Vidarbha Youth Welfare Society's INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH

Borgaon (Meghe), Wardha (M.S.)

Representative documents for collaborative activities 2018-19

Sr. No.	Name of Institution/Industry	Activity	Page No.
1	Datta Meghe Institute of Medical Sciences, Sawangi, Wardha.	X-ray imaging for gastro retention studies, Externship	01-06
2	Genetek Life SceincesPvt. Ltd, Wardha	Students Industrial visits and internship	07
3	Allwin MedicotPvt. Ltd., Wardha	Internship	08
4	Siddhayu Ayurvedic Research Foundation Pvt. Ltd. Nagpur	Acute toxicity study	09-43

Table of content



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(Dr. R. O. Ganjiwale) Principal PRINCIPAD Institute of Pharmscortical Education & Resource Borgnon (Meghe), Wardha To,

The Hon'ble Vice- Chancellor, DMIMS, Deemed to be university, Sawangi (Meghe), Wardha.

Sir,

Mrs. J. S. Wankhede is registered in this institute for Ph. D course in Pharmaceutical sciences from the academic session 2014-2015. The said course is affiliated to R. T. M. Nagpur University, Nagpur.

She is working on "formulation and evaluation of semi-interpenetrating polymer network microspheres for peptic ulcer". For her studies she has to carry out X-ray imaging studies in rats under the guidance of Dr. Manish Deshmukh , Deputy Director, Interdisciplinary research, JNMC, Sawangi (Meghe) Wardha.

I will be very much obliged to you if you permit Mrs. J. S. Wankhede to carry out her study in your esteemed institute. Your help will be acknowledged during

Thanking you

Yours, faithfully

porte

(Dr. R. O. Ganjiwale) I/c Principal I/c. PRINCIPAR Institute of Pharmaceutical Education & Ressarch



(Dr. R. O. Ganjiwale) Principal Ref. No. GEN/153/155

Date : 10.05.2019

The Registrar, JNMC, DMIMS, Sawangi (meghe), Wardha.

Sir,

To.

Mrs. J. S. Wankhede is registered in this institute for Ph. D course in Pharmaceutical sciences from the academic session 2014-2015. The said course is affiliated to R. T. M. Nagpur University, Nagpur.

She is working on "Formulation and evaluation of semi-interpenetrating polymer network microspheres for peptic ulcer". For her studies she has to carry out X-Ray imaging studies in rats under the guidance of Dr. Manish Deshmukh, Deputy director ,interdisciplinary research , JNMC , Sawangi (Meghe) Wardha.

I will be very much obliged to you if you permit Mrs. J. S. Wankhede to carry out her study in your esteemed institute. Your help will be acknowledged during publication.

Thanking you

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Yours faithfully

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(Dr. R. O. Ganjiwale) I/c Principal/CIPAL Institute of Phermaceutical Education & Research Borgaon (Meghe), Wardha



(Dr. R. O. Ganjiwale) Principal

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Datta Meghe Institute of Medical Sciences (Deemed to be University) Conferred 'A' Grade status by H.R.D. Ministry Govt. of India Re-accredited by NAAC (3rd Cycle) with 'A+' Grade

Mahatma Gandhi Ayurved Medical College, Hospital & Research Centre,

Salod (Hirapur) - 442007 Wardha (M.S.)

College : 07152-304532,304545, (Deam Chamber.) - 07152-304567, Hospital : 07152-304560 Email : mgayurvedcollege@gmail.com, College Website : www.mgachrc.org, University Website : www.dmimsu.edu.in

MGACHRC/2018-19/1640

Date:05/09/2018

To, The Principal, Institute of Pharmaceutical Education and Research (IPER), Borgaon (Meghe),Wardha.

Through: The Dean, MGACH&RC, Salod (Hi), Wardha

Subject: Regarding Externship of fellowship scholars

Respected sir,

Under the fellowship of Ethnopharmacology, this year two fellows are registered. As per our university policy, fellowship scholars are required to do one month externship in analytical research laboratory at renowned institute. Hence we wish to give externship to fellowship scholars at your institute for a period of one month during January 2019.

Name of fellowship scholars are as follows:

1.Dr.Bharat Rathi , Professor, Dept., of Rasashastra

2.Dr.Premkumar Badwaik, Associate Prof , Dept of Swasthavritta

Period of externship: 01/01/2019 to 31/01/2019

Kindly accept our request and permit our fellowship scholars for one month externship.

Thanking you.

M.G.A.C.H.& R.Centre SALOD (H), WARDHA



Sincerely yours

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(Dr. R. O. Ganjiwale) Principal , PRINCIPAD stitute of Pharmacerical Education & Sensered Borguou (Megho), Wardha

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igade



Estd: 1991



INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH

Ph. 07152 -240284 Fax 07152-241684

Dr. Nitin R. Dhande President

Received 03/03/2021 B.S Adv. Uday S. Deshmukh Vice President Prof. (Dr.) Hemant M. Deshmukh Shri. Yuvrajsingh V. Choudhary Treasurer Secretary

Borgaon (Meghe), Wardha, Maharashtra State, India - 442 001

Dr. R. O. Ganjiwale I/c Principal

E-mail: iper4160@gmail.com Web Side: www.iperwardha.com

Conducting Degree, Post Graduate and Doctorate Programme in Pharmaceutical Sciences

Ref.No. ADM/936/2018-19/001

Date - 08/03/2019

VIDARBHA YOUTH WELFARE SOCIETY'S

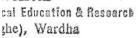
CERTIFICATE

This is to certify that **Dr. Premkumar badwaik**, Professor in Department of Swasthavritta at mahatma Gnadhi Ayurved College, Hospital and Research Center has successfully completed one month externship form **21**st **January 2019 to 20**th **February 2019** in the analytical research Laboratories of this institute.

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(Dr. R. O. Ganjiwale)

Principal NEIPA





(Dr. R. O. Ganjiwale) Principal Principal Bustitef of Pharmaceutical Education & Sensered Borganou (Megho), Wardha

5

Estd : 1991

INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH

Borgaon (Meghe), Wardha, Maharashtra State, India - 442 001

Ph. 07152 -240284 Fax 07152-241684

VIDARBHA YOUTH WELFARE SOCIETY'S

Dr. Nitin R. Dhande President Adv. Uday S. Deshmukh Vice President Prof. (Dr.) Hemant M. Deshmukh Shri. Yuvrajsingh V. Choudhary Treasurer Secretary

Dr. R. O. Ganjiwale I/c Principal

E-mail: iper4160@gmail.com Web Side: www.iperwardha.com

Date - 08/03/2019

Conducting Degree, Post Graduate and Doctorate Programme in Pharmaceutical Sciences

Ref.No. ADM/936/2018-19/002

CERTIFICATE

This is to certify that **Dr. Bharat Rathi**, Professor in Department of Rasashastra at mahatma Gnadhi Ayurved College, Hospital and Research Center has successfully completed one month externship form **21**st **January 2019 to 20**th **February 2019** in the analytical research Laboratories of this institute.

2 wate (Dr. R. O. Ganjiwale)

Institute of Pharmaceutical Education & Research Borgaon (...egne), Wardha

untitsfe 13/19

(Dr. R. O. Ganjiwale) Principal , PRINCIPAD satilate of Pharmacortical Education & Resserved Borguou (Megho), Wardha



Genetek Lifesciences Pvt. Ltd.

Admn. Office : 85, KT Nagar, Katol Road, Nagpur-440 013 (M.S.) India Cell No. : +91-9371272375 E-mail : genetekpharma@gmail.com

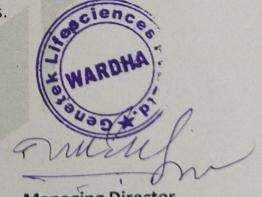
Factory : Plot No. B-18, MIDC, Sevagram Road, Wardha-442 006. (India) Drug Mfg. Lic No. ND/56, ND/57 CIN No. U51101MH2012PTC228652, GST No. 27AAECG6460D1ZQ MSME No. MH34C0010223

CERTIFICATE

Date: 21/01/2019

To whom so ever it may concern

This to certify that sixty five students of B. Pharm final year of the Institute of Pharmaceutical Education and Research Borgaon (Meghe) Wardha visited our industry on **21/01/2019** and got the opportunity to see the large scale production and quality control of parenterals. They learned the critical process controls that are exercised to get the reproducible quality batches.



Managing Director

Genetek Life SceincesPvt. Ltd, Wardha



(Dr. R. O. Ganjiwale) Principal PRINCIPAD Institute of Plasmeentical Education & Resource Bergmou (Maghe), Wardha Regd. No. 11-109052



ALLWIN MEDICOT PVT. LTD

REG. OFFICE : Opp. Income Tax Office. Dr. Ambedkar Marg, Civil Lines, Wardha-4420 (07152) 230215, Fax (07152) 244005, Mobile - 97661441.

Email ID : allwinsurgical 11@smail c.

FACTORY . Survey No. 414/3, At Saled (Hirapur), Dist. Wardha, Maharashtra State, IND

Rei No. 6, L1/2018-19/7-

Date 4th July 20

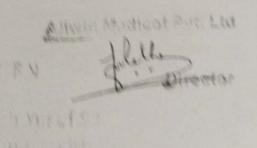
TO WHOM SO EVER IT MAY CONCERN

This is to certify that Mr. Mohammad Akhlakh Yusuf Sheikh R/O, Laxminarayanpur, Wardha done Industrial training with our Organization . His training was starting from 1st may,2019 to 30th june,2019.

We wish him a bright future .



(Dr. R. O. Ganjiwale) Principal PRINCIPAS Institute of Pharmacentical Education & Research Institute of Pharmacentical Education & Research



Siddhayu Ayurvedic Research Foundation Private Limited Office : Baidyanath Bhawan, Great Nag Road, Nagpur - 440 009. Maharashtra (INDIA) Ph. No.: (+91) - 0712 - 6644900 / 901 / 902 Website : www.siddhayu.com CIN No. : U24233MH1983PTC030020

Date: 28.03.2019.

Ref No.: SARF/2018-19/ To, The Principal, Institute of Pharmaceutical Education and Research, Borgaon,Wardha.

Sub: Sample for acute toxicity study.

Dear Sir,

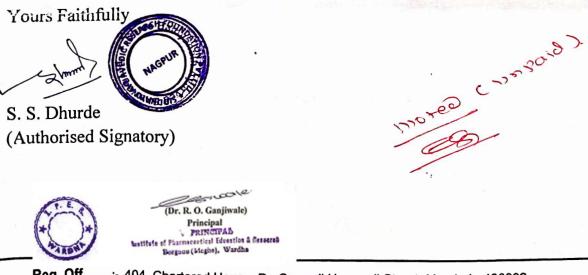
With reference to our discussion, we are sending herewith following samples for acute toxicity.

1) STRESSCLINE COMPLEX (Tablet Coated)

2 Nos

Kindly acknowledge the receipt of the same and start the work.

Thanking you.



Reg. Off. :-Factory At :-Bahadura :-Wadsa :-

:- 404, Chartered House, Dr. Cawasji Harmosji Street, Mumbai - 400002.

:- Post - Kalmana (Acharya), Umrer Road, Bahadura, - Dist. Nagpur - 441 204. Ph. No.: 07103-276115 :- Lakhandur Road, Desaiganj Wadsa, - Dist. Gadchiroli - 441 207 Ph. No.: 07137-272856

ACUTE ORAL TOXICITY TEST IN THE RATS -Fixed Dose Procedure-

Test substance :- STRESCLIN COMPLEX Tablet - Coated Supplied by :- Siddhayu Ayurvedic Research Foundation Pvt. Ltd. Nagpur

TEST REPORT

Project coordinator : Dr. R. O. Ganjiwale

Principal investigator : Mr. A. M. Patole



(Dr. R. O. Ganjiwale) Principal * PRINCIPAD Institute of Pharmacentical Education & Senserab Borgmon (Meghe), Wardha

eutical Education & Research, HA (M.S.) INDIA

Date of completion: 29th April 2019

CONTENTS

I. AIM AND OBJECTIVES	3
II. TEST SUBSTANCE	3
III. TEST ANIMALS	4
IV. TEST PROCEDURE	4
V. OBSERVATIONS	5
VI. RESULTS	6
VII. CONCLUSION	6
VIII. REFERENCES	7

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(Dr. R. O. Ganjiwale) Principal Principal PRINCIPAD Institute of Pharmacertical Education & Ressered Borgnon (Megine), Wardha

ACUTE ORAL TOXICITY TEST IN THE RATS – FIXED DOSE PROCEDURE METHOD-OECD GUIDELINE 420¹

I. AIM & OBJECTIVE OF THE TEST

The aim of the test is to obtain, using a minimum number of animals, sufficient information on the acute toxicity after single administration, by oral route in the rat, of a test substance, for its classification.

The test substance is administered to a group of experimental animals, by oral route at one defined dose (5 mg/kg, 50 mg/kg, 300 mg/kg or 2000 mg/kg) according to the available information on the test substance.

The animals are observed each day for 14 days at least, after administration, to detect the signs of toxicity. Animals which die are necropsied ; the animals which are intercurrently sacrificed as well as the ones which survive until the end of the test are necropsied.

This test using pre-defined doses provides results allowing the test substance to be ranked according to the Globally Harmonised System (GHS) for classification of chemicals which cause acute toxicity (OECD 1998).²

II. TEST SUBSTANCE

The supplier provided for the test pack containing Tablets identified as : STRESCLIN COMPLEX Coated Tablet

(Contraction of the second se

(Dr. R. O. Ganjiwale) Principal PRINCIPAD Institute of Pharmecertical Education & Sessered Borgnon (Megho), Wardha nperature and out of the light.

III. TÉST ANIMALS

Species: Albino rats weighing in range of 180-200 g
Strain: Wister
Age : 8-12 weeks
Number & Sex: 5 nulliparous and non-pregnant females.
Diet: Standard feed prepared in-house.
Water: Plain tap water *ad libitum*.
Housing: The animals were housed in 37cm x 23cm.

Housing: The animals were housed in 37cm x 23cm x 16cm polypropylene cages with maximum 3 animals per cage. The cages were placed in limited-access premises of animal house with controlled temperature and humidity. The artificial lighting ensured a sequence of 12 hours light and 12 hours dark.

IV. TEST PROCEDURE

Preparation of the test substance: The test substance was dissolved in water

Administration of the test substance : The animals fasted overnight prior to the test substance administration. All animals were weighed again on day 1 before administration.

The volume per 100 g of body weight, defined to 2 ml/100g, the volume to administer was calculated for each rat.

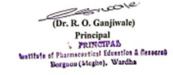
The test substance was administered in a single dose, orally by gavage using a syringe fitted with suitable sized canula. After administration, animals were fasted for 3-4 hours.

Selection of starting dose: As the test substance was an Ayurvedic formulation the starting dose was selected as 2000 mg/kg.

Main study: According to the methodology describe in the Annex 3 of the OECD guideline 420 (joined in Appendix IV of the present report) the test was performed with 5 animals

el of 2000mg/kg of body weight.

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V. OBSERVATIONS

Animals were observed individually after dosing during the first 30 minutes, periodically during the first 24 hours and daily thereafter for a total of 14 days.

The clinical observations were made individually, each animal being examined outside the home cage.

The different parameters observed were – changes in skin & fur, eyes & mucous membranes, respiratory function, tremors, convulsions, salivation, diarrhea, lethargy, sleep & coma.³

Body weight: The animals were regularly weighed on day 1 before administration, then on day 8 and day 15 i.e. 7 and 14 days after administration of the test substance.

Pathology: All the animals surviving at the end of the 14 days of observation were scarified by intraperitoneal injection of 6% sodium pentobarbital solution at the rate of 0.12 ml/100g and bled at the femoral artery. They were necropsied and the main organs were examined macroscopically.

Interpretation of the results: The assessment criteria of the toxicity of the test substance taken into account were:

- Body weight change
- Clinical and behavioral signs
- Necropsy findings
- The mortality expressed in % of compound related deaths.

These results enabled to classify the test substance to one of a series of toxicity classes defined by fixed oral LD50 cut-off values, incompliance with Globally Harmonized System (GHS).²

- Category 1	= 0	< LD50 <	5 mg/kg
- Category 2	= 5 mg/kg	< LD50 <	50 mg/kg
- Category 3	= 50 mg/kg	< LD50 <	300 mg/kg
- Category 4	= 300 mg/kg	s < LD50 ≤	2000 mg/kg
- Category 5	= LD50 >		2000 mg/kg

- Category 5 or non classified



(Dr. R. O. Ganjiwale) Principal PRINCIPAD Institute of Pharmaceutical Education & Research Borgnon (Meghe), Wardha

VI. RESULTS

Body weight: All animals exhibited normal and comparable body weight gain throughout the period of study. The individual weights of the animals assessed during the test are supplied in Appendix 1.

Clinical Observations: All animals were free of intoxication signs throughout the period of study. The results of the clinical observations are summarized in the table enclosed in Appendix II.

Pathology: All main organs subjected to necropsy were found normal in all animals. The result of the necropsy findings are summarized in the table enclosed in Appendix III.

VII. CONCLUSION

According to the Globally Harmonized System (GHS) for the classification of substances which cause acute toxicity, the substance STRESCLIN COMPLEX Tablet – Coated (Batch No. T- 01), supplied by SIDDHAYU Ayurvedic Research Foundation Pvt. Ltd., Nagpur was classified in the hazard category 5 or unclassified with a LD50 higher than 2000 mg/kg in the Rat.

The Study has indicated that STRESCLIN COMPLEX Tablet – Coated (Batch T-01) at dose of 2000mg/kg did not affect general health of Wistar rats. There were no gross abnormalities observed in necropsied rats. Based on this, minimal lethal dose of STRESCLIN COMPLEX Tablet - Coated (Batch No. T-01) was more than 2000 mg/kg.

Project coordinator

10010

Dr. R. O. Ganjiwale Principal I.P.E.R. Wardha Institute of Pharmaceutical Education & Bossarch, Borgaon (Meghe), Wardha,

(Dr. R. O. Ganjiwale) Principal Principal



Ref.No : SARF/2019-20/101

Date: 11.06.2019

To,

The Principal,

Institute of Pharmaceutical Education and Research, Borgaon, Wardha.

Sub: Sample for acute toxicity study.

Dear Sir,

With reference to our discussion, we are sending herewith following samples for acute toxicity.

1.	Sidpiles DS tablet	2 X 60 Tabs
2.	Sidpiles Cream	2 X 100 gm
3.	Nasiyam Nasal drop	2 X 100 ml
4.	Clearactiv syrup	2 X 200 ml

Kindly acknowledge the receipt of the same and start the work.

Thanking you

Yours Faithfully

S.S.Dhurde

(Authorised Signatory)



8,00 (Dr. R. O. Ganjiwale) Principal PRINCIPAD untitute of Pharmacentical Education & Resourch Borgnou (Meghe), Wardha

Reg. Off. Factory At :-Bahadura Wadsa

:- 404, Chartered House, Dr. Cawasji Harmosji Street, Mumbai - 400002.

:- Post - Kalmana (Acharya), Umrer Road, Bahadura, - Dist. Nagpur - 441 204. Ph. No.: 07103-276115 :- Lakhandur Road, Desaiganj Wadsa, - Dist. Gadchiroli - 441 207 Ph. No.: 07137-272856

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ACUTE ORAL TOXICITY TEST IN THE RATS -Fixed Dose Procedure-

Test substance Supplied by

:- SIDPILES DS TABLET

:- Siddhayu Ayurvedic Research Foundation Pvt. Ltd. Nagpur

TEST REPORT

Project coordinator : Dr. R. O. Ganjiwale

Principal investigator : Mr. A. M. Patole

200010 (Dr. R. O. Ganjiwale) Principal PRINCIPAL untitute of Pharmacentical Education & Resourch Borgnou (Meghe), Wardha

Institute of Dharmaccutical Education & Research, IA (M.S.) INDIA

Date of completion: 19th April 2019

Acute toxicity of Sidpiles DS Tablet Study No.: PL - 02 (2019-20) IPER, Wardha

CONTENTS

I. AIM AND OBJECTIVES	3
II. TEST SUBSTANCE	3
III. TEST ANIMALS	4
IV. TEST PROCEDURE	4
V. OBSERVATIONS	5
VI. RESULTS	6
VII. CONCLUSION	6
VIII. REFERENCES	7

ADDENDICES



(Dr. R. O. Ganjiwale) Principal > PrincipAb Austitute of Pharmacentical Education & Second Borgnon (Megine), Wardha

ACUTE ORAL TOXICITY TEST IN THE RATS – FIXED DOSE PROCEDURE METHOD-OECD GUIDELINE 420¹

I. AIM & OBJECTIVE OF THE TEST

The aim of the test is to obtain, using a minimum number of animals, sufficient information on the acute toxicity after single administration, by oral route in the rat, of a test substance, for its classification.

The test substance is administered to a group of experimental animals, by oral route at one defined dose (5 mg/kg, 50 mg/kg, 300 mg/kg or 2000 mg/kg) according to the available information on the test substance.

The animals are observed each day for 14 days at least, after administration, to detect the signs of toxicity. Animals which die are necropsied ; the animals which are intercurrently sacrificed as well as the ones which survive until the end of the test are necropsied.

This test using pre-defined doses provides results allowing the test substance to be ranked according to the Globally Harmonised System (GHS) for classification of chemicals which cause acute toxicity (OECD 1998).²

II. TEST SUBSTANCE

The supplier provided for the test pack containing Tablets identified as : SIDPILES DS TABLET





(Dr. R. O. Ganjiwale) Principal PRINCIPAD Institute of Pharmacertical Idensition & Research Borguou (Megice), Wardha Acute toxicity of Sidpiles DS Tablet Study No.: PL – 02 (2019-20)

IPER, Wardha

III. TEST ANIMALS

Species: Albino rats weighing in range of 190-200 g
Strain: Wister
Age : 8-12 weeks
Number & Sex: 5 nulliparous and non-pregnant females.
Diet: Standard feed prepared in-house.
Water: Plain tap water *ad libitum*.
Housing: The animals were housed in 37cm x 23cm x 16cm polypropylene cages with maximum 3 animals per cage. The cages were placed in limited-access premises of animal house with controlled temperature and humidity. The artificial lighting ensured a sequence of

12 hours light and 12 hours dark.

IV. TEST PROCEDURE

Preparation of the test substance: The test substance was dissolved in water

Administration of the test substance : The animals fasted overnight prior to the test substance administration. All animals were weighed again on day 1 before administration.

The volume per 100 g of body weight, defined to 2 ml/100g, the volume to administer was calculated for each rat.

The test substance was administered in a single dose, orally by gavage using a syringe fitted with suitable sized canula. After administration, animals were fasted for 3-4 hours.

Selection of starting dose: As the test substance was an Ayurvedic formulation the starting dose was selected as 2000 mg/kg.

Main study: According to the methodology describe in the Annex 3 of the OECD guideline 420 (joined in Appendix IV of the present report) the test was performed with 5 animals receiving the test substance at the dose level of 2000 mg/kg of body weight.



(Dr. R. O. Ganjiwale) Principal Principal Institute of Pharencertical Education & Research Borguos (Meghe), Wardha

V. OBSERVATIONS

Animals were observed individually after dosing during the first 30 minutes, periodically during the first 24 hours and daily thereafter for a total of 14 days.

The clinical observations were made individually, each animal being examined outside the home cage.

The different parameters observed were – changes in skin & fur, eyes & mucous membranes, respiratory function, tremors, convulsions, salivation, diarrhea, lethargy, sleep & coma.³

Body weight: The animals were regularly weighed on day 1 before administration, then on day 8 and day 15 i.e. 7 and 14 days after administration of the test substance.

Pathology: All the animals surviving at the end of the 14 days of observation were scarified by intraperitoneal injection of 6% sodium pentobarbital solution at the rate of 0.12 ml/100g and bled at the femoral artery. They were necropsied and the main organs were examined macroscopically.

Interpretation of the results: The assessment criteria of the toxicity of the test substance taken into account were:

- Body weight change
- Clinical and behavioral signs
- Necropsy findings
- The mortality expressed in % of compound related deaths.

These results enabled to classify the test substance to one of a series of toxicity classes defined by fixed oral LD₅₀ cut-off values, incompliance with Globally Harmonized System (GHS).²

- Category 1 = 0 $< LD_{50} < 5 \text{ mg/kg}$
- Category 2 = 5 mg/kg $< LD_{50} < 50$ mg/kg
- Category 3 = $50 \text{ mg/kg} < LD_{50} < 300 \text{ mg/kg}$
- Category 4 = $300 \text{ mg/kg} < \text{LD}_{50} \leq 2000 \text{ mg/kg}$
- Category 5 = LD_{50} > 20

2000 mg/kg

- Category 5 or non classified



en cole Dr. R. O. Ganjiwale) Principal PRINCIPAD untitute of Pharmacentical Education & Resource Borgnou (Meghe), Wardha

21

VI. RESULTS

Body weight: All animals exhibited normal and comparable body weight gain throughout the period of study. The individual weights of the animals assessed during the test are supplied in Appendix I.

Clinical Observations: All animals were free of intoxication signs throughout the period of study. The results of the clinical observations are summarized in the table enclosed in Appendix II.

Pathology: All main organs subjected to necropsy were found normal in all animals. The result of the necropsy findings are summarized in the table enclosed in Appendix III.

VII. CONCLUSION

According to the Globally Harmonized System (GHS) for the classification of substances which cause acute toxicity, the substance Sidpiles DS Tablet (Batch No. TST-19-01), supplied by SIDDHAYU Ayurvedic Research Foundation Pvt. Ltd., Nagpur was classified in the **hazard category 5 or unclassified** with a LD_{50} higher than 2000 mg/kg in the Rat.

The Study has indicated that SIDPILES DS TABLET (Batch No. TST-19-01) at dose of 2000mg/kg did not affect general health of Wistar rats. There were no gross abnormalities observed in necropsied rats. Based on this, minimal lethal dose of SIDPILES DS TABLET (Batch No. TST-19-01) was more than 2000 mg/kg.

essive.

Ranke

Project coordinator

: Dr. R. O. Ganjiwale I/c Principal I.P.E.R. Wardha Tostitute of Pharmaceutical Education & Research, Borgaon (Meghe), Wardha.

(Dr. R. O. Ganjiwale) Principal PRINCIPAD Institute of Plannecestical Education & Sessered Borgnon (Megho), Wardha

Patole Professor ardha

ACUTE TOXICITY STUDY OF SIDPILES CREAM

Supplied by :- Siddhayu Ayurvedic Research Foundation Pvt. Ltd. Nagpur.

TEST REPORT

Project coordinator : Dr. R. O. Ganjiwale

Principal investigator : Mr. A. M. Patole

Institute of Pharmaceutical Education & Research, WARDHA



(Dr. R. O. Ganjiwale) Principal * PRINCIPAD bestitute of Pharmacertical Education & Resource Bergmon (Megho), Wardha

Date of completion: 19th July 2019

Acute toxicity study of Sidpiles Cream

OBJECTIVE: To determine the acute toxicity (if any) of the test sample Sidpiles Cream (Batch No. TSC-19-01) supplied by Siddhayu Ayurvedic Research Foundation Private Limited Nagpur.

PRINCIPLE: The test substance is applied to the skin in graduated doses to several groups of experimental animals, one dose being used per group. Subsequently, observations of effects and deaths are made. Animals which die during the test are necropsed. The surviving animals are sacrificed and necropsied. Animals showing severe and enduring signs of distress and pain may need to be humanely killed. Dosing test substances in a way known to cause marked pain and distress due to corrosive or irritating properties need not be carried out.

TEST PROCEDURE

Preparations

Healthy young adult rats were acclimatized to the laboratory conditions for 5 days prior to the test. Before the test, animals were randomized and assigned to the treatment groups. Approximately 24 hours before the test, fur was removed from the dorsal area of the trunk of the test animals by shaving. Care was taken to avoid abrading the skin, which could alter its permeability.

About 10 per cent of the body surface area was clear for the application of the test substance.

Details of test animals

Species: Albino rats weighing in range of 140-170 g

Strain: Wistar

Sex: Male

Number of animals per dose level: 5

Number of grouns. Five



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Housing and feeding conditions

Animals were caged individually. The temperature of the experimental animal room was $22^{\circ}C$ (± 3°) and the relative humidity 30-70 per cent. Cages maintained at 12 hr of light and dark cycle in the animal house of the Institute.

Diet: Standard feed prepared in-house.

Water: Plain tap water ad libitum.

Allocation of animals to various groups:

Group No.	Dose (mg/kg)	Animal Numbers
I	Control	1 – 5
П	II 5	
III	50	1 – 5
IV	300	1 – 5
v	2000	1 – 5

Table No. 1. GROUPS OF ANIMALS



en cole (Dr. R. O. Ganjiwale) Principal PRINCIPAD untitute of Pharmacertical Education & Resourch Borgnou (Micghe), Wardha

EXPERIMENTAL:

The animals were fasted overnight prior to dosing but water was not withheld. Following the period of fasting, the animals were weighed and the test sample was applied on the fur removed skin.

OBSERVATIONS:

The animals were clinically observed twice on the day of the dosing and once daily thereafter for 14 days.

1. Clinical signs:

All animals were observed daily for clinical signs such as gross changes in the activity and the behavioral pattern. They were also observed for the presence of tremors, convulsions, salivation, diarrhea and lethargy.

2. Body weight:

The mean group body weight of the control and test group animals was recorded on 0^{th} day, 7^{th} day and 14^{th} day.

3. Mortality:

All animals were observed twice daily for mortality during the period of the study.

4. Food consumption:

The quantity of food consumed by control and test groups was recorded on 0^{th} day, 7^{th} day and on 14^{th} day.

5. Pathology:

All the animals surviving at the end of the 14 days of observation were scarified by intraperitoneal injection of 6% sodium pentobarbital solution at the rate of 0.12 ml/100g and bled at the femoral artery. They were necropsied and the main organs were examined macroscopically.



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RESULTS:

Clinical signs:

All the groups were free of intoxication signs throughout the period of study.

Body weight: (Table No. 2)

Animals from control and test groups exhibited normal and comparable body weight gain throughout the period of study.

Group No.	Dose (mg/kg)	Mean body weight <u>+</u> SD (g) 0 th day	Mean body weight <u>+</u> SD (g) 7 th day	Mean body weight <u>+</u> SD (g) 14 th day
I	Control	156 ± 6.16	160 ± 6.00	165.8 ± 5.26
II	5	157.6 ± 3.84	162.4 ± 3.04	166.8 ± 3.56
III	50	152.6 ± 3.97	157.4 ± 3.91	161.6 ± 4.15
IV	300	155 ± 3.16	159.6 ± 3.36	162. 6± 2.07
V	2000	148.8 ± 5.89	153.0 ± 6.32	158.2 ± 5.97

Table No. 2 MEAN BODY WEIGHT

Values expressed as mean \pm standard deviation

Mortality: (Table No. 3)

All animals from control group and test group survived throughout the study for 14 days.

Table No. 3 MORTALITY

Under the condition of the present study, the following mortality rates were recorded

Group No.	Dose (mg/kg) Body weight (g) Mortality
I	Control	0/5
	5	0/5
	50	0/5
1	R. O. Ganjiwale)	0/5
)*)	Principal 00 PRINCIPAD 00 ou (Meghe), Wardha	0/5

Food consumption: (Table No. 4)

During the course and at the termination of the study the quantity of food consumed by animals of test groups was comparable with that by control animals.

Table No. 4 GROUP MEAN FOOD CONSUMPTION (g / animal)

Group No.	Dose (mg/kg)	Day			
		0 th	7 th	14 th	
I	Control	12	14	15	
II	5	13	16	15	
III	50	12	14	17	
IV	300	13	16	15	
V	2000	11	13	14	

Pathology: All main organs subjected to necropsy were found normal in all animals. The result of the necropsy findings are summarized in the table 5.

Table No. 5 PATHOLOGY FINDINGS

	Death		
Group No.	Day	Reason	Comments
Ι	Day 15	Sacrifice	NTR
II	Day 15	Sacrifice	NTR
III	Day 15	Sacrifice	NTR
IV	Day 15	Sacrifice	NTR
V	Day 15	Sacrifice	NTR
	P.O. Continues		



(Dr. R. O. Ganjiwale) Principal '> PRINCIPAD Institute of Pharmeerical Idention & Sesserab Berguou (Ategho), Wardha

DISCUSSION:

- The animals treated at different dose levels with the above test compound Sidpiles Cream (Batch No. TSC-19-01) in all the groups exhibited normal activity and behavioral pattern.
- 2. There were no clinical signs of tremors, convulsions, exophthalmia, salivation, diarrhea and lethargy.
- 3. Animals from control and test groups exhibited normal and comparable body weight gain throughout the period of study.
- 4. Food intake of normal and animals treated at different dose levels was found to be comparable throughout the tenure of the study.
- 5. The pathology finding shows no abnormality in any group of animals.

CONCLUSION:

The above findings revealed that the Sidpiles Cream (Batch No. TSC-19-01) supplied by Siddhayu Ayurvedic Research Foundation Private Limited, Nagpur was found to be safe at doses 5, 50, 300, and 2000 mg/kg when applied locally. None of the animals were found to be moribund condition in all the groups until the 14 days of the study.

The Study has indicated that Sidpiles Cream (Batch No. TSC-19-01) at dose of 2000mg/kg did not affect general health of Wistar rats. There were no gross abnormalities observed in necropsied rats, based on this, minimal lethal dose of Sidpiles Cream (Batch No. TSC-19-01) was more than 2000 mg/kg.

Project coordinator

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Principal investigator : Mr. A. M

Palde

Mr. A. M Assistant I.P.E.R. V (Dr. R. O. Ganjiwale) Principal PRINCIPAD Institute of Pharmscentical Education & Ressered Berganou (Meghe), Wardha

DISCUSSION:

- 1. The animals treated at different dose levels with the above test compound Sidpiles Cream (Batch No. TSC-19-01) in all the groups exhibited normal activity and behavioral pattern.
- 2. There were no clinical signs of tremors, convulsions, exophthalmia, salivation, diarrhea and lethargy.
- 3. Animals from control and test groups exhibited normal and comparable body weight gain throughout the period of study.
- 4. Food intake of normal and animals treated at different dose levels was found to be comparable throughout the tenure of the study.
- 5. The pathology finding shows no abnormality in any group of animals.

CONCLUSION:

The above findings revealed that the Sidpiles Cream (Batch No. TSC-19-01) supplied by Siddhayu Ayurvedic Research Foundation Private Limited, Nagpur was found to be safe at doses 5, 50, 300, and 2000 mg/kg when applied locally. None of the animals were found to be moribund condition in all the groups until the 14 days of the study.

The Study has indicated that Sidpiles Cream (Batch No. TSC-19-01) at dose of 2000mg/kg did not affect general health of Wistar rats. There were no gross abnormalities observed in necropsied rats, based on this, minimal lethal dose of Sidpiles Cream (Batch No. TSC-19-01) was more than 2000 mg/kg.

Project coordinator : Dr. R. O. Ganjiwale

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Dr. R. O. Ganjiwale I/c Principal I.P.E.R. Wardha Borgaon (Meghe), Wardha.

Principal investigator : Mr. A. M.

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Mr. A. M. Assistant P I.P.E.R. W (Dr. R. O. Ganjiwale) Principal , PRINCIPAD attivie of Pharmeentical Education & Research Bergnon (Megho), Wardha

ACUTE TOXICITY STUDY OF NASIYAM NASAL DROP

Supplied by :- Siddhayu Ayurvedic Research Foundation Pvt. Ltd. Nagpur.

TEST REPORT

Project coordinator : Dr. R. O. Ganjiwale

Principal investigator : Mr. A. M. Patole

Institute of Pharmaceutical Education & Research, WARDHA

Date of commencement: 5th July 2019



(Dr. R. O. Ganjiwale) Principal PrincipAL Austitute of Pharmeentical Edensities & Sesserab Borganou (Megho), Wardha

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Acute toxicity study of Nasiyam Nasal Drop

OBJECTIVE: To determine the acute toxicity (if any) of the test sample NASIYAM Nasal Drop (Batch No. TND-19-01) supplied by Siddhayu Ayurvedic Research Foundation Private Limited Nagpur.

PRINCIPLE: The test substance is applied to the skin in graduated doses to several groups of experimental animals, one dose being used per group. Subsequently, observations of effects and deaths are made. Animals which die during the test are necropsed. The surviving animals are sacrificed and necropsied. Animals showing severe and enduring signs of distress and pain may need to be humanely killed. Dosing test substances in a way known to cause marked pain and distress due to corrosive or irritating properties need not be carried out.

TEST PROCEDURE

Preparations

Healthy young adult rats were acclimatized to the laboratory conditions for 5 days prior to the test. Before the test, animals were randomized and assigned to the treatment groups. Approximately 24 hours before the test, fur was removed from the dorsal area of the trunk of the test animals by shaving. Care was taken to avoid abrading the skin, which could alter its permeability.

About 10 per cent of the body surface area was clear for the application of the test substance.

Details of test animals Species: Albino rats weighing in range of 150-170 g Strain: Wistar Sex: Male Number of animals per dose level: 5 Number of groups: Five Selected doses: 5, 50, 300 and 2000 mg/kg Rationale of selection: As per OECD 402 g



(Dr. R. O. Ganjiwale) Principal PRINCIPAD Institute of Pharmecerical Education & Research Borgnou (Meghe), Wardha Acute toxicity of NASIYAM Nasal drop Study No.: 04/2019-20 IPER, Wardha

Housing and feeding conditions

Animals were caged individually. The temperature of the experimental animal room was 22°C (\pm 3°) and the relative humidity 30-70 per cent. Cages maintained at 12 hr of light and dark cycle in the animal house of the Institute.

Diet: Standard feed prepared in-house.

Water: Plain tap water ad libitum.

Allocation of animals to various groups:

Table No. 1. GROUPS OF ANIMALS

Group No.	Dose (mg/kg)	Animal Numbers
I	Control	1 – 5
II	II 5 1-5	
111	50	1 – 5
IV	300	1 – 5
v	2000	1 – 5



20010 (Dr. R. O. Ganjiwale)

Principal PRINCIPAD Institute of Pharmacertical Education & Resource Borgnon (Megine), Wardha

EXPERIMENTAL:

The animals were fasted overnight prior to dosing but water was not withheld. Following the period of fasting, the animals were weighed and the test sample was applied on the fur removed skin.

OBSERVATIONS:

The animals were clinically observed twice on the day of the dosing and once daily thereafter for 14 days.

1. Clinical signs:

All animals were observed daily for clinical signs such as gross changes in the activity and the behavioral pattern. They were also observed for the presence of tremors, convulsions, salivation, diarrhea and lethargy.

2. Body weight:

The mean group body weight of the control and test group animals was recorded on 0^{th} day, 7^{th} day and 14^{th} day.

3. Mortality:

All animals were observed twice daily for mortality during the period of the study.

4. Food consumption:

The quantity of food consumed by control and test groups was recorded on 0^{th} day, 7^{th} day and on 14^{th} day.

5. Pathology:

All the animals surviving at the end of the 14 days of observation were scarified by intraperitoneal injection of 6% sodium pentobarbital solution at the rate of 0.12 ml/100g and bled at the femoral artery. They were necropsied and the main organs were examined macroscopically.



(Dr. R. O. Ganjiwale) Principal PRINCIPAD

RESULTS:

Clinical signs:

All the groups were free of intoxication signs throughout the period of study.

Body weight: (Table No. 2)

Animals from control and test groups exhibited normal and comparable body weight gain throughout the period of study.

Group No.	Dose (mg/kg)	Mean body weight <u>+</u> SD (g) 0 th day	Mean body weight <u>+</u> SD (g) 7 th day	Mean body weight <u>+</u> SD (g) 14 th day
1	Control	154 ± 2.23	158.2 ± 1.92	161.8 ± 1.30
11	5	152.6 ± 2.07	157.8 ± 2.58	163.0 ± 1.73
III	50	166.0 ± 3.08	169.8 ± 3.03	173.4 ± 3.43
IV	300	164.6 ± 5.27	169.2 ± 5.26	172.6± 4.27
V	2000	153.2 ± 2.28	156.6 ± 2.07	160.8 ± 2.16

Table No. 2 MEAN BODY WEIGHT

Values expressed as mean ± standard deviation

Mortality: (Table No. 3)

All animals from control group and test group survived throughout the study for 14 days.

Table No. 3 MORTALITY

Under the condition of the present study, the following mortality rates were recorded

Group No.	Dose (mg/kg) Body weight (g)	Mortality
I	Control	0/5
11	5	0/5
III	50	0/5
IV	30	ensole.
V	200	(Dr. R. O. Ganjiwale) Principal Principal barnicetical Eduction & Resources Borguou (Meghe), Wardha

Food consumption: (Table No. 4)

During the course and at the termination of the study the quantity of food consumed by animals of test groups was comparable with that by control animals.

Group No.	Dose (mg/kg)	Day		
1101	(6,6)	0 th	7 th	14 th
I	Control	13	14	15
II	5	13	15	15
III	50	11	15	16
IV	300	11	15	14
V	2000	13	15	12

Table No. 4 GROUP MEAN FOOD CONSUMPTION (g/animal)

Pathology: All main organs subjected to necropsy were found normal in all animals. The result of the necropsy findings are summarized in the table 5.

Table No. 5 PATHOLOGY FINDINGS

	Death		
Group No.	Day	Reason	Comments
Ι	Day 15	Sacrifice	NTR
II	Day 15	Sacrifice	NTR
III	Day 15	Sacrifice	NTR
IV	Day 15	Sacrifice	NTR
V	Day 15	Sacrifice	NTR

NTR = nothing to report



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DISCUSSION:

- The animals treated at different dose levels with the above test compound NASIYAM Nasal drop (Batch No. TND-19-01) in all the groups exhibited normal activity and behavioral pattern.
- 2. There were no clinical signs of tremors, convulsions, exophthalmia, salivation, diarrhea and lethargy.
- 3. Animals from control and test groups exhibited normal and comparable body weight gain throughout the period of study.
- 4. Food intake of normal and animals treated at different dose levels was found to be comparable throughout the tenure of the study.
- 5. The pathology finding shows no abnormality in any group of animals.

CONCLUSION:

The above findings revealed that the NASIYAM Nasal Drop (Batch No. TND-19-01) supplied by Siddhayu Ayurvedic Research Foundation Private Limited, Nagpur was found to be safe at doses 5, 50, 300, and 2000 mg/kg when applied locally. None of the animals were found to be moribund condition in all the groups until the 14 days of the study.

The Study has indicated that NASIYAM Nasal Drop (Batch No. TND-19-01) at dose of 2000mg/kg did not affect general health of Wistar rats. There were no gross abnormalities observed in necropsied rats. Based on this, minimal lethal dose of NASIYAM Nasal Drop (Batch No. TND-19-01) was more than 2000 mg/kg.

Project coordinator

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: Dr. R. O. Ganjiwale I/c Principal I.P.E.R. Wardha institute of Phatmaceutical Education & Bossared, Borgaon (Meghe), Wardha,

Principal investigator : Mr. A. M. Pat

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Mr. A. M. Pat Assistant Prof I.P.E.R. Ward (Dr. R. O. Ganjiwale) Principal Principal Principal Principal Bergeou (Megio), Wardha

ACUTE ORAL TOXICITY TEST IN THE RATS -Fixed Dose Procedure-

Test substance Supplied by

:- CLEARACTIV Syrup :- Siddhayu Ayurvedic Research Foundation Pvt. Ltd. Nagpur

TEST REPORT

Project coordinator : Dr. R. O. Ganjiwale

Principal investigator : Mr. A. M. Patole

Institute of Pharmaceut WARDHA

Date of commencement: 05th July 2019

(Dr. R. O. Ganjiwale) Principal PRINCIPAD bastitute of Pharmacortical Edvention & Ressered Borgnou (Megine), Wardha IV 2019

CONTENTS

I. AIM AND OBJECTIVES	3
II. TEST SUBSTANCE	3
III. TEST ANIMALS	4
IV. TEST PROCEDURE	4
V. OBSERVATIONS	5
VI. RESULTS	6
VII. CONCLUSION	6
VIII. REFERENCES	7

APPENDICES



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ACUTE ORAL TOXICITY TEST IN THE RATS – FIXED DOSE PROCEDURE METHOD-OECD GUIDELINE 420¹

I. AIM & OBJECTIVE OF THE TEST

The aim of the test is to obtain, using a minimum number of animals, sufficient information on the acute toxicity after single administration, by oral route in the rat, of a test substance, for its classification.

The test substance is administered to a group of experimental animals, by oral route at one defined dose (5 mg/kg, 50 mg/kg, 300 mg/kg or 2000 mg/kg) according to the available information on the test substance.

The animals are observed each day for 14 days at least, after administration, to detect the signs of toxicity. Animals which die are necropsied ; the animals which are intercurrently sacrificed as well as the ones which survive until the end of the test are necropsied.

This test using pre-defined doses provides results allowing the test substance to be ranked according to the Globally Harmonised System (GHS) for classification of chemicals which cause acute toxicity (OECD 1998).²

II. TEST SUBSTANCE

The supplier provided for the test container containing solution identified as : **CLEARACTIV Syrup** (Batch No. TCA-19-01).

The test substance was stored at ambient temperature and out of the light.



Acute toxicity of CLEARACTIV Syrup Study No.: PL – 05 (2019-20) IPER, Wardha

III. TEST ANIMALS

Species: Albino rats weighing in range of 160-190 g
Strain: Wister
Age: 8-12 weeks
Number & Sex: 5 nulliparous and non-pregnant females.
Diet: Standard feed prepared in-house.
Water: Plain tap water *ad libitum*.
Housing: The animals were housed in 37cm x 23cm x 16cm polypropylene cages with maximum 3 animals per cage. The cages were placed in limited-access premises of animal house with controlled temperature and humidity. The artificial lighting ensured a sequence of

house with controlled temperature and humidity. The artificial lighting ensured a sequence of 12 hours light and 12 hours dark.

IV. TEST PROCEDURE

Preparation of the test substance: The test substance was administered without dilution. **Administration of the test substance:** The animals fasted overnight prior to the test substance administration. All animals were weighed again on day 1 before administration. The volume per 100 g of body weight, defined to 2 ml/100g, the volume to administer was calculated for each rat.

The test substance was administered in a single dose, orally by gavage using a syringe fitted with suitable sized canula. After administration, animals were fasted for 3-4 hours.

Selection of starting dose: As the test substance was an Ayurvedic formulation the starting dose was selected as 2ml/100g rat.

Main study: According to the methodology describe in the Annex 3 of the OECD guideline 420 (joined in Appendix IV of the present report) the test was performed with 5 animals receiving the test substance at the dose level of 2ml/100g of body weight.



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IPER, Wardha

V. OBSERVATIONS

Animals were observed individually after dosing during the first 30 minutes, periodically during the first 24 hours and daily thereafter for a total of 14 days.

The clinical observations were made individually, each animal being examined outside the home cage.

The different parameters observed were – changes in skin & fur, eyes & mucous membranes, respiratory function, tremors, convulsions, salivation, diarrhea, lethargy, sleep & coma.³

Body weight : The animals were regularly weighed on day 1 before administration, then on day 8 and day 15 i.e. 7 and 14 days after administration of the test substance.

Pathology: All the animals surviving at the end of the 14 days of observation were scarified by intraperitoneal injection of 6% sodium pentobarbital solution at the rate of 0.12 ml/100g and bled at the femoral artery. They were necropsied and the main organs were examined macroscopically.

Interpretation of the results: The assessment criteria of the toxicity of the test substance taken into account were:

- Body weight change
- Clinical and behavioral signs
- Necropsy findings
- The mortality expressed in % of compound related deaths.

These results enabled to classify the test substance to one of a series of toxicity classes defined by fixed oral LD_{50} cut-off values, incompliance with Globally Harmonized System (GHS).²

- Category 1	= 0	< LD ₅₀ <	5 mg/kg
- Category 2	= 5 mg/kg	< LD ₅₀ <	50 mg/kg
- Category 3	= 50 mg/kg	< LD ₅₀ <	300 mg/kg
- Category 4	= 300 mg/kg	s < LD ₅₀ ≤	2000 mg/kg
- Category 5	$= LD_{50} >$		2000 mg/kg

- Category 5 or non classified





42

VI. RESULTS

Body weight: All animals exhibited normal and comparable body weight gain throughout the period of study. The individual weights of the animals assessed during the test are supplied in Appendix I.

Clinical Observations: All animals were free of intoxication signs throughout the period of study. The results of the clinical observations are summarized in the table enclosed in Appendix II.

Pathology: All main organs subjected to necropsy were found normal in all animals. The result of the necropsy findings are summarized in the table enclosed in Appendix III.

VII. CONCLUSION

According to the Globally Harmonized System (GHS) for the classification of substances which cause acute toxicity, the substance **CLEARACTIV Syrup** (Batch No.TCA-19-01), supplied by Siddhayu Ayurvedic Research Foundation Pvt. Ltd., Nagpur was classified in the **hazard category 5 or unclassified** with a LD₅₀ higher than 2000 mg/kg in the Rat.

The Study has indicated that CLEARACTIV Syrup (Batch No.TCA-19-01) at dose of 2000mg/kg did not affect general health of Wistar rats. There were no gross abnormalities observed in necropsied rats. Based on this, minimal lethal dose of CLEARACTIV Syrup (Batch No.TCA-19-01) was more than 2000 mg/kg.

Project coordinator

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