.5335	.8659
		5XOryzanol	-.24126	.34500	.489	-.9410	.4584
	5XOryzanol VC	VC	.35960	.34500	.304	-.3401	1.0593

		1XOryzanol	.40745	.34500	.245	-.2922	1.1071
		2XOryzanol	.24126	.34500	.489	-.4584	.9410
PLT10E3mm3	VC	1XOryzanol	-46.100	82.343	.579	-213.10	120.90
		2XOryzanol	8.700	82.343	.916	-158.30	175.70
		5XOryzanol	62.200	82.343	.455	-104.80	229.20
	1XOryzanol	VC	46.100	82.343	.579	-120.90	213.10
		2XOryzanol	54.800	82.343	.510	-112.20	221.80
		5XOryzanol	108.300	82.343	.197	-58.70	275.30
	2XOryzanol	VC	-8.700	82.343	.916	-175.70	158.30
		1XOryzanol	-54.800	82.343	.510	-221.80	112.20
		5XOryzanol	53.500	82.343	.520	-113.50	220.50
	5XOryzanol	VC	-62.200	82.343	.455	-229.20	104.80
		1XOryzanol	-108.300	82.343	.197	-275.30	58.70
		2XOryzanol	-53.500	82.343	.520	-220.50	113.50
Neutrophils	VC	1XOryzanol	-1.700	2.969	.570	-7.72	4.32
		2XOryzanol	-1.700	2.969	.570	-7.72	4.32
		5XOryzanol	-2.900	2.969	.335	-8.92	3.12
	1XOryzanol	VC	1.700	2.969	.570	-4.32	7.72
		2XOryzanol	0.000	2.969	1.000	-6.02	6.02
		5XOryzanol	-1.200	2.969	.688	-7.22	4.82
	2XOryzanol	VC	1.700	2.969	.570	-4.32	7.72
		1XOryzanol	0.000	2.969	1.000	-6.02	6.02
		5XOryzanol	-1.200	2.969	.688	-7.22	4.82
	5XOryzanol	VC	2.900	2.969	.335	-3.12	8.92
		1XOryzanol	1.200	2.969	.688	-4.82	7.22
		2XOryzanol	1.200	2.969	.688	-4.82	7.22
Lymphocytes	VC	1XOryzanol	1.900	3.037	.536	-4.26	8.06
		2XOryzanol	1.800	3.037	.557	-4.36	7.96
		5XOryzanol	3.000	3.037	.330	-3.16	9.16
	1XOryzanol	VC	-1.900	3.037	.536	-8.06	4.26
		2XOryzanol	-.100	3.037	.974	-6.26	6.06
		5XOryzanol	1.100	3.037	.719	-5.06	7.26
	2XOryzanol	VC	-1.800	3.037	.557	-7.96	4.36
		1XOryzanol	.100	3.037	.974	-6.06	6.26
		5XOryzanol	1.200	3.037	.695	-4.96	7.36
	5XOryzanol	VC	-3.000	3.037	.330	-9.16	3.16
		1XOryzanol	-1.100	3.037	.719	-7.26	5.06
		2XOryzanol	-1.200	3.037	.695	-7.36	4.96
Monocytes	VC	1XOryzanol	-.300	.367	.420	-1.05	.45
		2XOryzanol	-.100	.367	.787	-.85	.65
		5XOryzanol	-.100	.367	.787	-.85	.65
	1XOryzanol	VC	.300	.367	.420	-.45	1.05
		2XOryzanol	.200	.367	.590	-.55	.95
		5XOryzanol	.200	.367	.590	-.55	.95

	2XOryzanol	VC	.100	.367	.787	-.65	.85
	1XOryzanol		-.200	.367	.590	-.95	.55
	5XOryzanol		0.000	.367	1.000	-.75	.75
	5XOryzanol	VC	.100	.367	.787	-.65	.85
	1XOryzanol		-.200	.367	.590	-.95	.55
	2XOryzanol		0.000	.367	1.000	-.75	.75
Eosinophils	VC	1XOryzanol	.100	.222	.656	-.35	.55
		2XOryzanol	0.000	.222	1.000	-.45	.45
		5XOryzanol	0.000	.222	1.000	-.45	.45
	1XOryzanol	VC	-.100	.222	.656	-.55	.35
		2XOryzanol	-.100	.222	.656	-.55	.35
		5XOryzanol	-.100	.222	.656	-.55	.35
	2XOryzanol	VC	0.000	.222	1.000	-.45	.45
		1XOryzanol	.100	.222	.656	-.35	.55
		5XOryzanol	0.000	.222	1.000	-.45	.45
	5XOryzanol	VC	0.000	.222	1.000	-.45	.45
		1XOryzanol	.100	.222	.656	-.35	.55
		2XOryzanol	0.000	.222	1.000	-.45	.45

*. The mean difference is significant at the 0.05 level.

Oneway

Sex = MALE

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
WBC10E3mm3	VC	5	9.20	1.345	.60165	7.5255	10.8665	7.08	10.56
	1XOryzanol	5	6.50	2.068	.92484	3.9342	9.0698	4.81	9.90
	2XOryzanol	5	7.85	1.630	.72881	5.8225	9.8695	6.63	10.55
	5XOryzanol	5	7.47	1.667	.74545	5.3983	9.5377	5.38	9.36
	Total	20	7.75	1.846	.41285	6.8889	8.6171	4.81	10.56
RBC10E6mm3	VC	5	8.24	0.531	.23739	7.5829	8.9011	7.61	8.85
	1XOryzanol	5	8.25	0.765	.34225	7.2958	9.1962	7.05	9.16
	2XOryzanol	5	8.56	0.617	.27606	7.7935	9.3265	7.74	9.33
	5XOryzanol	5	8.62	0.820	.36667	7.6060	9.6420	7.31	9.47
	Total	20	8.42	0.661	.14778	8.1087	8.7273	7.05	9.47
HGBgdl	VC	5	16.02	0.753	.33675	15.0850	16.9550	15.20	16.80
	1XOryzanol	5	15.62	1.502	.67186	13.7546	17.4854	13.30	17.40
	2XOryzanol	5	16.22	0.915	.40915	15.0840	17.3560	14.90	17.20
	5XOryzanol	5	16.36	0.934	.41785	15.1999	17.5201	14.80	17.30
	Total	20	16.06	1.018	.22763	15.5786	16.5314	13.30	17.40
HCT	VC	5	48.06	2.470	1.10481	44.9926	51.1274	44.60	51.10
	1XOryzanol	5	47.28	4.346	1.94355	41.8838	52.6762	40.00	51.20
	2XOryzanol	5	48.80	2.070	.92574	46.2297	51.3703	45.70	50.70

	5XOryzanol	5	48.72	3.034	1.35698	44.9524	52.4876	43.40	50.90
	Total	20	48.22	2.915	.65173	46.8509	49.5791	40.00	51.20
MCV	VC	5	58.36	1.474	.65919	56.5306	60.1910	55.82	59.41
	1XOryzanol	5	57.35	1.361	.60848	55.6589	59.0377	55.90	59.54
	2XOryzanol	5	57.11	1.925	.86109	54.7229	59.5045	54.23	59.04
	5XOryzanol	5	56.65	2.238	1.00104	53.8727	59.4314	53.75	59.37
	Total	20	57.37	1.759	.39331	56.5455	58.1919	53.75	59.54
	VC	5	19.46	0.428	.19131	18.9288	19.9912	19.00	19.90
MCHpg	1XOryzanol	5	18.92	0.295	.13191	18.5538	19.2862	18.60	19.40
	2XOryzanol	5	19.00	0.367	.16432	18.5438	19.4562	18.50	19.40
	5XOryzanol	5	19.04	0.770	.34438	18.0838	19.9962	18.30	20.20
	Total	20	19.11	0.506	.11320	18.8681	19.3419	18.30	20.20
	VC	5	33.35	0.697	.31176	32.4796	34.2107	32.62	34.08
MCHCgdl	1XOryzanol	5	33.03	0.593	.26516	32.2972	33.7697	32.62	33.98
	2XOryzanol	5	33.22	0.520	.23265	32.5763	33.8682	32.60	33.99
	5XOryzanol	5	33.59	0.420	.18761	33.0704	34.1121	33.20	34.10
	Total	20	33.30	0.560	.12520	33.0360	33.5601	32.60	34.10
	VC	5	1002.60	196.410	87.837	758.73	1246.47	800	1308
PLT10E3mm3	1XOryzanol	5	1016.80	258.150	115.448	696.26	1337.34	812	1398
	2XOryzanol	5	952.20	92.427	41.334	837.44	1066.96	863	1087
	5XOryzanol	5	886.00	225.794	100.978	605.64	1166.36	494	1043
	Total	20	964.40	193.510	43.270	873.83	1054.97	494	1398
	VC	5	21.80	5.020	2.245	15.57	28.03	14	26
Neutrophils	1XOryzanol	5	25.80	10.330	4.620	12.97	38.63	14	39
	2XOryzanol	5	25.20	4.712	2.107	19.35	31.05	21	33
	5XOryzanol	5	27.00	6.124	2.739	19.40	34.60	19	36
	Total	20	24.95	6.653	1.488	21.84	28.06	14	39
	VC	5	73.40	4.219	1.887	68.16	78.64	70	80
Lymphocytes	1XOryzanol	5	68.80	10.232	4.576	56.09	81.51	56	80
	2XOryzanol	5	69.20	4.207	1.881	63.98	74.42	62	73
	5XOryzanol	5	67.20	6.979	3.121	58.53	75.87	58	77
	Total	20	69.65	6.730	1.505	66.50	72.80	56	80
	VC	5	3.00	0.707	.316	2.12	3.88	2	4
Monocytes	1XOryzanol	5	3.40	0.548	.245	2.72	4.08	3	4
	2XOryzanol	5	3.40	0.548	.245	2.72	4.08	3	4
	5XOryzanol	5	3.80	0.837	.374	2.76	4.84	3	5
	Total	20	3.40	0.681	.152	3.08	3.72	2	5
	VC	5	1.80	0.447	.200	1.24	2.36	1	2
Eosinophils	1XOryzanol	5	2.00	0.000	0.000	2.00	2.00	2	2
	2XOryzanol	5	2.20	0.837	.374	1.16	3.24	1	3
	5XOryzanol	5	2.00	0.707	.316	1.12	2.88	1	3
	Total	20	2.00	0.562	.126	1.74	2.26	1	3
	VC	5	0.00	0.000	0.000	0.00	0.00	0	0
Basophils	1XOryzanol	5	0.00	0.000	0.000	0.00	0.00	0	0

	2XOryzanol	5	0.00	0.000	0.000	0.00	0.00	0	0
	5XOryzanol	5	0.00	0.000	0.000	0.00	0.00	0	0
	Total	20	0.00	0.000	0.000	0.00	0.00	0	0
a. Sex = MALE									

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
WBC10E3mm3	.176	3	16	.911
RBC10E6mm3	.087	3	16	.966
HGBgdl	.552	3	16	.654
HCT	.617	3	16	.614
MCV	.811	3	16	.506
MCHpg	1.744	3	16	.198
MCHCgdl	.606	3	16	.621
PLT10E3mm3	1.456	3	16	.264
Neutrophils	1.776	3	16	.192
Lymphocytes	2.459	3	16	.100
Monocytes	.396	3	16	.758
Eosinophils	2.495	3	16	.097
Basophils		3		
a. Sex = MALE				

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
WBC10E3mm3	Between Groups	18.686	3	6.229	2.163	.132
	Within Groups	46.084	16	2.880		
	Total	64.769	19			
RBC10E6mm3	Between Groups	.616	3	.205	.427	.736
	Within Groups	7.683	16	.480		
	Total	8.299	19			
HGBgdl	Between Groups	1.553	3	.518	.457	.716
	Within Groups	18.136	16	1.134		
	Total	19.690	19			
HCT	Between Groups	7.477	3	2.492	.259	.854
	Within Groups	153.928	16	9.621		
	Total	161.406	19			
MCV	Between Groups	7.816	3	2.605	.818	.503
	Within Groups	50.967	16	3.185		
	Total	58.783	19			
MCHpg	Between Groups	.878	3	.293	1.172	.351
	Within Groups	3.992	16	.249		
	Total	4.870	19			
MCHCgdl	Between Groups	.820	3	.273	.851	.486

	Within Groups	5.137	16	.321		
	Total	5.956	19			
	Between Groups	52502.000	3	17500.667	.425	.738
PLT10E3mm3	Within Groups	658974.800	16	41185.925		
	Total	711476.800	19			
	Between Groups	74.550	3	24.850	.519	.675
Neutrophils	Within Groups	766.400	16	47.900		
	Total	840.950	19			
	Between Groups	104.950	3	34.983	.741	.543
Lymphocytes	Within Groups	755.600	16	47.225		
	Total	860.550	19			
	Between Groups	1.600	3	.533	1.185	.347
Monocytes	Within Groups	7.200	16	.450		
	Total	8.800	19			
	Between Groups	.400	3	.133	.381	.768
Eosinophils	Within Groups	5.600	16	.350		
	Total	6.000	19			
	Between Groups	0.000	3	0.000		
Basophils	Within Groups	0.000	16	0.000		
	Total	0.000	19			
a. Sex = MALE						

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
VC	1XOryzanol	2XOryzanol	2.69400 [*]	1.07335	.023	.4186	4.9694
		5XOryzanol	1.35000	1.07335	.227	-.9254	3.6254
		VC	1.72800	1.07335	.127	-.5474	4.0034
	2XOryzanol	1XOryzanol	-2.69400 [*]	1.07335	.023	-4.9694	-.4186
		5XOryzanol	-1.34400	1.07335	.229	-3.6194	.9314
		VC	-96600	1.07335	.381	-3.2414	1.3094
	5XOryzanol	1XOryzanol	-1.35000	1.07335	.227	-3.6254	.9254
		2XOryzanol	1.34400	1.07335	.229	-.9314	3.6194
		VC	.37800	1.07335	.729	-1.8974	2.6534
	VC	1XOryzanol	-1.72800	1.07335	.127	-4.0034	.5474
		2XOryzanol	.96600	1.07335	.381	-1.3094	3.2414
		5XOryzanol	-.37800	1.07335	.729	-2.6534	1.8974
WBC10E3mm3	VC	1XOryzanol	-.00400	.43826	.993	-.9331	.9251
RBC10E6mm3	VC	2XOryzanol	-.31800	.43826	.479	-1.2471	.6111
		5XOryzanol	-.38200	.43826	.396	-1.3111	.5471
		1XOryzanol	.00400	.43826	.993	-.9251	.9331

		2XOryzanol	-.31400	.43826	.484	-1.2431	.6151		
		5XOryzanol	-.37800	.43826	.401	-1.3071	.5511		
		2XOryzanol	VC	.31800	.43826	.479	-.6111	1.2471	
		1XOryzanol	.31400	.43826	.484	-.6151	1.2431		
		5XOryzanol	-.06400	.43826	.886	-.9931	.8651		
		5XOryzanol	VC	.38200	.43826	.396	-.5471	1.3111	
		1XOryzanol	.37800	.43826	.401	-.5511	1.3071		
		2XOryzanol	.06400	.43826	.886	-.8651	.9931		
		HGBgdl	VC	1XOryzanol	.40000	.67335	.561	-1.0274	1.8274
			2XOryzanol	2XOryzanol	-.20000	.67335	.770	-1.6274	1.2274
5XOryzanol	-.34000			.67335	.620	-1.7674	1.0874		
VC	-.40000			.67335	.561	-1.8274	1.0274		
1XOryzanol	2XOryzanol		-.60000	.67335	.386	-2.0274	.8274		
	5XOryzanol		-.74000	.67335	.288	-2.1674	.6874		
	VC		.20000	.67335	.770	-1.2274	1.6274		
2XOryzanol	1XOryzanol		.60000	.67335	.386	-.8274	2.0274		
	5XOryzanol		-.14000	.67335	.838	-1.5674	1.2874		
	VC		.34000	.67335	.620	-1.0874	1.7674		
5XOryzanol	1XOryzanol		.74000	.67335	.288	-.6874	2.1674		
	2XOryzanol		.14000	.67335	.838	-1.2874	1.5674		
	HCT		VC	1XOryzanol	.78000	1.96168	.696	-3.3786	4.9386
2XOryzanol			2XOryzanol	-.74000	1.96168	.711	-4.8986	3.4186	
			5XOryzanol	-.66000	1.96168	.741	-4.8186	3.4986	
			VC	-.78000	1.96168	.696	-4.9386	3.3786	
1XOryzanol			2XOryzanol	-1.52000	1.96168	.450	-5.6786	2.6386	
			5XOryzanol	-1.44000	1.96168	.474	-5.5986	2.7186	
		VC	.74000	1.96168	.711	-3.4186	4.8986		
2XOryzanol		1XOryzanol	1.52000	1.96168	.450	-2.6386	5.6786		
		5XOryzanol	.08000	1.96168	.968	-4.0786	4.2386		
		VC	.66000	1.96168	.741	-3.4986	4.8186		
5XOryzanol		1XOryzanol	1.44000	1.96168	.474	-2.7186	5.5986		
		2XOryzanol	-.08000	1.96168	.968	-4.2386	4.0786		
		MCV	VC	1XOryzanol	1.01247	1.12879	.383	-1.3805	3.4054
2XOryzanol			2XOryzanol	1.24706	1.12879	.286	-1.1459	3.6400	
			5XOryzanol	1.70873	1.12879	.150	-.6842	4.1017	
			VC	-1.01247	1.12879	.383	-3.4054	1.3805	
1XOryzanol			2XOryzanol	.23459	1.12879	.838	-2.1583	2.6275	
			5XOryzanol	.69625	1.12879	.546	-1.6967	3.0892	
	VC		-1.24706	1.12879	.286	-3.6400	1.1459		
2XOryzanol	1XOryzanol		-.23459	1.12879	.838	-2.6275	2.1583		
	5XOryzanol		.46167	1.12879	.688	-1.9313	2.8546		
	VC		-1.70873	1.12879	.150	-4.1017	.6842		
5XOryzanol	1XOryzanol		-.69625	1.12879	.546	-3.0892	1.6967		
	2XOryzanol		-.46167	1.12879	.688	-2.8546	1.9313		

MCHpg	VC	1XOryzanol	.54000	.31591	.107	-.1297	1.2097
		2XOryzanol	.46000	.31591	.165	-.2097	1.1297
		5XOryzanol	.42000	.31591	.202	-.2497	1.0897
	1XOryzanol	VC	-.54000	.31591	.107	-1.2097	.1297
		2XOryzanol	-.08000	.31591	.803	-.7497	.5897
		5XOryzanol	-.12000	.31591	.709	-.7897	.5497
	2XOryzanol	VC	-.46000	.31591	.165	-1.1297	.2097
		1XOryzanol	.08000	.31591	.803	-.5897	.7497
		5XOryzanol	-.04000	.31591	.901	-.7097	.6297
	5XOryzanol	VC	-.42000	.31591	.202	-1.0897	.2497
		1XOryzanol	.12000	.31591	.709	-.5497	.7897
		2XOryzanol	.04000	.31591	.901	-.6297	.7097
MCHCgdl	VC	1XOryzanol	.31171	.35835	.397	-.4480	1.0714
		2XOryzanol	.12289	.35835	.736	-.6368	.8825
		5XOryzanol	-.24610	.35835	.502	-1.0058	.5136
	1XOryzanol	VC	-.31171	.35835	.397	-1.0714	.4480
		2XOryzanol	-.18882	.35835	.605	-.9485	.5708
		5XOryzanol	-.55780	.35835	.139	-1.3175	.2019
	2XOryzanol	VC	-.12289	.35835	.736	-.8825	.6368
		1XOryzanol	.18882	.35835	.605	-.5708	.9485
		5XOryzanol	-.36898	.35835	.318	-1.1286	.3907
	5XOryzanol	VC	.24610	.35835	.502	-.5136	1.0058
		1XOryzanol	.55780	.35835	.139	-.2019	1.3175
		2XOryzanol	.36898	.35835	.318	-.3907	1.1286
PLT10E3mm3	VC	1XOryzanol	-14.200	128.353	.913	-286.30	257.90
		2XOryzanol	50.400	128.353	.700	-221.70	322.50
		5XOryzanol	116.600	128.353	.377	-155.50	388.70
	1XOryzanol	VC	14.200	128.353	.913	-257.90	286.30
		2XOryzanol	64.600	128.353	.622	-207.50	336.70
		5XOryzanol	130.800	128.353	.323	-141.30	402.90
	2XOryzanol	VC	-50.400	128.353	.700	-322.50	221.70
		1XOryzanol	-64.600	128.353	.622	-336.70	207.50
		5XOryzanol	66.200	128.353	.613	-205.90	338.30
	5XOryzanol	VC	-116.600	128.353	.377	-388.70	155.50
		1XOryzanol	-130.800	128.353	.323	-402.90	141.30
		2XOryzanol	-66.200	128.353	.613	-338.30	205.90
Neutrophils	VC	1XOryzanol	-4.000	4.377	.374	-13.28	5.28
		2XOryzanol	-3.400	4.377	.449	-12.68	5.88
		5XOryzanol	-5.200	4.377	.252	-14.48	4.08
	1XOryzanol	VC	4.000	4.377	.374	-5.28	13.28
		2XOryzanol	.600	4.377	.893	-8.68	9.88
		5XOryzanol	-1.200	4.377	.787	-10.48	8.08
	2XOryzanol	VC	3.400	4.377	.449	-5.88	12.68
		1XOryzanol	-.600	4.377	.893	-9.88	8.68

		5XOryzanol	-1.800	4.377	.686	-11.08	7.48
	5XOryzanol	VC	5.200	4.377	.252	-4.08	14.48
		1XOryzanol	1.200	4.377	.787	-8.08	10.48
		2XOryzanol	1.800	4.377	.686	-7.48	11.08
	VC	1XOryzanol	4.600	4.346	.306	-4.61	13.81
		2XOryzanol	4.200	4.346	.348	-5.01	13.41
		5XOryzanol	6.200	4.346	.173	-3.01	15.41
	1XOryzanol	VC	-4.600	4.346	.306	-13.81	4.61
		2XOryzanol	-.400	4.346	.928	-9.61	8.81
		5XOryzanol	1.600	4.346	.718	-7.61	10.81
	2XOryzanol	VC	-4.200	4.346	.348	-13.41	5.01
		1XOryzanol	.400	4.346	.928	-8.81	9.61
		5XOryzanol	2.000	4.346	.652	-7.21	11.21
	5XOryzanol	VC	-6.200	4.346	.173	-15.41	3.01
		1XOryzanol	-1.600	4.346	.718	-10.81	7.61
		2XOryzanol	-2.000	4.346	.652	-11.21	7.21
	VC	1XOryzanol	-.400	.424	.360	-1.30	.50
		2XOryzanol	-.400	.424	.360	-1.30	.50
		5XOryzanol	-.800	.424	.078	-1.70	.10
	1XOryzanol	VC	.400	.424	.360	-.50	1.30
		2XOryzanol	0.000	.424	1.000	-.90	.90
		5XOryzanol	-.400	.424	.360	-1.30	.50
	2XOryzanol	VC	.400	.424	.360	-.50	1.30
		1XOryzanol	0.000	.424	1.000	-.90	.90
		5XOryzanol	-.400	.424	.360	-1.30	.50
	5XOryzanol	VC	.800	.424	.078	-.10	1.70
		1XOryzanol	.400	.424	.360	-.50	1.30
		2XOryzanol	.400	.424	.360	-.50	1.30
	VC	1XOryzanol	-.200	.374	.600	-.99	.59
		2XOryzanol	-.400	.374	.301	-1.19	.39
		5XOryzanol	-.200	.374	.600	-.99	.59
	1XOryzanol	VC	.200	.374	.600	-.59	.99
		2XOryzanol	-.200	.374	.600	-.99	.59
		5XOryzanol	0.000	.374	1.000	-.79	.79
	2XOryzanol	VC	.400	.374	.301	-.39	1.19
		1XOryzanol	.200	.374	.600	-.59	.99
		5XOryzanol	.200	.374	.600	-.59	.99
	5XOryzanol	VC	.200	.374	.600	-.59	.99
		1XOryzanol	0.000	.374	1.000	-.79	.79
		2XOryzanol	-.200	.374	.600	-.99	.59

*. The mean difference is significant at the 0.05 level.

a. Sex = MALE

Oneway
Sex = FEMALE

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
WBC10E3mm3	VC	5	6.41	1.388	.62070	4.6867	8.1333	5.43	8.66
	1XOryzanol	5	9.03	1.706	.76306	6.9094	11.1466	7.55	11.11
	2XOryzanol	5	8.31	1.746	.78084	6.1401	10.4759	6.15	10.17
	5XOryzanol	5	6.93	1.274	.56953	5.3527	8.5153	5.54	8.95
	Total	20	7.67	1.776	.39714	6.8388	8.5012	5.43	11.11
RBC10E6mm3	VC	5	8.73	0.487	.21797	8.1248	9.3352	8.31	9.52
	1XOryzanol	5	8.85	0.264	.11804	8.5243	9.1797	8.56	9.11
	2XOryzanol	5	9.13	0.183	.08206	8.9042	9.3598	8.96	9.41
	5XOryzanol	5	8.89	0.322	.14391	8.4904	9.2896	8.43	9.24
	Total	20	8.90	0.341	.07615	8.7416	9.0604	8.31	9.52
HGBgdl	VC	5	16.68	0.687	.30725	15.8269	17.5331	16.00	17.70
	1XOryzanol	5	17.04	0.598	.26758	16.2971	17.7829	16.10	17.60
	2XOryzanol	5	16.72	0.466	.20833	16.1416	17.2984	16.20	17.30
	5XOryzanol	5	16.34	0.483	.21587	15.7406	16.9394	15.80	17.10
	Total	20	16.70	0.578	.12926	16.4244	16.9656	15.80	17.70
HCT	VC	5	49.20	2.479	1.10860	46.1220	52.2780	46.30	53.00
	1XOryzanol	5	49.92	1.653	.73919	47.8677	51.9723	47.30	51.80
	2XOryzanol	5	48.80	1.776	.79436	46.5945	51.0055	45.80	50.30
	5XOryzanol	5	47.52	0.963	.43058	46.3245	48.7155	46.20	48.30
	Total	20	48.86	1.878	.41999	47.9810	49.7390	45.80	53.00
MCV	VC	5	56.38	1.402	.62721	54.6418	58.1246	54.60	57.85
	1XOryzanol	5	56.41	1.781	.79663	54.1996	58.6232	54.86	58.76
	2XOryzanol	5	53.44	1.852	.82809	51.1447	55.7429	50.83	55.52
	5XOryzanol	5	53.51	2.211	.98892	50.7644	56.2557	50.00	55.52
	Total	20	54.94	2.254	.50390	53.8824	55.9918	50.00	58.76
MCHpg	VC	5	19.12	0.396	.17720	18.6280	19.6120	18.60	19.70
	1XOryzanol	5	19.22	0.581	.25962	18.4992	19.9408	18.60	19.90
	2XOryzanol	5	18.30	0.332	.14832	17.8882	18.7118	18.00	18.80
	5XOryzanol	5	18.40	0.436	.19494	17.8588	18.9412	17.70	18.80
	Total	20	18.76	0.589	.13167	18.4844	19.0356	17.70	19.90
MCHCgdl	VC	5	33.92	0.587	.26265	33.1885	34.6469	33.33	34.77
	1XOryzanol	5	34.13	0.291	.13032	33.7718	34.4955	33.98	34.65
	2XOryzanol	5	34.28	0.773	.34558	33.3178	35.2367	33.33	35.37
	5XOryzanol	5	34.39	0.994	.44463	33.1563	35.6253	33.33	35.50
	Total	20	34.18	0.676	.15119	33.8634	34.4963	33.33	35.50
PLT10E3mm3	VC	5	978.20	244.370	109.286	674.77	1281.63	633	1295
	1XOryzanol	5	1056.20	93.644	41.879	939.93	1172.47	938	1179
	2XOryzanol	5	1011.20	162.400	72.627	809.55	1212.85	780	1171

	5XOryzanol	5	970.40	193.766	86.655	729.81	1210.99	655	1130
	Total	20	1004.00	170.522	38.130	924.19	1083.81	633	1295
Neutrophils	VC	5	19.80	5.805	2.596	12.59	27.01	13	25
	1XOryzanol	5	19.20	6.760	3.023	10.81	27.59	13	30
	2XOryzanol	5	19.80	2.280	1.020	16.97	22.63	16	22
	5XOryzanol	5	20.40	6.731	3.010	12.04	28.76	12	28
	Total	20	19.80	5.248	1.173	17.34	22.26	12	30
Lymphocytes	VC	5	74.60	5.983	2.676	67.17	82.03	69	82
	1XOryzanol	5	75.40	6.580	2.943	67.23	83.57	65	82
	2XOryzanol	5	75.20	2.950	1.319	71.54	78.86	72	80
	5XOryzanol	5	74.80	7.190	3.216	65.87	83.73	68	84
	Total	20	75.00	5.429	1.214	72.46	77.54	65	84
Monocytes	VC	5	3.40	0.894	.400	2.29	4.51	2	4
	1XOryzanol	5	3.60	0.548	.245	2.92	4.28	3	4
	2XOryzanol	5	3.20	0.837	.374	2.16	4.24	2	4
	5XOryzanol	5	2.80	1.304	.583	1.18	4.42	2	5
	Total	20	3.25	0.910	.204	2.82	3.68	2	5
Eosinophils	VC	5	2.20	0.447	.200	1.64	2.76	2	3
	1XOryzanol	5	1.80	0.447	.200	1.24	2.36	1	2
	2XOryzanol	5	1.80	0.447	.200	1.24	2.36	1	2
	5XOryzanol	5	2.00	0.000	0.000	2.00	2.00	2	2
	Total	20	1.95	0.394	.088	1.77	2.13	1	3
Basophils	VC	5	0.00	0.000	0.000	0.00	0.00	0	0
	1XOryzanol	5	0.00	0.000	0.000	0.00	0.00	0	0
	2XOryzanol	5	0.00	0.000	0.000	0.00	0.00	0	0
	5XOryzanol	5	0.00	0.000	0.000	0.00	0.00	0	0
	Total	20	0.00	0.000	0.000	0.00	0.00	0	0
a. Sex = FEMALE									

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
WBC10E3mm3	.788	3	16	.518
RBC10E6mm3	1.639	3	16	.220
HGBgdl	.271	3	16	.845
HCT	.559	3	16	.650
MCV	.383	3	16	.766
MCHpg	.848	3	16	.488
MCHCgdl	3.836	3	16	.030
PLT10E3mm3	.937	3	16	.446
Neutrophils	2.164	3	16	.132
Lymphocytes	2.200	3	16	.128
Monocytes	.889	3	16	.468
Eosinophils	2.370	3	16	.109
Basophils		3		
a. Sex = FEMALE				

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
WBC10E3mm3	Between Groups	21.903	3	7.301	3.071	.058
	Within Groups	38.032	16	2.377		
	Total	59.935	19			
RBC10E6mm3	Between Groups	.426	3	.142	1.277	.316
	Within Groups	1.778	16	.111		
	Total	2.203	19			
HGBgdl	Between Groups	1.230	3	.410	1.281	.315
	Within Groups	5.120	16	.320		
	Total	6.349	19			
HCT	Between Groups	15.192	3	5.064	1.563	.237
	Within Groups	51.836	16	3.240		
	Total	67.028	19			
MCV	Between Groups	42.656	3	14.219	4.226	.022
	Within Groups	53.834	16	3.365		
	Total	96.490	19			
MCHpg	Between Groups	3.412	3	1.137	5.730	.007
	Within Groups	3.176	16	.199		
	Total	6.588	19			
MCHCgdl	Between Groups	.624	3	.208	.413	.746
	Within Groups	8.062	16	.504		
	Total	8.686	19			
PLT10E3mm3	Between Groups	22856.400	3	7618.800	.230	.874
	Within Groups	529619.600	16	33101.225		
	Total	552476.000	19			
Neutrophils	Between Groups	3.600	3	1.200	.037	.990
	Within Groups	519.600	16	32.475		
	Total	523.200	19			
Lymphocytes	Between Groups	2.000	3	.667	.019	.996
	Within Groups	558.000	16	34.875		
	Total	560.000	19			
Monocytes	Between Groups	1.750	3	.583	.667	.585
	Within Groups	14.000	16	.875		
	Total	15.750	19			
Eosinophils	Between Groups	.550	3	.183	1.222	.334
	Within Groups	2.400	16	.150		
	Total	2.950	19			
Basophils	Between Groups	0.000	3	0.000		
	Within Groups	0.000	16	0.000		
	Total	0.000	19			
a. Sex = FEMALE						

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
WBC10E3mm3	VC	1XOryzanol	-2.61800 [*]	.97509	.016	-4.6851	-.5509
		2XOryzanol	-1.89800	.97509	.069	-3.9651	.1691
		5XOryzanol	-.52400	.97509	.598	-2.5911	1.5431
	1XOryzanol	VC	2.61800 [*]	.97509	.016	.5509	4.6851
		2XOryzanol	.72000	.97509	.471	-1.3471	2.7871
		5XOryzanol	2.09400 [*]	.97509	.047	.0269	4.1611
	2XOryzanol	VC	1.89800	.97509	.069	-.1691	3.9651
		1XOryzanol	-.72000	.97509	.471	-2.7871	1.3471
		5XOryzanol	1.37400	.97509	.178	-.6931	3.4411
	5XOryzanol	VC	.52400	.97509	.598	-1.5431	2.5911
		1XOryzanol	-2.09400 [*]	.97509	.047	-4.1611	-.0269
		2XOryzanol	-1.37400	.97509	.178	-3.4411	.6931
RBC10E6mm3	VC	1XOryzanol	-.12200	.21082	.571	-.5689	.3249
		2XOryzanol	-.40200	.21082	.075	-.8489	.0449
		5XOryzanol	-.16000	.21082	.459	-.6069	.2869
	1XOryzanol	VC	.12200	.21082	.571	-.3249	.5689
		2XOryzanol	-.28000	.21082	.203	-.7269	.1669
		5XOryzanol	-.03800	.21082	.859	-.4849	.4089
	2XOryzanol	VC	.40200	.21082	.075	-.0449	.8489
		1XOryzanol	.28000	.21082	.203	-.1669	.7269
		5XOryzanol	.24200	.21082	.268	-.2049	.6889
	5XOryzanol	VC	.16000	.21082	.459	-.2869	.6069
		1XOryzanol	.03800	.21082	.859	-.4089	.4849
		2XOryzanol	-.24200	.21082	.268	-.6889	.2049
HGBgdl	VC	1XOryzanol	-.36000	.35777	.329	-1.1184	.3984
		2XOryzanol	-.04000	.35777	.912	-.7984	.7184
		5XOryzanol	.34000	.35777	.356	-.4184	1.0984
	1XOryzanol	VC	.36000	.35777	.329	-.3984	1.1184
		2XOryzanol	.32000	.35777	.384	-.4384	1.0784
		5XOryzanol	.70000	.35777	.068	-.0584	1.4584
	2XOryzanol	VC	.04000	.35777	.912	-.7184	.7984
		1XOryzanol	-.32000	.35777	.384	-1.0784	.4384
		5XOryzanol	.38000	.35777	.304	-.3784	1.1384
	5XOryzanol	VC	-.34000	.35777	.356	-1.0984	.4184
		1XOryzanol	-.70000	.35777	.068	-1.4584	.0584
		2XOryzanol	-.38000	.35777	.304	-1.1384	.3784
HCT	VC	1XOryzanol	-.72000	1.13838	.536	-3.1332	1.6932
		2XOryzanol	.40000	1.13838	.730	-2.0132	2.8132

		5XOryzanol	1.68000	1.13838	.159	-.7332	4.0932
		1XOryzanol VC	.72000	1.13838	.536	-1.6932	3.1332
		2XOryzanol	1.12000	1.13838	.340	-1.2932	3.5332
		5XOryzanol	2.40000	1.13838	.051	-.0132	4.8132
		2XOryzanol VC	-.40000	1.13838	.730	-2.8132	2.0132
		1XOryzanol	-1.12000	1.13838	.340	-3.5332	1.2932
		5XOryzanol	1.28000	1.13838	.277	-1.1332	3.6932
		5XOryzanol VC	-1.68000	1.13838	.159	-4.0932	.7332
		1XOryzanol	-2.40000	1.13838	.051	-4.8132	.0132
		2XOryzanol	-1.28000	1.13838	.277	-3.6932	1.1332
MCV	VC	1XOryzanol	-.02824	1.16011	.981	-2.4876	2.4311
		2XOryzanol	2.93937*	1.16011	.022	.4801	5.3987
		5XOryzanol	2.87310*	1.16011	.025	.4138	5.3324
	1XOryzanol VC	VC	.02824	1.16011	.981	-2.4311	2.4876
		2XOryzanol	2.96762*	1.16011	.021	.5083	5.4269
		5XOryzanol	2.90135*	1.16011	.024	.4420	5.3607
	2XOryzanol VC	VC	-2.93937*	1.16011	.022	-5.3987	-.4801
		1XOryzanol	-2.96762*	1.16011	.021	-5.4269	-.5083
		5XOryzanol	-.06627	1.16011	.955	-2.5256	2.3930
	5XOryzanol VC	VC	-2.87310*	1.16011	.025	-5.3324	-.4138
		1XOryzanol	-2.90135*	1.16011	.024	-5.3607	-.4420
MCHpg	VC	2XOryzanol	.06627	1.16011	.955	-2.3930	2.5256
		1XOryzanol	-.10000	.28178	.727	-.6973	.4973
		2XOryzanol	.82000*	.28178	.010	.2227	1.4173
	1XOryzanol VC	5XOryzanol	.72000*	.28178	.021	.1227	1.3173
		VC	.10000	.28178	.727	-.4973	.6973
		2XOryzanol	.92000*	.28178	.005	.3227	1.5173
	2XOryzanol VC	5XOryzanol	.82000*	.28178	.010	.2227	1.4173
		VC	-.82000*	.28178	.010	-1.4173	-.2227
		1XOryzanol	-.92000*	.28178	.005	-1.5173	-.3227
	5XOryzanol VC	5XOryzanol	-.10000	.28178	.727	-.6973	.4973
		VC	-.72000*	.28178	.021	-1.3173	-.1227
MCHCgdl	VC	1XOryzanol	-.82000*	.28178	.010	-1.4173	-.2227
		2XOryzanol	.10000	.28178	.727	-.4973	.6973
		1XOryzanol	-.21599	.44894	.637	-1.1677	.7357
	1XOryzanol VC	2XOryzanol	-.35957	.44894	.435	-1.3113	.5921
		5XOryzanol	-.47310	.44894	.308	-1.4248	.4786
		VC	.21599	.44894	.637	-.7357	1.1677
	2XOryzanol VC	2XOryzanol	-.14357	.44894	.753	-1.0953	.8081
		5XOryzanol	-.25710	.44894	.575	-1.2088	.6946
		VC	.35957	.44894	.435	-.5921	1.3113
	5XOryzanol VC	1XOryzanol	.14357	.44894	.753	-.8081	1.0953
		5XOryzanol	-.11353	.44894	.804	-1.0652	.8382
		VC	.47310	.44894	.308	-.4786	1.4248

		1XOryzanol	.25710	.44894	.575	-.6946	1.2088
		2XOryzanol	.11353	.44894	.804	-.8382	1.0652
PLT10E3mm3	VC	1XOryzanol	-78.000	115.067	.508	-321.93	165.93
		2XOryzanol	-33.000	115.067	.778	-276.93	210.93
		5XOryzanol	7.800	115.067	.947	-236.13	251.73
	1XOryzanol	VC	78.000	115.067	.508	-165.93	321.93
		2XOryzanol	45.000	115.067	.701	-198.93	288.93
		5XOryzanol	85.800	115.067	.467	-158.13	329.73
	2XOryzanol	VC	33.000	115.067	.778	-210.93	276.93
		1XOryzanol	-45.000	115.067	.701	-288.93	198.93
		5XOryzanol	40.800	115.067	.728	-203.13	284.73
	5XOryzanol	VC	-7.800	115.067	.947	-251.73	236.13
		1XOryzanol	-85.800	115.067	.467	-329.73	158.13
		2XOryzanol	-40.800	115.067	.728	-284.73	203.13
Neutrophils	VC	1XOryzanol	.600	3.604	.870	-7.04	8.24
		2XOryzanol	0.000	3.604	1.000	-7.64	7.64
		5XOryzanol	-.600	3.604	.870	-8.24	7.04
	1XOryzanol	VC	-.600	3.604	.870	-8.24	7.04
		2XOryzanol	-.600	3.604	.870	-8.24	7.04
		5XOryzanol	-1.200	3.604	.743	-8.84	6.44
	2XOryzanol	VC	0.000	3.604	1.000	-7.64	7.64
		1XOryzanol	.600	3.604	.870	-7.04	8.24
		5XOryzanol	-.600	3.604	.870	-8.24	7.04
	5XOryzanol	VC	.600	3.604	.870	-7.04	8.24
		1XOryzanol	1.200	3.604	.743	-6.44	8.84
		2XOryzanol	.600	3.604	.870	-7.04	8.24
Lymphocytes	VC	1XOryzanol	-.800	3.735	.833	-8.72	7.12
		2XOryzanol	-.600	3.735	.874	-8.52	7.32
		5XOryzanol	-.200	3.735	.958	-8.12	7.72
	1XOryzanol	VC	.800	3.735	.833	-7.12	8.72
		2XOryzanol	.200	3.735	.958	-7.72	8.12
		5XOryzanol	.600	3.735	.874	-7.32	8.52
	2XOryzanol	VC	.600	3.735	.874	-7.32	8.52
		1XOryzanol	-.200	3.735	.958	-8.12	7.72
		5XOryzanol	.400	3.735	.916	-7.52	8.32
	5XOryzanol	VC	.200	3.735	.958	-7.72	8.12
		1XOryzanol	-.600	3.735	.874	-8.52	7.32
		2XOryzanol	-.400	3.735	.916	-8.32	7.52
Monocytes	VC	1XOryzanol	-.200	.592	.740	-1.45	1.05
		2XOryzanol	.200	.592	.740	-1.05	1.45
		5XOryzanol	.600	.592	.326	-.65	1.85
	1XOryzanol	VC	.200	.592	.740	-1.05	1.45
		2XOryzanol	.400	.592	.509	-.85	1.65
		5XOryzanol	.800	.592	.195	-.45	2.05

	2XOryzanol	VC	-.200	.592	.740	-1.45	1.05
		1XOryzanol	-.400	.592	.509	-1.65	.85
		5XOryzanol	.400	.592	.509	-.85	1.65
	5XOryzanol	VC	-.600	.592	.326	-1.85	.65
		1XOryzanol	-.800	.592	.195	-2.05	.45
		2XOryzanol	-.400	.592	.509	-1.65	.85
Eosinophils	VC	1XOryzanol	.400	.245	.122	-.12	.92
		2XOryzanol	.400	.245	.122	-.12	.92
		5XOryzanol	.200	.245	.426	-.32	.72
	1XOryzanol	VC	-.400	.245	.122	-.92	.12
		2XOryzanol	0.000	.245	1.000	-.52	.52
		5XOryzanol	-.200	.245	.426	-.72	.32
	2XOryzanol	VC	-.400	.245	.122	-.92	.12
		1XOryzanol	0.000	.245	1.000	-.52	.52
		5XOryzanol	-.200	.245	.426	-.72	.32
	5XOryzanol	VC	-.200	.245	.426	-.72	.32
		1XOryzanol	.200	.245	.426	-.32	.72
		2XOryzanol	.200	.245	.426	-.32	.72

*. The mean difference is significant at the 0.05 level.
a. Sex = FEMALE

Sex = FEMALE
Kruskal-Wallis Test

Ranks ^a			
Testgroup		N	Mean Rank
MCHCgdl	VC	5	9.50
	1XOryzanol	5	10.80
	2XOryzanol	5	11.30
	5XOryzanol	5	10.40
	Total	20	

a. Sex = FEMALE

Test Statistics ^{a,b,c}	
	MCHCgdl
Chi-Square	.250
df	3
Asymp. Sig.	.969

a. Sex = FEMALE
b. Kruskal Wallis Test
c. Grouping Variable:
Testgroup

Sex = FEMALE
Mann-Whitney Test

Ranks ^a			
Testgroup	N	Mean Rank	Sum of Ranks

MCHCgdl	VC	5	5.30	26.50
	1XOryzanol	5	5.70	28.50
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	MCHCgdl
Mann-Whitney U	11.500
Wilcoxon W	26.500
Z	-.210
Asymp. Sig. (2-tailed)	.834
Exact Sig. [2*(1-tailed Sig.)]	.841 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
MCHCgdl	VC	5	5.10	25.50
	2XOryzanol	5	5.90	29.50
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	MCHCgdl
Mann-Whitney U	10.500
Wilcoxon W	25.500
Z	-.419
Asymp. Sig. (2-tailed)	.675
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
MCHCgdl	VC	5	5.10	25.50
	5XOryzanol	5	5.90	29.50
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	MCHCgdl
Mann-Whitney U	10.500
Wilcoxon W	25.500
Z	-.419
Asymp. Sig. (2-tailed)	.675
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
MCHCgdl	1XOryzanol	5	5.10	25.50
	2XOryzanol	5	5.90	29.50
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	MCHCgdl
Mann-Whitney U	10.500
Wilcoxon W	25.500
Z	-.419
Asymp. Sig. (2-tailed)	.675
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
MCHCgdl	1XOryzanol	5	6.00	30.00
	5XOryzanol	5	5.00	25.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	MCHCgdl
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.522
Asymp. Sig. (2-tailed)	.602
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Testgroup		N	Mean Rank	Sum of Ranks
MCHCgdl	2XOryzanol	5	5.50	27.50
	5XOryzanol	5	5.50	27.50
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	MCHCgdl
Mann-Whitney U	12.500
Wilcoxon W	27.500
Z	0.000
Asymp. Sig. (2-tailed)	1.000
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Sex = FEMALE	
b. Grouping Variable: Testgroup	
c. Not corrected for ties.	

Immunology**Sexpooled**

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
IgA (ng/ml)	VC	10	93.30	59.381	18.778	50.826	135.783	35.625	208.125
	1XOryzanol	10	74.44	41.352	13.077	44.856	104.019	41.016	175.781
	2XOryzanol	10	62.04	32.389	10.242	38.870	85.209	24.844	138.047
	5XOryzanol	10	64.73	20.986	6.636	49.722	79.747	35.625	105.703
	Total	40	73.63	41.306	6.531	60.419	86.839	24.844	208.125
IgM (ng/ml)	VC	10	118.64	17.085	5.403	106.419	130.862	94.922	154.219
	1XOryzanol	10	108.40	18.717	5.919	95.009	121.788	78.750	138.047
	2XOryzanol	10	102.47	12.757	4.034	93.343	111.594	89.531	121.875
	5XOryzanol	10	86.30	18.535	5.861	73.038	99.556	62.578	111.094
	Total	40	103.95	20.147	3.186	97.508	110.395	62.578	154.219
IgE (ng/ml)	VC	10	0.09	0.000	0.000	0.087	0.087	0.087	0.087
	1XOryzanol	10	0.09	0.000	0.000	0.087	0.087	0.087	0.087
	2XOryzanol	10	0.09	0.000	0.000	0.087	0.087	0.087	0.087
	5XOryzanol	10	0.09	0.000	0.000	0.087	0.087	0.087	0.087
	Total	40	0.09	0.000	0.000	0.087	0.087	0.087	0.087

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
IgA (ng/ml)	3.504	3	36	.025
IgM (ng/ml)	.746	3	36	.532
IgE (ng/ml)		3		

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
IgA (ng/ml)	Between Groups	6012.271	3	2004.090	1.192	.327
	Within Groups	60529.573	36	1681.377		
	Total	66541.844	39			
IgM (ng/ml)	Between Groups	5494.302	3	1831.434	6.379	.001
	Within Groups	10336.232	36	287.118		
	Total	15830.534	39			
IgE (ng/ml)	Between Groups	0.000	3	0.000		
	Within Groups	0.000	36	0.000		
	Total	0.000	39			

Post Hoc Tests

Multiple Comparisons							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
IgA (ng/ml)	VC	1XOryzanol	18.8671900	18.3378136	.310	-18.323620	56.058000
		2XOryzanol	31.2656100	18.3378136	.097	-5.925200	68.456420
		5XOryzanol	28.5703200	18.3378136	.128	-8.620490	65.761130
		VC	-18.8671900	18.3378136	.310	-56.058000	18.323620
		2XOryzanol	12.3984200	18.3378136	.503	-24.792390	49.589230
		5XOryzanol	9.7031300	18.3378136	.600	-27.487680	46.893940
	1XOryzanol	VC	-31.2656100	18.3378136	.097	-68.456420	5.925200
		1XOryzanol	-12.3984200	18.3378136	.503	-49.589230	24.792390
		5XOryzanol	-2.6952900	18.3378136	.884	-39.886100	34.495520
	2XOryzanol	VC	-28.5703200	18.3378136	.128	-65.761130	8.620490
		1XOryzanol	-9.7031300	18.3378136	.600	-46.893940	27.487680
		2XOryzanol	2.6952900	18.3378136	.884	-34.495520	39.886100
	5XOryzanol	VC	-28.5703200	18.3378136	.128	-65.761130	8.620490
IgM (ng/ml)		1XOryzanol	10.2422000	7.5778303	.185	-5.126352	25.610752
		2XOryzanol	16.1718700*	7.5778303	.040	.803318	31.540422
		5XOryzanol	32.3437600*	7.5778303	.000	16.975208	47.712312
	VC	VC	-10.2422000	7.5778303	.185	-25.610752	5.126352
		2XOryzanol	5.9296700	7.5778303	.439	-9.438882	21.298222
		5XOryzanol	22.1015600*	7.5778303	.006	6.733008	37.470112
	1XOryzanol	VC	-16.1718700*	7.5778303	.040	-31.540422	-.803318
		1XOryzanol	-5.9296700	7.5778303	.439	-21.298222	9.438882
		5XOryzanol	16.1718900*	7.5778303	.040	.803338	31.540442
	2XOryzanol	VC	-32.3437600*	7.5778303	.000	-47.712312	-16.975208
		1XOryzanol	-22.1015600*	7.5778303	.006	-37.470112	-6.733008
		2XOryzanol	-16.1718900*	7.5778303	.040	-31.540442	-.803338
	5XOryzanol	VC	-32.3437600*	7.5778303	.000	-47.712312	-16.975208

*. The mean difference is significant at the 0.05 level.

Kruskal-Wallis Test

Ranks			
Testgroup		N	Mean Rank
IgA (ng/ml)	VC	10	24.20
	1XOryzanol	10	20.55
	2XOryzanol	10	16.80
	5XOryzanol	10	20.45
	Total	40	

Test Statistics ^{a,b}	
	IgA (ng/ml)
Chi-Square	2.018
df	3
Asymp. Sig.	.569
a. Kruskal Wallis Test	
b. Grouping Variable: Testgroup	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
IgA (ng/ml)	VC	10	11.60	116.00
	1XOryzanol	10	9.40	94.00
	Total	20		

Test Statistics ^a	
	IgA (ng/ml)
Mann-Whitney U	39.000
Wilcoxon W	94.000
Z	-.835
Asymp. Sig. (2-tailed)	.404
Exact Sig. [2*(1-tailed Sig.)]	.436 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
IgA (ng/ml)	VC	10	12.25	122.50
	2XOryzanol	10	8.75	87.50
	Total	20		

Test Statistics ^a	
	IgA (ng/ml)
Mann-Whitney U	32.500
Wilcoxon W	87.500
Z	-1.327
Asymp. Sig. (2-tailed)	.184
Exact Sig. [2*(1-tailed Sig.)]	.190 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
IgA (ng/ml)	VC	10	11.35	113.50
	5XOryzanol	10	9.65	96.50
	Total	20		

Test Statistics ^a	
	IgA (ng/ml)
Mann-Whitney U	41.500
Wilcoxon W	96.500
Z	-.645
Asymp. Sig. (2-tailed)	.519
Exact Sig. [2*(1-tailed Sig.)]	.529 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
IgA (ng/ml)	1XOryzanol	10	11.60	116.00
	2XOryzanol	10	9.40	94.00
	Total	20		

Test Statistics ^a	
	IgA (ng/ml)
Mann-Whitney U	39.000
Wilcoxon W	94.000
Z	-.840
Asymp. Sig. (2-tailed)	.401
Exact Sig. [2*(1-tailed Sig.)]	.436 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
IgA (ng/ml)	1XOryzanol	10	10.55	105.50
	5XOryzanol	10	10.45	104.50
	Total	20		

Test Statistics ^a	
	IgA (ng/ml)
Mann-Whitney U	49.500
Wilcoxon W	104.500
Z	-.038
Asymp. Sig. (2-tailed)	.970
Exact Sig. [2*(1-tailed Sig.)]	.971 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Mann-Whitney Test

Ranks				
Testgroup		N	Mean Rank	Sum of Ranks
IgA (ng/ml)	2XOryzanol	10	9.65	96.50
	5XOryzanol	10	11.35	113.50
	Total	20		

Test Statistics ^a	
	IgA (ng/ml)
Mann-Whitney U	41.500
Wilcoxon W	96.500
Z	-.645
Asymp. Sig. (2-tailed)	.519
Exact Sig. [2*(1-tailed Sig.)]	.529 ^b
a. Grouping Variable: Testgroup	
b. Not corrected for ties.	

Sex = Male

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
IgA (ng/ml)	VC	5	52.88	13.953	6.240	35.550	70.200	35.625	67.969
	1XOryzanol	5	70.13	28.929	12.937	34.205	106.045	41.016	105.703
	2XOryzanol	5	63.66	43.694	19.541	9.403	117.910	24.844	138.047
	5XOryzanol	5	60.42	19.286	8.625	36.475	84.369	35.625	78.750
	Total	20	61.77	27.166	6.075	49.055	74.484	24.844	138.047
IgM (ng/ml)	VC	5	113.25	14.057	6.286	95.796	130.704	94.922	127.266
	1XOryzanol	5	107.86	23.060	10.313	79.226	136.493	78.750	138.047
	2XOryzanol	5	105.70	13.204	5.905	89.308	122.098	89.531	121.875
	5XOryzanol	5	92.77	17.715	7.923	70.769	114.762	62.578	105.703
	Total	20	104.89	17.774	3.974	96.576	113.213	62.578	138.047
IgE (ng/ml)	VC	5	0.09	0.000	0.000	0.087	0.087	0.087	0.087

	1XOryzanol	5	0.09	0.000	0.000	0.087	0.087	0.087	0.087
	2XOryzanol	5	0.09	0.000	0.000	0.087	0.087	0.087	0.087
	5XOryzanol	5	0.09	0.000	0.000	0.087	0.087	0.087	0.087
	Total	20	0.09	0.000	0.000	0.087	0.087	0.087	0.087
a. Sex = Male									

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
IgA (ng/ml)	1.338	3	16	.297
IgM (ng/ml)	.602	3	16	.623
IgE (ng/ml)		3		
a. Sex = Male				

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
IgA (ng/ml)	Between Groups	771.513	3	257.171	.311	.817
	Within Groups	13250.826	16	828.177		
	Total	14022.338	19			
IgM (ng/ml)	Between Groups	1131.843	3	377.281	1.239	.328
	Within Groups	4870.259	16	304.391		
	Total	6002.102	19			
IgE (ng/ml)	Between Groups	0.000	3	0.000		
	Within Groups	0.000	16	0.000		
	Total	0.000	19			
a. Sex = Male						

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
IgA (ng/ml)	VC	1XOryzanol	-17.2500000	18.2008417	.357	-55.834061	21.334061
		2XOryzanol	-10.7812800	18.2008417	.562	-49.365341	27.802781
		5XOryzanol	-7.5468800	18.2008417	.684	-46.130941	31.037181
		VC	17.2500000	18.2008417	.357	-21.334061	55.834061
		2XOryzanol	6.4687200	18.2008417	.727	-32.115341	45.052781
		5XOryzanol	9.7031200	18.2008417	.601	-28.880941	48.287181
	1XOryzanol	VC	10.7812800	18.2008417	.562	-27.802781	49.365341
		1XOryzanol	-6.4687200	18.2008417	.727	-45.052781	32.115341
		5XOryzanol	3.2344000	18.2008417	.861	-35.349661	41.818461
	2XOryzanol	VC	7.5468800	18.2008417	.684	-31.037181	46.130941
	5XOryzanol						

		1XOryzanol	-9.7031200	18.2008417	.601	-48.287181	28.880941
		2XOryzanol	-3.2344000	18.2008417	.861	-41.818461	35.349661
IgM (ng/ml)	VC	1XOryzanol	5.3906200	11.0343321	.632	-18.001119	28.782359
		2XOryzanol	7.5468600	11.0343321	.504	-15.844879	30.938599
		5XOryzanol	20.4843800	11.0343321	.082	-2.907359	43.876119
	1XOryzanol	VC	-5.3906200	11.0343321	.632	-28.782359	18.001119
		2XOryzanol	2.1562400	11.0343321	.848	-21.235499	25.547979
		5XOryzanol	15.0937600	11.0343321	.190	-8.297979	38.485499
	2XOryzanol	VC	-7.5468600	11.0343321	.504	-30.938599	15.844879
		1XOryzanol	-2.1562400	11.0343321	.848	-25.547979	21.235499
		5XOryzanol	12.9375200	11.0343321	.258	-10.454219	36.329259
	5XOryzanol	VC	-20.4843800	11.0343321	.082	-43.876119	2.907359
		1XOryzanol	-15.0937600	11.0343321	.190	-38.485499	8.297979
		2XOryzanol	-12.9375200	11.0343321	.258	-36.329259	10.454219
a. Sex = Male							

Sex = Female

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
IgA (ng/ml)	VC	5	133.73	60.438	27.028	58.691	208.778	73.36	208.13
	1XOryzanol	5	78.75	54.443	24.347	11.151	146.350	51.80	175.78
	2XOryzanol	5	60.42	21.086	9.430	34.241	86.603	35.63	89.53
	5XOryzanol	5	69.05	23.926	10.700	39.339	98.755	41.02	105.70
	Total	20	85.49	49.680	11.109	62.237	108.739	35.63	208.13
IgM (ng/ml)	VC	5	124.03	19.659	8.792	99.621	148.441	105.70	154.22
	1XOryzanol	5	108.94	15.991	7.151	89.082	128.793	84.14	127.27
	2XOryzanol	5	99.23	12.870	5.756	83.254	115.215	89.53	121.88
	5XOryzanol	5	79.83	18.829	8.420	56.449	103.207	62.58	111.09
	Total	20	103.01	22.703	5.076	92.383	113.633	62.58	154.22
IgE (ng/ml)	VC	5	0.09	0.000	0.000	0.087	0.087	0.09	0.09
	1XOryzanol	5	0.09	0.000	0.000	0.087	0.087	0.09	0.09
	2XOryzanol	5	0.09	0.000	0.000	0.087	0.087	0.09	0.09
	5XOryzanol	5	0.09	0.000	0.000	0.087	0.087	0.09	0.09
	Total	20	0.09	0.000	0.000	0.087	0.087	0.09	0.09
a. Sex = Female									

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
IgA (ng/ml)	2.398	3	16	.106
IgM (ng/ml)	.360	3	16	.782
IgE (ng/ml)		3		
a. Sex = Female				

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
IgA (ng/ml)	Between Groups	16358.676	3	5452.892	2.857	.070
	Within Groups	30535.034	16	1908.440		
	Total	46893.710	19			
IgM (ng/ml)	Between Groups	5143.416	3	1714.472	5.900	.007
	Within Groups	4649.419	16	290.589		
	Total	9792.836	19			
IgE (ng/ml)	Between Groups	0.000	3	0.000		
	Within Groups	0.000	16	0.000		
	Total	0.000	19			

a. Sex = Female

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
IgA (ng/ml)	VC	1XOryzanol	54.9843800	27.629	.064	-3.587	113.556
		2XOryzanol	73.3125000*	27.629	.017	14.741	131.884
		5XOryzanol	64.6875200*	27.629	.032	6.116	123.259
		VC	-54.9843800	27.629	.064	-113.556	3.587
		2XOryzanol	18.3281200	27.629	.517	-40.243	76.900
		5XOryzanol	9.7031400	27.629	.730	-48.868	68.275
	1XOryzanol	VC	-73.3125000*	27.629	.017	-131.884	-14.741
		1XOryzanol	-18.3281200	27.629	.517	-76.900	40.243
		5XOryzanol	-8.6249800	27.629	.759	-67.196	49.946
	2XOryzanol	VC	-64.6875200*	27.629	.032	-123.259	-6.116
		1XOryzanol	-9.7031400	27.629	.730	-68.275	48.868
		2XOryzanol	8.6249800	27.629	.759	-49.946	67.196
IgM (ng/ml)		1XOryzanol	15.0937800	10.781	.181	-7.761	37.949
		2XOryzanol	24.7968800*	10.781	.035	1.942	47.652
		5XOryzanol	44.2031400*	10.781	.001	21.348	67.058
	VC	VC	-15.0937800	10.781	.181	-37.949	7.761
		2XOryzanol	9.7031000	10.781	.381	-13.152	32.558
		5XOryzanol	29.1093600*	10.781	.016	6.254	51.965
	1XOryzanol	VC	-24.7968800*	10.781	.035	-47.652	-1.942
		1XOryzanol	-9.7031000	10.781	.381	-32.558	13.152
		5XOryzanol	19.4062600	10.781	.091	-3.449	42.262
	2XOryzanol	VC	-44.2031400*	10.781	.001	-67.058	-21.348
		1XOryzanol	-29.1093600*	10.781	.016	-51.965	-6.254
		2XOryzanol	-19.4062600	10.781	.091	-42.262	3.449

*. The mean difference is significant at the 0.05 level.

a. Sex = Female

Organ weights**Oneway Sexpooled**

Descriptives									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Brain	VC	10	.66	.103	.03243	.5856	.7323	.50	.82
	1XOryzanol	10	.63	.086	.02712	.5665	.6892	.50	.72
	2XOryzanol	10	.64	.098	.03099	.5666	.7068	.49	.75
	5XOryzanol	10	.65	.098	.03089	.5802	.7200	.53	.78
	Total	40	.64	.093	.01474	.6136	.6732	.49	.82
Heart	VC	10	.38	.035	.01112	.3543	.4046	.31	.44
	1XOryzanol	10	.38	.034	.01086	.3508	.4000	.31	.42
	2XOryzanol	10	.39	.042	.01333	.3647	.4250	.35	.48
	5XOryzanol	10	.39	.033	.01057	.3616	.4094	.33	.43
	Total	40	.38	.036	.00566	.3723	.3952	.31	.48
Lungs	VC	10	.65	.147	.04634	.5452	.7548	.51	.99
	1XOryzanol	10	.65	.196	.06187	.5086	.7885	.42	.92
	2XOryzanol	10	.68	.144	.04564	.5802	.7867	.52	.94
	5XOryzanol	10	.69	.155	.04917	.5829	.8053	.47	.93
	Total	40	.67	.157	.02479	.6189	.7192	.42	.99
Liver	VC	10	2.68	.191	.06035	2.5410	2.8141	2.43	3.01
	1XOryzanol	10	2.63	.216	.06832	2.4787	2.7878	2.24	2.99
	2XOryzanol	10	2.64	.134	.04250	2.5402	2.7325	2.49	2.89
	5XOryzanol	10	2.62	.098	.03085	2.5502	2.6897	2.48	2.81
	Total	40	2.64	.161	.02550	2.5902	2.6933	2.24	3.01
Spleen	VC	10	.22	.023	.00718	.2018	.2343	.18	.25
	1XOryzanol	10	.22	.023	.00734	.2044	.2376	.17	.25
	2XOryzanol	10	.23	.032	.01026	.2085	.2550	.19	.27
	5XOryzanol	10	.22	.036	.01136	.1978	.2492	.17	.27
	Total	40	.22	.028	.00450	.2145	.2327	.17	.27
Kidney	VC	10	.65	.044	.01392	.6195	.6824	.57	.73
	1XOryzanol	10	.63	.038	.01193	.6059	.6599	.58	.69
	2XOryzanol	10	.69	.055	.01723	.6540	.7320	.60	.76
	5XOryzanol	10	.66	.035	.01099	.6302	.6799	.61	.73
	Total	40	.66	.047	.00747	.6429	.6731	.57	.76
Testis	VC	5	1.32	.175	.07832	1.1064	1.5414	1.08	1.54
	1XOryzanol	5	1.44	.066	.02971	1.3605	1.5255	1.34	1.52
	2XOryzanol	5	1.43	.165	.07396	1.2257	1.6364	1.31	1.71
	5XOryzanol	5	1.30	.275	.12277	.9597	1.6414	.83	1.50
	Total	20	1.37	.182	.04074	1.2894	1.4599	.83	1.71

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
Brain	.254	3	36	.858
Heart	.132	3	36	.940
Lungs	.835	3	36	.484
Liver	2.323	3	36	.091
Spleen	2.289	3	36	.095
Kidney	.875	3	36	.463
Testis	1.388	3	16	.283

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Brain	Between Groups	.006	3	.002	.206	.891
	Within Groups	.333	36	.009		
	Total	.339	39			
Heart	Between Groups	.002	3	.001	.537	.660
	Within Groups	.048	36	.001		
	Total	.050	39			
Lungs	Between Groups	.016	3	.005	.206	.892
	Within Groups	.943	36	.026		
	Total	.959	39			
Liver	Between Groups	.019	3	.006	.224	.879
	Within Groups	.996	36	.028		
	Total	1.015	39			
Spleen	Between Groups	.001	3	.000	.409	.747
	Within Groups	.031	36	.001		
	Total	.032	39			
Kidney	Between Groups	.019	3	.006	3.385	.028
	Within Groups	.068	36	.002		
	Total	.087	39			
Testis	Between Groups	.080	3	.027	.770	.528
	Within Groups	.551	16	.034		
	Total	.631	19			

Post Hoc Tests

Multiple Comparisons							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Brain	VC	1XOryzanol	.03110	.04302	.474	-.0562	.1184
		2XOryzanol	.02221	.04302	.609	-.0650	.1095
		5XOryzanol	.00888	.04302	.838	-.0784	.0961

	1XOryzanol	VC	-.03110	.04302	.474	-.1184	.0562
		2XOryzanol	-.00889	.04302	.837	-.0961	.0784
		5XOryzanol	-.02222	.04302	.609	-.1095	.0650
	2XOryzanol	VC	-.02221	.04302	.609	-.1095	.0650
		1XOryzanol	.00889	.04302	.837	-.0784	.0961
		5XOryzanol	-.01333	.04302	.759	-.1006	.0739
	5XOryzanol	VC	-.00888	.04302	.838	-.0961	.0784
		1XOryzanol	.02222	.04302	.609	-.0650	.1095
		2XOryzanol	.01333	.04302	.759	-.0739	.1006
Heart	VC	1XOryzanol	.00407	.01629	.804	-.0290	.0371
		2XOryzanol	-.01536	.01629	.352	-.0484	.0177
		5XOryzanol	-.00602	.01629	.714	-.0391	.0270
	1XOryzanol	VC	-.00407	.01629	.804	-.0371	.0290
		2XOryzanol	-.01943	.01629	.241	-.0525	.0136
		5XOryzanol	-.01010	.01629	.539	-.0431	.0229
	2XOryzanol	VC	.01536	.01629	.352	-.0177	.0484
		1XOryzanol	.01943	.01629	.241	-.0136	.0525
		5XOryzanol	.00933	.01629	.570	-.0237	.0424
	5XOryzanol	VC	.00602	.01629	.714	-.0270	.0391
		1XOryzanol	.01010	.01629	.539	-.0229	.0431
		2XOryzanol	-.00933	.01629	.570	-.0424	.0237
Lungs	VC	1XOryzanol	.00139	.07237	.985	-.1454	.1482
		2XOryzanol	-.03351	.07237	.646	-.1803	.1133
		5XOryzanol	-.04413	.07237	.546	-.1909	.1026
	1XOryzanol	VC	-.00139	.07237	.985	-.1482	.1454
		2XOryzanol	-.03490	.07237	.633	-.1817	.1119
		5XOryzanol	-.04552	.07237	.533	-.1923	.1013
	2XOryzanol	VC	.03351	.07237	.646	-.1133	.1803
		1XOryzanol	.03490	.07237	.633	-.1119	.1817
		5XOryzanol	-.01062	.07237	.884	-.1574	.1362
	5XOryzanol	VC	.04413	.07237	.546	-.1026	.1909
		1XOryzanol	.04552	.07237	.533	-.1013	.1923
		2XOryzanol	.01062	.07237	.884	-.1362	.1574
Liver	VC	1XOryzanol	.04430	.07439	.555	-.1066	.1952
		2XOryzanol	.04120	.07439	.583	-.1097	.1921
		5XOryzanol	.05760	.07439	.444	-.0933	.2085
	1XOryzanol	VC	-.04430	.07439	.555	-.1952	.1066
		2XOryzanol	-.00309	.07439	.967	-.1540	.1478
		5XOryzanol	.01330	.07439	.859	-.1376	.1642
	2XOryzanol	VC	-.04120	.07439	.583	-.1921	.1097
		1XOryzanol	.00309	.07439	.967	-.1478	.1540
		5XOryzanol	.01639	.07439	.827	-.1345	.1673
	5XOryzanol	VC	-.05760	.07439	.444	-.2085	.0933
		1XOryzanol	-.01330	.07439	.859	-.1642	.1376
		2XOryzanol	-.01639	.07439	.827	-.1673	.1345

Spleen	VC	1XOryzanol	-.00301	.01303	.819	-.0294	.0234
		2XOryzanol	-.01374	.01303	.299	-.0402	.0127
		5XOryzanol	-.00544	.01303	.679	-.0319	.0210
	1XOryzanol	VC	.00301	.01303	.819	-.0234	.0294
		2XOryzanol	-.01073	.01303	.416	-.0372	.0157
		5XOryzanol	-.00244	.01303	.853	-.0289	.0240
	2XOryzanol	VC	.01374	.01303	.299	-.0127	.0402
		1XOryzanol	.01073	.01303	.416	-.0157	.0372
		5XOryzanol	.00830	.01303	.528	-.0181	.0347
	5XOryzanol	VC	.00544	.01303	.679	-.0210	.0319
		1XOryzanol	.00244	.01303	.853	-.0240	.0289
		2XOryzanol	-.00830	.01303	.528	-.0347	.0181
Kidney	VC	1XOryzanol	.01804	.01941	.359	-.0213	.0574
		2XOryzanol	-.04206*	.01941	.037	-.0814	-.0027
		5XOryzanol	-.00406	.01941	.836	-.0434	.0353
	1XOryzanol	VC	-.01804	.01941	.359	-.0574	.0213
		2XOryzanol	-.06010*	.01941	.004	-.0995	-.0207
		5XOryzanol	-.02210	.01941	.263	-.0615	.0173
	2XOryzanol	VC	.04206*	.01941	.037	.0027	.0814
		1XOryzanol	.06010*	.01941	.004	.0207	.0995
		5XOryzanol	.03800	.01941	.058	-.0014	.0774
	5XOryzanol	VC	.00406	.01941	.836	-.0353	.0434
		1XOryzanol	.02210	.01941	.263	-.0173	.0615
		2XOryzanol	-.03800	.01941	.058	-.0774	.0014
Testis	VC	1XOryzanol	-.11906	.11739	.326	-.3679	.1298
		2XOryzanol	-.10718	.11739	.375	-.3560	.1417
		5XOryzanol	.02333	.11739	.845	-.2255	.2722
	1XOryzanol	VC	.11906	.11739	.326	-.1298	.3679
		2XOryzanol	.01189	.11739	.921	-.2370	.2607
		5XOryzanol	.14239	.11739	.243	-.1065	.3912
	2XOryzanol	VC	.10718	.11739	.375	-.1417	.3560
		1XOryzanol	-.01189	.11739	.921	-.2607	.2370
		5XOryzanol	.13050	.11739	.283	-.1183	.3794
	5XOryzanol	VC	-.02333	.11739	.845	-.2722	.2255
		1XOryzanol	-.14239	.11739	.243	-.3912	.1065
		2XOryzanol	-.13050	.11739	.283	-.3794	.1183

*. The mean difference is significant at the 0.05 level.

Oneway Sex = MALE

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Brain	VC	5	.57	.039	.0174	.521	.618	.50	.59

	1XOryzanol	5	.57	.084	.0376	.465	.674	.50	.71
	2XOryzanol	5	.59	.079	.0355	.488	.685	.49	.69
	5XOryzanol	5	.57	.048	.0215	.510	.630	.53	.65
	Total	20	.57	.061	.0136	.546	.602	.49	.71
Heart	VC	5	.36	.027	.0120	.324	.390	.31	.38
	1XOryzanol	5	.36	.043	.0193	.308	.415	.31	.42
	2XOryzanol	5	.38	.026	.0116	.347	.412	.35	.40
	5XOryzanol	5	.37	.036	.0161	.322	.411	.33	.41
	Total	20	.37	.032	.0072	.351	.381	.31	.42
Lungs	VC	5	.54	.025	.0114	.507	.570	.51	.58
	1XOryzanol	5	.51	.126	.0562	.355	.667	.42	.73
	2XOryzanol	5	.67	.154	.0689	.475	.858	.52	.92
	5XOryzanol	5	.61	.140	.0628	.432	.780	.47	.81
	Total	20	.58	.128	.0287	.521	.641	.42	.92
Liver	VC	5	2.68	.118	.0529	2.536	2.830	2.59	2.81
	1XOryzanol	5	2.67	.289	.1292	2.310	3.027	2.24	2.99
	2XOryzanol	5	2.61	.108	.0485	2.473	2.742	2.49	2.72
	5XOryzanol	5	2.61	.136	.0607	2.441	2.778	2.48	2.81
	Total	20	2.64	.168	.0375	2.564	2.721	2.24	2.99
Spleen	VC	5	.20	.018	.0082	.181	.227	.18	.22
	1XOryzanol	5	.21	.024	.0105	.181	.240	.17	.24
	2XOryzanol	5	.20	.009	.0042	.192	.215	.19	.22
	5XOryzanol	5	.19	.017	.0077	.172	.214	.17	.21
	Total	20	.20	.018	.0039	.195	.211	.17	.24
Kidney	VC	5	.66	.043	.0194	.603	.711	.62	.73
	1XOryzanol	5	.66	.019	.0086	.640	.687	.64	.69
	2XOryzanol	5	.68	.056	.0252	.610	.750	.60	.76
	5XOryzanol	5	.66	.040	.0179	.610	.709	.62	.73
	Total	20	.67	.040	.0088	.647	.684	.60	.76
Testis	VC	5	1.32	.175	.0783	1.106	1.541	1.08	1.54
	1XOryzanol	5	1.44	.066	.0297	1.360	1.525	1.34	1.52
	2XOryzanol	5	1.43	.165	.0740	1.226	1.636	1.31	1.71
	5XOryzanol	5	1.30	.275	.1228	.960	1.641	.83	1.50
	Total	20	1.37	.182	.0407	1.289	1.460	.83	1.71
a. Sex = MALE									

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
Brain	1.364	3	16	.290
Heart	1.124	3	16	.369
Lungs	1.487	3	16	.256
Liver	1.692	3	16	.209
Spleen	.989	3	16	.423
Kidney	.834	3	16	.495
Testis	1.388	3	16	.283
a. Sex = MALE				

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
Brain	Between Groups	.001	3	.000	.078	.971
	Within Groups	.069	16	.004		
	Total	.070	19			
Heart	Between Groups	.001	3	.000	.424	.738
	Within Groups	.018	16	.001		
	Total	.020	19			
Lungs	Between Groups	.073	3	.024	1.623	.224
	Within Groups	.240	16	.015		
	Total	.312	19			
Liver	Between Groups	.023	3	.008	.242	.866
	Within Groups	.510	16	.032		
	Total	.534	19			
Spleen	Between Groups	.001	3	.000	.818	.503
	Within Groups	.005	16	.000		
	Total	.006	19			
Kidney	Between Groups	.002	3	.001	.310	.818
	Within Groups	.028	16	.002		
	Total	.030	19			
Testis	Between Groups	.080	3	.027	.770	.528
	Within Groups	.551	16	.034		
	Total	.631	19			
a. Sex = MALE						

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Brain	VC	1XOryzanol	-.00001	.04149	1.000	-.0880	.0879
		2XOryzanol	-.01642	.04149	.697	-.1044	.0715
		5XOryzanol	-.00013	.04149	.998	-.0881	.0878
	1XOryzanol	VC	.00001	.04149	1.000	-.0879	.0880
		2XOryzanol	-.01641	.04149	.698	-.1044	.0715
		5XOryzanol	-.00012	.04149	.998	-.0881	.0878
	2XOryzanol	VC	.01642	.04149	.697	-.0715	.1044
		1XOryzanol	.01641	.04149	.698	-.0715	.1044
		5XOryzanol	.01629	.04149	.700	-.0717	.1042
	5XOryzanol	VC	.00013	.04149	.998	-.0878	.0881
		1XOryzanol	.00012	.04149	.998	-.0878	.0881
		2XOryzanol	-.01629	.04149	.700	-.1042	.0717
Heart	VC	1XOryzanol	-.00431	.02133	.842	-.0495	.0409

		2XOryzanol	-0.02264	.02133	.304	-.0679	.0226
		5XOryzanol	-.01001	.02133	.645	-.0552	.0352
	1XOryzanol	VC	.00431	.02133	.842	-.0409	.0495
		2XOryzanol	-.01833	.02133	.403	-.0636	.0269
	5XOryzanol	VC	-.00570	.02133	.793	-.0509	.0395
		2XOryzanol	.02264	.02133	.304	-.0226	.0679
	1XOryzanol	VC	.01833	.02133	.403	-.0269	.0636
		5XOryzanol	.01263	.02133	.562	-.0326	.0579
	5XOryzanol	VC	.01001	.02133	.645	-.0352	.0552
		1XOryzanol	.00570	.02133	.793	-.0395	.0509
	2XOryzanol	VC	-.01263	.02133	.562	-.0579	.0326
		1XOryzanol	.02755	.07739	.727	-.1365	.1916
	Lungs	2XOryzanol	-.12770	.07739	.118	-.2918	.0364
		5XOryzanol	-.06719	.07739	.398	-.2312	.0969
	1XOryzanol	VC	-.02755	.07739	.727	-.1916	.1365
	2XOryzanol	VC	-.15524	.07739	.062	-.3193	.0088
		5XOryzanol	-.09474	.07739	.239	-.2588	.0693
	5XOryzanol	VC	.12770	.07739	.118	-.0364	.2918
		1XOryzanol	.15524	.07739	.062	-.0088	.3193
	1XOryzanol	VC	.06051	.07739	.446	-.1036	.2246
		5XOryzanol	.06719	.07739	.398	-.0969	.2312
	2XOryzanol	VC	.09474	.07739	.239	-.0693	.2588
		5XOryzanol	-.06051	.07739	.446	-.2246	.1036
	Liver	VC	.01483	.11297	.897	-.2246	.2543
		2XOryzanol	.07553	.11297	.513	-.1640	.3150
	5XOryzanol	VC	.07384	.11297	.523	-.1656	.3133
		2XOryzanol	-.01483	.11297	.897	-.2543	.2246
	1XOryzanol	VC	.06069	.11297	.598	-.1788	.3002
		5XOryzanol	.05901	.11297	.609	-.1805	.2985
	2XOryzanol	VC	-.07553	.11297	.513	-.3150	.1640
		1XOryzanol	-.06069	.11297	.598	-.3002	.1788
	5XOryzanol	VC	-.00169	.11297	.988	-.2412	.2378
		2XOryzanol	-.07384	.11297	.523	-.3133	.1656
	1XOryzanol	VC	-.05901	.11297	.609	-.2985	.1805
		5XOryzanol	.00169	.11297	.988	-.2378	.2412
	Spleen	VC	-.00660	.01129	.567	-.0305	.0173
		2XOryzanol	.00064	.01129	.956	-.0233	.0246
	5XOryzanol	VC	.01089	.01129	.349	-.0131	.0348
		2XOryzanol	.00660	.01129	.567	-.0173	.0305
	1XOryzanol	VC	.00724	.01129	.530	-.0167	.0312
		5XOryzanol	.01749	.01129	.141	-.0065	.0414
	2XOryzanol	VC	-.00064	.01129	.956	-.0246	.0233
		1XOryzanol	-.00724	.01129	.530	-.0312	.0167
	5XOryzanol	VC	.01025	.01129	.378	-.0137	.0342

	5XOryzanol	VC	-.01089	.01129	.349	-.0348	.0131
		1XOryzanol	-.01749	.01129	.141	-.0414	.0065
		2XOryzanol	-.01025	.01129	.378	-.0342	.0137
Kidney	VC	1XOryzanol	-.00625	.02648	.816	-.0624	.0499
		2XOryzanol	-.02315	.02648	.395	-.0793	.0330
		5XOryzanol	-.00258	.02648	.924	-.0587	.0535
	1XOryzanol	VC	.00625	.02648	.816	-.0499	.0624
		2XOryzanol	-.01690	.02648	.532	-.0730	.0392
		5XOryzanol	.00367	.02648	.891	-.0525	.0598
	2XOryzanol	VC	.02315	.02648	.395	-.0330	.0793
		1XOryzanol	.01690	.02648	.532	-.0392	.0730
		5XOryzanol	.02057	.02648	.448	-.0356	.0767
	5XOryzanol	VC	.00258	.02648	.924	-.0535	.0587
		1XOryzanol	-.00367	.02648	.891	-.0598	.0525
		2XOryzanol	-.02057	.02648	.448	-.0767	.0356
Testis	VC	1XOryzanol	-.11906	.11739	.326	-.3679	.1298
		2XOryzanol	-.10718	.11739	.375	-.3560	.1417
		5XOryzanol	.02333	.11739	.845	-.2255	.2722
	1XOryzanol	VC	.11906	.11739	.326	-.1298	.3679
		2XOryzanol	.01189	.11739	.921	-.2370	.2607
		5XOryzanol	.14239	.11739	.243	-.1065	.3912
	2XOryzanol	VC	.10718	.11739	.375	-.1417	.3560
		1XOryzanol	-.01189	.11739	.921	-.2607	.2370
		5XOryzanol	.13050	.11739	.283	-.1183	.3794
	5XOryzanol	VC	-.02333	.11739	.845	-.2722	.2255
		1XOryzanol	-.14239	.11739	.243	-.3912	.1065
		2XOryzanol	-.13050	.11739	.283	-.3794	.1183

a. Sex = MALE

Sex = FEMALE

Descriptives ^a									
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Brain	VC	5	.75	.0476	.0213	.689	.807	.69	.82
	1XOryzanol	5	.69	.0321	.0144	.646	.726	.65	.72
	2XOryzanol	5	.69	.0944	.0422	.570	.805	.52	.75
	5XOryzanol	5	.73	.0556	.0249	.661	.799	.63	.78
	Total	20	.71	.0632	.0141	.683	.742	.52	.82
Heart	VC	5	.40	.0280	.0125	.367	.437	.38	.44
	1XOryzanol	5	.39	.0168	.0075	.369	.410	.37	.41
	2XOryzanol	5	.41	.0523	.0234	.345	.475	.35	.48
	5XOryzanol	5	.40	.0187	.0084	.381	.427	.38	.43
	Total	20	.40	.0305	.0068	.387	.416	.35	.48

Lungs	VC	5	.76	.1295	.0579	.600	.922	.67	.99
	1XOryzanol	5	.79	.1524	.0681	.597	.975	.60	.92
	2XOryzanol	5	.70	.1496	.0669	.515	.886	.57	.94
	5XOryzanol	5	.78	.1236	.0553	.629	.936	.64	.93
	Total	20	.76	.1326	.0296	.695	.819	.57	.99
Liver	VC	5	2.67	.2606	.1165	2.348	2.995	2.43	3.01
	1XOryzanol	5	2.60	.1360	.0608	2.429	2.767	2.46	2.79
	2XOryzanol	5	2.66	.1638	.0733	2.462	2.868	2.50	2.89
	5XOryzanol	5	2.63	.0519	.0232	2.566	2.695	2.55	2.70
	Total	20	2.64	.1591	.0356	2.567	2.716	2.43	3.01
Spleen	VC	5	.23	.0184	.0082	.209	.255	.21	.25
	1XOryzanol	5	.23	.0198	.0088	.207	.256	.20	.25
	2XOryzanol	5	.26	.0167	.0075	.239	.281	.24	.27
	5XOryzanol	5	.25	.0180	.0081	.231	.276	.23	.27
	Total	20	.24	.0213	.0048	.234	.254	.20	.27
Kidney	VC	5	.64	.0489	.0219	.584	.705	.57	.69
	1XOryzanol	5	.60	.0224	.0100	.575	.630	.58	.63
	2XOryzanol	5	.71	.0558	.0250	.636	.775	.61	.75
	5XOryzanol	5	.65	.0326	.0146	.610	.691	.61	.69
	Total	20	.65	.0539	.0121	.626	.676	.57	.75
a. Sex = FEMALE									

Test of Homogeneity of Variances ^a				
	Levene Statistic	df1	df2	Sig.
Brain	1.025	3	16	.408
Heart	5.257	3	16	.010
Lungs	.400	3	16	.755
Liver	6.767	3	16	.004
Spleen	.021	3	16	.996
Kidney	.907	3	16	.460
a. Sex = FEMALE				

ANOVA ^a						
		Sum of Squares	df	Mean Square	F	Sig.
Brain	Between Groups	.015	3	.005	1.275	.317
	Within Groups	.061	16	.004		
	Total	.076	19			
Heart	Between Groups	.001	3	.000	.359	.784
	Within Groups	.017	16	.001		
	Total	.018	19			
Lungs	Between Groups	.023	3	.008	.402	.753
	Within Groups	.311	16	.019		
	Total	.334	19			

Liver	Between Groups	.017	3	.006	.200	.895
	Within Groups	.464	16	.029		
	Total	.481	19			
Spleen	Between Groups	.003	3	.001	3.288	.048
	Within Groups	.005	16	.000		
	Total	.009	19			
Kidney	Between Groups	.027	3	.009	5.089	.012
	Within Groups	.028	16	.002		
	Total	.055	19			
a. Sex = FEMALE						

Post Hoc Tests

Multiple Comparisons ^a							
LSD							
Dependent Variable		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
					Lower Bound	Upper Bound	
Brain	VC	1XOryzanol	.06221	.03912	.131	-.0207	.1451
		2XOryzanol	.06084	.03912	.139	-.0221	.1438
		5XOryzanol	.01789	.03912	.653	-.0650	.1008
	1XOryzanol	VC	-.06221	.03912	.131	-.1451	.0207
		2XOryzanol	-.00137	.03912	.973	-.0843	.0816
		5XOryzanol	-.04432	.03912	.274	-.1272	.0386
	2XOryzanol	VC	-.06084	.03912	.139	-.1438	.0221
		1XOryzanol	.00137	.03912	.973	-.0816	.0843
		5XOryzanol	-.04295	.03912	.288	-.1259	.0400
	5XOryzanol	VC	-.01789	.03912	.653	-.1008	.0650
		1XOryzanol	.04432	.03912	.274	-.0386	.1272
		2XOryzanol	.04295	.03912	.288	-.0400	.1259
Heart	VC	1XOryzanol	.01246	.02037	.549	-.0307	.0556
		2XOryzanol	-.00808	.02037	.697	-.0513	.0351
		5XOryzanol	-.00204	.02037	.922	-.0452	.0411
	1XOryzanol	VC	-.01246	.02037	.549	-.0556	.0307
		2XOryzanol	-.02053	.02037	.328	-.0637	.0227
		5XOryzanol	-.01449	.02037	.487	-.0577	.0287
	2XOryzanol	VC	.00808	.02037	.697	-.0351	.0513
		1XOryzanol	.02053	.02037	.328	-.0227	.0637
		5XOryzanol	.00604	.02037	.771	-.0371	.0492
	5XOryzanol	VC	.00204	.02037	.922	-.0411	.0452
		1XOryzanol	.01449	.02037	.487	-.0287	.0577
		2XOryzanol	-.00604	.02037	.771	-.0492	.0371
Lungs	VC	1XOryzanol	-.02476	.08811	.782	-.2115	.1620
		2XOryzanol	.06068	.08811	.501	-.1261	.2475
		5XOryzanol	-.02106	.08811	.814	-.2079	.1657
	1XOryzanol	VC	.02476	.08811	.782	-.1620	.2115

	2XOryzanol	2XOryzanol	.08544	.08811	.347	-.1014	.2722	
		5XOryzanol	.00369	.08811	.967	-.1831	.1905	
		VC	-.06068	.08811	.501	-.2475	.1261	
		1XOryzanol	-.08544	.08811	.347	-.2722	.1014	
		5XOryzanol	-.08175	.08811	.367	-.2685	.1050	
		VC	.02106	.08811	.814	-.1657	.2079	
		1XOryzanol	-.00369	.08811	.967	-.1905	.1831	
		2XOryzanol	.08175	.08811	.367	-.1050	.2685	
		Liver	VC	.07376	.10767	.503	-.1545	.3020
			2XOryzanol	.00688	.10767	.950	-.2214	.2351
5XOryzanol	.04136		.10767	.706	-.1869	.2696		
1XOryzanol	VC		-.07376	.10767	.503	-.3020	.1545	
2XOryzanol	-.06688		.10767	.543	-.2951	.1614		
5XOryzanol	-.03240		.10767	.767	-.2606	.1958		
2XOryzanol	VC		-.00688	.10767	.950	-.2351	.2214	
1XOryzanol	.06688		.10767	.543	-.1614	.2951		
5XOryzanol	.03448		.10767	.753	-.1938	.2627		
5XOryzanol	VC		-.04136	.10767	.706	-.2696	.1869	
Spleen	1XOryzanol	.03240	.10767	.767	-.1958	.2606		
	2XOryzanol	-.03448	.10767	.753	-.2627	.1938		
	VC	1XOryzanol	.00059	.01155	.960	-.0239	.0251	
	2XOryzanol	-.02812*	.01155	.027	-.0526	-.0036		
	5XOryzanol	-.02177	.01155	.078	-.0462	.0027		
	1XOryzanol	VC	-.00059	.01155	.960	-.0251	.0239	
	2XOryzanol	-.02871*	.01155	.024	-.0532	-.0042		
	5XOryzanol	-.02236	.01155	.071	-.0468	.0021		
	2XOryzanol	VC	.02812*	.01155	.027	.0036	.0526	
	1XOryzanol	.02871*	.01155	.024	.0042	.0532		
Kidney	5XOryzanol	.00635	.01155	.590	-.0181	.0308		
	5XOryzanol	VC	.02177	.01155	.078	-.0027	.0462	
	1XOryzanol	.02236	.01155	.071	-.0021	.0468		
	2XOryzanol	-.00635	.01155	.590	-.0308	.0181		
	VC	1XOryzanol	.04233	.02658	.131	-.0140	.0987	
	2XOryzanol	-.06096*	.02658	.036	-.1173	-.0046		
	5XOryzanol	-.00554	.02658	.838	-.0619	.0508		
	1XOryzanol	VC	-.04233	.02658	.131	-.0987	.0140	
	2XOryzanol	-.10330*	.02658	.001	-.1596	-.0469		
	5XOryzanol	-.04787	.02658	.091	-.1042	.0085		
	2XOryzanol	VC	.06096*	.02658	.036	.0046	.1173	
	1XOryzanol	.10330*	.02658	.001	.0469	.1596		
	5XOryzanol	.05543	.02658	.053	-.0009	.1118		
	5XOryzanol	VC	.00554	.02658	.838	-.0508	.0619	
	1XOryzanol	.04787	.02658	.091	-.0085	.1042		
	2XOryzanol	-.05543	.02658	.053	-.1118	.0009		

*. The mean difference is significant at the 0.05 level.

a. Sex = FEMALE

Sex = FEMALE
Kruskal-Wallis Test

Ranks ^a			
Test group		N	Mean Rank
Heart	VC	5	10.40
	1XOryzanol	5	8.40
	2XOryzanol	5	11.40
	5XOryzanol	5	11.80
	Total	20	
a. Sex = FEMALE			

Test Statistics ^{a,b,c}	
	Heart
Chi-Square	.989
df	3
Asymp. Sig.	.804
a. Sex = FEMALE	
b. Kruskal Wallis Test	
c. Grouping Variable: Test group	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Heart	VC	5	6.00	30.00
	1XOryzanol	5	5.00	25.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	Heart
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.522
Asymp. Sig. (2-tailed)	.602
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Heart	VC	5	5.20	26.00
	2XOryzanol	5	5.80	29.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	Heart
Mann-Whitney U	11.000
Wilcoxon W	26.000
Z	-.313
Asymp. Sig. (2-tailed)	.754
Exact Sig. [2*(1-tailed Sig.)]	.841 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Heart	VC	5	5.20	26.00
	5XOryzanol	5	5.80	29.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	Heart
Mann-Whitney U	11.000
Wilcoxon W	26.000
Z	-.313
Asymp. Sig. (2-tailed)	.754
Exact Sig. [2*(1-tailed Sig.)]	.841 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Heart	1XOryzanol	5	4.80
	2XOryzanol	5	6.20
	Total	10	
a. Sex = FEMALE			

Test Statistics ^{a,b}	
	Heart
Mann-Whitney U	9.000
Wilcoxon W	24.000
Z	-.731
Asymp. Sig. (2-tailed)	.465
Exact Sig. [2*(1-tailed Sig.)]	.548 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a			
Test group	N	Mean Rank	Sum of Ranks
Heart	1XOryzanol	5	4.60
	5XOryzanol	5	6.40
	Total	10	
a. Sex = FEMALE			

Test Statistics ^{a,b}	
	Heart
Mann-Whitney U	8.000
Wilcoxon W	23.000
Z	-.940
Asymp. Sig. (2-tailed)	.347
Exact Sig. [2*(1-tailed Sig.)]	.421 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a			
Test group		N	Mean Rank
Heart	2XOryzanol	5	5.40
	5XOryzanol	5	5.60
	Total	10	
Sum of Ranks			
a. Sex = FEMALE			

Test Statistics ^{a,b}	
	Heart
Mann-Whitney U	12.000
Wilcoxon W	27.000
Z	-.104
Asymp. Sig. (2-tailed)	.917
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Sex = FEMALE
Kruskal-Wallis Test

Ranks ^a			
Test group		N	Mean Rank
Liver	VC	5	10.20
	1XOryzanol	5	9.00
	2XOryzanol	5	11.40
	5XOryzanol	5	11.40
	Total	20	
a. Sex = FEMALE			

Test Statistics ^{a,b,c}	
	Liver
Chi-Square	.566
df	3
Asymp. Sig.	.904
a. Sex = FEMALE	
b. Kruskal Wallis Test	
c. Grouping Variable: Test group	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a			
Test group		N	Mean Rank
Liver	VC	5	5.80
Sum of Ranks			
29.00			

	1XOryzanol	5	5.20	26.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	Liver
Mann-Whitney U	11.000
Wilcoxon W	26.000
Z	-.313
Asymp. Sig. (2-tailed)	.754
Exact Sig. [2*(1-tailed Sig.)]	.841 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Liver	VC	5	5.40	27.00
	2XOryzanol	5	5.60	28.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	Liver
Mann-Whitney U	12.000
Wilcoxon W	27.000
Z	-.104
Asymp. Sig. (2-tailed)	.917
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Liver	VC	5	5.00	25.00
	5XOryzanol	5	6.00	30.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	Liver
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.522
Asymp. Sig. (2-tailed)	.602
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Liver	1XOryzanol	5	4.80	24.00
	2XOryzanol	5	6.20	31.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	Liver
Mann-Whitney U	9.000
Wilcoxon W	24.000
Z	-.731
Asymp. Sig. (2-tailed)	.465
Exact Sig. [2*(1-tailed Sig.)]	.548 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Liver	1XOryzanol	5	5.00	25.00
	5XOryzanol	5	6.00	30.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	Liver
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.522
Asymp. Sig. (2-tailed)	.602
Exact Sig. [2*(1-tailed Sig.)]	.690 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

Sex = FEMALE
Mann-Whitney Test

Ranks ^a				
Test group		N	Mean Rank	Sum of Ranks
Liver	2XOryzanol	5	5.60	28.00
	5XOryzanol	5	5.40	27.00
	Total	10		
a. Sex = FEMALE				

Test Statistics ^{a,b}	
	Liver
Mann-Whitney U	12.000
Wilcoxon W	27.000
Z	-.104
Asymp. Sig. (2-tailed)	.917
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^c
a. Sex = FEMALE	
b. Grouping Variable: Test group	
c. Not corrected for ties.	

HISTOPATHOLOGY

BRAIN

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

HEART

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

LUNGS

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Chronic interstitial pneumonitis grade I (CIPn-I)	1	10.0	1	10.0	4	40.0	1	10.0
Chronic interstitial pneumonitis grade II (CIPn-II)	5	50.0	6	60.0	4	40.0	5	50.0
Chronic interstitial pneumonitis grade III (CIPn-III)	3	30.0	3	30.0	1	10.0	4	40.0
CIPn-II with Abscesses	1	10.0						
CIPn-III with granulomatous reaction					1	10.0		

LIVER

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	5	50.0	6	60.0	8	80.0	7	70.0
Focal vacuolation	3	30.0					1	10.0
Paracytic cyst (PC)			1	10.0			1	10.0
Micro Vacuolation in 5-33% Liver	1	10.0	3	30.0	1	10.0	1	10.0
Micro Vacuolation in 33-66% Liver	1	10.0			1	10.0		

SPLEEN

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

KIDNEYS

Test group							
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	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	1	10.0	1	10.0	3	30.0	2	20.0
Focal interstitial nephritis			1	10.0			1	10.0
Tubular Atrophy with chronic inflammation-Mid	4	40.0	6	60.0	3	30.0	1	10.0
Tubular Atrophy with chronic inflammation-Moderate	3	30.0	1	10.0	1	10.0	4	40.0
Tubular Atrophy with chronic inflammation-Severe	2	20.0	1	10.0	3	30.0	2	20.0

UrinaryBladder

		Test group							
		VC		1XOryzanol		2XOryzanol		5XOryzanol	
		N	%	N	%	N	%	N	%
Urinary Bladder	Normal	10	100.0	10	100.0	10	100.0	9	90.0
	Multiple foci of chronic inflammation							1	10.0

Testes epididymis

		Test group							
		VC		1XOryzanol		2XOryzanol		5XOryzanol	
		N	%	N	%	N	%	N	%
Testes & epididymis	Normal	5	100.0	5	100.0	5	100.0	4	80.0
	Atrophic							1	20.0

Prostate & Seminalvesicle

		Test group							
		VC		1XOryzanol		2XOryzanol		5XOryzanol	
		N	%	N	%	N	%	N	%
Prostate & Seminal vesicle	Normal	5	100.0	5	100.0	5	100.0	5	100.0

UTERUS OVARIES

		Test group							
		VC		1XOryzanol		2XOryzanol		5XOryzanol	
		N	%	N	%	N	%	N	%
Uterus & Ovaries	Normal	5	100.0	5	100.0	5	100.0	5	100.0

PANCREAS

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

SPINAL CORD

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

TRACHEA

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal			1	10.0				
Tracheitis	10	100.0	9	90.0	10	100.0	10	100.0

OESOPHAGUS

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Oeso-phagus Normal	10	100.0	10	100.0	10	100.0	10	100.0

THYMUS

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	9	100.0	9	100.0	10	100.0	10	100.0

AORTA

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

ADRENALS

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

STOMACH

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

SMALLL INTESTINE

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Small Intestine Normal	10	100.0	10	100.0	10	100.0	10	100.0

RECTUM

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

Muscle/Skin

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

STERNUM

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

BONEMARROW

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0

ADIPOSE TISSUE

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Adipose tissue Normal	10	100.0	10	100.0	10	100.0	10	100.0

Colon

	Test group							
	VC		1XOryzanol		2XOryzanol		5XOryzanol	
	N	%	N	%	N	%	N	%
Normal	10	100.0	10	100.0	10	100.0	10	100.0