## Geethanjali College of Pharmacy

Approved by AICTE, PCI New Delhi. Permanently Affiliated to JNTUH
Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Recognized Under UGC Section 2F & 12B of UGC Act, 1956, by DSIR-SIRO & HI/BI of MSME,
Certified by ISO 9001:2015, AMC of PvPi, NIRF
Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State- 501301

## 1.3.3. Fercentage of students undertaking project work/field work/internship (Data for latest completed year)

S.No.	File No	Weblink
1.	1.3.3 (1)	Student list, list of Project titles, cover page of projects for A.Y. 2022-23

## Geethanjali College of Pharmacy

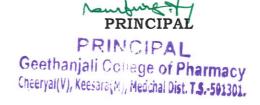
Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH
Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Recognized Under UGC Section 2F & 12B of UGC Act, 1956, by DSIR-SIRO & HI/BI of MSME,
Certified by ISO 9001:2015, AMC of PvPi, NIRF
Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State- 501301

## B.Pharmacy Project work students list for the AY 2022-23

S.NO	NAME OF THE STUDENT	ROLL NUMBER
1	Aditya Vikas Mane	19Z51R0001
2	Aliminati Varsha	19Z51R0001 19Z51R0002
3	ArigelaLikhitha	19Z51R0003
4	BaikadiSwathika	19Z51R0003
5	Birukuri Bhanu Prasad	19Z51R0005
6	Bonda Thanusri	19Z51R0006
7	ChinthalaVikasini Reddy	19Z51R0007
8	Dandu Divyasri	19Z51R0008
9	Dhiravath Jyothi	19Z51R0009
10	Dukkidi Srikanth	19Z51R0011
11	Elasani Keerthi	19Z51R0012
12	GadilaIndu	19251R0013
13	GottimukkalaRakshitha	19Z51R0014
14	Gugulavath Mounika	19Z51R0015
15	Jampana Shivani	19Z51R0016
16	Jetta Sravani	19Z51R0017
17	Kala Vaishnavidevi	19Z51R0018
18	Kasani Priyanka	19Z51R0019
19	Kola-Pavani	19Z51R0020
20	Kurella Madhuri	19Z51R0021
21	M Deekshitha	19Z51R0022
22	Mamidi Akshaya	19Z51R0023
23	Mangalarapu Pooja	19Z51R0024
24	Mani Bhushan Kumar	19Z51R0025
25	Manthena Sai Laxmi	19Z51R0026
26	NainiNikhitha	19Z51R0027
27	ParipelliChandravadana	19Z51R0029
28	Puli Raghavi	19Z51R0030
29	Safa Sultana	19Z51R0031
<b>3</b> ()	SamulaSalathya	1938 (170033)
.a1	SimllamaKompella	19Z51R0033
32	Sk Salma	19Z51R0034
33	Thota Chandu Priya	19Z51R0036
34	Vaishnavi Patil	19Z51R0037
35	VasarlaSatyasree	19Z51R0038

36	Velatur Murali Reddy	19Z51R0039
37	Vislavath Deepika	19Z51R0040
38	YamadriVineela	19Z51R0041
39	AgaramNikhitha	19Z51R0042
40	Anumula Anjali	19Z51R0043
41	Ataka Rajeshwari	19Z51R0044
42	BhudidhaShivathmika	19Z51R0045
43	Boddu Ratnakar	19Z51R0046
44	ChithullaKeerthana Goud	19Z51R0048
45	DebbataKruthi	19Z51R0049
46	Dilip Kumar Das	19Z51R0050
47	Duduka Sai Raghavendra	19Z51R0051
48	Durga Choudary	19Z51R0052
49	Farah Azam	19Z51R0053
50	Gandra Deepika	19Z51R0054
51	Govooru Kalyani	19Z51R0055
52	GurramHarshitha	19Z51R0056
53	Janga Preethi	19Z51R0057
54	Kampella Sandeep	19Z51R0059
55	Keerthana Ambati	19Z51R0060
56	KompallySaikiran	19Z51R0061
57	LunavathSusheela	19Z51R0062
58	Mallepally Bhavani	19Z51R0063
59	Manasa Ch	19Z51R0064
60	Manglaram Aparna	19Z51R0065
61	ManojVislavath	19Z51R0066
62	MolgaraNikhila	19Z51R0067
63	Nallategala Renuka Devi	19Z51R0068
64	Pandey Vishal Rameshkumar	19Z51R0069
65	PittalaKirthi	19Z51R0070
66	Ramgalla Krishna Sreelakshmi	19Z51R0071
67	Sakina Fatima	19Z51R0072
68	Sd Shaziya	19Z51R0073
69	SingamManasa	19Z51R0074
70	TennetiDevayaani	19Z51R0075
71	ThimmajipetRagamai	19Z51R0076
72	Vadlakonda Jessi Priya	19Z51R0077
73	Valluri Sowmya	19Z51R0078
74	VatamThirumalesh	19Z51R0079
75	VishwatejaVislavath	19Z51R0080
76	VithanalaTejaswini	19Z51R0081
77	Yellam Ravi Teja	19Z51R0082
78	Panjala Sneha	19Z51R0083
79	Ambati Rony Abhishek	19Z51R0084







A dissertation submitted to



## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### BACHELOR OF PHARMACY

BY

B.RATNAKAR 19Z51R0046

B.S.AJ RAGHAVENORA 19Z51R0051

H.K.SREELLAKSHAM 19Z51R0071

A.RAVII EJA 19Z51R0082

Under the Guidance of

B.SANDHYA

M.Pharm.,(Ph.D).,
ASSISTANT PROFESSOR

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY



## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,

Recognized by DSIR-SIRO; under UGC section 2 (f) 12(B),

HI/BI Approved by MSME, Certified by ISO 9001:2015

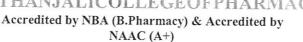
Cheeryal (V), Keesara (M), MedchalDt. Telangana-501301

June 2023



PRINCIPAL
Geethanjali College of Pharmacy
Cheeryai(V), Keesara(M), Medicinal Dist. I.S.: 501301.





Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "THE FORMULATION OF MICROEMULGEL FROM POMEGRANATE PEEL EXTRACT" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by B. RATNAKAR (19Z51R0046), D. SAI RAGHAVENDRA (19Z51R0051), R.K. SREE LAKSHMI (19Z51R0071), Y. RAVITEJA (19Z51R0082) during the academic year 2022 - 2023 under the guidance of Mrs. B.SANDYA M.Pharm., (Ph.D)., Assistant Professor at Geethanjali College of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. M. SRINIVAS

M.Tech., Ph.D.,

Professor and Head

Department of Pharmaceutical chemistry

Geethanjah College of Pharmacy.

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF., (USA)

Professor and Principal

Geethanjali College of pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER



Geethaniali College of Pharmacy Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "THE FORMULATION OF MICROEMULGEL FROM POMEGRANATE PEEL EXTRACT" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by B. RATNAKAR (19Z51R0046), D. SAI RAGHAVENDRA (19Z51R0051), R.K. SREE LAKSHMI (19Z51R0071), Y. RAVI TEJA (19Z51R0082) during the academic year 2022 - 2023 under the guidance of Mrs. B. SANDYA M.Pharm., (Ph.D)., Assistant Professor, Geethanjali ('ollege of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATUREOFTHEGUIDE

Mrs. B. SANDHYA

M.Pharm.,(Ph.D).,

Assistant Professor

Geethanjali College of Pharmacy



PRINCIPAL

Geethanjali Coilege of Pharmacy
Cheeryai(V), Keessass(M), Meddhal Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGC section 2 (f) 12(B) HI/BI Approved by MSME, CertifiedbyISO9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "THE FORMULATION OF MICROEMULGEL FROM POMEGRANATE PEEL EXTRACT" is a bonafide and genuine research work carried out by me/us under the guidance of Mrs. B.SANDHYA M.Pharm., (Ph.D)., Assistant Professor at Geethanjali College of Pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF STUDENT

B.RATNAKAR (19Z51R0046)

D. Sal Raghavendra

Latnaka: B.

D.SAI RAGHAVENDRA (19Z51R0051)

R.K.SREELAKSHMI (19Z51R0071)

(Patty a. Y Y.RAVITEJA (19Z51R0082)



Cheeryal(V), Keesara(M), Hedonal Dist. T.S.-501301.

## FORMULATION AND IN-VITRO EVALUATION OF PROPIOSOMES OF NEBIVOLOL

A dissertation submitted to



### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **BACHELOR OF PHARMACY**

BY

K. PRIYANKA (19Z51R0019)

M. POOJA (19Z51R00024)

S.K. SALMA (19Z51R0034)

Under the Guidance of S. D. SHALLNIM. Pharm.,

ASSISTANT PROFESSOR

DEPARTMENT OF PHARMACEUTICS



## Geethanjali College of Pharmacy

Accredited by NBA B. Pharmacy & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301



June 2023

PRINCIPAL
Geethanjali Gollege of Pharmacy
Cheeryal(V), Septim (M. A. Strait, T. S. 50130)





Accredited by NBA (B. Pharmacy) & Accredited by

NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; Under UGC Section 2(f)12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND INVITRO EVALUATION OF PRONIOSOMES OF NEBIVOLOL" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by K. PRIYANKA (19Z51R0019), M. POOJA (19Z51R0024) SK. SALMA (19Z51R0034) during the academic year 2022-2023 under the guidance of S.D. SHALINI M. Pharm., Assistant Professor. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 19/6/2023

Place: Cheeryal

SIGNATURE OF THE HOD

III L' NEERAJA

M. Pharm, Ph.D.

Professor and Head

Hejantine of l'harmaceutics

the than pale ( pring poil Dharmacy

Department of Pharmaceutics

Geethanjali College of Pharmacy

(heeryel(V), Ressara (M), Medchal (Dt)-501301. T.S.

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M. Pharm., Ph.D PDF (USA)

Professor and Principal

eethanjali College of Pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER

Geethanjali College of Pharmacy Cheeryal(Y), Keesara(H), Medichal Dist. T.S.-501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi

Permanently Affiliated to JNTUH
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana- 501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND INVITRO EVALUATION OF PRONIOSOMES OF NEBIVOLOL" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by K.PRIYANKA (19Z51R0019), M.POOJA(19Z51R0024), SK.SALMA(19Z51R0034) during the academic year 2022-2023 under the guidance of S. D. SHALINI M.Pharm., Assistant Professor. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 19/6/2023

Place: Cheerval

SIGNATURE OF THE GUIDE

S.D. SHALINI M. Pharm, Assistant Professor Geetanjali College of Pharmacy



PRINCIPAL

Geethaniali College of Pharmacy

Cneeryal(V), Keesara(M), Medichal Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & accredited by NAAC(A+)

Approved by AICTE and PCI New Delhi Permanently affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified ISO 9001:2015 Cheryl (V), Keesara (M) Medchal Dt., Telangana-501301



#### DECLARATION

I hereby declare that this "FORMULATION AND INVITRO EVALUTION OF PRONIOSOMES OF NEBIVOLOL" is a Bonafide and genuine research work carried out by me/us under the guidance of SD. SHALINI, M.Pharm, ASSISTANT Professor, Geethanjali college of pharmacy, Cheryl (V), Keesara (M) 501301, IMedchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 19 6 2023

Place: Cheeryal

SIGNATURE OF STUDENT

K-priyanka

K. PRIY'ANKA (19Z51R0019)

M. POOJA (19Z51R0024)

SK. SALMA (19Z51R0034)



PRINCIPAL

Geethaniali College of Pharmacy
Cheeryal(V), Keesara(N), Meachail Dist. T.S. -501301.

# PRELIMINARY PHYTOCHEMICAL INVESTIGATION AND ANTHELMINTIC ACTIVITY OF SPILANTHES FILICAULIS

A dissertation submitted to



## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

## BACHELOR OF PHARMACY

BY

A. VARSHA 19Z51R0002 P. CHANDRAVADANA 19Z51R00029

Under the Guidance of

SUMALATHA CHEPYALA

M. Pharm., (Ph.D.,)

ASSOCIATE PROFESSOR

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,

Recognized by DSIR-SIRO; under UGC section 2 (f) 12(B),

HI/BI Approved by MSME, Certified by ISO 9001:2015

Checryal (V), Keesara (M), Mcdchaldt. Telangana-501301

June 2023

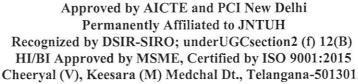


PRINCIPAL

Geethaniali College of Pharmacy
Cheeryal(V), Keesara(M), Meacrial Dist. T.S. 501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)







#### **CERTIFICATE**

This is to certify that the dissertation entitled "PRELIMINARY PHYTOCHEMICAL INVESTIGATION AND ANTHEHELMINTIC ACTIVITY OF SPILANTHES FILICAULIS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried by A.VARSHA(19Z51R0002), P. CHANDRAVADANA (19Z51R0029), during the academic year 2022-2023 under the guidance of CHEPYALA SUMALATHA M.Pharm., (Ph.D), Associate Professor of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 3 6 2023

Place: Cheeryal

SIGNATURE OF THE HOD

Dr.M.SRINIVAS

Ph.D

Professor and Head,

Depertment of pharmaceutical chemistry,

Geethanjali college of pharmacy.

SIGNATURE OF THE PRINCIPAL

Dr.M.RAVI KUMAR

M.pharm., Ph.D., PDF(USA),

Professor and principal,

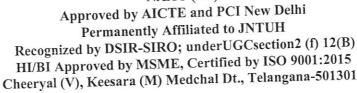
Geethanjali college of pharmacy.

SIGNATURE OF THE EXTERNAL EXAMINER

Geethaniali College of Pharmacy Cheerval(V), Keessay, xl), Madchal Dist. T.S.-501201.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)







## **CERTIFICATE**

This is to certify that the dissertation entitled "PRELIMINARY PHYTOCHEMICAL INVESTIGATION AND ANTHEHELMINTIC ACTIVITY OF SPILANTHES FILICAULIS" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully entried out by A. VARSHA (19Z51R0002), P. CHANDRAVADANA (19Z51R0029), during the academic year 2022- 2023 under the guidance of CHEPYALA SUMALATHA M.Pharm., (Ph.D), Associate Professor and Principal of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 3/6/2023

Place: Cheeryal

Sund

SIGNATURE OF THE GUIDE

CHEPYALA, SUMALATHA

M.Pharm.,(Ph.D).,

Associate Professor,

Department of pharmaceutical chemistry,

Geethanjali College Of Pharmacy.



PRINCIPAL

Geethanjali College of Pharmacy

Cheeryal(V), Keesara(M), Medichal Dist. T.S. - S01301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)

HI/BI Approved by MSME, CertifiedbyISO9001:2015

Cheeryal (V), Keesara (M) Medchal Dt., Telangana-





## **DECLARATION**

501301

We here by declare that this dissertation/thesis entitled "PRELIMINARY PHYTOCHEMICAL INVESTIGATION AND ANTHEHELMINTIC ACTIVITY OF SPILANTHES FILICAULIS" is a bonafide and genuine research work carried out by me/us under the guidance of CHEPYALA SUMALATHA M.Pharm., (Ph.D), Associate Professor, Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 3/6/2023

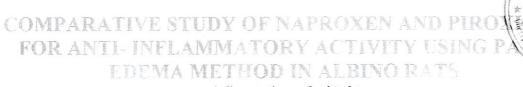
Place:Cheeryal



A. VARSHA (19Z51R0002)
P. CHANDRAVADANA (19Z51R0029)

Cyangelyakulanga

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryai(V), Keesara(M), Medchal Dist. T.S. -501301.



A dissertation submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **BACHELOR OF PHARMACY**

BY

GOVVURI. KALYANI 19Z51R0055 JANGA. PREETHI 19Z51R00057 MANASA C.H 19Z51R0064

Under the Guidance of

Dr. BHARAT BHUSAN MOHAPATRA

M.Pharm., Ph.D.

PROFESSOR IN PHARMACOLOGY

DEPARTMENT OF PHARMACOLOGY



## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH, Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015

Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301

**June 2023** 

1-infrue: 1

Geethanjali College of Pharmacy Cheeryst(V), Keesara(M), Medenat Dist, T.S./501.301.





Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Tclangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "COMPARATIVE STUDY OF NAPROXEN AND PIROXICAM FOR ANTI-INFLAMMATORY ACTIVITY USING PAW-EDEMA METHOD IN ALBINO RATS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by G. KALYANI (19Z51R0055), J. PREETHI (19Z51R0057), MANASA C.H (19Z51R0064) during the academic year 2022 - 2023 under the guidance of Dr. BHARAT BHUSAN MOHAPATRA of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 15 . 06 . 23

Place: Cheeryal

R. N. Dishse SIGNATURE OF THE HOD

Dr. R. NAGA KISHORE

M.Pharm., Ph.D.

Professor and HOD

Department of Pharmacology

Geethanjali College of Pharmacy.

Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF., (USA)

SIGNATURE OF THE PRINCIPAL

Professor and Principal

Geethanjali College of pharmacy

HEAD

Department of Pharmacology Geethanjali College of Pharmacy Energyal(V), Kersara (M), Medchal (Dt)-501301. T.S.

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL Geethanjali Cellege of Pharmac General Reddelte i Const





Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)

HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



### **CERTIFICATE**

This is to certify that the dissertation entitled "COMPARATIVE STUDY OF NAPROXEN AND PIROXICAM FOR ANTI-INFLAMMATORY ACTIVITY USING PAW-EDEMA METHOD IN ALBINO RATS" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by G. KALYANI (19Z51R0055), J. PREETHI (19Z51R0057), MANASA C.H (19Z51R0064) during the academic year 2020 - 2021 under the guidance of Dr. BHARAT BHUSAN MOHAPATRA of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 15.06.23

Place: Cheeryal

Signature of the Guide

Dr. BHARAT BHUSAN MOHAPATRA

M.Pharm., Ph.D.

PROFESSOR IN

PHARMACOLOGY

Geethanjali College of pharmacy



PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Heddhai Dist. T.S.: 501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, CertifiedbyISO9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





## **DECLARATION**

I hereby declare that this dissertation/ thesis entitled "COMPARATIVE STUDY OF NAPROXEN" AND PIROXICAM FOR ANTI-INFLAMMATORY ACTIVITY USING PAW-EDEMA METHOD IN ALBINO RATS" is a bonafide and genuine research work carried out by me/us under the guidance of Dr. BHARAT BHUSAN MOHAPATRA of Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 15.06.23

Place: Cheeryal

SIGNATURE OF STUDENT

Kalyonel G. KALYANI (19Z51R0055)

J. PREETHI (19Z51R0057)

MANASA C.H (19Z51R0064)



PRINCIPAL
Geethaniali College of Pharmacy
Cheerysi(V), Keesara(M), Medicinar Dist. T.S. -501301.

ledge, Attitude & Practice towards Breast Cancer & Breast Self-Examination
among Female Private Pharmacy College Students in Cheeryal: Telangary
India.

A dissertation submitted to



## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **BACHELOR OF PHARMACY**

BY

## DURGA CHOUDHARY 19Z51R0052 SAKINA FATIMA 19Z51R0072 SD. SHAZIYA 19Z51R0073

Under the Guidance of Dr. ABDUL NAZER ALI

M Pharm, Ph.D., (Clinical Pharmacy, USM, Malaysia)
PROFESSOR AND HEAD,
DEPARTMENT OF PHARMACY PRACTICE



## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,

Recognized by DSIR-SIRO; under UGC section 2 (f) 12(B),

HI/BI Approved by MSME, Certified by ISO 9001:2015

Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301

June 2023

PRINCIPAL
Geethaniali College of Pharmacy
Cheerys!(V), Keessia(N), Nedural Dist. T.S. 50 (10).



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





## **CERTIFICATE**

Is is to certify that the dissertation entitled "Knowledge, Attitude & Practice towards Breast Cancer Breast Self-Examination (BSE) among Female Private Pharmacy College Students in Cheeryal, langana, India" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for award of the degree of Bachelor of Pharmacy, has been successfully carried out by DURGA (OUDHARY (19Z51R0052), SAKINA FATIMA (19Z51R0072), SD.SHAZIYA (19Z51R0073) ring the academic year 2022 – 2023 under the guidance of Dr. ABDUL NAZER ALI M. Pharm, D., (Clinical pharmacy, USM, Malaysia) Professor and Head, Department of Pharmacy actice, Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the professor of diploma of any University/Institution.

inte:

Ince: Cheeryal

SIGNATURE OF THE HOD

Dr. ABDUL NAZER ALI

M. Pharm., Ph.D. (Clinical Pharmacy, USM, Malaysia)

Professor and Head,

Department of Pharmacy Practice

Geethanjali College of pharmacy

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M. Pharm., Ph.D., PDF., (USA)

Professor and Principal

Geethanjali College of pharmacy

PRINCIPAI Geethanjail College of Pharmacy

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medonai Dist. T.S.-501301.

SIGNATURE OF THE EXTERNAL EXAMINER



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





## DECLARATION

I hereby declare that this dissertation/ thesis entitled "Knowledge, Attitude & Practice towards Breast Cancer & Breast Self-Examination (BSE) among Female Private Pharmacy College Students in Cheeryal, Telangana, India" is a bonafide and genuine research work carried out by me/us under the guidance of Dr. Abdul NAZER Ali M.Pharm., Ph.D., (Clinical pharmacy, USM, Malaysia) Professor and Head, Department of Pharmacy Practice, Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF STUDENT

DURGA CHOUDHARY (19Z51R0052))

SAKINA FATIMA (19Z51R0072)

SD. SHAZIYA (19Z51R0073)

73)

PRINCIPAL
Geethanjali College of Pharmacy
(neergal(Y), Keesara(M), Maccossi Dist. 1.5.501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





## CERTIFICATE

This is to certify that the dissertation entitled "Knowledge, Attitude & Practice towards Breast Cancer & Breast Self-Examination (BSE) among Female Private Pharmacy College Students in Cheeryal, Telangana, India" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by DURGA CHOUDHARY (19Z51R0052), SAKINA FATIMA (19Z51R0072), SD. SHAZIYA (19Z51R0073) during the academic year 2022 - 2023 under the guidance of Dr. ABDUL NAZER ALI M.Pharm., Ph.D., (Clinical pharmacy USM, Malaysia) Professor and Head, Department of Pharmacy Practice, Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. ARDIH, NAZER ALI

M.Pharm., Ph.D.,
PROFESSOR AND HEAD,
DEPARTMENT OF PHARMACY PRACTICE
Geethanjali College of pharmacy

PRINCIPAL

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medenai Dist. T.S.-501301.

## FORMULATION AND COMPARATIVE EVALUATION OF MOISTURE CREAM CONTAINING CARROT OIL AND ALMOND PASTE

A dissertation submitted to





In partial fulfillment of the requirement for the award of the degree of

**BACHELOR OF PHARMACY** 

BY

DILIP KUMAR DAS (19Z51R0050)

NALLATEGALA RENUKA DEVI (19Z51R00068)

VISHWATEJA VISLAVATH (19Z51R0080)

Under the Guidance of

Mr. M. SATISH KUMAR

M.Pharm.,

Asst. professor

DEPARTMENT OF PHARMACEUTICAL ANALYSIS



## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M), Medchal (D). Telangana-501301

June 2023

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medicinal Dist. T.S.-501301.



D

G

11

of

),

F

r



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M), Medchal (D). Telangana-501301



## **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND COMPARATIVE EVALUATION OF MOISTURE CREAM CONTAINING CARROT OIL AND ALMOND PASTE" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by DILIP KUMAR DAS (19Z51R0050), NALLATEGALA RENUKADEVI (19Z51R0068), VISHWATEJA VISLAVATH (19Z51R0080), during the academic year 2022 - 2023 under the guidance of Mr. M. SATISH KUMAR M.Pharm., Asst. Professor. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. P. NEERAAD
Department of Pharmaceutics
GM: Rampati Chilogo of Pharmany
Chiefyal Viscos and Milledge al (Di) 501301. I.S.

Department of Pharmaceutics Geethanjali College of Pharmacy. SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M.Pharm.,Ph.D.,PDF.,(USA)

Professor and Principal

Geethanjali College of pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL
Geethaniali College of Pharmacy
Cneeryal(V), Keesara(M), Medchal Dist. T.S.-501301.





Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M), Medchal (D). Telangana-501301



### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "FORMULATION AND COMPARATIVE EVALUATION OF MOISTURE CREAM CONTAINING CARROT OIL AND ALMOND PASTE" is a bonafide and genuine research work carried out by me/us under the guidance of Mr. M. SATISH KUMAR M.Pharm., Asst. Professor, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF STUDENT

DILIP KUMAR DAS (19Z51R0050)

NALLATEGALA RENUKADEVI (19Z51R0068)

V เวียนพลาศุล VISHWATEJA VISLAVATH (19Z51R0080)

Cheeran I CAC In I Can I

PRINCIPAL
Geethanijali College of Pharmacy
Cheeryal(Y), Kressira(M), Medchal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M), Medchal (D). Telangana-501301





## **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND COMPARATIVE EVALUATION OF MOISTURE CREAM CONTAINING CARROT OIL AND ALMOND PASTE" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by DILIP KUMAR DAS (19Z51R0050), NALLATEGALA RENUKADEVI (19Z51R0068), VISHWATEJA VISLAVATH (19Z51R0080), during the academic year 2022 - 2023 under the guidance of Mr. M. SATISH KUMAR M.Pharm., Asst. Professor. It was not submitted carlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

M. Stite

SIGNATURE OF THE GUIDE

Mr. M. SATISH KUMAR

M.Pharm., Asst. Professor

Stramali College or Cheevel Mr. Medichally

PRINCIPAL

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medchal Dist. T.S.:501301.

## ISOLATION OF POLYUNSATURATED FATTY ACIDS FROM MICROALGAE

A dissertation submitted to



## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **BACHELOR OF PHARMACY**

BY

A. LIKHITHA 19Z51R0003 E. KEERTHI 19Z51R0012 SAFA SULTANA 19Z51R0031

Under the Guidance of
Dr. M. RAVI KUMAR
M.Pharm., Ph.D., PDF (USA)
PROFESSOR AND PRINCIPAL
DEPARTMENT OF PHARMACEUTICS

Geethanjali College of Pharmacy

Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH, Accredited by NAAC A+ Grade, NBA (B. Pharmacy)

Recognized Under UGC Section 2F & 12B of UGC Act, 1956,DSIR-SIRO, HI/BI of MSME & ISO 9001:2015 Certified, AMC of PvPI.

Cheeryal (V), Keesara (M), Mcdchal-Malkajgiri Dist., Telangana State- 501301

June 2023

PRINCIPAL

Geethanjali College of Pharmacy

Cheeryal(V), Keesara(M), Medichai Dist. T.S.-501301.





## Geethaniali College of Pharmacy

Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH, Accredited by NAAC A+ Grade, NBA (B. Pharmacy) Recognized Under UGC Section 2F & 12B of UGC Act, 1956, DSIR-SIRO. HI/BI of MSME & ISO 9001:2015 Certified, AMC of PvPI.

Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State-501301



## **CERTIFICATE**

this is to certify that the dissertation entitled "ISOLATION OF POLYUNSATURATED FATTY ACIDS FROM MICROALGAE" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by A. likhitha [19Z51R0003], E. keerthi [19Z51R0012], Safa Sultana [197.5] ROULL during the academic year 2022 - 2023 under the guidance of M.RAVIKUMAR M. Pharm., Ph. D, PDF.,(USA) Professor and Principal of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:02 6 23

Place: Cheeryal

URE OF THE HOD

Dr. P. NEERAJA

M. Pharm. Ph.D. Proteisor and Head

the partment of Pharmaceurics IGAC HEAD Department of Pharmaceutics

Department of Pharmaceutics Goethanjali College of Pharmacy Cheerval(V), Keesara (M), Medchai (Dt)-501361. T.S. SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

Pharm Ph D. PDF (USA)

ofessor and Principal

eethanjali College of Pharmacy.

SIGNATURE OF THE EXTERNAL EXAMINER

Geethaniali College of Pharmacy Cheeryal(V), Keessra(M), Medichai Dist. T S -501301-

are MAN



## Geethanjali College of Pharmacy

Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH,
Accredited by NAAC A+ Grade, NBA (B. Pharmacy)
Recognized Under UGC Section 2F & 12B of UGC Act, 1956,DSIR-SIRO,
HI/BI of MSME & ISO 9001:2015 Certified, AMC of PvPI.
Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State-





### **CERTIFICATE**

This is to certify that the dissertation entitled "ISOLATION OF POLYUNSATURATED FATTY ACIDS FROM MICROALGAE" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by A.LIKHITHA [19Z51R0603] E.KEERTHI [19Z51R0612] SAFASULTANA [19Z51R0631] during the academic year 2022 - 2023 underthe guidance of Dr. M. HAVI KUMAR M. Pharm., Ph.D., PDF., (USA)Professor and Principal of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 03 6 23

Place: Cheeryal



SIGNATURE OF THE GUIDE

Dr. M. RAVIKUMAR

M.Pharm.. Ph.D.. PDF (USA) Professor and Principal Geethanjali College of Pharmacy

PRINCIPA

Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Meddhai Dist. T.S.-501301.

## Geethanjali College of Pharmacy



Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH, Accredited by NAAC A+ Grade, NBA (B. Pharmacy)

Recognized Under UGC Section 2F & 12B of UGC Act, 1956,DSIR-SIRO, HI/BI of MSME & ISO 9001:2015 Certified, AMC of PvPI.

Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State-





## **DECLARATION**

hat TVACIDS FROM MICROALGAE" is a bonafide and genuine research work carried out by me/us under the guidance of Dr. M. RAVI KUMAR M. Pharm., Ph.D., PDF., (USA) Professor and Principal, Geethanjali college of pharmacy, cheeryal (V), Keesara (M), 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diplomaof any University/Institution.

Date: 03/6/23

Place: Cheeryal

SIGNATURE OF THE STUDENT

\_+, «Likhitha A. LIKHITHA [19Z51R0003]

E. KEERTHI [19Z51R0012]

Safasultana SAFA SULTANA [19251R0031]



PRINCIPAL

Geethanjali College of Pharmacy Geergal(V), Keesass(M), Madami Dist. T.S. 201301,

## FORMULATION AND EVALUATION OF CLOPID BISULPHATE FLOATING TABLETS

A dissertation submitted to



### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **BACHELOR OF PHARMACY**

BY

CHITHULLA KEERTHANA GOUD (19Z51R0048)

MALLEPALLY BHAVANI (19Z51R0063)

MANASA SINGAM (19Z51R0074)

Under the Guidance of
Mr. K. KISHORE KUMAR REDDY
M Pharmacy
ASSOCIATE PROFESSOR

GEETHANJALI COLLEGE OF PHARMACY

Accredited by NAΛC (Λ+)

DEPARTMENT OF PHARMACEUTICS

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH, Recognized by DSIR-SIRO; under UGC section 2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015

Obeerval (W. Keesara (M), MedchalDt. Telangana-501301

June2023

PRINCIPAL
Geethaniali Cotlege of Pharmacy
(neeryal(V), Keesara(N), Medinal Dist. T.S.: 501301.





Accredited by NAAC (A+)

Approved by AICTE and PCI NewDelhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; under UGC section2 (f) 12(B)
HI/BI ApprovedbyMSME, Certified by ISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF CLOPIDOGREL BISULPHATE FLOATING TABLETS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by CHITHULLA KEERTHANAGOUD(19Z51R0048), MALLEPALLY BHAVANI(19Z51R0063), MANASA SINGAM (19Z51R0074) during the academic year 2022- 2023 under the guidance of K.KISHORE KUMAR REDDY, Associate Professor .It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 8 06 2023

Place: Cheeryal

SIGNATURE OF THE HOD

Dr.P NEERAJA

M.Pharm., Ph.D.

Professor and Head

Department of Pharmaceutics

Geethanjali College of Pharmacy.

HEAD

Department of Pharmaceutics Geethanjali College of Pharmacy Cheeryal(V), Keesara (M), Medchal (DI)-501301. T.S.

SIGNATURE OF THE PRINCIPAL

Dr.M.RAVI KUMAR

M.Pharm., Ph.D., PDF., (USA)

Professor and Principal

Geethanjali College of pharmacy

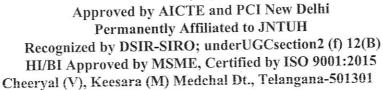
SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keescra(N), Medichal Dist. T.S. 500002.





Accredited by NBA (B.Pharmacy)& Accredited by NAAC (A+)







## **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF CLOPIDOGREL BISULPHATE FLOATING TABLETS" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by CHITHULLA. KEERTHANA GOUD (19Z51R0048), MALLEPALLY.BHAVANI (19Z51R0063), MANASASINGAM (19Z51R0074), during the academic year 2022 – 2023 under the guidance of K.KISHORE KUMAR REDDY Associate Professor. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: O

08/06/2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

K.KISHORE KUMAR REDDY

Associate professor

Geethanjali College of pharmacy



PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.

## COMPARATIVE STUDY OF IBUPROFEN AND DICLOFENAC FOR ANTI-INFLAMMATORY ACTIVITY IN RATS USING PAW OEDEMA METHOD

A dissertation submitted to



## JAWAHARLAL ŅEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfilment of the requirement for the award of the degree

#### **BACHELOR OF PHARMACY**

BY

D.DIVYA (19Z51R0008)

J. SRAVANI (19251R0017)

K. MADHURI (19751R0021)

M. DEEKSHITHA (10//54R0022)

N. NIKHITHA (1975) R0027).

Under the guidance of

Dr. R. NAGA KISHORE

M.Pharm, Ph.D, (Pharmacology)

Professor & HOD

DEPARTMENT OF PHARMACOLOGY



## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,

Recognized by DSIR-SIRO; under UGC section 2(f) 12(B),

HI/BI Approved by MSME, Certified by 18O 9001:2015

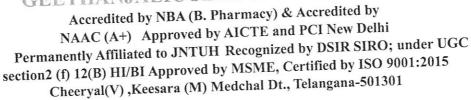
Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301

June 2023



PRINCIPAL
Gaethanial College of Pharmacy
Gaeryan, Kessarani, Meschaidist, I.S.-501301.







## **CERTIFICATE**

This is to certify that the dissertation entitled "COMPARATIVE STUDY OF IBUPROFEN AND DICLOFENAC FOR ANTI-INFLAMMATORY ACTIVITY IN RATS USING PAW OEDEMA METHOD" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfilment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by D.DIVYA (19Z51R0008), J.SRAVANI (19Z51R0017), K.MADHURI (19Z51R0021), M.DEEKSHITHA(19Z51R0022), N.NIKHITHA(19Z51R0027) during the academic year 2022-2023 under the guidance of Dr.R.NAGA KISHORE M.PHARM, Ph.D, Professor and HOD, Department of pharmacology. It was not submitted earlier in part or full for the award of the Degree of diploma of University/Institution.

Date: 14/06/2023

SIGNATURE OF THE HOD

SIGNATURE OF THE PRINCIPAL

Dr. R. NAGA KISHORE

M.Pharm., Ph.D.

Professor and Head

Department of pharmacology

Geethanjali College of Pharmacy.

-HEAD

Department of Pharmacology
Geethanjali College of Pharmacology
Cheeryal(V), Keesara (M), Medchal (Dt)-501301. 1.5.

Dr. M. RAVIKUMAR

M.Pharm.,Ph.D.,PDF.,(USA)

Professor and Principal

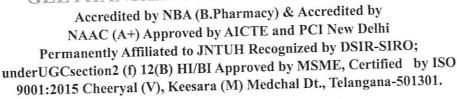
Geethanjali College of pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER

Curpus of

Georgian Cottoge of Pharmacy Deevelor Conserve McHalifia 14 Sector









#### **CERTIFICATE**

This is to certify that the dissertation entitled "COMPARATIVE STUDY OF IBUPROFEN AND DICLOFENAC FOR ANTI-INFLAMMATORY ACTIVITY IN RATS USING PAW OEDEMA METHOD" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfilment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by D.DIVYA (19Z51R0008), J.SRAVANI (19Z51R0017), K.MADHURI (19Z51R0021), M.DEEKSHITHA(19Z51R0022), N.NIKHITHA(19Z51R0027) during the academic year 2022-2023 under the guidance of Dr.R.NAGA KISHORE M.PHARM, Ph.D, Professor and HOD, Department of pharmacology. It was not submitted earlier in part or full for the award of the Degree of diploma of University/Institution.

Date: 17/∞6/2023 Place: Cheeryal



Mangue

SIGNATUREOFTHEGUIDE

Dr. R. NAGA KISHORE

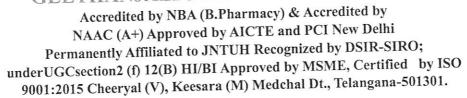
M.Pharm., Ph.D.

Department of pharmacology

Geethanjali College of pharmacy

Department of Pharmacology Geethanjali College of Pharmacy Cheeryal(V), Keesara (M), Medchal (Di)-501301. 1.2







#### **DECLARATION**

There by declare that this dissertation/thesis entitled "COMPARATIVE STUDY OF IBUPROFEN AND DICLOFENAC FOR ANTI-INFLAMMATORY ACTIVITY IN RATS USING PAW OEDEMA METHOD" is a bonafied and genuine research work carried out by me/us under the guidance of Dr.R.NAGA KISHORE M.PHARM, Ph.D, Professor and HOD, Department of pharmacology Cheeryal(V), Keesara(M), Medchal(Dist), T.S, India. This work is original and has not been submitted earlier in part or full for the award of the Degree or diploma of University/Institution.

Date: 17/06/2023
Place: Cheeryal

SIGNATURE OF STUDENT

D.DIVYA (19Z51R0008)

J. SRAVANI (19Z51R0017)

K. MADHURI (19Z51R0021) K. Madhun

M. DEEKSHITHA (19751R0022) M Deskylither

N. NIKHITHA (19Z51R0027) N. Nikhitha



PRINCIPAL

Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.

# FORMULATION AND EVALUATION OF HERBAL TRANSDERMALS PATCHES IN THE TREATMENT OF WOUND HEALING

A dissertation submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **BACHELOR OF PHARMACY**

BY

CHINTHALA VIKASINI REDDY 19Z51R00007
PULI RAGHAVI 19Z51R0030
SAMALA SAHITHYA 19Z51R0032

Under the Guidance of
Mr. SHANKARAIAH PULIPAKA

M.Pharm., (PhD)

ASSOCIATE PROFESSOR
DEPARTMENT OF PHARMACOGNO





# Geethanjali College of Pharmacp

Approved by AICTE, PCI New Delhl, Permanently Affillated to JNTUH,
Accredited by NAAC A+ Grade, NBA (B. Pharmacy),
Recognized Under UGC Section 2F & 12B of UGC Act, 1956, DSIR-SIRO,
HI/BI of MSME & ISO 9001:2015 Certified, AMC of PvPI.
Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State-501301

June 2023







Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF HERBAL TRANSDERMAL PATCHES IN THE TREATMENT OF WOUND HEALING" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by CHINTHALA VIKASINI REDDY (19Z51R0007), PULI RAGHAVI (19Z51R0030), SAMALA SAHITHYA (19Z51R0032) during the academic year 2022 - 2023 under the guidance of Mr. SHANKARAIAH PULIPAKA, M.Pharm.,(PhD), Associate Professor of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 03 06 2023

Place: Cheeryal

SIGNATURE OF THE HOD

Brokepalac

Dr. BHARATH BHUSHAN MOHAPATRA

M.Pharm., Ph.D.,

Professor and Head,
Department of Pharmacognosy,
Geethanjali College of Pharmacy.

Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF (USA),

Professor and Principal,

Geethamali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL
Geethanjali College of Pharmacy
Cneerysi(\*), Reesau(#), Medichal Dist. T.S.: 501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF HERBAL TRANSDERMAL PATCHES IN THE TREATMENT OF WOUND HEALING" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by CHINTHALA VIKASINI REDDY (19Z51R0007), PULI RAGHAVI (19Z51R0030), SAMALA SAHITHYA (19Z51R0032) during the academic year 2022 - 2023 under the guidance of Mr. SHANKARAIAH PULIPAKA, M.Pharm.,(PhD), Associate Professor of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place:Cheeryal

flool

SIGNATURE OF THE GUIDE

Mr. SHANKARAIAH PULIPAKA, M.Pharm.,(PhD), Associate Professor

Geethanjali college of pharmacy.



PRINCIPAL PRINCIPAL

Geethanjali College of Pharmacy Cheeryal(V), Keessra(K), Meddial Dist. T.S.-501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "FORMULATION AND EVALUATION" OF HERBAL TRANSDERMAL PATCHES IN THE TREATMENT OF WOUND HEALING" is a bonafide and genuine research work carried out by me/us under the guidance of Mr. SHANKARAIAH PULIPAKA, M.Pharm.,(PhD), Associate Professor of Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date:

Place : Cheeryal

SIGNATURE OF STUDENT

CHINTHALA VIKASINI REDDY (19Z51R0007)

PULI RAGHAVI (19Z51R0030)

SAMALA SAHITHYA (19Z51R0032)

P. Raghar

PRINCIPAL Geethanjali College of Pharmacy

Chearyal(Y), Reesara(M), Medicinal Dist. T.S.-501301.

COMPARATIVE STUDY OF ANTI-INFLAMMATORY ACTIVITY OF INDOMES DEXAMETHASONE ON RATS USING PAW OEDEMA METHOD

A dissertation submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### BACHELOR OF PHARMACY

BY

G. INDU (19Z51R0013)

J. SHIVANI (19Z51R0016)

M. AKSHAYA (19Z51R0023)

V. DEEPIKA (19Z51R0040)

#### Under the Guidance of

Mrs. T. ANOOSHA

M. Pharm., B. Ed, (Asst. Professor)

DEPARTMENT OF PHARMACOLOGY

Mrs. V. SHALINI

M. Pharm., (Asst. Professor)
DEPARTMENT OF PHARMACOLOGY





GEETHANJALI COLLEGE OF PHARMACY

ccredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,

Recognized by DSIR-SIRO; under UGC section 2 (f) 12(B),

HI/BI Approved by MSME, Certified by ISO 9001:2015

Checryal (V), Keesara (M), Medehal Dt. Telangana-501301

June 2023

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(N), Medichal Dist. T.S. -501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "COMPARITIVE STUDY OF ANTI-INFLAMMATORY ACTIVITY OF INDOMETHACIN AND DEXAMETHASONE ON RATS BY USING PAW OEDEMA METHOD" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by G. INDU (19Z51R0013), J. SHIVANI (19Z51R0016), M. AKSHAYA (19Z51R0023), V. DEEPIKA (19Z51R0040) during the academic year 2022 - 2023 under the guidance of Mrs. T. ANOOSHA M. Pharm., B.Ed, Asst. professor in Department of pharmacology, Mrs. V. SHALINI M. Pharm., Asst. professor in Department of pharmacology . It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 06 06 2023.

Place: Cheeryal

R · N · (UM h).
SIGNATURE OF THE HOD

Dr. R. NAGA KISHORE

M.Pharm., Ph.D.

Professor and Head

Department of Pharmacology

Geethanjali College of Pharmacks

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF., (USA)

Professor and Principal

Geethanjali College of pharmacy

HEAD

of Pharmacology

College of Pharmacy

adra (M), Medenai war adra is Signature of the External Examiner

R New PRINCIPAL

Geethanjali College of Pharmacy Cheenyal(V), Keesarz(M), Keethal Pist, T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation "COMPARITIVE STUDY OF ANTI-INFLAMMATORY ACTIVITY OF INDOMETHACIN AND DEXAMETHASONE ON RATS BY USING PAW OEDEMA METHOD" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by G. INDU (19Z51R0013), J. SHIVANI (19Z51R0016), M. AKSHAYA (19Z51R0023), V. DEEPIKA (19Z51R0040) during the academic year 2022 - 2023 under the guidance of Mrs. T. ANOOSHA M. Pharm, B. Ed, Asst. professor in Department of pharmacology, Mrs. V. SHALINI M. Pharm., Asst. professor in Department of pharmacology . It was not submitted earlier in part or full for the award of the Degree or diplomá of any University/Institution.

Date: 66 06 2023.

Place: Cheeryal

SIGNATURE OF THE GUIDE

Mrs. T. ANOOSHA

M. Pharm., B. Ed, Asst. professor

Department of pharmacology

V. Shalini Mrs. V. SHALINI

M. Pharm., Asst. professor

Department of pharmacology

PRINCIPAL
Goethanjali College of Pharmacy
Chendry Rest. (N. Marcha Data I.S. Scillet.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### DECLARATION

ANTI-INFLAMMATORY ACTIVITY OF INDOMETHACIN AND DEXAMETHASONE ON RATS BY USING PAW OEDEMA METHOD" is a bonafide and genuine research work carried out by me/us under the guidance of Mrs.T.ANOOSHA M.Pharm, B.Ed, Asst.professor and Department of pharmacology, V. SHALINI M.Pharm., Asst. professor in Department of pharmacology, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 06 | 56 | 2023.

Place:Cheeryal

SIGNATURE OF THE STUDENTS

G. Endu G. INDU (19Z51R0013)

Shivani J. SHIVANI (19Z51R0016)

M. AKSHAYA (19Z51R0023)

V. DEEPIKA (19Z51R0040)

PRINCIPAL
Geethanjali College of Pharmacy
Cheergal(V), Keesana(H), Mecchal Dist. T.S.-501301.

# DISRUPTIVE TECHNOLOGY: INTENSIFICATION OF PRECISION MEDICINE IN PHARMACY

A dissertation submitted to



# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **BACHELOR OF PHARMACY**

BY

D. SRIKANTH 19Z51R0011
G. RAKSHITHA 19Z51R00014
T. CHANDÚ PRIYA 19Z51R0036

Under the Guidance of

Mrs. L. DEVAKMMA..

· M.Pharm..

ASSISTANT PROFESSOR
DEPARTMENT OF PHARMACEUTICS



## Geethanjali College of Pharmacp

Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; under UGC section 2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (Y), Keesara (M), Medchaldt. Telangana-501301

**June 2023** 

PRINCIPAL
Geethanjali College of Pharmacy
(neeryalyt), Keesoralili, Medinel Dist. T.S.-50130).



# Geethanjali College of Pharmacy

Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### CERTIFICATE

This is to certify that the dissertation entitled "DISRUPTIVE TECHNOLOGY: INTENSIFICATION OF PRECISION MEDICINE IN PHARMACY" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by D. SRIKANTH (19Z51R0011), G. RAKSHITHA (19Z51R0014), T. CHANDUPRIYA (19Z51R0036) (during the academic year 2022 - 2023 under the guidance of Mrs. L. Devakmma M. Pharm, Assistant Professor of Geethanjali College of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 14/6/2023

Place: Cheeryal

NGNATURE OF THE HOD

Mrs. P. NEERAJA

M. Pharm., Ph.D.

Professor and Head

Department of Pharmaceutics

Cauthanjali College of Pharmacy

Geethand

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M. Pharm., Ph. D., PDF., (USA)

Professor and Principal

Geethanjali College of Pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL

Geethaniali College of Pharmac

Cneeryal(V), Keessac(N), Medicial Dist. T.S.-50130



# Geethansali College of Pharmacy



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "DISRUPTIVE TECHNOLOGY: INTENSIFICATION OF PRECISION MEDICINE IN PHARMACY" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by D. SRIKANTH (19Z51R0011), G. RAKSHITHA (19Z51R0014), T. CHANDUPRIYA (19Z51R0036) (during the academic year 2022 - 2023 under the guidance of Mrs. L. Devakmma M. Pharm, Assistant Professor of Geethanjali College of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 14/6/2023

Place: Cheeryal



SIGNATURE OF THE GUIDE

Mrs. L. DEVAKMMA

M. Pharm.,

Assistant Professor

Department of Pharmaceutics

Geethanjali College of Pharmacy

PRINCIPAL
Geethaniali College of Pharmacy
(heerraliy), kessarqilii, Reseasi Sist. 1.5.-501301.



# Geethanjali College of Pharmacy

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **DECLARATION**

We hereby declare that this thesis entitled "DISRUPTIVE TECHNOLOGY: INTENSIFICATION OF PRECISION MEDICINE IN PHARMACY" is a bonafide and genuine research work carried out by me/us under the guidance of Mrs. L. Devakmma M. Pharm, Assistant Professor, Geethanjali College of Pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 14/6/2023

Place: Cheeryal



SIGNATURE OF STUDENT

D. Sorkanth

D SRIKANTH (19Z51R0011)

4. Robbitha

G. RAKSHITHA (19Z51R0014)

T. Chandu prija

T. CHANDU PRIYA (19Z51R0036)

PRINCIPAL
Geethaniali College of Pharmacy
(neeryal(V), Seesara(N), Meddial Dist. T.S.-501301.

## FORMULATION AND EVALUATION OF TAPENTADOL: HCI

A dissertation submitted to





JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSIT Y HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### BACHELOR OF PHARMACY

BY

BAIKADI SWATHIKA (19Z51R0004)
BIRUKURI BHANU PRASAD (19Z51R00005)
BANDA THANU SRI (19Z51R0006)

Under the Guidance of

Dr. Y. SHIVA KUMAR

M. Pharm, Ph. D.

PROFESSOR & HEAD

## DEPARTMENT OF PHARMACEUTICAL REGULATORY AFFAIRS



## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUII,
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M), Medchal (D). Telangana-501301

June 2023



Geethanjali College of Pharmacy Cheeryal(V), Keesara(H), Medchai Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M), Medchal (D). Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF TAPENTADOL HCL TOPICAL GEL" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by B.SWATHIKA(19Z51R0004), B.BHANUPRASAD(19Z51R0005), BANDA THANU SRI(19Z51R0006), during the nendemic year 2022 - 2023 under the guidance of Dr. Y.SHIVA KUMAR, M.Pharmacy, Ph.D., Department of Pharmaceutical Regulatory Affairs. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 24/06/2023

Place: Cheeryal

Control College of Pharmacy Chargolia, Korsan M. Merchal (Dt)-501301. T.S.

M.Pharmacy., Ph.D.

Professor and Head

Department of Pharmaceutics

Geethanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF., (USA)

Professor and Principal

Geethanjali College of pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER

College of Albanana Ass.

PRINCIPAL
Geethanisti College of Pharmacy
Creeryal(V), Vessala(V), ireadial dist. T.S.: 501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M), Medchal (D). Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF TAPENTADOL HCL TOPICAL GEL" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award ofthe degree of Buchelor of Pharmacy, has been successfully carried out by B.SWATHIKA(19Z51R0004), B.BHANUPRASAD(19Z51R0005), BANDA THANUSRI(19Z51R0006), during the neademic year 2022 - 2023 under the guidance of Dr. Y.SHIVA KUMAR, M.Pharmacy, Ph.D., Department of Pharmaceutical Regulatory Affairs. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 24/06/2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. Y. SHIVA KUMAR

M. Pharm, Ph. D,

PROFESSOR & HEAD

DEPARTMENT OF PHARMACEUTICAL

REGULATORY AFFAIRS

GEETHANJALI COLLEGE OF PHARMACY



PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Meachail Dist. T.S. -581301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH

prized by DSIR-SIRO: underLICCsection? (f)

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M), Medchal (D). Telangana-501301



#### **DECLARATION**

I hereby declare that this dissertation/ thesis entitled "FORMULATION AND EVALUATION OF TAPENTADOL HCL TOPICAL GEL" is a bonafide and genuine research work carried out by me/us under the guidance of Dr. Y.SHIVA KUMAR, M.Pharmacy, Ph.D., Department of Pharmaceutical Regulatory Affairs, Cheeryal (V), Keenara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 24/06/2023

Place: Cheeryal

SIGNATURE OF STUDENT

BAIKADI SWATHIKA (19Z51R0004)

BIRUKURI BHANU PRASAD (19Z51R0005)
8. Thanusti

BANDA THANU SRI (19Z51R0006)



PRINCIPAL
Geethanjali College of Pharmacy
Geeryal(\*), Acesara(\*), Med. mil Dist. T.S. 1501301.

# SYNTHESIS AND MOLECULAR DOCKING ANALYSIS OF SOME NOVEL CHROMONE DERIVATIVES

A dissertation submitted to



## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **BACHELOR OF PHARMACY**

BY

ADITYA VIKAS MANE 19Z51R0001 KALA VAISHNAVI DEVI 19Z51R0018 MANI BHUSHAN KUMAR 19Z51R0025 VASARLA SATYASREE 19Z51R0038

Under the Guidance of

Prof. Dr. M. Srinivas, M.Tech., Ph.D.,

**HEAD** 

DEPARTMENT OF PHARM CHEMISTRY



## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),

HI/BI Approved by MSME, Certified by ISO 9001:2015

Cheeryal (V), Keesara (M), MedchalDt. Telangana-501301

June 2023

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medicinal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "SYNTHESIS AND MOLECULAR DOCKING ANALYSIS OF SOME NOVEL CHROMONE DERIVATIVES" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by ADITYA VIKAS MANE (19Z51R0001), KALA VAISHNAVI DEVI (19Z51R0018), MANI BHUSHAN KUMAR (19Z51R0025), VASARLA SATYASREE (19Z51R0038) during the academic year 2022 - 2023 under the guidance of Prof. Dr. M. Srinivas, M. Tech., Ph.D., Professor and Head, Department of Pharmaceutical Chemistry. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF THE HOP

Prof. Dr. M. SRINIVAS

M. Tech., Ph.D.,

Professor and Head

Department of Pharmaceutical Chemistry

Geethanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL

Prof. Dr. M. RAVI KUMAR

M.Pharm., Ph.D., PDF. (USA)

Professor and Principal

Geethanjali College of pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER

Geethaniali College of Pharmacy Conserval(V), Kaesara(M), Medichal Dist. 1.5.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "SYNTHESIS AND MOLECULAR DOCKING ANALYSIS OF SOME NOVEL CHROMONE DERIVATIVES" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by ADITYA VIKAS MANE (19Z51R0001), KALA VAISHNAVI DEVI (19Z51R0018), MANI BHUSHAN KUMAR (19Z51R0025), VASARLA SATYASREE (19Z51R0038) during the academic year 2022 - 2023 under the guidance of Prof. Dr. M. Srinivas, M.Tech., Ph.D., Professor and Head, Department of Pharm Chemistry. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Cheerral M. Leaster College of plia macy + St.

Ch

SIGNATURE OF THE GUIDE

Prof. Dr. M. Srinivas, M. Tech., Ph.D.,

Professor and Head

Department of Pharm Chemistry

GeethanJall College of pharmacy

PRINCIPAL
Geethanjali Gollege of Pharmacy
Cheeryal(V), Keesara(M), Heschal Dist. T.S. -501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **DECLARATION**

We here by declare that this dissertation/ thesis entitled "SYNTHESIS AND MOLECULAR DOCKING ANALYSIS OF SOME NOVEL CHROMONE DERIVATIVES" is a bonafide and genuine research work carried out by us under the guidance of Prof. Dr. M. Srinivas, M. Tech., Ph.D., Professor and Head, Department of Pharm Chemistry, Geethanjali College of Pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF STUDENT

ADITY A KIKAS, MANE (19Z51R0001)

KALA VAISHNAVI DEVI (19Z51R0018)

Mani Bhushan kumat. MANI BHUSHAN KUMAR (19Z51R0025)

TANI BHUSHAN KUMAR (19251R0025)

V.Swizastee Vasarla satyasree (19**Z51R0038**)

PRINCIPAL

Geethanjali College of Pharmacy Geegal(v), Keessa(N), Redmi Dist, T.S.-501301

### FORMULATION AND EVALUATION OF BARLERIA PRIONITIS

A dissertation Submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfilment of the requirement for the award of the degree of

#### **BACHELOROFPHARMACY**

BY

BHUDIDHA SHIVATMIKA [19Z51R0045] FARAH AZAM [19Z51R0053] LUNAVATH SUSHEELA [19Z51R0062]

Under the guidance of

Dr. SUNIL JUNAPUDI

M. Pharm. Ph. D

PROFESSOR
DEPARTMENT OF PHARMACEUTICAL CHEMISTRY





## GEETHANJALICOLLEGEOFPHARMACY

Accredited by NBA (B. Pharmacy)
Approved by AICTE and PCI New Dolhi, Permanently Affiliated to
JNTUH

Recognised by DSIR-SIRO; under ug esection2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO9001:2015 Cheeryal(V), Keesara(M), Medchal Dist, Telangana – 501301

**JUNE 2023** 

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryai(V), Keesara(H), Meechal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accrediated by NAAC (A<sup>+</sup>)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF BARLERIA PRIONITIS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by BHUDIDHA SHIVATMIKA (19Z51R0045), FARAH AZAM (19Z51R0053), LUNAVATH SUSHEELA (19Z51R0062) during the academic year 2022 - 2023 under the guidance of Dr. SUNIL JUNAPUDI M. Pharm., Ph.D. Professor of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 30 6 2023

Place: Cheeryal

NIGNATURE OF THE HOD

Dr. M.SRINIVAS

M. Tech., Ph.D.

Professor and HOD

Department of Pharmaceutical Chemistry

Geethanjali College of Pharmacy

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M.Pharm., Ph.., PDF., (USA)

Professor and Principal

Geethanjali College of pharmacy

NIGNATURE OF THE EXTERNAL EXAMINER



PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Meacrasi Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited By NAAC (A<sup>+</sup>)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)

HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V) Keesara (M) Medchal Dt., Telangana-501301





#### **CETIFICATION**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OFBALERIA PRIONITIS" being submitted to Jawaharlal NehruTechnology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by BHUDIDHASHIVATHMIKA (19Z51R0045), FARAH AZAM (19Z51R0053), LUNAVATH SUSHEELA (19Z51R0062)during the academic year 2022-2023 under the guidance of Dr. SUNIL JUNAPUDI M. Pharm., Ph.D. Professor of Getthanjali College of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 30/6/2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. SUNIL JUNAPUDI

M.Pharm.,Ph.D.

Professor

Geethanjali College of pharmacy



PRINCIPAL Geethanijali Collegio of Pharmacy Geegaly), keesas, iii, Heddisivisi, 1.5.-501.pr.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A<sup>+</sup>)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### DECLARATION .

I hereby declare that this dissertation/ thesis entitled "FORMULATION AND EVALUATION OF BALERIA PRIONITIS" is a bonafide and genuine research work carried out by me/us under the guidance of Dr. SUNIL JUNAPUDI M. Pharm., Ph.D. Professor, Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 30 6 2023

SIGNATURE OF STUDENT

B Shivathwaka BHUDIDHA SHIVATMIKA (19Z51R0045)

FARAH AZAM (19Z51R0053)

L. Susheela LUNAVATH SUSHEELA (19Z51R0062)

College of Phainado A & St.

PRINCIPAL Geethanjali College of Pharmacy Cheeryal(V), Keessaa(N), Heddhal Bist, T.S.-501301.

# ANTI-MICROBIAL AND ANTI-OXIDANT ACTIVITY OF ETHANOLIC EXTRACT OF CARICA PAPAYA LEAF EXTRACT

A dissertation submitted to



# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

## BACHELOR OF PHARMACY

BY

AGARAM NIKHITHA (19Z51R0042) MANGLARAM APARNA (19Z51R0065) PANJALA SNEHA (19Z51R0083)

Under the Guidance of

Mrs.R.UMADEVI

M.Pharm., Associate Professor

DEPARTMENT OF PHARMACEUTICAL CHEMISRTY



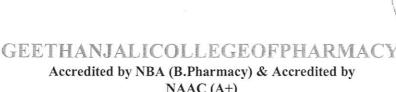
# GEETHANJALI COLLEGE OF PHARMACY

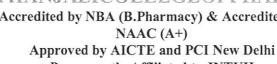
Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015
Checryal (V), Recogniz (M), MedchalDt. Telangana-501301

June 2023



PRINCIPAL
Geethaniali College of Pharmacy
Cheeryal(V), Kechnifity, Howard Ltt. T.S. 501361





Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; under UGC section 2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "ANTI-MICROBIAL AND ANTI-OXIDANT ACTIVITY OF ETHANOLIC EXTRACT OF CARICA PAPAYA LAEF EXTRACT" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by AGARAM NIKHITHA (19Z51R0042), MANGLARAM APARNA (19Z51R0065), PANJALA SNEHA (19Z51R0083) during the academic year 2022 - 2023 under the guidance of Mrs.R.UMADEVI M.Pharm., ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL CHEMISTRY. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 21-06-2023

Place: Cheerya

SIGNATURE OF THE HOD

Dr. M. SRINIVAS

M.Tech., Ph.D.

Professor and Head

Department of Pharmaceutical Chemistry

Geethanjali College of Pharmacy.

SIGNATURE OF

Dr. M. RAVIKUMAR

M.Pharm.,Ph.D.,PDF.,(USA)

Professor and Principal

Geethanjali College of pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER

Geethaniali College of Pharmacy Cheeryal(V), Kessara(M), Meachai Dist. T.S. 501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "ANTI-MICROBIAL AND ANTI-OXIDANT ACTIVITY OF ETHANOLIC EXTRACT OF CARICA PAPAYA LAEF EXTRACT" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by AGARAM NIKHITHA (19Z51R0042), MANGLARAM APARNA (19Z51R0065), PANJALA SNEHA (19Z51R0083) during the academic year 2022 - 2023 under the guidance of Mrs.R.UMADEVI M.Pharm., ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL CHEMISTRY. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution:

Date: 31-06-2023

Place:Cheeryal



SIGNATURE OF THE CUIDE

Mrs.R.UMADEVI

M.Pharm., Associate professor

DEPARTMENT OF

PHARMACEUTICAL CHEMISTRY

PRINCIPAL
Goethaniali College of Pharmacy
Creenyo(1), Kessing(N), McConsidist, LS, -501301,



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana501301





#### DECLARATION

I here by declare that this dissertation/ thesis entitled "ANTI-MICROBIAL AND ANTI-OXIDANT ACTIVITY OF ETHANOLIC EXTRACT OF CARICA PAPAYA LAEF EXTRACT" is a Bonafide and genuine research work carried out by me/us under the guidance of Mrs.R.UMADEVI M.Pharm., ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL CHEMISTRY, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 21-06-2023

Place:Cheeryal

SIGNATURE OF STUDENT

AGARAM NIKHITHA (19Z51R0042)

M. Opano. MANGLARAM APARNA (19Z51R0065)

P. Sucha

PANJALA SNEHA (19Z51R0083)

PRINCIPAL
Geethanjali Gollege of Pharmacy
Cheeryai(V), Keasara(M), Meschai dist. T.S. -501361.

# EXTRACTION OF BIOACTIVE COMPOUNDS FROM MULBERRY

A dissertation submitted to



# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### BACHELOR OF PHARMACY

BY

GANDRA DEEPIKA RAO 19Z51R0054
PITTALA KIRTHI 19Z51R0070
VATAM THIRUMALESH 19Z51R0079

Under the Guidance of
Dr. R. SIVAKUMAR, M. Pharm., Ph.D.,
PROFESSOR
DEPARTMENT OF PHARMACEUTICAL CHEMISTRY



# GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),

HI/BI Approved by MSME, Certified by ISO 9001;2015

Cheeryal (V), Keesara (M), Medchal (Dt). Telangana-501301

June 2023



PRINCIPAL
Geethaniali College of Pharmacy
Cheeryaly, Kessara(N), Medical Dist. T.S. 501361.





Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF CURCUMIN EMULGEL FOR TOPICAL DELIVERY" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by V.MANOJ (19Z51R0066), M.NIKHILA(19Z51R0067), V.JESSIPRIYA(19Z51R0077), A.RONYABHISHEK(19Z51R0084) during the academic year 2022 - 2023 under the guidance of B.SANTHOSH KUMAR M.Pharm., Assistant Professor of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 30/06/2023

Place: Cheeryal

1

SIGNATURE OF THE GUIDE

**B. SANTHOSH KUMAR** 

M.Pharm. ASSISTANT PROFESSOR Geethanjali College of pharmacy



PRINCIPAL
Geethaniali College of Pharmacy
.nec.yal(V), keesala(M), keeddal Dist. T.S.-501501.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **DECLARATION**

I hereby declare that this dissertation/ thesis entitled "FORMULATION AND EVALUATION OF CURCUMIN EMULGEL FOR TOPICAL DELIVERY" is a bonafide and genuine research work carried out by me/us under the guidance of B. SANTHOSH KUMAR M.Pharm., Assistant Professor, Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 30-06-2023

Place: Cheeryal

SIGNATURE OF THE STUDENT

V. MANOJ (19Z51R0066)

Dikhila

M. NIKHILA (19Z51R0067)

V. Jenipuya

V. JESSI PRIYA (19Z51R0077)

A. Paryoto high

A. RONY ABHISHEK (19751R0084)

PETN CIPAL

Geethan Jail College of Pharmacy
Cheeryal (V), Kassara (N), Redenal dist. T.S. (50) 30).

# MOLECULAR DOCKING OF SELECTIVE FLAVONOID DERIVATIVES AS MONOAMINE OXIDASE A INHIBITORS (2Z5Y) USING AUTODOCK VINA

A dissertation submitted to



# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### BACHELOR OF PHARMACY

BY

# ATAKA RAJESHWARI 19Z51R0044 KOMPALLY SAIKIRAN 19Z51R00061 VISHAL RAMESH PANDEY 19Z51R0069

Under the Guidance of N. SWETHA REDDY

M.Pharm

ASSISTANT PROFESSOR
DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

# GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi,
Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301

June 2023

PROMOTEAL
Geethan, all Colleges of Pharmacy
Cheeryal(V), Komanyin, Koomanist. 13-50-30



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+ Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### CERTIFICATE

This is to certify that the dissertation entitled "MOLECULAR DOCKING OF SELECTIVE FLAVONOID DERIVATIVES AS MONOAMINE OXIDASE A INHIBITORS (2Z5Y) USING AUTODOCK VINA" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by ATAKA RAJESHWARI (19Z51R0044), KOMPALLY SAIKIRAN (19Z51R00061), VISHAL RAMESH PANDEY (19Z51R0069) during the academic year 2022 - 2023 under the guidance of N. SWETHA REDDY M.Pharm., Assistant Professor, Department of Pharmaceutical Chemistry. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 15/06/2023

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. M. SRINIVAS

M.Tech., Ph.D.

Professor and Head

Department of Pharmaceutical Cherustry

Geethanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF., (USA)

Professor and Principal

Geethanjali College of pharmacy

Cheeryal (V), (casan, In), agree '

Beathraid Col

SIGNATURE OF THE EXTERNAL EXAMINER

Geethaniali College of Pharma Cheeryal(V), Keesara(M), Medchal Dist. T.S. 501



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### CERTIFICATE

This is to certify that the dissertation entitled "MOLECULAR DOCKING OF SELECTIVE FLAVONOID DERIVATIVES AS MONOAMINE OXIDASE A INHIBITORS (2Z5Y) USING AUTODOCK VINA" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by ATAKA RAJESHWARI (19Z51R0044), KOMPALLY SAIKIRAN (19Z51R00061), VISHAL RAMESH PANDEY (19Z51R0069) during the academic year 2022 - 2023 under the guidance of N. SWETHA REDDY M.Pharm., Assistant Professor, Department of Pharmaceutical Chemistry. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 15 106 2023

Place: Cheeryal

Secretary IV. Recommendation of the debaggion of the deba

SIGNATURE OF THE GUIDE

N. SWETHA REDDY

15/6/23

M.Pharm

ASST PROFESSOR

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

PRINCIPAL

Geethanjali College of Pharmacy
Cneeryal(V), Keesara(M), Medicinal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





## **DECLARATION**

I here by declare that this dissertation/ thesis entitled "MOLECULAR DOCKING OF SELECTIVE FLAVONOID DERIVATIVES AS MONOAMINE OXIDASE A INHIBITORS (2Z5Y) USING AUTODOCK VINA" is a bonafide and genuine research work carried out by me/us under the guidance of N. SWETHA REDDY M.Pharm., Assistant Professor, Department of Pharmaceutical Chemistry, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 15/06/2023

Place: Cheerval

SIGNATURE OF STUDENT

A Rojeshweri (19251R0044)

KOMPALLY ŞAIKIRAN (19Z51R00061)

VISHAL RAMESH PANDEY (19Z51R0069)

PEINCIPAL

Geethanjali College of Pharmacy
Cneeryal(V), Researa(M), Meddial Dist. T.S. -501301.

ARTIFICIAL INTELLIGENCE IN PHARMACY, HEALT & CIENCES AN ALLIED FIELDS: A CASE STUDY

A dissertation submitted to



# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **BACHELOR OF PHARMACY**

BY

MANTHENA SAI LAXMI 19Z51R00026 SINDHURA KOMPELLA 19Z51R0033 VAISHNAVI PATIL 19Z51R0037 YAMADRI VINEELA 19Z51R0041

Under the Guidance of

Mr. NAVEEN JAMJALA

M.Pharm., WBA

ASSISTANT PROFESSOR DEPARTMENT OF PHARMACEUTICS



## Geethanjali College of Pharmacy

Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH,
Accredited by NAAC A+ Grade, NBA (B. Pharmacy)
Recognized Under UGC Section 2F & 12B of UGC Act, 1956, DSIR-SIRO,
HI/BI of MSME & ISO 9001:2015 Certified, AMC of PvPI.
Cheeryal (V), Keesara (M), Medehal-Malkaigiri Dist., Telangana State- 501301



June 2023

PRINCIPAL
Geethanjali College of Pharmacy
Cneeryal(V), Keessara(N), Medichal Dist. T.S.-501301.



## Geethanjali College of Pharmacy

Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH,
Accredited by NAAC A+ Grade, NBA (B. Pharmacy)
Recognized Under UGC Section 2F & 12B of UGC Act, 1956, DSIR-SIRO,
HI/BI of MSME & ISO 9001:2015 Certified, AMC of PvPI.
Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "ARTIFICIAL INTELLIGENCE IN PHARMACY, HEALTH SCIENCES AND ALLIED FIELDS: A CASE STUDY" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by MANTHENA SAIL AND (19751R0026), SINDHURA KOMPELLA (19751R0033), VAISHNAVI PATIL (19751R0037), YAMADRI VINEELA (19751R0041) during the academic year 2022 - 2023 under the guidance of Mr. NAVEEN JAMJALA M.Pharm., MBA, Assistant Professor, Dept of Pharmaceutics, Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 03/06/2023

SIGNATURE OF THE HOD

Place: Cheeryal

DE P. NEERAJA

Professor and Head

Department of Pharmac

Cicethaniah College of Ph

M.Pharm, Ph D.

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M Pharm. Ph.D., PDF (USA)

Professor and Principal

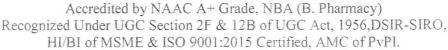
Geethanjali College of Pharmacy.

SIGNATURE OF THE EXTERNAL EXAMINER

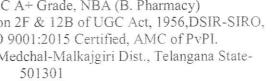
PRINCIPAL

Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medchai Dist. T.S.: 501301.

Geethaniali College of Pharmacy Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH,



Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State-





## **CERTIFICATE**

This is to certify that the dissertation entitled "ARTIFICIAL INTELLIGENCE IN PHARMACY, HEALTH SCIENCES AND ALLIED FIELDS: A CASE STUDY" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by MANTHENA SAI LAXMI (19Z51R0026), SINDHURA KOMPELLA (19Z51R0033), VAISHNAVI PATIL (19Z51R0037), YAMADRI VINEELA (19Z51R0041) during the academic year 2022 -2023 under the guidance of Mr. NAVEEN JAMJALA M.Pharm., MBA. Assistant Professor, Dept of Pharmaceutics, Geethanjali college of pharmacy. It was not submitted carlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 03/06/2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

MI, NAVEEN JAMJALA

M.Pharm., MBA. Assistant Professor **Dept of Pharmaceutics** Geethanjali College of pharmacy

Geethaniali College of Pharmacy Cheeryal(V), Keesara(M), Modonai Dist. T.S.-501301.



## Geethanjali College of Pharmacy

Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH,
Accredited by NAAC A+ Grade, NBA (B. Pharmacy)
Recognized Under UGC Section 2F & 12B of UGC Act, 1956, DSIR-SIRO,
HI/BI of MSME & ISO 9001:2015 Certified, AMC of PvPI.
Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State501301





## **DECLARATION**

I here by declare that this dissertation/ thesis entitled "ARTIFICIAL INTELLIGENCE IN PHARMACY, HEALTH SCIENCES AND ALLIED FIELDS: A CASE STUDY" is a bonafide and genuine research work carried out by me/us under the guidance of Mr. NAVEEN JAMJALA M.Pharm., MBA. Assistant Professor, Dept of Pharmaceutics, Geethanjali college of pharmacy. Cheeryal (V), Keesara (M), Medchal (D), T.S-501301 This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 03/06/2023

Place: Cheeryal

SIGNATURE OF THE STUDENT

ENA SALLAXMIT

HENA SAI LAXMI 19Z51R00026

Sindhura.k

SINDHURA KOMPELLA 19Z51R0033

Vaishnovi patil
VAISHNAVI PATIL 19751R0037

Y. Vincela VAMADRI VINEELA 19251R0041

PRINCIPAL
Geethaniali College of Pharmacy
Cnearyal(V), Keesara(M), Medcnai Dist. T.S.: 501, 101.

## PREPARATION OF HERBAL COSMETICS FROM PONGAMIA PINNATA

A dissertation submitted to



## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **BACHELOR OF PHARMACY**

BY

DHIRAVATH JYOTHI (19Z51R0009)

KOLA PAVANI YADAV (19Z51R0020)

VELATUR MURALI REDDY (19Z51R0039)

Under the guidance of

Dr. N. ANJANEYULU

M.Pharm, Ph.D.

Professor and Head

Department of Pharmaceutical Analysis



## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),

HI/BI Approved by MSME, Certified by ISO 9001:2015

Cheeryal (V), Keesara (M), Medchal (Dt.), Telangana-501301.

June 2023

187 × 187

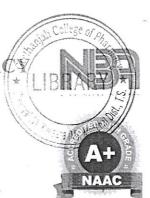
PRINCIPAL

Geethanjali College of Pharmacy
Chearyal(V), Keessra(N), Redmar Olst. T.S.: 501101.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301.



## **CERTIFICATE**

This is to certify that the dissertation entitled "PREPARATION OF HERBAL COSMETICS FROM PONGAMIA PINNATA" being submitted to "JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD" in partial fulfilment for the award of the degree of BACHELOR OF PHARMACY has been successfully carried out by DHIRAVATH JYOTHI (19Z51R0009), KOLA PAVANI YADAV (19Z51R0020), and VELATUR MURALI REDDY (19Z51R0039) during the academic year 2022-2023 under the guidance of Dr. N. ANJANEYULU M.Pharm, Ph.D. It was not submitted earlier in part or full for the award of the degree or diploma of any university institution.

Date: 23/6/23

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. N. ANJANEYULU

M.Pharm., Ph.D.

Professor and Head

Department of Pharmaceutical Analysis

Geethanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M. Pharm., Ph.D., PDF. (USA)

Professor and Principal

Geethanjali College of pharmacy.

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL
Geethanjal: College of Pharmacy
Cheeryal(V), Keesara(H), Fredchal Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "PREPARATION OF HERBAL COSMETICS FROM PONGAMIA PINNATA" being submitted to "JAWAHARLAL NICHRU TECHNOLOGICAL UNIVERSITY HYDERABAD" in partial fulfilment for the award of the degree of BACHELOR OF PHARMACY has been successfully carried out by DHIRAVATH JYOTHI (19Z51R0009), KOLA PAVANI YADAV (19Z51R0020), and VELATUR MURALI REDDY (19Z51R0039) during the academic year 2021-2022 under the guidance of Dr. N. ANJANEYULU M.Pharm, Ph.D. It was not submitted earlier in part or full for the award of the degree or diploma of any university Institution.

Date: 23/6/23

Place: Cheeryal



v and

SIGNATURE OF THE GUIDE

Dr. N. ANJANEYULU

M Pharm, Ph.D.

Professor and Head

Department of Pharmaceutical analysis

PRINCIPAL
Geethanjal: College of Pharmacy
Interval(V), Keesara(II), Medichal Dist. 1.5 -501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, CertifiedbyISO9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **DECLARATION**

I hereby declare that the dissertation entitled "PREPARATION OF HERBAL COSMETICS FROM PONGAMIA PINNATA" is a bonafide and genuine research work carried out by me/us under the guidance of Dr. N. ANJANEYULU M.Pharm, I'h.D. Geethanjali College of pharmacy Cheeryal (v), Keesara (M), Medchal (Dist.), I clangana 501301. This work is original and has not been submitted earlier in part or full for the award of the degree or diploma of any university Institution.

Date: 23/6/23

Place: Cheeryal

**SIGNATUREOFSTUDENT** 

DHIRAVATH JYOTNI (19Z51R0009)

K. Pavani

KOLA PAVANI YADAY (19Z51R0020)

VELATUR MURALI REDDY (19Z51R0039)

PRINCIPAL
Geethanjaii Coilege of Pharmac
Cheeryal(V), Keessaa(M), Mcdchal Dist, T.S.-50130

# SODIUM BENZOATE IN FRUIT JUICES

A dissertation submitted to



## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

BACHELOR OF PHARMACY .

by

ANUMULA ANJALI 19Z51R0043

THIMMAJIPET RAGAMAI 19Z51R0076

VITHANALA TEJASWINI 19Z51R0081

Under the Guidance of

M.Pharm., Assistant professor

DEPARTMENT OF PHARMACEUTICAL ANALYSIS

## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Attiliated to JNTUH, Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M), MedchalDt. Telangana-501301

June 2023



PRINCIPAL
Geethanjali College of Pharmacy
Cheerysign, Kessang My, McCons. pist. T.S.: 501391.





Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12 HI/BI Approved by MSME, Certified by ISO 9001:2 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-50



#### **CERTIFICATE**

This is to certify that the dissertation entitled "A NEW VALIDATED SPECTROSCOPIC METHOD FOR ESTIMATION OF SODIUM BENZOATE IN FRUIT JUICES" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by A.ANJALI (19Z51R0043), T.RAGAMAI(19Z51R0076), V.TEJASWINI(19Z51R0081) during the academic year 2022 - 2023 under the guidance of Mrs. A. Madhavi M.Pharm., Assistant professor, Department of pharmaceutical analysis. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 24/06/23

Place: Cheeryal

SIGNATURE OF THE HOD

Prof. M. SRINIVAS

M.Pharm., Ph.D.,

Professor and Head

Department of Pharmaceutical Chemistry and Anal

Geethanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVI KUMAR

M.Pharm., Ph.D., PDF., (USA)

Professor and Principal

Geethanjali College of pharmacy.

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPA)

Geethanjali College of Pharmacy
Cheeryai(V), Keesara(M), Medichal Ord. 7.8-5013ct



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





### CERTIFICATE

This is to certify that the dissertation entitled "A NEW VALIDATED SPECTROSCOPIC METHOD FOR ESTIMATION OF SODIUM BENZOATE IN FRUIT JUICES" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been carried out by A. ANJALI (19Z51R0043), T. RAGAMAI(19Z51R0076), V. TEJASWINI(19Z51R0081) during the academic year 2022-23 Under the guidance of Mrs. A. Madhavi. M.Pharm. Assistant professor, Department of Pharmaccutical Analysis. It was not submitted earlier in part or full for the award of the Degree or diploma of any University Institution.

Date: 24 06 23

Place: Cheeryal



Pollan

SIGNATURE OF THE GUIDE

Mrs.A.MADHAVI

M.Pharm.,

Assistant professor, Department of

pharmaceutical analysis

Geethanjali college of pharmacy

PRINCIPAL Geethaniali College of Pharmany

Cheeryal(V), Keesara(M), Medichal Dist. Y.S.-5013622



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### DECLARATION

I here by declare that this dissertation/ thesis entitled "A NEW VALIDATED SPECTROSCOPIC METHOD FOR ESTIMATION OF SODIUM BENZOATE IN FRUIT JUICES" is a bonafide and genuine research work carried out by me/us under the guidance of Mrs A. MADHAVI M.Pharm., Assistant Professor, Department of pharmaceutical Analysis. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 24/06/23

Place: Cheeryal



A.ANJALI (19Z51R0043) Angali T.RAGAMAI(19Z51R0076) T.Ragamai(19Z51R0076) V.TEJASWINI(19Z51R081) V. Ligasun

PRINCIPAL

Geethaniali College of Pharmacy
Cheeryal(V), Keesaro(M), Medchal Dist. T.S.-501361.

## DESIGN AND CHARACTERIZATION OF TRANSETHO GEMICITABINE HCL; ANTI TUMOUR AGENT

A dissertation submitted to



## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### BACHELOR OF PHARMACY

BY

G. HARSHITHA [19Z51R0056]

A. KEERTHANA [19Z51R0060]

T. DEVAYANI [19Z51R0075]

Under the Guidance of

NAGA CHANDRIKA PALLAM
M. Pharm, (Ph. D.)
ASSISTANT PROFESSOR
DEPARTMENT OF PHARMACEUTICS





## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),

HI/BI Approved by MSME, Certified by ISO 9001:2015

C'hecryal (V), Keesara (M), Medchal Dt. Telangana-501301

June 2023



Ganthaniah College of Pharmacy Cheeryal(\*), Ressaro(\*), Meddial Dist. T.S.: 501361,



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; under UGC section 2 (f) 12(B)
HI/BLApproved by MSME. Certified by ISO 9001:2015

HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301

12(B) 22015 01301 A

#### **CERTIFICATE**

"DESIGN entitled dissertation certify the to This is CHARACTERIZATION OF TRANSETHOSOMES ON GEMICITABINE HCL; ANTI TUMOUR AGENT" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has G.HARSHITHA(19Z51R0056),A by carried out successfully .KEERTHANA(19Z51R0060),T.DEVAYANI(19Z51R0075) during the academic year 2022 - 2023 under the guidance of NAGA CHANDRIKA PALLAM, M.Pharm, (Ph.D.), Assistant Professor, Department of Pharmaceutics of Geethanjali College of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution

Date:

Place: Cheeryal

MIGNATURE OF THE HOD

Dr. P. NEERAJA

M. Pharmil PID. A.D.
Department of Pharmaceutics
Contribution College of Pharmacy
Charmacy (M), Marking (D), 267301. T.S.

Cresthanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVI KUMAR

M.Pharm., Ph.D. ,PDF.,(USA)

Professor and Principal

Geethanjali College of Pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL
Gentlangs a College of Pharmacy
theorystyl kesszelly, Meddalbist, 1.8-501501.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### CERTIFICATE

This is to certify that the dissertation entitled "DESIGN AND CHARACTERIZATION OF TRANSETHOSOMES ON GEMICITABINE HCL; ANTI TUMOUR AGENT being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by G.HARSHITHA(19Z51R0056),A.KEERTHANA(19Z51R0060),T.DEVAYANI (197.51R0075) during the academic year 2022 - 2023 under the guidance of NAGA CHANDRIKA PALLAM, M.Pharm, (Ph.D.), Assistant Professor, Department of Pharmaceutics of Geethanjali College of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date

Place: Cheeryal

D. w. Chandie Pa(.)

SIGNATURE OF THE GUIDE

NAGA CHANDRIKA PALLAM

M. Pharm., (Ph.D.) Assistant professor Department of pharmaceutics.

Geethanial College of Pharmacy Cheeryal(V), Keesara(M), Meachar Dist. 1.S.-501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana501301



## **DECLARATION**

CHARACTERIZATION OF TRANSETHOSOMES ON GEMICITABINE
HCL; ANTI TUMOUR AGENT" is a bonafide and genuine research work carried out by me/us under the guidance of of NAGA CHANDRIKA PALLAM, M.Pharm, (Ph.D.), Assistant Professor, Department of Pharmaceutics of Geethanjali College of Pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work to original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

College or of the chair of the

SIGNATURE OF THE STUDENT

G. Harshitha

G. HARSHITHA (19Z51R0056)

A. KEERTHANA (19Z51R0060)

T. Devayani

T. DEVAYANI (19Z51R0075)

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medical Dist. T.S.:501301.

## FORMULATION AND EVALUATION OF GEL LOADED WITH CLOPIDOGREL BI SULPHATE MICROSPHERE

A dissertation submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfilment of the requirement for the award of the degree of

**BACHELOR OF PHARMACY** 

BY D.KRUTHI 19Z51R0049 K.SANDEEP 19Z51R00059 V.SOWMYA 19Z51R0078

Under the Guidance of

Dr. P. NEERAJA,

M.Pharm., Ph.D.

PROFESSOR AND HEAD

DEPARTMENT OF PHARMACEUTICS

## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+) Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH, Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015 AMC of PvPI Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301

June 2023



Geethanjali College of Pharmacy Cheeryal(V), Keesura(M), Medchal Dist. T.S.-501301.

## Geethanjali College of Pharmacy



Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH,
Accredited by NAAC A+ Grade, NBA (B. Pharmacy)
Recognized Under UGC Section 2F & 12B of UGC Act, 1956,DSIR-SIRO,
HI/BI of MSME & ISO 9001:2015 Certified, AMC of PvPI.
Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF GEL LOADED WITH CLOPIDOGREL BI SULPHATE MICROSPHERES" being submitted to Jawaharlal Nehru Technology University in partial fulfilment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by D.KRUTH(19Z51R0049), K.SANDEEP(19Z51R0059), V.SOWMYA(19Z51R0078), during the academic year 2022 - 2023 under the guidance of Dr. P.NEERAJA M.Pharm., Ph.D., Professor and Head, Department of Pharmaceutics, Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 14/06/2023

Place: ( hoorya

MIGNATURE OF THE HOD.

Dr. P. NEERAJA

M.Pharm., Ph.D.

HEAD

Opportunitely of Pharmaceutics

Opportunitely College of Pharmacy

Charry I(V), Keosara (M), Medchal (Dt)-501301. T.S.

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF. (USA)

Professor and Principal

Geethanjali College of pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL
Geethanjali Gollege of Pharmacy
Cheeryal(V), Keessra(H), Medchal Dist. T.S.-501301.

## Geethanjali College of Pharmacy



Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH,
Accredited by NAAC A+ Grade, NBA (B. Pharmacy)
Recognized Under UGC Section 2F & 12B of UGC Act, 1956, DSIR-SIRO,
HI/BI of MSME & ISO 9001:2015 Certified, AMC of PvPI.
Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State501301





## **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF GEL LOADED WITH CLOPIDOGREL BI SULPHATE MICROSPHERES" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfilment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by D.KRUTHI(19Z51R0049), K.SANDEEP(19Z51R0059), V.SOWMYA(19Z51R0078) during the headernic year 2022 – 2023 under the guidance of Dr. P.NEERAJA M.Pharm., Ph.D., Professor and Head of Geethanjali College Of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

14/06/2023 Places Chooryal College of Diamery & St. in Medichaller Minds

SIGNATUREOFTHEGUIDE

Dr. P. NEERAJA

M.Pharm, Ph.D.

Professor and Head

Department of Pharmaceutics

Geethanjali College of Pharmacy

PRINCIPAL
Geethaniali College of Pharmacy
cneeryal(V<sub>II</sub>, Keesara(M<sub>II</sub>, Meachardist, T.S.-501301.

## Geethaniali College of Pharmacy



Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH, Accredited by NAAC A+ Grade, NBA (B. Pharmacy) Recognized Under UGC Section 2F & 12B of UGC Act, 1956, DSIR-SIRO, HI/BI of MSME & ISO 9001:2015 Certified, AMC of PvPI. Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State-





## DECLARATION

I hereby declare that this dissertation/ thesis entitled "FORMULATION AND EVALUATION OF GEL LOADED WITH CLOPIDOGREL BI SULPHATE MICROSPHERES" is a bonafide and genuine research work carried out by me/us under the guidance of Dr. P.NEERAJA, M.Pharm., Ph.D., Professor and Head of Geethanjali College Of Pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 14/06/2023
Place: Cheeryal

SIGNATURE OF STUDENT

D. KRUTHI (19Z51R0049) Kuthi

K. SANDEEP (19Z51R0059) K. Sondeci

V. SOWMYA (19Z51R0078) V. Sowonya

Geethanjali College of Pharmacv uneeryal(V), Keesara(M), Medonal Dist. T.S.-501301.

# FORMULATION AND EVALUATION OF CURCUMIN ENTULGEL F TOPICAL DELIVERY

A dissertation submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **BACHELOR OF PHARMACY**

BY

V.MANOJ (19Z51R0066)

M. NIKHILA (19Z51R0067)

V. JESSI PRIYA (19Z51R0077)

A. RONY ABHISHEK (19Z51R0084)

Under the Guidance of

Mr. B. SANTHOSH KUMAR, M.Pharm

ASSISTANT PROFESSOR

DEPARTMENT OF PHARMACOGNOSY



## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; underUGCscction2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M), Medchal (Dt). Telangana-501301

June 2023



PRINCIPAL
Geethanjah College of Pharmacy
Cheeryal(V), Kessara(M), Middhal Dist. T.S.-501301.





Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal (Dt)., Telangana-501301



#### CERTIFICATE

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF CURCUMIN EMULGEL FOR TOPICAL DELIVERY" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by V.MANOJ(19Z51R0066),M.NIKHILA(19Z51R0067),V.JESSIPRIYA(19Z51R0077),A.RONY ABHISHEK(19Z51R0084) during the academic year 2022 - 2023 under the guidance of B.SANTHOSH KUMAR M.Pharm., Assistant Professor of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 30/06/2023

Place: Cheeryal

SIGNATURE OF THE PRINCIPAL

Dr. BHARAT BHUSHAN MOHAPATRA

M.Pharm., Ph.D.

Professor and HOD

Department of Pharmacognosy

Geethanjali College of Pharmacy

Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF., (USA)

Professor and Principal

Geethanjali College of pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL
Geotheria : Conege of Pharmacy
Cheeryd(v), kespork), Middal Ski, I.S. 461301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015, AMC of PvPI, NIRF Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



## **CERTIFICATE**

This is to certify that the dissertation entitled "REGULATORY COMPLIANCE ON VARIETY OF INGREDIENTS USED IN THE COSMETIC INDUSTRY AND THEIR TOXICOLOGICAL EFFECTS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by D S R AMUKTHA (21Z51S1301) during the academic year 2022 – 2023 under the guidance of Dr. Y SHIVA KUMAR M.Pharm., Ph. D, Head of the Department, Dept of Pharmaceutical Regulatory Affairs. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 11-10-2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. Y SHIVA KUMAR

M.Pharm., Ph. D.

Head of Department, Department of Pharmaceutical Regulatory

Affairs

Geethanjali College of pharmacy

College of Photogram of the State of the Sta

PRINCIPAL
Geethanjali College of Pharmacy
uneeryal(V), Keesara(N), Medichal Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi

Permanently Affiliated to JNTUH

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)

HI/BI Approved by MSME, Certified by ISO 9001:2015, AMC of PvPI, NIRF Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "REGULATORY COMPLIANCE ON VARIETY OF INGREDIENTS USED IN THE COSMETIC INDUSTRY AND THEIR TOXICOLOGICAL EFFECTS" is a bonafide and genuine research work carried out by me under the guidance of Dr. Y SHIVA KUMAR M.Pharm., Ph. D, Head of the Department, Dept of Pharmaceutical Regulatory Affairs, Geethanjali college of pharmacy. Cheeryal (V), Keesara (M), Medchal (D), T.S-501301 This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 11-10-2023

Place: Cheeryal

SIGNATURE OF THE STUDENT

D S R AMUKTHA (21Z51S1301)

Colloge of Phanistra

Goothangall Corrage of Pharmacy Cheeryal(1), Keasara(N), Medichal bist. 1.5.-501301.

## Geethanjali College of Pharmacy

Approved by AICTE, PCI New Delhi, Permanently Affiliated to JNTUH
Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Recognized Under UGC Section 2F & 12B of UGC Act, 1956, by DSIR-SIRO & HI/BI of MSME,
Certified by ISO 9001:2015, AMC of PvPi, NIRF
Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana State- 501301

## M.Pharmacy Project work students list for the AY 2022-23

S.NO	NAME OF THE STUDENT	ROLL NUMBER
1	Azmera Tejaswi	21Z51S1201
2	Dappu Aiswarya	21Z51S1202
3	Dwarampudi Harshita	21Z51S1203
-4	Kalepu Eswar Krishna Sai	21Z51S1204
5	K Anil	21Z51S1205
6	Madhireddy Srija Reddy	2175181206
7	Ankita Tiwari	21Z51S1207
8	Sanala Nikitha	21Z51S1209
9	Kanakala Raghu	21Z51S1208
10	Ukku Naga Mohana Kumari	21Z51S1210
11	Vanapalli Sindhu	21Z51S1211
12	Dsr Amuktha	21Z51S1301
13	Md Haseena	21Z51S1303
14	Patlalla Harika	2125121204
15	Vootukuri Vaishnavi	21Z51S1306
16	Ainary Anjali	21Z51S0301
17	Andigari Ramya Sree	21Z51S0302
18	Annepally Dharani	21Z51S0303
19	Anusha Dev	21Z51S0304
20	Tallapalli Manisha	21Z51S0307

# A NEW STABILITY INDICATING RP-HPLC METHOD DEVELOPMENTAND VALIDATION FOR THE SIMULTANEOUS ESTIMATION OF BEMPEDOIC ACID AND EZETIMIBE IN PHARMACEUTICAL DOSAGEFORM

A Project submitted to



## JAWAHARLALNEHRUTECHNOLOGICALUNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

MASTER OF PHARMACY IN PHARMACEUTICAL ANALYSIS BY

AZMERA TEJASWI – (21Z51S1201)

Under the Guidance of

M. SATISH KUMAR, M.Pharm

ASSISTANT PROFESSOR

DEPARTMENT OF PHARMACEUTICAL ANALYSIS

GFFTHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH, Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015

AMC of PvPI/NIRF

Cheeryal (V), Keesara (M), Medchal dist. Telangana-501301

October 2023

Geethanjali Collage of Pharmacy Cheeryal(V), Keessia(M), Medchal Dist. T.S.-501301.





Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC of PvPI/NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the Project entitled "A NEW STABILITY INDICATING RP-HPLC METHOD DEVELOPMENT AND VALIDATION FOR THE SIMULTANEOUS ESTIMATION OF BEMPEDOIC ACID AND EZETIMIBE IN PHARMACEUTICAL DOSAGE FORM" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of master of Pharmacy, has been successfully carried out by AZMERA TEJASWI(21Z51S1201) during the academic year 2023 under the guidance of Mr, M. SATISH KUMAR, M.Pharm., ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACEUTICAL ANALYSIS. It was not submitted earlier in part or full for the award of the degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. N. ANJANEYULU

M. Pharm., Ph.D.

Professor and

Head of Pharmaceutical Analysis

Geethanjali College of Pharmacy

Department of Pharmaceutical Analysis Geethanjali College of Pharmacy Cheenal (V), Keesara (M) Medahal (D), T c coront

SIGNATURE OF THE EXTERNAL EXAMINER

SIGNATURE OF THE PRINC

M Phones Ph D DDF (LIC

Dr.M. RAVI KUMAR

M. Pharm., Ph.D., PDF (USA)

Professor and Principal

Geethanjali College of Pharmacy

Geethanije ii Cothege of Pharmacy Chenge(V), is access it is access Dist. T.S. 501301.

> PRINCIPAL panjali College of Phar

Geethanjali College of Pharmacy Cheeryal(V), Kaesara(M), Medchal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015

AMC of PvPI/NIRF Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the Project entitled "A NEW STABILITY INDICATING RP-HPLC METHOD DEVELOPMENT AND VALIDATION FOR THE SIMULTANEOUS ESTIMATION OF BEMPEDOIC ACID AND EZETIMIBE IN PHARMACEUTICAL DOSAGE FORM" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of master of Pharmacy, has been successfully carried out by AZMERA TEJASWI (21Z51S1201) during the academic year 2023 under the guidance of Mr. M. SATISH KUMAR, M. Pharm., ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACEUTICAL ANALYSIS. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

Collage of Planting # SE I III

SIGNATURE OF THE GUIDE

Mr. M SATISH KUMAR

M.Pharm

**Assistant Professor** 

Department of Pharmaceutical Analysis

Geethanjali College of Pharmacy

PRINCIPAL

Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC of PvPI/NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana501301



## **DECLARATION**

I hereby declare that this Project entitled"A NEW STABILITY INDICATING RP-HPLC METHOD DEVELOPMENT AND VALIDATION FOR THE SIMULTANEOUS ESTIMATION OF BEMPEDOIC ACID AND EZETIMIBE IN PHARMACEUTICAL DOSAGE FORM" is a bonafide and genuine research work carried out by me/us under the guidance of Mr. M. SATISH KUMAR, M.Pharm. ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACEUTICAL ANALYSIS. Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

AZM

SIGNATURE OF STUDENT

AZMERA TEJASWI - 21Z51S1201

PRINCIPAL Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medicial Dist. T.S.:501381.

# DEVELOPMENT OF NEWER VALIDATED ANALYTICAL METHODS FOR THE DETERMINATION OF RIOCIGUAT IN TABLET DOSAGE FORM

A dissertation submitted to



## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### MASTER OF PHARMACY

IN

#### PHARMACEUTICAL ANALYSIS

BY

D. AISWARYA (21Z51S1202)

Under the Guidance of

Dr. R. SIVA KUMAR

M. Pharm., Ph.D.,

**PROFESSOR** 

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY



## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi,

Permanently Affiliated to JNTUH,

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)

HI/BI Approved by MSME, Certified by ISO 9001:2015

Cheeryal (V), Keesara (M), MedchalDt. Telangana-501301

PRINCIPAL

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medchal Dist. T. S. - 501301.

2023



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 , Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "DEVELOPMENT OF NEWER VALIDATED ANALYTICAL METHODS FOR THE DETERMINATION OF RIOCIGUAT IN TABLET DOSAGE FORM being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by D. AISWARYA(21Z51S1202) during the academic year 2021 - 2023 under the guidance of Dr. R. SIVA KUMAR M.Pharm., Ph.D., Professor of the Department of Pharmaceutical Chemistry, Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheerval

SIGNATURE OF THE HOD

Dr. N. ANJANEYULU

M.Pharm., Ph.D.

Professor and HOD

Department of Pharmaceutical Analysts

Geethanjali College of Pharmacy

HEAD

Department of Pharmaceutical Analysis Geethanjali College of Pharmacy Cheeryal (V), Keesara (M), Medchal (Dt.), T.S-501301.

M.Pharm., Ph.D., PDF (USA)

Dr. M. RAVI KUMAR

SIGNATURE OF THE PRINCIPAL

Professor and Principal

Geethanjali College of Pharmacy PRINCIPAL

Geethanjali College of Pharmacy Cheervaily), Keesera(1), Herichel Dist. T.S. 501301.

SIGNITURE OF THE EXTERNAL EXAMINER

Geethanical College of Pharmacy Cheeryan(V), Keesaru(M), Medenai Dist. T.S.:501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "DEVELOPMENT OF NEWER VALIDATED ANALYTICAL METHODS FOR THE DETERMINATION OF RIOCIGUAT IN TABLET DOSAGE FORM" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by D. AISWARYA (21Z51S1202) during the academic year 2021-2023 under the guidance of Dr. R. SIVA KUMAR M.Pharm., Ph.D., Professor of the Department of Pharmaceutical Chemistry of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

10-10-

Place: Cheeryal

College of Pharmack St. 16 A C. 16 A C

SIGNATURE OF THE GUIDE

Dr.R. SIVA KUMAR

M. Pharm.. Ph.D..

Professor

Department of Pharmaceutical Chemistry

Geethanjali College of Pharmacy

PRINCIPAL
Geethanjal College of Pharmacy
Cneeryal(V), Koesara (M), Meddhal Dist. T.S.-501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC(A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certifiedby ISO 9001:2015 Cheeryal (V), Keesara(M) Medchal Dt., Telangana-501301





#### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "DEVELOMENT OF NEWER VALIDATED ANALYTICAL METHODS FOR THE DETERMINATION OF RIOCIGUAT IN TABLET DOSAGE FORM" is a bonafide and genuine research work carried out by me under the guidance of Dr. R. SIVA KUMAR M.Pharm., Ph.D., Professor of the Department of Pharmaceutical Chemistry of Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 10 - 10 - 202

Place:Cheeryal

D. Alswarya

SIGNATURE OF STUDENT

D.AISWARYA (21Z51S1202)

Geethonial Journa of Pharmacy Cheerpar(V), Rossara, M), Medenal Dist. 1.5. SU1304.

# DALBAVANCIN INJECTION: AN APPROACH FOR METHOD DEVELOPMENT AND VALIDATION

A dissertation submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### MASTER OF PHARMACY

IN

PHARMACEUTICAL ANALYSIS
BY

**D.HARSHITA 21Z51S1203** 

Under the Guidance of

Dr. M. SRINIVAS

M.Tech, Ph.D

PROFESSOR AND HEAD
DEPARTMENT OF PHARMACEUTICAL CHEMISTRY



## GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301

September 2023



PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keessara(M), Medchai Dist. T.S.-S01301.



## COLLEGE OF PHAR



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### CERTIFICATE

This is to certify that the dissertation entitled "DALBAVANCIN INJECTION: AN APPROACH FOR METHOD DEVELOPMENT AND VALIDATION" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by D.HARSHITA (21Z51S1203) during the academic year 2021-2023 under the guidance of Dr. M. SRINIVAS M.Tech., Ph.D, Professor and Head of Department of Pharmaceutical Chemistry of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. N. ANJANEYULU

M.Pharm., Ph.D.

Professor and HOD

Department of Pharmaceutical Analysis

Geethanjali College of Pharmacy

HEAD Department of Pharmaceutical Analysis Geethanjali College of Pharmacy

loloh

Cheeryal (V), Keesara (M), Medchal (Dt.), T.S-501301.

Dr.M. RAVI KUMAR

M.Pharm., Ph.D., PDF (USA)

Professor and Principal

Geethanjali College of Pharmacy

PRINCIPAL

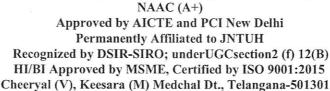
Germanjaŭ Carlaga of Prisamaci

SIGNATURE OF THE EXTERNAL EXAMINER

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by





#### **CERTIFICATE**

This is to certify that the dissertation entitled "DALBAVANCIN INJECTION: AN APPROACH FOR METHOD DEVELOPMENT AND VALIDATION" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by D.HARSHITA (21Z51S1203) during the academic year 2021-2023 under the guidance of Dr. M. SRINIVAS M.Tech., Ph.D, Professor and Head of Department of Pharmaceutical Chemistry of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr.M.SRINIVAS

M.Tech., Ph.D.,

Professor and HOD

Department of Pharmaceutical Chemistry

Geethanjali College of Pharmacy

Geethanjeli College of Pharmacy Cheeryar(V), Keescrafff), Medichal dist. T.S.-501361.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, CertifiedbyISO9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### DECLARATION

I hereby declare that this dissertation/ thesis entitled "DALBAVANCIN INJECTION: AN APPROACH FOR METHOD DEVELOPMENT AND VALIDATION" is a bonafide and genuine research work carried out by me under the guidance of Dr. M. SRINIVAS M.Tech., Ph.D., Professor and Head of Department of Pharmaceutical Chemistry of Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

gardin.

SIGNATURE OF STUDENT

D.HARSHITA (21Z51S1203)



Geethanjali College of Pharmacy Cneeryal(V), Keesara(N), Neumai Dist. T.S.-5013vi.

### LOBEGLITAZONE TABLET: AN APPROACH FOR METHOD DEVELOPMENT AND VALIDATION

A dissertation submitted to



### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

### MASTER OF PHARMACY

IN

PHARMACEUTICAL ANALYSIS

BY

#### K. ESWAR KRISHNA SAI 21Z51S1204

Under the Guidance of

Dr. M. SRINIVAS

M.Tech, Ph.D.

PROFESSOR AND HEAD

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

### GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A1)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH, Recognized by DSIR-SIRO; underUGC section 2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015

Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301

September 2023

Geethaniali College of Pharmacy Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.





Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



### CERTIFICATE

This is to certify that the dissertation entitled "LOBEGLITAZONE TABLET: AN APPROACH FOR METHOD DEVELOPMENT AND VALIDATION" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by K.ESWAR KRISHNA SAI (21Z51S1204) during the academic year 2021 - 2023 under the guidance Dr. M. SRINIVAS M.Tech., Ph.D, Professor and Head of Department of Pharmaceutical Chemistry, Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. N. ANJANEYULU

M.Pharm., Ph.D.

Professor and HOD

Department of Pharmaceutical Analysis

Geethanjali College of Pharmacy

HEAD

Department of Pharmaceutical Analysis Geethanjali College of Pharmacy

Cheeryal (V), Keesara (M), Medchal (Dt.), T.S-501301.

SIGNATURE OF THE PRINCIPAL

Dr.M. RAVI KUMAR

M.Pharm., Ph.D., PDF (USA)

Professor and Principal

Geethanjali College of Pharmacy

PRINCIPAL

Geethaniali College of Pharmacy Cheeryal(v), keesara(M), Meachal Dist. T.S.-501301.

SIGNATURE OF THE EXTERNAL EXAMINER

Geethaniali College of Pharmacy Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.





Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



### **CERTIFICATE**

This is to certify that the dissertation entitled "LOBEGLITAZONE TABLET: AN APPROACH FOR METHOD DEVELOPMENT AND VALIDATION" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by K.ESWAR KRISHNA SAI (21Z51S1204) during the academic year 2021-2023 under the guidance of Dr. M. SRINIVAS M.Tech., Ph.D, Professor and Head of Department of Pharmaccutical Chemistry of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. M.SRINIVAS

M.Tech., Ph.D.,

Professor and HOD

Department of Pharmaceutical Chemistry

Gcethaniali College of Pharmacy

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; under UGC section2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





### DECLARATION

I here by declare that this dissertation/ thesis entitled "LOBEGLITAZONE TABLET: AN APPROACH FOR METHOD DEVELOPMENT AND VALIDATION" is a bonafide and genuine research work carried out by me/us under the guidance of Dr. M. SRINIVAS M.Tech., Ph.D., Professor and Head of Department of Pharmaceutical Chemistry of Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

SIGNATURE OF STUDENT

K.ESWAR KRISHNA SAI (21Z51S1204)

PRINCIPAL Geethaniali College of Phan

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.

### A STABILITY INDICATING RP-HPLC METHOD VALIDATION FOR SIMULTANEOUS ESTIMATION OF TELMISARTAN AND AZELNIDIPINE IN A FIXED DOSE COMBINATION

A dissertation submitted to



### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, **HYDERABAD**

In partial fulfilment of the requirement for the award of the degree of

### MASTERS OF PHARMACY PHARMACEUTICAL ANALYSIS

K.ANIL (21Z51S1205)

UNDER THE GUIDANCE OF

Dr. J. SUNIL,

M. Pharm, Ph.D.,

**Professor** 

Department of Pharmaceutical Chemistry



### GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+) Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUII, Recognized by DSIR-SIRO; under UGC section2 (f) 12(D), HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501.501



Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi

Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### CERTIFICATE

This is to certify that the dissertation entitled "A STABILITY INDICATING RP-HPLC METHOD VALIDATION FOR SIMULTANEOUS ESTIMATION OF TELMISARTAN AND AZELNIDIPINE IN A FIXED DOSE COMBINATION" being submitted to Jawaharlal Nehru Technology University in partial fulfilment for the award of the degree of Masters of Pharmacy (Pharmaceutical Analysis) has been successfully carried out by K ANIL (21Z51S1205) during the academic year 2022 - 2023 under the guidance of Dr. J. SUNIL, M. Pharm., Ph. D., It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10/10/2023

Place: Cheeryal

SIGNATURE OF HEAD

SIGNATURE OF PRINCIPAL

Dr N ANJANEYULU

M. Pharm, Ph.D.,

Professor and Head

Department of Pharmaceutical analysis

Geethanjali College of Pharmacy

HEAD

Department of Pharmaceutical Analysis Geethan all College of Pharmacy Cheeryal (V), Keesara (M), Medchal (Dt.), T.S-501301. Dr. M. RAVI KUMAR
M.Pharm, Ph.D., PDF (USA)
Professor and Principal
Geethanjali College of Pharmacy
PRINCIPAL

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Modehal Dist, T.S. 591301.

SIGNATURE OF EXTERNAL EXAMINER

Geethanjali College of Pharmacy Charyal(V), Reserrath), Rescharbist (S. 50130).



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### CERTIFICATE

This is to certify that the dissertation "A STABILITY INDICATING RP-HPLC METHOD VALIDATION FOR SIMULTANEOUS ESTIMATION OF TELMISARTAN AND AZELNIDIPINE IN A FIXED DOSE COMBINATION" to Jawaharlal Nehru Technology University Hyderabad in partial fulfilment for the award of the degree of Masters in Pharmacy (Pharmaceutical Analysis), has been successfully carried out by K ANIL (21Z51S1205) during the academic year 2020-2021 under the guidance of Dr. J. SUNIL, M.Pharm, Ph.D.,. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10/10/23.

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. J. SUNIL

M. Pharm, Ph. D.,

Professor

Department of pharmaceutical chemistry

FELMOIPAL Geethanjali College of Pharmacy Cheeryal(V), Keessia(M), Medchal Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **DECLARATION**

I hereby declare that this dissertation / thesis entitled is "A STABILITY INDICATING RP-HPLC METHOD VALIDATION FOR SIMULTANEOUS ESTIMATION OF TELMISARTAN AND AZELNIDIPINE IN A FIXED DOSE COMBINATION" a bonafide and genuine research work carried out by me under the guidance of Dr. J SUNIL, M.Pharm Ph.D., Department of Pharmaceutical Chemistry.

Date: 10/10/23
Place: drecoryal.

Signature of Student

K ANIL

(21Z51S1205)



PRINCIPAL
Goothanjali Cullenje of Pharmacy
Cheeryal(V), Keesara(M), Meachal dist. T.S.-501301.

# DEVELOPMENT AND VALIDATION OF RP-UPLC METHOD FOR SIMULTANEOUS DETERMINATION OF LAMIVUDINE AND DOLUTEGRAVIR IN COMBINED DOSAGE FORM

#### A dissertation submitted to



### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

MASTER OF PHARMACY

BY

MADHIREDDY SRIJA REDDY- 21Z51S1206

Under the Guidance of

Dr. N. ANJANEYULU

M.Pharm., Ph.D.

Professor and Head

(DEPARTMENT OF PHARMACEUTICAL ANALYSIS)



### **GEETHANJALI COLLEGE OF PHARMACY**

Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH, Recognized by DSIR-SIRO; under UGC section2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015 Checryal (V), Keesara (M), Medehal Dt. Telangana-501301

September 2023



PRINCIPAL
Goethanjah College of Pharmacy
Gesgaga, Associaty, Associaty



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015

Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





### CERTIFICATE

This is to certify that the dissertation entitled "DEVELOPMENT AND VALIDATION OF RP-UPLC METHOD FOR SIMULTANEOUS DETERMINATION OF LAMIVUDINE AND DOLUTEGRAVIR IN COMBINED DOSAGE FORM" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by MADHIREDDY SRIJA REDDY (21Z51S1206) during the academic year 2022 - 2023 under the guidance of Dr. N ANJANEYULU M.Pharm., Ph. D, Head of the Department, Dept of Pharmaceutical Analysis. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 30 110 2023

Place: Cheeryal

SIGNATURE OF THE HOD Dr.N.ANJANEYULU

M.Pharm., Ph.D.
Professor and Head
Department of Pharmaceutical Analysi
Geethanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF (USA)
Professor and Principal
Geethanjali College of Pharmacy.

PRINCIPAL Geethoniqui Consege of Pharmacy (nematri, xessis,m), nousiarbis, 1.5, 501301.

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL
Geethaniali College of Pharmacy
Cneeryal(V), Seesara(M), Meuchal Dist, T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





### **CERTIFICATE**

This is to certify that the dissertation entitled "DEVELOPMENT AND VALIDATION OF RP-UPLC METHOD FOR SIMULTANEOUS DETERMINATION OF LAMIVUDINE AND DOLUTEGRAVIR IN COMBINED DOSAGE FORM" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by MADHIREDDY SRIJA REDDY (21Z51S1206) during the academic year 2022 – 2023 under the guidance of Dr. N ANJANEYULU M.Pharm., Ph. D, Head of the Department, Dept of Pharmaceutical Analysis. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 30.10.2023

Place: Cheeryal

College of One Colleg

SIGNATURE OF THE GUIDE

Dr. N ANJANEYULU M.Pharm., Ph. D.

Head of Department, Dept of Ph. Analysis Geethanjali College of Pharmacy

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medonal Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+) Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)

HI/BI Approved by MSME, Certified by ISO 9001:2015

Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "DEVELOPMENT AND VALIDATION OF RP-UPLC METHOD FOR SIMULTANEOUS DETERMINATION OF LAMIVUDINE AND DOLUTEGRAVIR IN COMBINED DOSAGE FORM" is a bonafide and genuine research work carried out by me under the guidance of Dr. N ANJANEYULU M.Pharm., Ph. D, Head of the Department, Dept of Pharmaceutical Analysis, Geethanjali college of pharmacy. Cheeryal (V), Keesara (M), Medchal (D), T.S-501301 This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 30°10°2023

Place: Cheeryal

SIGNATURE OF THE STUDENT

MADHIREDDY SRIJA REDDY 21Z51S1206



Geethaniali College of Pharmacv Cheerval(V), Keesara(M), Medonal Dist. T.S.-501301. METHOD DEVELOPMENT AND VALIDATION FOR THE QUANTITATIVE ESTIMATION OF UMECLIDINIUM AND VILANTEROL IN PURE FORM AND MARKETED PHARMACEUTICAL DOSAGE FORM BY RP- HPLC METHOD

A dissertation submitted to



### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

MASTER OF PHARMACY

BY

ANKITA TIWARI- 21Z51S1207

Under the Guidance of

Dr. N. ANJANEYULU

·M.Pharm., Ph.D.

Professor and Head

(DEPARTMENT OF PHARMACEUTICAL ANALYSIS)



### GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH, Recognized by DSIR-SIRO; under UGC section2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M), Mcdchal Dt. Telangana-501301

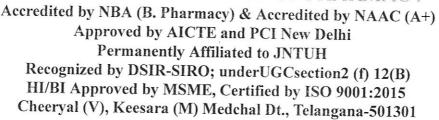
September 2023



PRINCIPAL
Geethaniali College of Pharmacy

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Menchal Dist. T.S.-501301.









### CERTIFICATE

This is to certify, that the dissertation entitled "METHOD DEVELOPMENT AND VALIDATION FOR THE QUANTITATIVE ESTIMATION OF UMECLIDINIUM AND VILANTEROL IN PURE FORM AND MARKETED PHARMACEUTICAL DOSAGE FORM BY RP- HPLC METHOD." being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by ANKITA TIWARI (21Z51S1207) during the academic year 2022 - 2023 under the guidance of Dr. N ANJANEYULU M.Pharm., Ph. D, Head of the Department, Dept of Pharmaceutical Analysis. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 30-10-2023

Place: Cheeryal

SIGNATURE OF THE HOD DEN.ANJANEYULU

M.Pharm. Ph.D.
Philessor and Head
Department of Pharmaceutical Analysis
Chethanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF (USA)

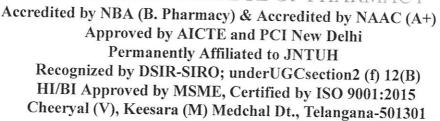
Professor and Principal
Geethanjali College of Pharmacy
Geethanjali College of Pharmacy
Geeryaly), Keessalla, Medical Dist, LS. 501301.

SIGNATURE OF THE EXTERNAL EXAMINER



PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(Y), Keesara(M), Medicial Dist. T.S.-501301.









#### **CERTIFICATE**

This is to certify that the dissertation entitled "METHOD DEVELOPMENT AND VALIDATION FOR THE QUANTITATIVE ESTIMATION OF UMECLIDINIUM AND VILANTEROL IN PURE FORM AND MARKETED PHARMACEUTICAL DOSAGE FORM BY RP- HPLC METHOD." being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by ANKITA TIWARI (21Z51S1207) during the academic year 2022 – 2023 under the guidance of Dr. N ANJANEYULU M.Pharm., Ph. D, Head of the Department, Dept of Pharmaceutical Analysis. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 30.10.2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. N ANJANEYULU M.Pharm., Ph. D. Head of Department, Dept of Ph. Analysis Geethanjali College of pharmacy



PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Meuchai Dist. T.S.: 501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "METHOD DEVELOPMENT AND VALIDATION FOR QUANTITATIVE ESTIMATION OF UMECLIDINIUM AND VILANTEROL IN **PURE FORM** AND MARKETED PHARMACEUTICAL DOSAGE FORM BY METHOD." is a bonafide and genuine research work carried out by me under the guidance of Dr. N ANJANEYULU M.Pharm., Ph. D, Head Department, the Dept of Pharmaceutical Analysis, Geethanjali college of pharmacy. Cheeryal (V), Keesara (M), Medchal (D), T.S-501301 This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 30-10-2023

Place: Cheeryal

SIGNATURE OF THE STUDENT

ANKITA TIWARI 21Z51S1207



PRINCIPAL
Gesthanjali Cottege of Pharmacy
Georgaly, Recognitional part 15-561201.

### RP-HPLC METHOD DEVELOPMENT AND VALIDATION FOR ESTIMATION ASSAY OF MEGESTROL ACETATE TABLETS USP

A Project submitted to



### JAWAHARLALNEHRUTECHNOLOGICALUNIVERSITYHYDERABAD

In partial fulfillment of the requirement for the award of the degree of

MASTER OF PHARMACY
IN
PHARMACEUTICAL ANALYSIS

BY

### KANKANALA RAGHU (21Z51S1208)

Under the Guidance of

Dr. R.SIVA KUMAR

M.Pharm., Ph.D.,

**PROFESSOR** 

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

### GEETHANJALI COLLEGE OF PHARMACY



Accredited by NBA (M.Pharmacy)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTU Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M), Medchal dist. Telangana-501301

2023



PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medchal Dist. T.S.:501301



Accredited by NBA (M.Pharmacy)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the Project entitled "RP-HPLC METHOD DEVELOPMENT AND VALIDATION FOR ESTIMATION ASSAY OF MEGESTROL ACETATE TABLETS USP" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of master of Pharmacy, has been successfully carried out by KANKANALA RAGHU (21Z51S1208) during the academic year 2021-2023 under the guidance of Dr. R. SIVA KUMAR M.Pharm., Ph.D., Professor, Department of Pharmaceutical Chemistry of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. N. ANJANEYULU

M.Pharm., Ph.D.

Professor and

Head of pharmaceutical analysis

Department of Fhasmage of Pharmacy Geethanjali College of Pharmacy Cheeryal (V), Keesara (M), Medchal (Dt.), T.S-501301. SIGNATURE OF THE PRINCIPAL

Dr.M. RAVI KUMAR

M.Pharm., Ph.D., PDF (USA)

Professor and Principal

Geethanjali College of Pharmacy

PRINCIPAL

Goothaniali Collegie of Pharmacy Cheryally), Kessara(M), Neirost Dist. 1.5.-501301.

SIGNATURE OF THE ENTERNAL EVANINGS

PRINCIPAL

Geethaniali Gollege of Pharmacy
Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.



Accredited by NBA (M.Pharmacy)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





### **CERTIFICATE**

This is to certify that the Project entitled "RP-HPLC METHOD DEVELOPMENT AND VALIDATION FOR ESTIMATION ASSAY OF MEGESTROL ACETATE TABLETS USP" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of master of Pharmacy, has been successfully carried out by KANKANALA RAGHU (21Z51S1208) during the academic year 2021-2023 under the guidance of Dr. R. SIVA KUMAR M.Pharm., Ph.D., Professor, Department of Pharmaceutical Chemistry of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-202]

Place: Cheeryal

College of Anguarda \* ST 108

SIGNATURE OF THE GUIDE

Dr. R.SIVA KUMAR

M.Pharm., Ph.D.,

Professor

Department of Pharmaceutical Chemistry

Geethanjali College of Pharmacy

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesala(M), Medichal Dist. T.S.-501301.



Accredited by NBA (M.Pharmacy)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; under UGC section 2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **DECLARATION**

I hereby declare that this Project entitled "RP-HPLC METHOD DEVELOPMENT AND VALIDATION FOR ESTIMATION ASSAY OF MEGESTROL ACETATE TABLETS USP" is a bonafide and genuine research work carried out by me under the guidance of by KANKANALA RAGHU (21Z51S1208) during the academic year 2021-2023 under the guidance of Dr. R. SIVA KUMAR M.Pharm., Ph.D, Professor, Department of Pharmaceutical Chemistry of Geethanjali college of pharmacy Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal



SIGNATURE OF STUDENT

KANKANALA RAGHU (21Z51S1208)

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.

## METHOD DEVELOPMENT AND VALIDATION FOR VITAMIN A AND E IN EGG BY HPLC

A dissertation submitted to



## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

In partial fulfilment of the requirement for the award of the degree of

MASTERS OF PHARMACY
IN
PHARMACEUTICAL ANALYSIS

BY S NIKITHA (21Z51S1209)

UNDER THE GUIDANCE OF

Dr. J. SUNIL,
M. Pharm, Ph.D.,
Professor
Department of Pharmaceutical Chemistry



### GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015

Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301

2023

PRINCIPAL
Geethanjali College of Pharmacy
Cneeryal(V), Keesara(M), Meddhal Dist. T.S.: 501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "METHOD DEVELOPMENT AND VALIDATION FOR VITAMIN A AND E IN EGG BY HPLC" being submitted to Jawaharlal Nehru Technology University in partial fulfilment for the award of the degree of Masters of Pharmacy (Pharmaceutical Analysis) has been successfully carried out by S NIKITHA (21Z51S1209) during the academic year 2022 - 2023 under the guidance of Dr. J. SUNIL, M. Pharm., Ph. D., It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10110103

Place: cheeryal

SIGNATURE OF HEAD

Dr'N ANJANEYULU M. Pharm, Ph.D., Professor and Head

Department of Pharmaceutical analysis
Goothaniali/GollogCof Pharmacy

Department of Pharmaceutical Analysis Geothanjall College of Pharmacy Cherysl (Y), Keesara (M), Medchal (Dt.), T.S-501301. SIGNATURE OF PRINCIPAL

Dr. M. RAVI KUMAR M.Pharm, Ph.D., PDF (USA) Professor and Principal Geethanjali College of Pharmacy

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), kaesara(M), Medicial Dist, T.S., 501301,

SIGNATURE OF EXTERNAL EXAMINER

F FUN CIPAL Geethanjali Codege of Pharmacy Geergal(V), Kestata(N), Neddaliviar, ES -5m,301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation "METHOD DEVELOPMENT AND VALIDATION FOR VITAMIN A AND E IN EGG BY HPLC" to Jawaharlal Nehru Technology University Hyderabad in partial fulfilment for the award of the degree of Masters in Pharmacy (Pharmaceutical Analysis), has been successfully carried out by S NIKITHA (21Z51S1209) during the academic year 2020 - 2021 under the guidance of Dr. J. SUNIL, M.Pharm, Ph.D., It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10/10/23

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. J. SUNIL

M. Pharm, Ph. D.,

Professor

Department of pharmaceutical chemistry



PRINCIPAL
Geothanjali College of Pharmacy
Cheeryal(V), Reesara(M), Medichal Dist. T.S. +501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



### **DECLARATION**

I hereby declare that this dissertation / thesis entitled is "METHOD DEVELOPMENT AND VALIDATION FOR VITAMIN A AND E IN EGG BY HPLC" a bonafide and genuine research work carried out by me under the guidance of Dr. J SUNIL, M. Pharm Ph.D., Department of Pharmaceutical Chemistry.

Date: 1010122

Place: cheeryal

Signature of Student
S NIKITHA
(21Z51S1209)

College of Pharmach 12s A 201.15s

PRINCIPAL

Geethanjali College of Pharmacy

Geerjally), keesna(M), Medital gist. 13.461301.

# ANALYZING AND EXPLORING THE EFFECT OF NOVEL DRUGS/MOLECULES ON THERAPEUTIC AND PHYSIOLOGICALLY RELEVANT PROTEINS.

A dissertation submitted to



### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITYHYDERABAD

In partial fulfillment of the requirement for the award of the degree of

MASTER OF PHARMACY IN

PHARMACEUTICAL ANALYSIS

BY

UKKU NAGA MOHANA KUMARI 21Z51S1210

Under the Guidance of

M. SATISH KUMAR M. Pharm.
Assistant Professor

Department of Pharmaceutical Analysis

### **GEETHANJALI COLLEGE OF PHARMACY**

Accredited by NBA (B. Pharmacy) & accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUII,
Recognized by DSIR-SIRO; underUGC section 2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC of PvPI/NIRF

October 2023

Cheeryal (V), Keesara (M), Medchal dist. Telangana-501301

Goethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC of PvPI/NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





### **CERTIFICATE**

This is to certify that the dissertation entitled "ANALYZING AND EXPLORING THE EFFECT OF NOVEL DRUGS/MOLECULES ON THERAPEUTIC AND PHYSIOLOGICALLY RELEVANT PROTEINS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by UKKU NAGA MOHANA KUMARI (21Z51S1210) during the academic year 2021 - 2023 under the guidance of Mr. M. SATISH KUMAR M. Pharm, Assistant professor, Department of Pharmaceutical Analysis. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. N. ANJANEYULU

M. Pharm, PhD

Professor And Head of

Pharmaceutical Analysis

Geethanjali college of pharmacy

HEAD

Department of Pharmaceutical Analysis

Geethanjali College of Pharmacy

Chooryal (V), Keesara (M), MSTGINIATEDREIOF THE EXPERNAL EXAMINER

SIGNATURE OF PRINCIPLE Dr. M. RAVI KUMAR

M. Pharm, PhD, PDF(USA)

Professor and Principal

Geethaniali college of Pharmacy

Geothanjeli College of Pharmacy Cheeryat(Y), Kessarat Kij, Medchal Olst. T.S.-501301.



Gaethanjalı Coringe vi Pharmacy Chenyal(v), Xeasou(M), Neddiai Olst. T.S.-501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO9001:2015
AMC of PvPI/NIRF

\*Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "ANALYZING AND EXPLORING THE EFFECT OF NOVEL DRUGS/MOLECULES ON THERAPEUTIC AND PHYSIOLOGICALLY RELAVENT PROTEINS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by UKKU NAGA MOHANA KUMARI (21Z51S1210) during the academic year 2021 – 2023 under the guidance of Mr. M. SATISH KUMAR, M. Pharm, Assistant Professor, Department of Pharmaceutical Analysis. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF THE GUIDE

Mr. M. Satish Kumar

Assistant professor

Department of Pharmaceutical Analysis

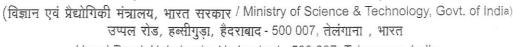
Geethanjali College of Pharmacy

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medicial Dist. T.S.-501301.

रीएमबी

### सीएसआईआर-कोशिकीय एवं आणविक जीवविज्ञान केन्द्र CSIR-CENTRE FOR CELLULAR AND MOLECULAR BIOLOGY

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद) (Council of Scientific & Industrial Research)



Uppal Road, Habsiguda, Hyderabad - 500 007, Telangana, India



#### **CERTIFICATE**

This is to certify that the dissertation entitled "ANALYZING AND EXPLORING THE **EFFECT** NOVEL DRUGS/MOLECULES ON THERAPEUTIC PHYSIOLOGICALLY RELEVANT PROTEINS" is submitted by Ms. UKKU NAGA MOHANA KUMARI, Register No: 21Z51S1210 to Geethanjali college of pharmacy, cheeryal, keesara, Hyderabad, towards partial fulfilment of the requirement for the Master of Pharmacy (Pharmaceutical analysis). This is a record of the work carried out by her under our supervision [Dr. Shiv Pratap Singh Yadav, Scientist and Dr. Mohammed Idris, Senior Principal Scientist, Centre for cellular and Molecular Biology, Hyderabad, India]. The contents of this dissertation, in full or in parts, have not been Submitted to any other institute or University for the award of any Degree or Diploma.

Dr. M. Mohammed Idris

Senior Principal Scientist

**CSIR-CCMB** 

Hyderabad, India

Date

auri.

m. Mohammed idris

Scientist

Centre for Cellular and Molecular Biology

bad - 500 007 (India)

प्पल रोड, हैदगबाद 500 00-Geathar as Colicus of Pharmacy Cheer yall(Y), Krossmarth), Neutonal dist. 1.5.-501301.

+91-40-27160591, 27160311

040-27160591, 27160311

दूरभाष Telephone

+91-40-27160222-41

na Road, Hyderabad-500 007

International India

भारत

+91-40-27160591, 27160311 040-27160591, 27160311

http://www.ccmb.res.in वेष साइट Website

Dr. Shiv Pratap Singh Yadav

डॉ. शिव प्रताप सिंह यादव

Dr. SHIV PRATAP SINGH YADAV

वैज्ञानिक, जैवभौतिकी / Scientist, Protein Biophysics

सीएसआईआर-कोशिकीय एवं अग्गितिक जीवविज्ञान केन्द्र CSIR - Centre for Central & Molecular Biology

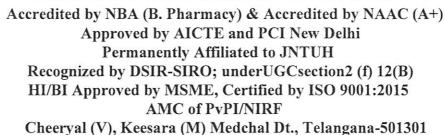
Scientist

Date

**CSIR-CCMB** 

Hyderabad, India









### **DECLARATION**

Thereby declare that this Project entitled "ANALYZING AND EXPLORING THE EFFECT OF NOVEL DRUGS/MOLECULES ON THERAPEUTIC AND PHYSIOLOGICALLY RELAVENT PROTEINS" is a bonafide and genuine research work carried out by me/us under the guidance of Mr. SATISH KUMAR, M. Pharm, Assistant Professor, Department of Pharmaceutical Analysis. Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF STUDENT

UKKU NAGA MOHANA KUMARI 21Z51S1210



PRINCIPAL
Geethanjali Goilege of Pharmacy
Cheeryal(V), Keesara(N), Hedehal Dist. T.S.-501301.

### YEW METHOD WAS ESTABLISHED FOR SIMULTANEOUS ESTIMATION OF ELBASVIR AND GRAZOPREVIR BY RP-HPLC METHOD

A Project submitted to



### **JAWAHARLALNEHRUTECHNOLOGICALUNIVERSITYHYDERABAD**

In partial fulfillment of the requirement for the award of the degree of

MASTER OF PHARMACY
IN
PHARMACEUTICAL ANALYSIS
BY

VANAPALLI.SINDHU - 21Z51S1211

Under the Guidance of Mrs.CII.SUMALATHA

M. PHARM.,(Ph.D)
Associate Professor
Department of Pharmaceutical Chemistry



### GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),

HI/BI Approved by MSME, Certified by ISO 9001:2015 AMC of PvPI/NIRF

Cheeryal (V), Keesara (M), Medchal dist. Telangana-501301



October 2023

PRINCIPAL

Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301,



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)

HI/BI Approved by MSME, Certified by ISO 9001:2015

AMC of PvPI/NIRF

Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





### **CERTIFICATE**

This is to certify that the Project entitled "A NEW METHOD WAS ESTABLISHED FOR SIMULTANEOUS ESTIMATION OF ELBASVIR AND GRAZOPREVIR BY RP-HPLC METHOD" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of master of Pharmacy, has been successfully carried out by VANAPALLI.SINDHU (21Z51S1211) during the academic year 2021-2023 under the guidance of Mrs.Ch.Sumalatha, M. Pharm.,(Ph.D), Associate Professor, Department of Pharmaceutical Chemistry. It was not submitted earlier in part or full for the award of the degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. N. ANJANEYULU

M.Pharm., Ph.D.

Professor and

Head of Pharmaceutical Analysis

Geethanjali College of Pharmacy

Department of Pharmaceutical Analysis Geethanjali College of Pharmacy Cheeryal (V), Keesara (M), Medchal (Dt.), T.S-501301. SIGNATURE OF THE PRINCIPAL

Dr .M. RAVI KUMAR

M.Pharm., Ph.D., PDF (USA)

Professor and Principal

Geethanjali College of Pharmacy

Geethanjali Coilege of Pharmacy Cheeryal(V), Keesara(M), Medchai Dist. F.S.-501301.

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)

HI/BI Approved by MSME, Certified by ISO 9001:2015

AMC of PvPI/NIRF

Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





### **CERTIFICATE**

This is to certify that the Project entitled "A NEW METHOD WAS ESTABLISHED FOR SIMULTANEOUS ESTIMATION OF ELBASVIR AND GRAZOPREVIR BY RP-HPLC METHOD" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of master of Pharmacy, has been successfully carried out by VANAPALLI.SINDHU (21Z51S1211) during the academic year 2021-2023 under the guidance of Mrs. Ch. Sumalatha, M. Pharm.,(Ph.D), Associate Professor, Department of Pharmaceutical Chemistry. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal



SIGNATURE OF THE GUIDE

Mrs.CH.SUMALATHA

M.Pharm., (Ph.D)

Associate Professor

Department of Pharmaceutical Chemistry

Geethanjali College of Pharmacy

PRINCIPAL

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Meachai Dist. T.S. -501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi

Permanently Affiliated to JNTUH

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)

HI/BI Approved by MSME, Certified by ISO 9001:2015

AMC of PvPI/NIRF

Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **DECLARATION**

I hereby declare that this Project entitled "A NEW METHOD WAS ESTABLISHED FOR SIMULTANEOUS ESTIMATION OF ELBASVIR AND GRAZOPREVIR BY RP-HPLC METHOD" is a bonafide and genuine research work carried out by me/us under the guidance of Mrs. Ch. Sumalatha, M. Pharm.,(Ph.D), Associate Professor, Department of Pharmaceutical Chemistry. Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

Colloge of S

SIGNATURE OF STUDENT

VANAPALLI.SINDHU - 21Z51S1211

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(Y), Keesara(M), Medchal Dist. T.S.-501301.

Regulatory Compliance on Variety of Ingredients Used in The Cosmetic Industry and Their Toxicological Effects

A dissertation submitted to



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
In partial fulfillment of the requirement for the award of the degree of

#### MASTER OF PHARMACY

IN

### PHARMACEUTICAL REGULATORY AFFAIRS

BY

DSRAMUKTHA 21Z51S1301

Under the Guidance of Dr. Y. SHIVA KUMAR

M.Pharm., Ph.D.

PROFESSOR AND HEAD

DEPARTMENT OF PHARMACEUTICAL REGULATORY AFFAIRS



### GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH, Recognized by DSIR-SIRO; under UGC section2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015, AMC of PvPI, NIRF

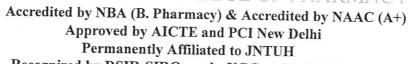
Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301

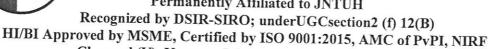
October 2023











Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "REGULATORY COMPLIANCE ON VARIETY OF INGREDIENTS USED IN THE COSMETIC INDUSTRY AND THEIR TOXICOLOGICAL EFFECTS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by D S R AMUKTHA (21Z51S1301) during the academic year 2022 - 2023 under the guidance of Dr. Y SHIVA KUMAR M.Pharm., Ph. D, Head of the Department, Dept of Pharmaceutical Regulatory Affairs. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 11-10-2023

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. Y SHIVA KUMAR

M.Pharm., Ph.D.

Professor and Head

Department of Pharmaceutical Regulatory Affairs

Geethanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF (USA)
Professor and Principal
Department of Pharmaceutics
Geethanjali College of Pharmacy.

PRINCIPAL
Scethanjali College of Pharmacy
Gresnally, Kersanjali, normal at 1,5,50000

SIGNATURE OF THE EXTERNAL EXAMINER

PERMINICIPAL
Geathaniali College of Pharmacy
Geavally, keesinilly, Reduction, 1.5.-501361.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### CERTIFICATE

This is to certify that the dissertation entitled "EXTRACTION OF BIO ACTIVE COMPOUNDS FROM MULBERRY" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by GANDRA DEEEPIKA [19Z5R0054], PITTALA KIRTHI [19Z51R0070], VATAM THIRUMALESH [19Z51R0079] during the academic year 2022 - 2023 under the guidance of Dr. R. SIVAKUMAR M.Pharm., Ph.D., Professor and Department of Pharmaceutical Chemistry. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. M. SRINIVAS

M. Tech., Ph.D.

Professor and Head

Department of Pharmaceutical Chemistry

Geethanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVI KUMAR

M. Pharm., Ph.D. PDF., (USA)

Professor and Principal

Geethanjali College of pharmacy

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL
Geethaniali Goilege of Pharmacy
uneeryal(V), Keessra(H), Meddial Dist. T.S.: 501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "EXTRACTION OF BIO ACTIVE COMPOUNDS FROM MULBERY" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Bachelor of Pharmacy, has been successfully carried out by GANDRA DEEPIKA (19Z51R0054), PITTALA KIRTHI (19Z51R0070), VATAM THIRUMALAESH (19Z51R0079) during the academic year 2022 - 2023 under the guidance of Dr. R. SIVAKUMAR M. Pharm., Ph.D., Professor and Department of Pharmaceutical Chemistry. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. R. SIVAKUMAR, M.Pharm., Ph.D.,

Professor,

Department of Pharmaceutical Chemistry

Geethanjali College of pharmacy

PRINCIPAL
Geethanjali Gollege of Pharmacy
neeryal(V), Keesara(M), Maachar Dist. T.S.: 501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "EXTRACTION OF BIOACTIVE COMPOUNDS FROM MULBERRY". is a bonafide and genuine research work carried out by me/us under the guidance of Dr. R. SIVAKUMAR M.Pharm., Ph.D., Professor and Department of Pharmaceutical Chemistry. Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date:

Place: Cheeryal

SIGNATURE OF THE STUDENT

GANDRA DEEPIKA (19Z51R0054)

PITTALA KIRTIII (19Z51R0070)

V. Thiramoleth VATAM THIRUMALESH (19Z51R0079)

PRINCIPAL
Geethaniali College of Phan

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medchal Dist. T.S.-501301.

# QUALITY MANAGEMENT SYSTEM IN INDIAN PHARMACEUTICAL INDUSTRY

A dissertation submitted to



### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **MASTER OF PHARMACY**

IN

#### PHARMACEUTICAL REGULATORY AFFAIRS

BY

MD. HASEENA-21Z51S1303

Under the Guidance of

K. MOUNIKA M.Pharm.

ASSISTANT PROFESSOR

DEPARTMENT OF PHARMACEUTICAL REGULATORY AFFAIRS



# GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; under UGCsection2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC OF PvPI, NIRF

Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301



October 2023

PECINGIPAL
Geethanjali Gohege of Pharmacy
Cheeryal(V), kcesara(K), Medchai Dist. T.S.-501301.





Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC OF PvPI, NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "QUALITY MANAGEMENT SYSTEM IN INDIAN PHARMACEUTICALS INDUSTRY" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by MD.HASEENA (21Z51S1303) during the academic year 2021-2023 under the guidance of K.MOUNIKA M.Pharm. Assistant Professor and Department of Pharmaceutical Regulatory Affairs of Geethanjali College of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

SIGNATURE OF THE HOD Dr. Y.SHIVA KUMAR

M.Pharm., Ph.D.

Professor and HOD

Department of Pharmaceutical Regulatory Affairs Geethanjali College of Pharmacy SIGNATURE OF THE PRINCIPAL Dr.M. RAVI KUMAR

M.Pharm., Ph.D., PDF (USA)

Professor and Principal

Geethanjali College of Pharmacy

Geethaujori Cultogs of Pharmacy Chearyai(Y), Notura(M), Mounal Dist. T.S.-601301.

SIGNATURE OF THE EXTERNAL EXAMINER

FRINCIPAL
Geethanjali College of Pharmacy
Cneeryal(V), Keesara(N), Medchal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC OF PvPI, NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "QUALITY MANAGEMENT SYSTEM IN INDIAN PHARMACEUTICALS INDUSTRY" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by MD.HASEENA (21Z51S1303) during the academic year 2021-2023 under the guidance of K.MOUNIKA M.Pharm. Assistant Professor and Department of Pharmaceutical Regulatory Affairs of Geethanjali College of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

M.Pharm.
Assistant Professor
Department of Pharmaceutical Regulatory Affairs

K. MOUNIKA

Geethanjali College of Pharmacy

PRINCIPAL

Geethanjali College of Pharmacy

Cheeryal(V), Keesara(N), Medichal Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
AMC OF PvPI, NIRF

Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **DECLARATION**

I hereby declare that this dissertation/ thesis entitled "QUALITY MANAGEMENT SYSTEM IN INDIAN PHARMACEUTICALS INDUSTRY" is a bonafide and genuine research work carried out by me under the guidance of K.MOUNIKA M.Pharm. Assistant Professor and Department of Pharmaceutical Regulatory Affairs of Geethanjali College of Pharmacy. Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

College of Pharmaco

SIGNATURE OF STUDENT

MD.HASEENA (21Z51S1303)

PRINCIPAL.

Geethanjali College of Pharmacy
Cheervelly), Keesnally, Meddistibut, 1.5.581301.

# REGULATIONS OF BIOLOGICALS - STEM CELLS, BLOOD AND ITS COMPONENTS IN INDIA, UNITED STATES AND EUROPE

A dissertation submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### MASTER OF PHARMACY

IN

#### PHARMACEUTICAL REGULATORY AFFAIRS

BY

#### PATLOLLA HARIKA 21Z51S1304

Under the Guidance of Dr. Y. SHIVA KUMAR

M.Pharm., Ph.D.

PROFESSOR AND HEAD OF THE DEPARTMENT

DEPARTMENT OF PHARMACEUTICAL REGULATORY AFFAIRS



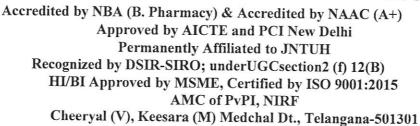
# GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (M. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; underUGCsection (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015, AMC of PVPI, NIRF
Cheeryal (V), Keesara (M), MedchalDt. Telangana-501301

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.

OCTOBER 2023







#### **CERTIFICATE**

This is to certify that the dissertation entitled "REGULATIONS OF BIOLOGICALS – STEM CELLS, BLOOD AND ITS COMPONENTS IN INDIA, UNITED STATES AND EUROPE" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by PATLOLLA HARIKA (21Z51S1304) during the academic year 2022 - 2023 under the guidance of Dr. Y. SHIVA KUMAR M.Pharm., Ph.D., Professor and Head of the Department, Dept of pharmaceutical regulatory affairs. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 11-10-2023

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. Y. SHIVA KUMAR

M.Pharm, Ph.D.

Professor and Head

Department of Pharmaceutical Regulatory Affairs

Geethanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M.Pharm.,Ph.D.,PDF.,(USA)

Professor and Principal

Geethanjali College of pharmacy

PRINCIPAL

Goethanijali College of Pharmac Cheeryal(V), Keasara(M), Nedchal Dist. T.S.-SU13

SIGNATURE OF THE EXTERNAL EXAMINER

Nambure of

Greethaniah College of Pharmacy Cheeryany, Raescrann, madarandist. T.S.: 501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC of PvPI, NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "REGULATIONS OF BIOLOGICALS – STEM CELLS, BLOOD AND ITS COMPONENTS IN INDIA, UNITED STATES AND EUROPE" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by PATLOLLA HARIKA (21Z51S1304) during the academic year 2022 - 2023 under the guidance of Dr. Y. SHIVA KUMAR M.Pharm., Ph.D., Professor and Head of the Department, Dept of pharmaceutical regulatory affairs. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date:

11-10-2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. Y. SHIVA KUMAR

M.Pharm., Ph.D.

Head of Department, Department of Pharmaceutical Regulatory Affairs

Geethanjali College of pharmacy



PRINCIPAL
Geethanjali College of Pharmacy
Cheeryai(V), Keesara(M), Medical Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, CertifiedbyISO9001:2015
AMC of PvPI, NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "REGULATIONS OF BIOLOGICALS – STEM CELLS, BLOOD AND ITS COMPONENTS IN INDIA, UNITED STATES AND EUROPE" is a bonafide and genuine research work carried out by me/us under the guidance of Dr. Y. SHIVA KUMAR M.Pharm., Ph.D., Professor and Head of the Department, Dept of pharmaceutical regulatory affairs, Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date:

11-10-2023

Place: Cheeryal

SIGNATURE OF STUDENT

PATLOLLA HARIKA (21Z51S1304)

College of Pharmacy x ST 108

Geethanjai, Octiene of Pharmacy Geerjaily, Kesson, M., Meanardist, L.S.-501, Sci.

# CLINICAL INVESTIGATION ON MEDICAL DEVICE AND ITS REGULATIONS

A dissertation submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### MASTER OF PHARMACY IN PHARMACEUTICAL REGULATORY AFFAIRS

BY

VOOTUKURI VAISHNAVI - 21Z51S1306

Under the Guidance of

Dr. M. RAVI KUMAR

M.Pharm., Ph.D.,
PDF(USA)

PROFESSOR AND PRINCIPAL
GEETHANJALI COLLEGE OF PHARMACY

# GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH, Recognized by DSIR-SIRO; under UGC section2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015, AMC of PvPI, NIRF

College of Cheerval (V), Keesara (M), Medchal Dt. Telangana-501301

October 2023

PRINCIPAL

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medchal Dist. T.S.-S01301,



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify 'that the dissertation entitled "CLINICAL INVESTIGATION ON MEDICAL DEVICES AND ITS REGULATIONS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by VOOTUKURI VAISHNAVI (21Z51S1306) during the academic year 2022 - 2023 under the guidance of Dr. M RAVI KUMAR M.Pharm., Ph. D, PDF (USA), Professor and Principal, Geethanjali College Of Pharmacy. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

SIGNATURE OF THE HOD Dr. Y SHIVA KUMAR

M Pharm., Ph.D.
Professor and Head
Department of Ph. Regulatory Affairs
Geothanjali College of Pharmacy.

SIGNATURE OF THE PRINCIPAL Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF (USA)
Professor and Principal
Geethanjali College of Pharmacy.
PRINCIPAL

Geethanjali College of Pharmacy Checryal(V), Keessraph, Mesonsi Dist. T.S. -501301.

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medchai Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015

Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "CLINICAL INVESTIGATION ON MEDICAL DEVICES AND ITS REGULATIONS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by VOOTUKURI VAISHNAVI (21Z51S1306) during the academic year 2022 – 2023 under the guidance of Dr. M RAVI KUMAR M.Pharm., Ph. D, PDF (USA), Professor and Principal, Geethanjali College Of Pharmacy. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal



SIGNATURE OF THE GUIDE

Dr. M RAVI KUMAR M.Pharm., Ph. D., PDF (USA) Professor and Principal Geethanjali College of pharmacy

Geethanjali College of Pharmacy Cheeryal(V), Keesara(N), Medinar Dist. T.S.-501301.

PRINCIPA

Geethanjali College of Pharmacy
Cheeryai(V), Keesara(M), Medchal Dist. T.S.-501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "CLINICAL INVESTIGATION ON MEDICAL DEVICES AND ITS REGULATIONS" is a bonafide and genuine research work carried out by me under the guidance of **Dr. M RAVI KUMAR M.Pharm.**, **Ph. D.**, **PDF (USA)**, Geethanjali college of pharmacy. Cheeryal (V), Keesara (M), Medchal (D), T.S-501301 This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

SIGNATURE OF THE STUDENT

VOOTUKURI VAISHNAVI 21Z51S1306

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keessara, M), Medichal Dist. T.S.: 501301.

# EXTRACTION AND CHARACTERIZATION OF PICRORHIZA KURROA LOADED GOLD NANOPARTICLES

A dissertation submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

MASTER OF PHARMACY

BY

#### A.ANJALI -21Z51SO301

Under the Guidance of
Mrs. L. Devakamma,
M. Pharm, Assistant Professor
DEPARTMENT OF PHARMACEUTICS



### **GEETHANJALI COLLEGE OFPHARMACY**

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC OF PVPI, NIRF

Cheeryal (V), Kccsara (M), MedchalDt. Telangana-501301

# **OCTOBER 2023**



PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesara, M), Medicinal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015 AMC OF PVPI, NIRF Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### CERTIFICATE

This certify the dissertation entitled "EXTRACTION AND CHARACTERIZATION OF PICRORHIZA KURROA LOADED GOLD

NANOPARTICLES" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by A.ANJALI (21Z51S0301) during the academic year 2021 - 2023 under the guidance of Mrs. L. DEVAKAMMA M.Pharm. Assistant Professor, Geethanjali College of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 11/10/23

Place: Cheeryal

4HE HOD

Dr. P.NEERAJA

M.Pharm., Ph.D.

Professor HdHezA D

Department of Pharmaceutics Get han jair of Plearnac Pharinacy Creet han jair college of Pharinacy Cheeryal(V), keesara (M), medenal (D) 50 130 V. I.S.

Dr. M. RAVIKUMAR

M.Pharm.,Ph.D.,PDF.,(USA)

Professor and Principal

Geethanjali College of Pharmacy.

PRINCIPAL

Geethanjall College of Pharmacy Cheeryal(V), KersotofM), Meuchar Dist. T.S.-501301.

SIGNATURE OF THE EXTERNAL EXAMINER

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC OF PVPI, NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "EXTRACTION AND CHARACTERIZATION OF PICRORHIZA KURROA LOADED GOLDNANOPARTICLES" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Masters of Pharmacy, has been successfully carried out by A.ANJALI (21Z51S0301) during the academic year 2021- 2023 under the guidance of Mrs.L. DEVAKAMMA M.Pharm., Assistant Professor of Geethanjali College of Pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 11 10 23

Place: Cheeryal

SIGNATURE OF THE GUIDE

Mrs. L. DEVAKAMMA

M.Pharm., Assistant Professor

Geethanjali College of Pharmacy

PRINCIPA Geethanjati College of Pharmacy Cheeryal(V), Keesara(M), Medichal Dist. T.S. -501301.



Accredited by NBA (B. Pharmacy) & Accredited by NAAC(A+)

Approved by AICTE and PCI New Delhi Permanently Affiliated to JNTUH Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, CertifiedbyISO9001:2015 AMC OF PVPI, NIRF Cheeryal (V), Keesara (M) Medchal Dt., Telangana-

501301





#### **DECLARATION**

I hereby declare that this dissertation/ thesis entitled "EXTRACTION AND CHARACTERIZATION OF PICRORHIZA KURROA LOADED GOLD NANOPARTICLES" is a bonafide and genuine research work carried out by me/us under the guidance of Mrs.L.Devakamma M.Pharm., Assistant Professor of Geethanjali College of Pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 11/10/23

Place: Cheeryal



A. Anjali SIGNATURE OF STUDENT

A.ANJALI (21Z51S0301)



# FORMULATION AND EVALUATION OF APIXABAN LOADED MAGNETIC NANOPARTICLES

A dissertation submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### **MASTER OF PHARMACY**

BY

A. RAMYA SREE (21Z51S0302)

Under the Guidance of

DR.P.NEERAJA

M.Pharm.,Ph.D.

PROFESSOR AND HEAD

DEPARTMENT OF PHARMACEUTICS



### GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH, Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015 AMC OF PvPI, NIRF Cheeryal (V), Keesara (M), MedchalDt. Telangana-501301

OCTOBER 2023



PRINCIPAL

Geethanjali College of Pharmacy

(neeryany), Keessian, Mij, Meadiar vist, T.S. -501301.





Accredited by NBA (B.Pharmacy) & Accredited NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015,
AMC of PvPI, NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF APIXABAN LOADED MAGNETIC NANOPARTICLES" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Masters of Pharmacy, has been successfully carried out by A. RAMYA SREE (21Z51S0302) during the academic year 2021 - 2023 under the guidance of Dr. P. NEERAJA M.Pharm., Ph.D, Professor and head of the department of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

me 10 - OC+ - 2023

NIGNATURE OF THE HOD

Dr.P.NEERAJA

M.Pharm., Ph.D.

HEAD

"Population Head D

SIGNATURE OF THE PRINCIPAL

Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF., (USA)

Professor and Principal

Geethanjali College of pharmacy

PRINCIPAL

Creethangoli Ciollogis, of Pharmacy Cheeryal(V), Keespiethi, Heachal Dist. I.S. -501301

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL

Geethanjali Gollege of Pharmacy Cheeryal(V), Keesara(M), Mecchai Dist. T.S.-501301.



Accredited by NBA (B.Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015,
AMC of PvPI, NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### CERTIFICATE

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF APIXABAN LOADED MAGNETIC NANOPARTICLES" being submitted to Jawaharlal Nehru Technology University Hyderabad in partial fulfillment for the award of the degree of Masters of Pharmacy, has been successfully carried out by A.RAMYA SREE (21Z51S0302)during the academic year 2021 - 2023 under the guidance of Dr. P.NEERAJA M.Pharm., Ph.D., Professor and head of the department of Geethanjali college of pharmacy. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10 + oct -2023

Place:Cheeryal

SIGI

SIGNATURE OF THE QUIDE

Dr.P.NEERAJA

M.Pharm., Ph.D.

Professor and Head

Department of Pharmaceutics

Geethanjali College of pharmacy

PRINCIPAL.

Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B),
HI/BI Approved by MSME, CertifiedbyISO9001:2015,
AMC of PvPI, NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "FORMULATION AND EVALUATION OF APIXABAN LOADED MAGNETIC NANAOPARTICLES" is a bonafide and genuine research work carried out by me/us under the guidance of Dr. P.NEERAJA M.Pharm., Ph.D., Professor and head of the department of Geethanjali college of pharmacy, Cheeryal (V), Keesara (M) 501301, Medchal (Dist.), T.S, India. This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Dute: 10 - OCt-2023



Kanya SIGNATURE OF STUDENT

A. RAMYA SREE (21Z51S0302)

PRINCIPAL ethaniali College of Pharm

Geethanjali College of Pharmacy Cheeryal(V), Keesara(M), Medicial Dist. T.S.-501301.

# FORMULATION AND EVALUATION OF MESALAZINE PULSINCAP DRUG DELIVERY SYSTEM

A dissertation submitted to



#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITYHYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### MASTER OF PHARMACY

BY

#### ANNEPALLY DHARANI (21Z51S0303)

Under the Guidance of

K. KISHORE KUMAR REDDY

M Pharm., (Ph.D)

ASSOCIATE PROFESSOR
DEPARTMENT OF PHARMACEUTICS



# GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B. Pharmacy) & accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH, Recognized by DSIR-SIRO; under UGC section2 (f) 12(B), HI/BI Approved by MSME, Certified by ISO 9001:2015

AMC of PvPI, NIRF

Cheeryal (V), Keesara (M), Medchal Dt. Telangana 501301



September 2023



PRINCIPA

Geethanjali College of Pharmacy
Cheeryal(V), Keesara(M), Medical Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC of PvPI, NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF MESALAZINE PULSINCAP DRUG DELIVERY SYSTEM" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by ANNEPALLY DHARANI (21Z51S0303) during the academic year 2021 - 2023under the guidance of K. KISHORE KUMAR REDDY M.Pharm., (Ph.D) Associate professor, Department of Pharmaceutics. The dissertation work has been satisfactory and the dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 11/10/23

Place: Cheeryal

SIGNATURE OF THE HOD

Dr. P. NEERAJA

M.Pharm., PLE AD

Professorand Headnarmaceutics

EKENJANJALLEGIS (IN Steel A Constracty I.S.

SIGNATURE OF THE PRINCIPAL Dr. M. RAVIKUMAR

M.Pharm., Ph.D., PDF (USA) Professor and Principal Geethanjali College of Pharmacy

PRINCIPAL

Geethanjali College of Pharmacy Cheeryal(V), Keesaro(M), Meadaar Dist. T.S. -5012-1.

T. / L.

SIGNATURE OF THE EXTERNAL EXAMINER



FRINCIPAL Geethanj di Culleng of Pharmacy Geetjaly), resus(N), Meddistan, 15, 301301.





Accredited by NBA (B. Pharmacy) & accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC of PvPI, NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF MESALAZINE PULSINCAP DRUG DELIVERY SYSTEM" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by ANNEPALLY DHARANI (21751S0303) during the academic year 2021 – 2023 under the guidance of K. KISHORE KUMAR REDDY M.Pharm., (Ph.D)Associate professor, Dept of Pharmaceutics. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 11 10 2023

Place: Cheeryal

College o/ Pi

SIGNATURE OF THE GUIDE

K. KISHORE KUMAR REDDY M.Pharm.,(Ph.D) Associate professor Department of Pharmaceutics Geethanjali College of Pharmacy

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keesaca(N), Medichal Dist. T.S.-501301.



Accredited by NBA (B. Pharmacy) & accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)
HI/BI Approved by MSME, Certified by ISO 9001:2015
AMC of PvPI, NIRF
Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **DECLARATION**

I hereby declare that this dissertation/ thesis entitled "FORMULATION AND EVALUATION OF MESALAZINE PULSINCAP DRUG DELIVERY SYSTEM" is a bonafide and genuine research work carried out by me under the guidance of K. KISHORE KUMAR REDDY M.Pharm., (Ph.D) Associate professor, Department of Pharmaceutics, Geethanjali college of pharmacy. Cheeryal (V), Keesara (M), Medchal (D), T.S-501301 This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 11-10-2023

Place: Cheeryal

College of Piana

SIGNATURE OF THE STUDENT

ANNEPALLY DHARANI 21Z51S0303

PRINCIPAL
Geethanjali College of Pharmacy
Cneeryal(V), Kessara(N), Medicinal Dist. T.S.-501361.

# Formulation and Evaluation of Mebeverine Hydrochloride Sustained-Release Capsules

A dissertation submitted to



# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

# MASTER OF PHARMACY

BY

ANUSHA DEV- (21Z51S0304)

Under the Guidance of Dr. Y. SHIVA KUMAR M.Pharm., Ph.D.

PROFESSOR AND HEAD OF THE DEPARTMENT
(DEPARTMENT OF PHARMACEUTICAL REGULATORY AFFAIRS)

# GEETHANJALI COLLEGE OF PHARMACY



Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,

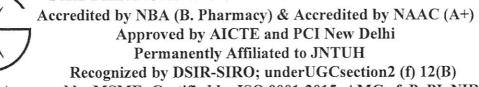
Recognized by DSIR-SIRO; under UGC section2 (f) 12(B),

HI/BI Approved by MSME, Certified by ISO 9001:2015, AMC of PvPI, NIRF

Cheeryal (V), Keesara (M), Medchal Dt. Telangana-501301

OCTOBER 2023

PRINCIPAL
Geethanjali Gollege of Pharmacy
Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.



HI/BI Approved by MSME, Certified by ISO 9001:2015, AMC of PvPI, NIRF Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF MEBEVERINE HYDROCHLORIDE SUSTAINED-RELEASE CAPSULES" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by ANUSHA DEV (21Z51S0304) during the academic year 2021 – 2023 under the guidance of Dr. Y SHIVA KUMAR M.Pharm., Ph. D, Head of the Department, Dept of Pharmaceutical Regulatory Affairs. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10/10/2023

Place: Cheeryal

Geethanjali College of Pharmacy (N), Keessia (M), Hedchal (DI)-501301. I.S.

SIGNATURE OF THE HOD

Dr. P. NEERAJA M.Pharm., Ph.D.

Professor and Head

Department of Pharmaceutics

Geethanjali College of Pharmacy

SIGNATURE OF THE PRI

SIGNATURE OF THE PRINCIPAL Dr. M. RAVIKUMAR M.Pharm., Ph.D., PDF (USA)

Professor and Principal Geethanjali College of Pharmacy

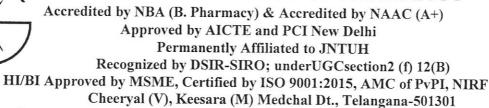
PRINCIPAL

Geethanjali College of Pharmacy Cheeryal(V), Kecsara(H), Meddial Olst. T.S.:501301.

SIGNATURE OF THE EXTERNAL EXAMINER

PRINCIPAL

Geethanjali College of Pharmacy Cheeryali, V., Keesaru, M., Medurar Dist. 1.5, 501301.







#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF MEBEVERINE HYDROCHLORIDE SUSTAINED-RELEASE CAPSULES" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by ANUSHA DEV(21Z51S0304) during the academic year 2021 – 2023 under the guidance of Dr. Y SHIVA KUMAR M.Pharm., Ph. D, Head of the Department, Dept of Pharmaceutical Regulatory Affairs. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10/10/2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. Y SHIVA KUMAR

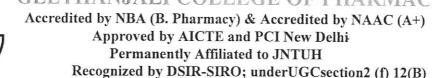
M.Pharm., Ph. D.

Head of Department, Dept. of Ph. Regulatory Affairs

Geethanjali College of Pharmacy

PRINCIPAL
Geethanjali College of Pharmacy
Cheeryal(V), Keasara(M), Medichal Dist. T.S.-50130/

11



HI/BI Approved by MSME, Certified by ISO 9001:2015, AMC of PvPI, NIRF Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **DECLARATION**

I here by declare that this dissertation/ thesis entitled "FORMULATION AND EVALUATION OF MEBEVERINE HYDROCHLORIDE SUSTAINED-RELEASE CAPSULES" is a bonafide and genuine research work carried out by me under the guidance of Dr. Y SHIVA KUMAR M.Pharm., Ph. D, Head of the Department, Dept of Pharmaceutical Regulatory Affairs, Geethanjali college of pharmacy. Cheeryal (V), Keesara (M), Medchal (D), T.S-501301 This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 10/10/2023

Place: Cheeryal

Connected W. March

SIGNATURE OF THE STUDENT

ANUSHA DEV (21Z51S0304)

PRINCIPAL
Genthaniali College of Pharmacy
(neeryany), 8033313(M), Medicial Dist. I.S. -501301

# ORMULATION AND EVALUATION OF APREMILAST LOADED NIOSOMAL GEL TO TREAT PSORIASIS

A dissertation submitted to



# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

In partial fulfillment of the requirement for the award of the degree of

#### MASTER OF PHARMACY

BY

T.MANISHA- (21Z51S0307)

Under the Guidance of

Dr. P.NEERAJA M.Pharm., Ph.D.

PROFESSOR AND HEAD

DEPARTMENT OF PHARMACEUTICS

# GEETHANJALI COLLEGE OF PHARMACY

Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)

Approved by AICTE and PCI New Delhi, Permanently Affiliated to JNTUH,
Recognized by DSIR-SIRO; under UGC section2 (f) 12(B),

HI/BI Approved by MSME, Certified by ISO 9001:2015, AMC of PvPI, NIRF

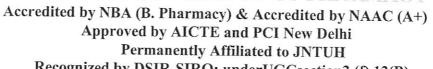
Collectival (V), Keesara (M), Medchal Dt. Telangana-501301

OCTOBER 2023

PRINCIPAL Geethani, ill College of Pharmacy

Cheeryangy), Kecharol My, Medicular User 1.5 -501301.





Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015, AMC of PvPI, NIRF Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301





#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF APREMILAST LOADED NIOSOMAL GEL TO TREAT PSORIASIS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by T.MANISHA(21Z51S0307) during the academic year 2021 - 2023 under the guidance of Dr. P.NEERAJA, M.Pharm., Ph. D, Professor and Head, Department of Pharmaceutics. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheerval

SIGNATURE OF THE HOD

Dr. P.NEERAJA

M.Pharm., Ph.D.

Professor and Head

HEAD

De Department Sharmacauticsics deethanali College of Pharmacy Choogally Liffatially Compagno Pharmacy SIGNATURE OF THE PRINCIPAL

Dr .M. RAVI KUMAR

M.Pharm., Ph.D., PDF (USA)

Professor and Principal

Geethanjali College of Pharmacy

PRINCIPAL

Geethanjali College of Pharmacy Chesqual(V), Keassard(M), Mesonal Dist. T.S.-501301.

SIGNATURE OF THE EXTERNAL EXAMINER

RATORE OF THE EXTERNAL

PRINCIPAL
Geethanjali College of Pharmacy
Cneeryal(V), Keesara(M), Medicasi Dist. T.S.-501301.





Accredited by NBA (B. Pharmacy) & Accredited by NAAC (A+)
Approved by AICTE and PCI New Delhi
Permanently Affiliated to JNTUH
Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B)

Recognized by DSIR-SIRO; underUGCsection2 (f) 12(B) HI/BI Approved by MSME, Certified by ISO 9001:2015, AMC of PvPI, NIRF Cheeryal (V), Keesara (M) Medchal Dt., Telangana-501301



#### **CERTIFICATE**

This is to certify that the dissertation entitled "FORMULATION AND EVALUATION OF APREMILAST LOADED NIOSOMAL GEL TO TREAT PSORIASIS" being submitted to Jawaharlal Nehru Technology University in partial fulfillment for the award of the degree of Master of Pharmacy, has been successfully carried out by T.MANISHA(21Z51S0307) during the academic year 2021 – 2023 under the guidance of Dr. P. NEERAJA, M.Pharm., Ph.D, Professor and Head, Department of Pharmaceutics. The dissertation work has been satisfactory and dissertation is original. It was not submitted earlier in part or full for the award of the Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal

SIGNATURE OF THE GUIDE

Dr. P. NEERAJA

M.Pharm., Ph. D.

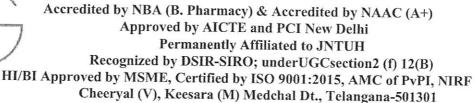
Professor and Head.

Department of pharmaceutics

Geethanjali College of Pharmacy



FRINCIPAL
Geethanjali Collège of Pharmacy
Cheeryal(V), Keesara(M), Medichal Dist. T.S.-501301.







#### DECLARATION .

I here by declare that this dissertation/ thesis entitled "FORMULATION AND EVALUATION OF APREMILAST LOADED NIOSOMAL GEL TO TREAT PSORIASIS" is a bonafide and genuine research work carried out by me under the guidance of Dr. P. NEERAJA, M.Pharm., Ph. D, Professor and Head, Department of Pharmaceutics, Geethanjali college of pharmacy. Cheeryal (V), Keesara (M), Medchal (D), T.S-501301 This work is original and has not been submitted earlier in part or full for any Degree or diploma of any University/Institution.

Date: 10-10-2023

Place: Cheeryal



I. Many ha SIGNATURE OF THE STUDENT

T.MANISHA (21Z51S0307)

ERINCIPA Geethaniali Conege of Pharmacy Geetjältij, kessistik, neodativist. 1.5.501701,