# Geethanjali College of Pharmacy

Approved by PCI New Delhi, Permanently Affiliated to JNTUH,
Accredited by NAAC A+ Grade, NBA (B. Pharmacy), NIRF,
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.
www.geethanjaliinstitutions.com PH: +91 9959390412



# DRAVYAKA 2024

14th INTERNATIONAL LEVEL CONFERENCE

On

"New Trends in Drug Development and the Role of Pharmacists in Public Health"  $30^{th} \& 31^{th}$  January, 2024

# SOUVENIR

In Association With



**Indian Pharmaceutical Association** 



AIMST University (Malaysia)

### **ORGANIZED BY**

IQAC and IIC
GEETHANJALI COLLEGE OF PHARMACY

SPONSORED BY
TEJA EDUCATIONAL SOCIETY

**SPONSORING PARTNERS** 













# Geethanjali College of Pharmacy

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

#### **OUR VISION**

To be a Premier Pharmaceutical Education and Research Institution.

#### **OUR MISSION**

- 1: Provide state of the art laboratories, information center and learning environment for holistic education.
- 2: Adopt and implement best practices for learning and research.
- 3: Collaborate with industry and society to identify problems, provide sustainable solutions and align curriculum.

#### **QUALITY POLICY**

• We are committed to setting standards in pharmaceutical education and research by implementing effective teaching and learning practices that contribute to improving the health care of society.

#### **MOTTO**

Striving towards perfection.







#### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

Kukatpally, Hyderabad - 500 085, Telangana, (India)
Phone: 040-23156109, Fax: 040-23156112, Email: vcjntu@jntuh.ac.in, Website: www.jntuh.ac.in

Prof. Katta Narasimha Reddy Ph.D. FWIF, FAPAS, PTAS Vice-Chancellor



MESSAGE

I am very delighted to know that Geethanjali College of Pharmacy is organizing the 14th twoday international conference "DRAVYAKA-2024," with the theme "New Trends in Drug Development and the Role of Pharmacists in Public Health," during January 30th and 31st, 2024.

The deliberations, discussions, and sharing of thoughts and ideas shall enable the participants to take up new challenges and initiatives in their chosen area of research.

I would like to congratulate the principal, faculty members, and students for taking up this monumental task, being intact with the current research topics from various domain areas, and improving their professional careers. I am sure that "DRAVYAKA-2024" will keep on contributing more effectively to achieve the ultimate goal.

I wish you all a unique opportunity to collaborate with researchers around the world without boundaries in "DRAVYAKA-2024.".

> Prof. Katta Narasimha Reddy Vice-Chancellor, JNTUH



**MESSAGE** 

I am incredibly delighted to be a part of the 14th national two-day conference, DRAVYAKA 2024, which has as its theme "New Trends in Drug Development and the Role of Pharmacists in Public Health." Geethanjali College of Pharmacy has an association with the Indian Pharmaceutical Association (IPA). It is a great source of pride for IPA to engage in this professional activity that exposes future chemists to cutting-edge pharmaceutical science research and innovation. Student participation in academic conferences plays a crucial role in their personal and professional development. Students should attend scientific seminars and conferences in addition to classroom instruction to get the best exposure to learning from scientists in both academia and industry. Their presentation abilities will also be improved by this. It allows them to contribute to the academic community, develop essential skills, build professional networks, learn from others, and gain inspiration for their own research endeavors. I appreciate the administration, faculty, and employees of Geethanjali College of Pharmacy for their flawless, continuous planning of the conference since 2010.

I thank all of the delegates for their interest in DRAVYAKA 2024 and extend a warm welcome to them.

Prof. Dr. T.V. NARAYANA
M.Pharm., Ph.D
President
Indian Pharmaceutical Association (IPA)



#### **MESSAGE**

It gives me great pleasure and honor to greet with great warmth all dignitaries and delegates who have been chosen to take part in the 14th International Level Pharmacy Conference, DRAVYAKA 2024, which has as its theme "New Trends in Drug Development and the Role of Pharmacists in Public Health." The role of pharmacists in public health is primary because they sell crucial lifesaving drugs that ease suffering. They are the bridge between the doctor and patient because they explain drug regimens, ensuring patient recovery. In light of the chosen theme, I firmly believe that new trends in drug development increase the efficiency of the drug discovery process and the development of promising drug candidates with desirable properties. For the benefit of society and humanity at large, DRAVYAKA offers a single platform for the faculty, researchers, and student community from various colleges to present their research as well as review work in the pharmaceutical sciences.

I wish you a successful DRAVYAKA 2024 conference.

G. R. RAVINDER REDDY M.Tech (NIT Warangal)
Superintendent of Police
Secretary
Geethanjali College of Pharmacy



#### **MESSAGE**

Good wishes to one and all,

It gives me immense pleasure to greet the dignitaries and delegates of the 14th International Level Annual Pharmacy Conference, DRAVYAKA 2024. The theme of the conference is "New Trends in Drug Development and the Role of Pharmacists in Public Health."

Having taken place every year since 2010, this kind of conference focuses on the most current developments in the pharmaceutical industry. Pharmacists' importance in public health is highlighted in the current DRAVYAKA.

Drug discovery and development are witnessing a golden era since the introduction of high-throughput screening, bioinformatics, in-silico drug design, genomics, proteomics, combinatorial chemistry, etc. Public health refers to the general health of the population within an area. The availability of community pharmacists ensures he takes appropriate medication, giving him instant relief.

Our conference's primary goal is to establish a research culture in educational establishments. It is encouraged for the student body to showcase their ideas and areas through project exhibitions, poster presentations, and oral presentations. To encourage new researchers to deepen their understanding of the pharmaceutical sciences, we invited experts.

I appreciate our management's support of DRAVYAKA 2024. This conference would not have been possible without the substantial contributions of several conference committees. We value each and every participant. We appreciate your feedback and suggestions, and we will make sure to incorporate them into the upcoming conferences. Again, thank you so much to all of you.

#### Dr. RAVI KUMAR MADDALI

M.Pharm, PhD, PDF (USA)
Principal & Professor
Geethanjali College of Pharmacy

# **DRAVYAKA 2024 RESOURCE PERSONS**



Prof. Dr. T.V. NARAYANA M.Pharm.,Ph.D President Indian Pharmaceutical Association (IPA)



Prof. Dr. M. AJITHA
Professor & Principal, APTI, ISTE,
Centre for Ph. Science, JNTUH, India.



Dr. CH. SREEDHARA Principal Scientist-III,ARD Analys Lab, AP, India.



Prof. Dr. NAHLAH EIKUDSSAIAH ISMAIL
Professor & Dean, Faculty of Pharmacy
AIMST University, Malaysia.



Ms. THANAPAKIAM GANESON
Deputy Dean (Academics & International Affairs)
AIMST University, Malaysia.



Dr. RAMESH ALLURI
Professor and Principal
Vishnu Institute of Ph. Education & Research



Dr. M. CHENNA REDDY Sr. Research Scientist Anticancer Bio Science, China

## DRAVYAKA 2024 COMMITTEE MEMBERS

Chief Patron: Sri. G.R. Ravinder Reddy Convener: Prof. Dr. M. Ravi Kumar

### Registration Committee

Prof. Dr.M.Srinivas Dr.Md.Abubakar Mrs.B.Sandhya Mrs.K.L.Rajitha Mrs.K. Sai Prabha Mrs. B.Saritha Mr. K. Bhaskar Mr.S. Neelam Reddy

## Reception Committee

Mrs.Ch.Sumalatha Mrs.Kiranmayee Mrs. G. Abhinayani Mrs. L. Devikamma Mrs. U.Rishika Mrs.M. Sreevidhya

### **Hosting Committee**

Stage Decoration

Mr. P. Shankarajah

Mr. B. Santhosh Kumar

Mrs.R.Umadevi

Mr. I. Venkat

Dr. P.Neeraja Mrs. S. Rani Mrs.T. Anoosha Mrs. V. Shalini Mrs. B.Supraja

### Souvenir Committee

Dr. R.Siva kumar Mr.J.Naveen Mrs. I. Neelam Mrs.B.Anitha Ms.K.Mounika Mrs.SD. Shalini Mrs. L. Saritha

#### Scientific Committee

Dr. Y.Shiva Kumar Dr. R. Naga Kishore Mrs. P. Naga Chandrika Dr.Md.Mohasin Pasha Mr. J. Naveen Mrs.P.Jyothi

Mrs. G. Sony Priyanka Mrs. L. Santhosha Mrs. L. Pushpalatha Ms. B. Tejaswini

#### **Hospitality**

Dr. Abdul Nazar Ali Mrs. I. Neelam Mrs.B.Mamatha Ms. G. Laxmi Prasanna Mrs. B. Swathi Mrs. A. Neeraja Mrs. Ch. Aruna Kumari

Food Committee Dr.N.Anjanevulu Mr.A.Srinivas Mr. S. Vijay Kumar Mrs N. Swetha Mr. K. Bala Krishna Mr.P.Surender Mr. S. Madhava Reddy Mrs.B. SivaJyothi Mrs. A Naga Sri

#### Cultural Committee

Mrs.T.Anoosha Mrs.B.Supraja Mrs. M. Srividhya Mr. J.Naveen

#### Media/Photo

Dr. Bharath Bhushan Mohapatra Mr. J.Naveen Mr. S. Prabhakar DOPY TEAM GCOP

# <u>Advertisement</u>

Dr. J. Sunil Mr. K.Prashanth Mr. I. Venkat.

### Discipline Committee

Dr.M.Srinivas Dr.R.Siva Kumar Mr.P.Ranadheer Reddy Mr.A.Srinivas Mr.A. Veeranna Mrs.K.Swapna Mr. G. Shekar Mrs. Ch. Archana Reddy

### Technical committee Mr. J.Naveen Mrs.B.Supraja Mr. K. Shravan

### **Certificates Committee**

Mr.K.Kishore Kumar Reddy Mr.M.Sathish Kumar Mrs. A.Madhavi Mrs. D. Aslesha Ms. K. Divya Jyothi Mrs. B. Anjali Mrs. G. Swathi

# Transport Committee

Mr.P.Ranadheer Reddy Mr.A.Srinivas Mr. Veeranna

# **GEETHANJALI'S FAMILY**



SRI G.R. RAVINDER REDDY

M.TECH (NIT WARANGAL)

SUPERINTENDENT OF POLICE,

SECRETARY

GEETHANJALI COLLEGE OF PHARMACY



Dr. M. RAVI KUMAR M.Pharm., Ph.D., PDF(USA) PROFESSOR AND PRINCIPAL

GEETHANJALI COLLEGE OF PHARMACY



**GEETHANJALI'S TEACHING STAFF** 



DEPT. OF Ph.CHEMISTRY & DEPT. OF Ph. ANALYSIS



**DEPT. OF PHARMACEUTICS** 





**DEPT. OF PHARMACOLOGY** 

**DEPT. OF PHARMACOGNOSY** 



**DEPT. OF PHARMACY PRACTICE** 



**GEETHANJALI'S NON TEACHING STAFF** 



**GEETHANJALI'S SUPPORTING STAFF** 

# FACULTY ARTICLES <u>INDEX</u>

S.No.	Name of the faculty	Department	Title
1.	Dr. Ravi kumar Maddali	Principal & Professor Geethanjali college of pharmacy.	Review on drug discovery and drug development.
2.	Dr. Medidi Srinivas, K Eswar Krishna Sai	Department of Pharmaceutical Chemistry	High-Performance Liquid Chromatography Analysis of Lobeglitazone: Method Development and Validation for Bulk and Tablet Formulations
3.	Junapudi Sunil, Yasodha Krishna Janapati	Department of Pharmaceutical Chemistry	The classical Biomarkers to Predict Diabetes Mellitus
4.	Dr. N.Anjaneyulu	Department of Pharmaceutical Analysis	Sustainability of Biodegradable Plastics
5.	Dr. P.Neeraja	Department of Pharmaceutics	Smart/Stimuli Responsive Hydrogels
6.	Dr. P. Neeraja, Dr. M. Ravi Kumar, P.Naga Chandrika, S.Rani, Devikamma, K. Prasanth Kumar, Jamjala.Naveen	Department of Pharmaceutics	A Review on Self-Emulsifying drug delivery systems for breast cancerous treatment
7.	R. Naga Kishore, M. Sreevidhya, L.Saritha, G.Abhinayani T.Anoosha	Department of Pharmacology	Zebra fish as a substitute animal model : A Review
8.	R. Naga Kishore, N.Anjaneyulu, Bhart bhushan Mohapatra, G Abhinayani	Department of Pharmacology	Data science in healthcare: how it improves care Data Science in Healthcare: Applications, Roles and Benefits

	V.Shalini		
9.	T. Anoosha,	Department of	Evaluation of oryza sativa (var. Joha
	B. Supraja	Pharmacology	rice) for anti hyperlipidemic activity in
			rats
10.	Shankaraiah	Department of	Herbal Nanomedicines: Current
	Pulipaka,	Pharmacognosy	Developments, Challenges, Prospects,
	Bharatbhusan		and Regulatory Summary
	Mohapatra, B.		
	B.Santhosh Kumar,		
	S.Vijay Kumar		
11.	Dr.Abdul Nazer Ali	Department of	Potentially inappropriate medications
		pharmacy practice	among older adults in a private teaching
			hospital in Telangana state, India.
12.	Dr. Y Shiva Kumar	Department of	Pharmaceutical packaging technology
		pharmaceutical	
		Regulatory Affairs	

	INDEX FOR ORALS ABSTRACTS				
SL.	NAME OF THE AUTHORS	NAME OF THE INSTITUTION	TITLE OF THE ABSTRACT	ID No.	
1	SAROVAR REDDY VANTIMITTA	ANNAMACHARY A COLLEGE OF PHARMACY, RAJAMPET,AND HRA PRADESH	ROLE OF SUPERDISINTEGRANTS IN ORAL DOSAGE FORMS	CO-101	
2	LAKSHMI DEVI GOTTEMUKKUL A, RAGHUVEER PATHURI	GITAM SCHOOL OF PHARMACY, GITAM (DEEMED TO BE UNIVERSITY),	DOLUTEGRAVIR SOLID DISPERSIONS AS ORO- DISPERSIBLE TABLETS: TO AMELIORATE THE INTEGRASE INHIBITION EFFECT	CO-102	
3	MOHAMMAD ATIF, SHAHEEN SULTANA	KVK COLLEGE OF PHARMACY HYDERABAD	PHARMACY IN COLLABORATION WITH ARTIFICIAL INTELLIGENCE	CO-103	
4	V. ARUN REDDY, K. ALEKHYA, N. PRAVEEN KUMAR	BHARAT SCHOOL OF PHARMACY, IBRAHIMPATNA M HYDERABAD	IMPACT OF ANTIOXIDANT- RICH FRACTIONS ISOLATED FROM MOSS FISSIDENS GRANDIFLORA ON ALCOHOL- INDUCED OXIDATIVE STRESS	CO-104	
5	E. NIKHIL CHAKRAVARTH Y	TEEGALA KRISHNA REDDY COLLEGE OF PHARMACY, HYDERABAD	EVALUATION OF ANTI- UROLITHIATIC ACTIVITY OF SELECTED MEDICINAL PLANTS AND ITS POLY HERBAL FORMULATION IN EXPERIMENTALLY INDUCED UROLITHIATIC RATS	CO-105	
6	TEJASREE, HEMA SREE SAI ,NIHARIKA, SREEVIDYA	GEETHANJALI COLLEGE OF PHARMACY	UNDERSTANDING ORPHAN DRUGS: UNVEILING THERAPEUTIC INNOVATIONS FOR RARE DISEASES	CO-106	
7	P AASHRITHA, B.CHATHURYA	KVK COLLEGE OF PHARMACY, HAYATHNAGAR MALLA REDDY ENGINEERING COLLEGE, DULAPALLY, MAISAMMAGUD	BREAKING FRONTIERS: AI- DRIVEN NEOEPITOPE PERSONALIZED IMMUNOTHERAPY RESHAPING CANCER TREATMENT	CO-107	

		A		
8	V. BHAVYA SREE	HOLY MARY INSTITUTE OF TECHNOLOGY AND SCIENCES, BOGARAM	NAVIGATING THE LANDSCAPE OF PHARMACOGENOMICS	CO-108
9	SWAPNA, NEELA, MAKULA AJITHA VIJAYA KUCHANA	JAWAHARLAL NEHRU TECHNOLOGICA L UNIVERSITY, KUKATPALLY, HYDERABAD	FORMULATION AND ASSESSMENT OF HERBAL EMULGELS IN THE MANAGEMENT OF ACNE: IN VITRO AND IN VIVO INVESTIGATIONS	CO-109
10	MUKKA DIVYA	MNR COLLEGE OF PHARMACY, HYDERABAD	ANTI CATARACT ACTIVITY OF CRESSA CRETICA ON STZ INDUCED DIABETIC CATARACT IN RATS	CO-110
11	D.ANITHA	KUMARAGURU COLLEGE OF TECHNOLOGY COIMBATORE, TAMILNADU	CASEIN NANOSCALED PARTICLES USED IN DRUG DELIVERY APPLICATIONS	CO-111
12	DR. NELLUTLA SANDEEPTHI	VIGNAN INSTITUTE OF PHARMACEUTIC AL SCIENCES	FORMULATION AND EVALUATION OF DEXTROMETHORPHAN HYDROBROMIDE EXTENDED- RELEASE SUSPENSION	CO-112
13	K.LAKSHMI BHAVANA, DR.S. HEMALATHA	SAROJINI NAIDU VANITHA PHARMACY MAHAVIDYALA YA, SECUNDERABAD , TELANGANA	THE GENDER HEALTH GAP – A BARRIER FOR BETTER HEALTH CARE	CO-113
14	NOOR US SABAH	SULTAN UL ULOOM COLLEGE OF PHARMACY	ALZHEIMER'S DISEASE: AN OVERVIEW	CO-114
15	E.VYSHNAVI, M.ABHINITHA, CH.SATHWIKA, P. NAGA CHANDRIKA. R. UMADEVI	GEETHANJALI COLLEGE OF PHARMACY	TRANSETHOSOMES AND ITS THERMODERMAL EFFECTS ON SKIN	CO-115
16	CH. SHIRISHA, V. ANUSHA, CH. PUJITHA, T. CHAITANYA, P. NAGA CHANDRIKA, DR.P. NEERAJA,	GEETHANJALI COLLEGE OF PHARMACY	REVIEW OF DRUG DISCOVERY PROCESS	CO-116

	DR. M.			
17	RAVIKUMAR  JELLA CHAITHANYA VADAPALLY SWETHA ERAKIPATI NIKITHA, P. NAGA CHANDRIKA, DR. P. NEERAJA, DR. M. RAVI KUMAR	GEETHANJALI COLLEGE OF PHARMACY	A REVIEW ON INNOVATIVE APPROACHES FOR BRAIN TARGETED DRUG DELIVERY SYSTEM	CO-117
18	S. ESTHER, AKUBATTINI BALAJI, AJAY KUMAR, ARUKONDA GANESH, P. NAGA CHANDRIKA, DR. P. NEERAJA, DR. M. RAVI KUMAR	GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD	A REVIEW ON FORMULATION AND INNOVATIVE APPLICATION OF HYDROGELS	CO-118
19	BANOTH ARUNA, BOINI HARI PRIYA, BUDHI PAVAN, BYRAVENI ABHINAY, P. NAGA CHANDRIKA, DR. P. NEERAJA, DR. M. RAVI KUMAR	GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD	A REVIEW ON FORMULATION AND EVALUATION OF EMULGELS	CO-119
20	FARIDA FARIDA, D. AKHIL NAYAK, ENDLA POOJA, GANESH CHOUDARY, P. NAGA CHANDRIKA, DR. P. NEERAJA, DR. M. RAVI KUMAR	GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD	A REVIEW ON A CLINICAL PERSPECTIVE OF CYSTIC FIBROSIS	CO-120
21	CHEEDU MEENAKSHI REDDY, CHIRADI PRASANNAAKUB ATTINI BALAJI,	GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD	A REVIEW ON A CLINICAL PERSPECTIVE OF ALZHEIMER'S DISEASE	CO-121

	AJAY KUMAR, ARUKONDA GANESH, P. NAGA CHANDRIKA, DR. P. NEERAJA, DR. M. RAVI KUMAR			
22	DR.S.JANET BEULA	TEEGALA RAM REDDY COLLEGE OF PHARMACY	INVITRO DENTAL GEL PRODUCTS AND THEIR ACTIVITY	CO-122
23	TEJASREE, HEMA SREE SAI , NIHARIKA, SREEVIDYA	GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD	UNDERSTANDING ORPHAN DRUGS: UNVEILING THERAPEUTIC INNOVATIONS FOR RARE DISEASES	CO-123
24	M. T. SULTHANA, V. ALAGARSAMY, B. NARENDHAR, MALLICK MAIDUL ISLAM, SANGEETHA DHANWAR	MNR COLLEGE OF PHARMACY, HYDERABAD	INSILICO DOCKING, MSD ANALYSIS AND ADME (T) STUDIES OF PLANT BASED PHYTOCONSTITUENTS AGAINST THE ESTROGEN ALPHA RECEPTOR OF BREAST CANCER	CO-124
25	DR.S.HEMALATH A*	S.N.VANITA PHARMACY MAHAVIDYALA YA, SECUNDERABAD	SYNTHESIS,BIOLOGICAL EVALUATION AND INSILICO PREDICTION OF IMIDAZOLE DERIVATIVES	CO-125
26	K PREETHI REDDY, V.SHALINI	GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD	MICROBIOME THERAPEUTICS: UNRAVELING THE HUMAN MICROBIOME'S IMPACT ON DRUG DEVELOPMENT	CO-126
27	MERLIN T BABU, N.MADHAVI	CMR COLLEGE OF PHARMACY, HYDERABAD	GENOMIC TECHNOLOGY IN MEDICINE	CO-127
28	B. ARCHANA, S. ESTHER <sup>1</sup> , SHAREEF, AJAY KUMAR, M. SATISH KUMAR	GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD	VALIDATION AND METHOD DEVELOPMENT OF ANALYTICAL METHODS AS PER ICH GUIDELINES	CO-128
29	DR. T. NAGA APARNA, DR. A. SAMBASIVA RAO	SRI INDU INSTITUTE OF PHARMACY, IBRAHIMPATNA M	AUGMENTING THE BIOAVAILABILITY OF POORLY SOLUBLE DRUG VALSARTAN USING DIFFERENTTECHNIQUES	CO-129

30	CHANDAN	SCHOOL OF	FORMULATION,	CO-130
30	NAYAK	PHARMACEUTIC	OPTIMIZATION AND	CO-130
	,RAJLAXMI	AL EDUCATION	EVALUATION OF SELF NANO	
	PATRO,	AND RESEARCH,	EMULSIFYING DRUG	
	TAIRO,	BERHAMPUR	DELIVERY SYSTEM OF	
		UNIVERSITY	BOSENTAN	
	•	,BERHAMPUR,OD	BOSENTAIN	
		ISHA		
31	MANORANJAN	SCHOOL OF	METHOD DEVELOPMENT AND	CO-131
	SAHU	PHARMACEUTIC	VALIDATION FOR THE	
		AL EDUCATION	SIMULTANEOUS ESTIMATION	
		AND RESEARCH,	OF GASTRO ESOPHAGEAL	
		BERHAMPUR	REFLUX DISEASE AND PEPTIC	
		UNIVERSITY	ULCER BY USING RP -HPLC IN	
		,BERHAMPUR,OD	ITS BULK AND	
		ISHA	PHARMACEUTICAL DOSAGE	
			FORM	
32	MUNAGALA	RAGHAVENDRA	ANTIMICROBIAL AGENTS	CO-132
	VENKATA	INSTITUTE OF	UTILIZATION IN THE	
	KRISHNA	PHARMACEUTIC	GENERAL INTENSIVE CARE	
	SHARVANI,	AL EDUCATION	UNIT OF A SECONDARY CARE	
	DASARI NANDINI	AND RESEARCH	REFERRAL HOSPITAL IN	
	, YEDDULA	(RIPER)	SOUTH INDIA	
	VISWA TEJA,	AUTONOMOUS,		
	GUNDRE JOSEPH	ANANTHAPURA		
	REDDY ,HARISH	MU A.P		
	HANDYAL	MO A.I		
	,MOHANRAJ			
	RATHINAVELU			
33	SIDDAVARAM	RAGHAVENDRA	PEDIATRIC SEPSIS: CLINICAL	CO-133
33	VARSHITHA,	INSTITUTE OF	OUTCOME AND PREDICTORS	CO 133
	MOHANRAJ	PHARMACEUTIC	OF MORTALITY FROM A	
	RATHINAVELU	AL EDUCATION	SECONDARY REFERRAL	
	KATIIINAVELU	AND RESEARCH	HEALTHCARE SETTING OF	
		(RIPER)	SOUTH INDIA	
		` ′	SOUTHINDIA	
		AUTONOMOUS,		
		ANANTHAPURA MU		
34	PORAKALA	RAGHAVENDRA	EVIDENCE -BASED PRACTICE	CO-134
J <del>4</del>		INSTITUTE OF	AMONG COMMUNITY	CO-134
	IASHWARYA,			
	MOHANRAJ	PHARMACEUTIC	PHARMACISTS AND	
	RATHINAVELU	AL EDUCATION	PHARMACY STUDENTS IN	
		AND RESEARCH	SOUTH INDIA	
		(RIPER)		
		AUTONOMOUS,		
		ANANTHAPURA		
25	TAL ADIDATIANT	MU	PROGNOGRIG PELEVANCE OF	00.125
35	JALADI PAVANI,	RAGHAVENDRA	PROGNOSTIC RELEVANCE OF	CO-135
	INAGANDLA	INSTITUTE OF	SERUM LACTATE: A	
	SRUTHI,	PHARMACEUTIC	RETROSPECTIVE ANALYSIS	

	CIDDATIADAT	AL EDUCATION	OF DATIENTS ADMITTED TO	
	SIDDAVARAM	AL EDUCATION	OF PATIENTS ADMITTED TO	
	VARSHITHA,	AND RESEARCH	ICU AT A RURAL HOSPITAL IN	
	PORAKALA	(RIPER)	SOUTH INDIA	
	IASHWARYA,	AUTONOMOUS,		
	HARISH	ANANTHAPURA		
	HANDYAL,	MU		
	MOHANRAJ			
	RATHINAVELU			
36	INAGANDLA	RAGHAVENDRA	CASE-BASED LEARNING IN	CO-136
	SRUTHI,	INSTITUTE OF	PHARMACY PRACTICE:	
	MOHANRAJ	PHARMACEUTIC	OBSERVATIONS FROM AN	
	RATHINAVELU	AL EDUCATION	INDIAN PHARMACY COLLEGE	
		AND RESEARCH		
		(RIPER)		
		AUTONOMOUS,		
		ANANTHAPURA		
		MU		
37	SYEDA NAZIA	GEETHANJALI	THE INNOVATIVE APPROACH	CO-137
	JABEEN, KAVYA	COLLEGE OF	TO TREATING ULCERATIVE	
	KATA,	PHARMACY,	COITUS THROUGH	
	GUNDLAPALLY	HYDERABAD	CHRONOPHARMACEUTICS	
	YOKSHITA,			
	BURGULA			
	EUNICE, P. NAGA			
	CHANDRIKA, DR			
	. P. NEERAJA, DR.			
	M. RAVIKUMAR.			
38	P. AKHIL, P.	GEETHANJALI	CLEARUP SINUS PAIN RELIEF-	CO-138
	DEEKSHITHA	COLLEGE OF	MEDICAL DEVICE	
		PHARMACY,		
		HYDERABAD		
39	AKHILA	GEETHANJALI	A REVIEW ON FORMULATION	CO-139
	PARVEEN,	COLLEGE OF	AND INNOVATIVE	/
	AKUBATTINI	PHARMACY,	APPLICATION OF HYDROGELS	
	BALAJI, SRIVANI,	HYDERABAD	THE EIGHT OF THE TROUBLES	
	ARUKONDA			
	GANESH, P.			
	NAGA			
	CHANDRIKA, DR.			
	P. NEERAJA, DR.			
	M. RAVI KUMAR			
40	C.MEENAKSHI	GEETHANJALI	A REVIEW ON A CLINICAL	CO-140
1 40	REDDY,	COLLEGE OF	PERSPECTIVE OF	CO-140
	C. PRASANNA,	PHARMACY,	ALZHEIMER'S DISEASE	
		HYDERABAD	ALLIEUVIER S DISEASE	
	DEGALA	ПІ РЕКАВАР		
	AMULYA RANI,			
	D.SOWMYA,			
	P.NAGACHANDRI			
	KA,			
	DR.P.NEERAJA,			

	DR.M.RAVI			1
	KUMAR			
41	RAKSHITA RAJ TALARI , SAI HASITA VEDULA , B SUPRAJA , DR.P.NEERAJA, DR.M.RAVIKUMA R	GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD	A NOVEL DRUG DELIVERY SYSTEM: HYODEOXYCHOLIC ACID-MODIFIED METFORMIN LIPOSOMES FOR TYPE 2 DIABETES TREATMENT	CO-141
42	V.KAVYA, A.ELWIN	GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD	STONEMAN SYNDROME- A DISORDER CAUSING SECOND SKELETON IN THE BODY	CO-142
43	SUMAYYA PARVEEN, BIRADAR AJAY KUMAR, K.SAIKUMAR GOUD, SUNIL JUNAPUDI	GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD	NANOPARTICLE POLYMERS INFLUENCE ON CARDIAC HEALTH: GOOD OR BAD FOR CARDIAC PHYSIOLOGY?	CO-143
44	DR.MERUVA SATHISH KUMAR,	MNR COLLEGE OF PHARMACY, MNR NAGAR, SANGAREDDY	RP-HPLC METHOD DEVELOPMENT AND VALIDATION OF RELUGOLIX	CO-144
45	RAVI KUMAR VEMULAPALLI	MNR COLLEGE OF PHARMACY	CARDIOPROTECTIVE ACTIVITY AND ANTIOXIDANT ACTIVITY OF CURCUMIN AGAINST DRUG INDUCED TOXICITY	CO-145
46	GOTTEMUKKUL A LAKSHMI DEVI, P. RAGHUVEER	GITAM SCHOOL OF PHARMACY, HYDERABAD	DOLUTEGRAVIR SOLID DISPERSIONS AS ORO- DISPERSIBLE TABLETS: TO AMELIORATE THE INTEGRASE INHIBITION EFFECT	CO-146
47	S. SIVAPRASAD AND V. ALAGARSAMY	MNR COLLEGE OF PHARMACY, TELANGANA	DRMULATION AND EVALUATION OF CAFFEINE LOADED COPPER NANOPARTICLES	CO-147
48	PARIJATHA BANDIGARI & KRISHNA MOHAN CHINNALA	NALLA NARASIMHA REDDY EDUCATIONAL SOCIETY AND GROUP OF INSTITUTIONS	DEVELOPMENT AND VALIDATION OF A NEW STABILITY INDICATING HPLC METHOD FOR SIMULTANEOUS ESTIMATION OF MONTELUKAST AND BILASTINE	CO-148

49	N.JHANCY	MNR COLLEGE	VALIDATION AND	CO-149
.,	LAXMI BAI	OF PHARMACY	DEVELOPMENT METHOD FOR	
			THE ESTIMATION OF	
			TEMOZOLOMIDE BY UV-	
			SPECTROSCOPY	
50	J.VASANTHA	SANTHIRAM	MAGNETIC MICROSPHERE	CO-150
		COLLEGE OF		
		PHARMACY		
51	JAVAJI MADHU	SANTHIRAM	ENHANCING THE AQUEOUS	CO-151
	SRI HARI	COLLEGE OF	SOLUBILITY AND	
		PHARMACY	DISSOLUTION OF	
			IVERMECTIN USING FREEZE –	
50	DOMA	C ANTELLID AND	DRYING	GO 150
52	BOYA	SANTHIRAM	FORMULATION AND	CO-152
	LAKSHMIKANTH	COLLEGE OF	EVALUATION OF LIQUISOLID	
		PHARMACY NANDYAL	COMPACTION OF APIXABAN	
53	DR.SHEIK NASAR	EAST POINT	EVALUATE THE ANTI-	CO-153
33	J J	COLLEGE OF	UROLITHIATIC ACTIVITY OF	CO-133
		PHARMACY	HYDRO-ALCOHOLIC	
			EXTRACT OF SEEDS OF	
			CAESALPINIA PULCHERRIMA	
			IN ETHYLENE GLYCOL	
			INDUCED RENAL CALCULI.	
54	SHAIK.MAHMMA	SCHOOL OF	SYNTHESIS OF HYDROXYL	CO-154
	D RAJA,RUBY	BASIC SCIENCES,	PROPYLENE ADENINE	
	SINGH, 1RAMA S.	JAIPUR		
	LOKHANDE,	NATIONAL		
	PRADEEP	UNIVERSITY		
	KUMAR SWAIN,	(RAJASTHAN		
	SAYABOINA			
	SANTHOSH			
55	KUMAR, D. MAHESWARA	SANTHIRAM	MICRONEEDLE FOR	CO-155
33	REDDY	COLLEGE OF	TRANSDERMAL DRUG	CO-133
	KEDD I	PHARMACY	DELIVERY: CURRENT TRENDS	
		THARWACT	AND FABRICATION	
56	SAMPATH	SRM COLLEGE	ADVANCEMENTS IN	CO-156
	KUMAR K	OF PHARMACY	SCAFFOLD-BASED DRUG	
			DELIVERY SYSTEMS: A	
			COMPREHENSIVE OVERVIEW	
			AND RECENT	
			DEVELOPMENTS	
57	DD I IVOTIII	MALLADEDDY	EODMII ATION	CO 157
57	DR L. JYOTHI	MALLAREDDY	FORMULATION DEVELOPMENT AND INVITED	CO-157
	RANI, G.MANOHAR	INSTITUTE OF PHARMACEUTIC	DEVELOPMENT AND INVITRO EVALUATION OF EXTENDED	
	U.MANUHAK	LA SCIENCES	RELEASE TABLETS OF	
		LA SCIENCES	AZILSARTAN	
ı			ALILOANIAN	

			USING DIFFERENT	
			POLYMERS	
58	K.DHANUSHA,	BHARATH	A COMPREHENSIVE	CO-158
	M.K.VIJAYALAKS	INSTITUTE OF	OVERVIEW OF	
	HMI,	HIGHER	INTELLECTUAL PROPERTY	
	DR.R.SRINIVASA	EDUCATION	RIGHTS (IPR) AND DRUG	
	N	AND RESEARCH	REGULATORY AFFAIRS	
59	P AASHRITHA,	KVK COLLEGE	BREAKING FRONTIERS: AI-	CO-159
	B.CHATHURYA	OF PHARMACY,	DRIVEN NEOEPITOPE	
		HAYATHNAGAR,	PERSONALIZED	
		ABDULLAPURME	IMMUNOTHERAPY	
		T	RESHAPING CANCER	
			TREATMENT	
60	B, AMBIKA1. K	JNTUA –OTPRI,	DESIGN,	CO-160
	ANITHA,	ANANATAPUR	CHARACTERISATION,	
	P.SHANUMUKA		MOLECULAR DOCKING	
	RAO		STUDIES AND IN SILICO	
			EVALUVATION	
61	MARISETTI.	KGR INSTITUTE	ANTIBIOTIC RESISTANCE	CO-161
	TEJASRI	OF	GENES FROM LIVESTOCK	
		TECHNOLOGY	WASTE	
		AND		
		MANAGEMENT		
62	G.MAMATHA	TEEGALAKRISH	TRANSDERMAL DRUG	CO-162
		NA REDDY	DELIVERY SYSTEM	
		COLLEGE OF		
		PHARMACY		
63	K.DIVYA LAXMI	CHAITANYA	BILAYERED TABLETS	CO-163
		DEEMED TO BE		
		UNIVERSITY		
64	YEDDULA VISWA	RAGHAVENDRA	PERCEPTION OF PHARMACY	CO-164
	TEJA,	INSTITUTE OF	STUDENTS TOWARDS	
	,	PHARMACEUTIC	BLENDED PEDAGOGY IN 21 <sup>ST</sup>	
	MOHANRAJ	AL EDUCATION	CENTURY PHARMACY	
	RATHINAVELU	AND RESEARCH	EDUCATION	
	I WITH WIVE LO	(RIPER)	EDUCATION	
		AUTONOMOUS,		
		ANANTHAPURA		
		MU		
65	SHAKTHI	GEETHANJALI	TRINITY TIES: THE	CO-165
	VANDANA,	COLLEGE OF	EVOLUTION OF THREE-	
	P.SHRUTHI	PHARMACY,	PARENT FAMILIES	
	REDDY,	HYDERABAD		
	P.BHAVANI,			
	DIVYA VARMA			
66	1YAKANNA	SCHOOL OF	SYNTHESIS METHOD OF 8-	CO-166
	CHARY SALLOJU,	BASIC	BROMO-3-METHYL-3,7-	
	1RUBI SINGH,	SCIENCES, JAIPU	DIHYDROXY- 1H-PURINE-2,6-	

	1RAMA S. LOKHANDE, PRADEEP KUMAR SWAIN	R NATIONAL UNIVERSITY, JAIPUR (RAJASTHAN)	DIONE	
67	DR.GUNDA SRILAKSHMI	TEEGALA RAM REDDY COLLEGE OF PHARMACY	HEPATOPROTECTIVE ACTIVITY OF MANSOA ALLIACEA LAM LEAF EXTRACT AGAINST CARBON TETRACHLORIDE INDUCED LIVER DAMAGE MODEL	CO-167
68	M. SUCHITRA SRI BHARGAVI, N. SRIVIDYA	GEETHANJALI COLLEGE OF PHARMACY,	NIPAH VIRUS: DIAGNOSIS AND THERAPY	CO-168
69	SHAMBHAVI JHA	GEETHANJALI COLLEGE OF PHARMACY,	BEYOND THE BLUEPRINT: GENE THERAPY'S ROLE IN UNVEILING A HEALTHIER FUTURE	CO-169
70	V.SRIHAAS , S.ABHISHEK	GEETHANJALI COLLEGE OF PHARMACY	NOOTROPICS – SMART DRUGS	CO-170
71	MRS. SIRISHA NARAPALLI	TEEGALA KRISHNA REDDY COLLEGE OF PHARMACY	SYNTHESIS OF SOME 1,4- DIHYDROPYRIDINE FUSED THIADIAZOLE DERIVATIVES	CO-171
72	DR.K. RAJKIRAN PRINCIPAL &PROFESSOR	SRI SIVANI COLLEGE OF PHARMACY, CHILAKAPALEM, SRIKAKULAM	AN OVERVIEW OF THE G20 NATIONS AND INDIA'S PATENT FRAMEWORK	CO-172
73	U. SRI VENKATESH.	SRI SIVANI COLLEGE OF PHARMACY, CHILAKAPALEM, SRIKAKULAM	AN OVERVIEW OF MEDICINAL PLANTS AND THEIR PHARMACOLOGICAL SCREENING FOR HAEMORRHOIDS IN THE ANIMAL MODEL	CO-173
74	S. LIKITHA	SRI SIVANI COLLEGE OF PHARMACY, CHILAKAPALEM, SRIKAKULAM	REGISTRATION STEPS FOLLOWED FOR FILING OF BIOSIMILARS IN REGULATED AND EMERGING MARKET	CO-174
75	G. EKSHITHA	SRI SIVANI COLLEGE OF PHARMACY, CHILAKAPALEM,	COMPARISON STUDY FOR DRUG MASTER FILE PROCEDURE IN USA & CANADA WITH REGARD TO	CO-175

		SRIKAKULAM	REGULATORY TECHNICALITIES	
76	U. UPENDRA RAO	SRI SIVANI COLLEGE OF PHARMACY, CHILAKAPALEM, SRIKAKULAM	METHOD DEVELOPMENT AND VALIDATION FOR VITAMIN-A AND E IN EGG BY USING HPLC	CO-176
77	DR.G.KALYANI	TEEGALA KRISHNA REDDY COLLEGE OF PHARMACY	QUALITATIVE ANALYSIS OF FOOD ADDITIVES IN FOOD PRODUCTS	CO-177
78	K.USHARANI, MOHAMMAD AFSHA SANA,T.K.TARUN	GEETHANJALI COLLEGE OF PHARMACY	MECHANISTIC UPDATE ON TRISENOX IN BLOOD CANCER	CO-178
79	SUVARNA ALADAKATTI	NALLA NARASIMHA REDDY GROUP OF INSTITUTIONS	MEDICINAL PLANTS AND BIOACTIVE COMPOUNDS USED IN TREATMENT OF POLYCYSTIC OVARY SYNDROME(PCOS)	CO-179
80	DHARAVATHAH ALYA, LAGUSANI.YASH WANTH GOUD,SUNKARA RENUKA DEVI, SHANKARAIAH PULIPAKA, DR.M. RAVI KUMAR, DR. BHARATH BHUSHAN	GEETHANJALI COLLEGE OF PHARMACY	HERBAL FACE CREAM OVERVIEW	CO-180
81	SUNKARA RENUKA DEVI,DHARAV ARH AHALYA, LAGUSANI YASHWANTH GOUD, SHANKARAIAH PULIPAKA, M. RAVI KUMAR, DR. BHARATH BHUSHAN	GEETHANJALI COLLEGE OF PHARMACY	PREPARATION AND EVALUATION OF MULTIPURPOSE CREAM	CO-181
82	MEGHANA PARASARAM, DR.V. SAIKISHORE	BAPATLA COLLEGE OF PHARMACY	DESIGN AND DEVELOPMENT OF KETOCONAZOLE NANOSPONGES LOADED GELS FOR TOPICAL DRUG	CO-182

			DELIVERY	
83	KASULA UZMA KOUSAR, B. SAHITHI	RAGHAVENDRA INSTITUTE OF PHARMACEUTIC AL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURA MU	A FIVE-YEAR RETROSPECTIVE STUDY ASSESSING ANTIMICROBIAL SENSITIVITY PATTERN AND FINANCIAL EXPENSES AMONG DIABETIC FOOT ULCER PATIENTS IN A RURAL SETTING OF SOUTH INDIA	CO-183
84	B. MOUNIKA, DR. V.SAIKISHORE	BAPATLA COLLEGEOF PHARMACY	DESIGN AND DEVELOPMENT OF FLOATING TABLETS OF METOPROLOL TARTARATE	CO-184
85	MANASA REDDY, VENUTURUPALLI KEYURA	GEETHANJALI COLLEGE OF PHARMACY	PERSONALISED MEDICINE: AN EMERGING PHARMACEUTICAL TREN	CO-185
86	CHARANYA GURRAM, T.E.GOPALA KRISHNA MURTHY	BAPATLA COLLEGE OF PHARMACY	A COMPARATIVE STUDY OF MOLECULAR DOCKING AND INVITRO DIFFUSION STUDIES TO SELECT THE SUITABLE VEHICLE FOR IMPROVING THE ORAL BIOAVAILABILITY OF ATENOLO	CO-186
87	SHATA RUPA ROY S.M.G ISHRAR	RAGHAVENDRA INSTITUTE OF PHARMACEUTIC AL EDUCATION AND RESEARCH (RIPER) ANANTAPURAM U	IMPACT OF STRESS, ANXIETY, AND DEPRESSION ON CHRONIC KIDNEY DISEASE AND ITS EFFECTS ON QUALITY OF LIFE	CO-187
88	N. NIKITHA, U. HIMABINDU, P. NAGA CHANDRIKA, Y. SHIVA KUMAR, DR. M. RAVI KUMAR	GEETHANJALI COLLEGE OF PHARMACY	COMPREHENSIVE APPROACHES OF DENDRIMERS AS MULTIFUNCTIONAL NANO- CARRIERS TO COMBAT BREAST CANCER	CO-189
89	VANISRI.M, DR.R.SRINIVASA N, DR.R. SARAVANAN	BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH, CHENNAI	THE ROLE OF PHARMACIST IN MEDICATION SAFETY	CO-190
90	JELLA CHAITHANYA,	GEETHANJALI COLLEGE OF	A REVIEW ON INNOVATIVE APPROACHES FOR BRAIN	CO-191

	VADAPALLY SWETHA, ERIKAPATI NIKITHA NAGA CHANDRIKA PALLAM, DR.P NEERAJA, DR. M RAVI KUMAR	PHARMACY	TARGETED DRUG DELIVERY SYSTEM	
91	KODURU SRINIJA, PULIPATI BHARGAVI	GEETHANJALI COLLEGE OF PHARMACY	RECENTLY BANNED DRUGS IN INDIA	CO-192
92	V. ANUSHA <sup>1</sup> , M. S. UMASHANKAR <sup>2</sup> , Y. GANESH KUMAR <sup>3</sup>	SRM COLLEGE OF PHARMACY, KATTANKULATH UR, INDIA	A THOROUGH REVIEW ON CHRONOTHERAPEUTIC PULSATILE DRUG DELIVERY APPROACH FOR TREATMENT OF HYPERCHOLETEROLEMIA USING STATINS	CO-193
93	PRAKASH DAS, 1RUBI SINGH, 1RAMA S. LOKHANDE, 2PRADEEP KUMAR SWAIN	SCHOOL OF BASIC SCIENCES, JAIPUR NATIONAL UNIVERSITY, JAIPUR (RAJASTHAN),	SYNTHESIS METHOD OF 5-(3,3- DIMETHYLOXIRAN-2-YL)-3- METHYLPENT-1-EN-3-YL ACETATE	CO-193
94	DR. Y. GANESH KUMAR	KVK COLLEGE OF PHARMACY,	PREPARATION AND OPTIMIZATION OF VILDAGLIPTIN CONTROLLED RELEASE TABLETS	CO-194
95	S. SHOWBHARNIKH AA, M.K. VIJAYALAKSHMI , DR R. SARAVANAN	BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH TAMBARAM CHENNAI	PHARMACOVIGILANCE'S PURPOSE IN PUBLIC HEALTH	CO-195
96	GOUTHAMI THUMMA	KAKATIYA UNIVERSITY OF PHARMACEUTIC AL SCIENCES	FORMULATION AND EVALUATION OF NANO PARTICULATE DRUG DELIVERY SYSTEM	CO-196
97	S. RAVIKUMAR, T. ASWINI, M.K.VIJAYALAKS HMI, Dr.	BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH,	A OVER ALL REVIEW OF RILUZOLE IN THE TREATMENT OF LOU'S GEHRIG'S DISEASE	CO-197

	R.SARAVANAN, Dr.R.	CHENNAI		
98	SRINIVASAN JYOTHI M	BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH	FORMULATION AND EVALUATION OF GASTRORETENTIVE DRUG DELIVERY SYSTEM OF AN ANTIHYPERTENSIVE DRUG – TELMISARTAN	CO-198
99	NITTALA SESHASARVANI, Y. GANESH KUMAR, V. ANUSHA	DEPARTMENT OF PHARMACEUTIC S, KVK COLLEGE OF PHARMACY	DESIGN FORMULATION DEVELOPMENT AND EVALUATION OF KETOROLAC EXTENDED RELEASE TABLETS	CO-199
100	ASWINI.T RAVIKUMAR. S,SARAVANAN.R, M.K VIJAYALAKSHMI , SRINIVASAN.R	FACULTY OF PHARMACY, BIST-BIHER, CHENNAI	EXPLORING THE THERAPEUTIC POTENTIAL: HERBAL OINTMENT WITH ACHYRANTHES ASPERA LINN LEAF AND ROOT EXTRACTS FOR WOUND HEALING	CO-200
101	T.THENMOZHI, DR. R. SARAVANAN, DR.R.SRINIVASA N	FACULTY OF PHARMACY, BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH	ELEVATING GLOBAL UNDERSTANDING AND EDUCATION TO CONFRONT THE CRITICAL CHALLENGE OF ANTIMICROBIAL RESISTANCE	CO-201
102	SUSWALA LAKSHMI <sup>*</sup> , RAGHAVENDRA KUMAR GUNDA, J.N.SURESH KUMAR	NARASARAOPET A INSTITUTE OF PHARMACEUTIC AL SCIENCES, NARASARAOPET , PALNADU (DT)	TRANSDERMAL DRUG DELIVERYSYSTEMS- AREVIEW	CO-202
103	M. HEMANTH REDDY*, RAGHAVENDRA KUMARGUNDA, J.N.SURESH KUMAR	NARASARAOPET A INSTITUTE OF PHARMACEUTIC AL SCIENCES, NARASARAOPET , PALNADU (DT)	REVIEW ON MICROSPHERES	CO-203
104	AKITHA PALLAVI ,AMRUTHA KSVN	GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD	THE USE OF ARITIFICAL INTELLIGENCE IN THE PHARMACEUTICAL INDUSTRY	CO-204
105	SUNITHA	TKR COLLEGE	ANTHELMENTIC ACTIVITY	CO-205

		OF PHARMACY	AGAINST DIFFERENT EXTRA OF	
			CALOTROPIS PROCERA	
106	ARAVIND A	EAST POINT COLLEGE OF PHARMACY	SYNTHESIS AND EVALUATION OF CHALCONE AND THEIR DERIVATIVES	CO-206
107	Dr. FIZIA MOHAMMADI, HARSHITHA K, SANDHYA A, SNEHA NAGARI V	EAST POINT COLLEGE OF PHARMACY	A STUDY ON DRUG UTILIZATION PATTERN OF ANTIEPILEPTICS AMONG PAEDIATRICS AND RAISING AWARENESS IN PARENTS REGARDING RECURENT SEIZURES	CO-207
108	DESHETTY SNEHITHA	CMR COLLEGE OF PHARMACY	SCIATICA	CO-208
109	KARAPAT SHMA	CMR COLLEGE OF PHARMACY	PERSONALISED MEDICINE	CO-209
110	RAGINI RAUT, K.USHA	CMR COLLEGE OF PHARMACY	SLEEP DISORDER AND SLEEP DEPRIVATION : AN UNMET PUBLIC HEALTH PROBLEM	CO-210
111	SHAN SHAFEEN SULTANA, FAIQUA FATIMA	CMR COLLEGE OF PHARMACY	A STUDY ON ASSESSMENT OF CLINICAL PROFILE AND QUALITY OF LIFE IN ACUTE DECOMPENSATED HEART FAILURE PATIENTS AT A TERTIARY CARE HOSPITAL	CO-211
112	NELIKANTI VAISHNAVI*, N. MADHAVI	CMR COLLEGE OF PHARMACY	BLOCKCHAIN TECHNOLOGY	CO-212
113	A. KOVIDHA	CMR COLLEGE OF PHARMACY	CRISPR-CAS9 AND GENE EDITING THERAPIES: A PHARMACIST'S GUIDE TO PERSONALIZED MEDICINE	CO-213
114	D. ANUPAMA D.RISHI PRAMIKA	CMR COLLEGE OF PHARMACY	TELE MEDICINE	CO-214
115	K.N.V.L. PADMAJA	NARASARAOPET A INSTITUTE OF PHARMACEUTIC AL SCIENCES	MICROSPHERES- REVIEW	CO-215
116	BODEPUDI SANDHYA	NARASARAOPET A INSTITUTE OF	A NOVEL DRUG DELIVERY SYSTEM -A REVIEW ON	CO-216

		PHARMACEUTIC	NIOSOMES	
117	AINAVALLI BHAVANI SATYA PRASAD	AL SCIENCES  NARASARAOPET A INSTITUTE OF PHARMACEUTIC AL SCIENCES	TRANSDERMAL DRUG DELIVERY SYSTEMS- AN EMPHASIS ON TRANSDERMAL PATCHES	CO-217
118	BHANU PRAKASH	NARASARAOPET A INSTITUTE OF PHARMACEUTIC AL SCIENCES	SHORT REVIEW ON SUSTAINED RELEASE TABLETS	CO-218
119	ASWATHY MELEL SOMARAJAN	RAGHAVENDRA INSTITUTE OF PHARMACEUTIC AL EDUCATION AND RESEARCH	APPROPRIATENESS ANALYSIS OF PROTON PUMP INHIBITOR USE AMONG GENERAL MEDICINE INPATIENTS OF A SECONDARY CARE HOSPITAL: A HOSPITAL BASED CROSS- SECTIONAL STUDY	CO-219
120	C. SHRAVANI, A. NANDINI, B. BHOMIKA, DR. P.NEERAJA, DR.M.RAVIKUM AR	GEETHANJALI COLLEGE OF PHARMACY	NANOTHERANOSTICS IN OVARIAN CANCER: AN INSIGHT	CO-220
121	DESHETTY SNEHITHA	CMR COLLEGE OF PHARMACY	THERAPY TARGETS IN GLIOBLASTOMA AND CANCER STEM CELLS	CO-221
122	KARRA GEETHA	CMR COLLEGE OF PHARMACY	FORMULATION AND EVALUATION OF NANOSUSPENSION OF AZELNIDIPINE	CO-222
123	A. VARSHA <sup>1</sup> V.T. ISWARIYA <sup>2</sup>	CMR COLLEGE OF PHARMACY	CLOUDING SOLUTION	CO-223
124	K.USHA <sup>1</sup> S. LAHARI <sup>2</sup> , V.T. ISWARIYA <sup>2</sup>	CMR COLLEGE OF PHARMACY	STRUCTURE BASED DRUG DESIGN	CO-224
125	VARADA SOUJANYA 1, REVU BABY NALANDA 2	GITAM SCHOOL OF PHARMACY, GITAM (DEEMED TO BE UNIVERSITY), VISAKHAPATNA M	ANALYTICAL METHOD DEVELOPMENT AND VALIDATION FOR THE ESTIMATION OF RILPIVIRINE AND ITS N-OXIDE IMPURITY USING UPLC	CO-225

		INDEX FOR POSTI	ER ABSTRACTS	
SL. NO	NAME OF THE AUTHORS	NAME OF THE INSTITUTION	TITLE OF THE ABSTRACT	ID NUMB ER
1	BALASANI PRANITHA, DR. S. ROHINI REDDY	SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA	FORMULATION DEVELOPMENT AND EVALUATION OF ORAL FILM CONTAINING ANTI DEPRESSANTS	CP-101
2	SYEDA NAZIA JABEEN, KAVYA KATA, GUNDLAPALLY YOKSHITA, BURGULA EUNICE, P. NAGA CHANDRIKA, DR. P. NEERAJA, DR. M. RAVIKUMAR.	GEETHANJALI COLLEGE OF PHARMACY	THE INNOVATIVE APPROACH TO TREATING ULCERATIVE COITUS THROUGH CHRONOPHARMACEUTICS	CP-102
3	SATU SRUJANA, DR. S. ROHINI REDDY	SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA	FORMULATION DEVELOPMENT AND EVALUATION OF FAST DISSOLVING TABLETS	CP-103
4	A STEPTOZOTOCIN AND NICOTINAMIDE- INDUCED DIABETIC RAT STUDY EVALUATING THE ANTI- DIABETIC EFFECTS OF ETHANOLIC ROOT EXTRACT	SRI INDU INSTITUTE OF PHARMACY	A STEPTOZOTOCIN AND NICOTINAMIDE-INDUCED DIABETIC RAT STUDY EVALUATING THE ANTI-DIABETIC EFFECTS OF ETHANOLIC ROOT EXTRACT OF POLYALTHIA LONGIFOLIA	CP-104

	OF POLYALTHIA LONGIFOLIA			
5	SRUJAN GUNTIAARATHI KESAPRAGADA, U S V R HYMAVATHI, ARCHANA JUYAL	ST. PIOUS X DEGREE & PG COLLEGE FOR WOMEN	INTELLECTUAL PROPERTY RIGHTS: AN OVERVIEW AND CHALLENGES IN THE PHARMACEUTICAL SECTOR	CP-105
6	N. DIVYA SRI, CH. BHARGAVI	SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA	REVIEW ON HERBAL HAIR OIL: USED AS A COSMETIC PRODUCT	CP-106
7	ADVANCED FORMULATION TECHNIQUES TO ENHANCE SOLUBILITY, DISSOLUTION AND BIOAVAILABILIT Y OF POORLY WATER- SOLUBLE DRUGS	ADVANCED FORMULATION TECHNIQUES TO ENHANCE SOLUBILITY, DISSOLUTION AND BIOAVAILABILIT Y OF POORLY WATER- SOLUBLE DRUGS	ADVANCED FORMULATION TECHNIQUES TO ENHANCE SOLUBILITY, DISSOLUTION AND BIOAVAILABILITY OF POORLY WATER- SOLUBLE DRUGS	CP-107
8	DR. BHARAT BHUSAN MOHAPATRA	GEETHANJALI COLLEGE OF PHARMACY	ADVANCED FORMULATION TECHNIQUES TO ENHANCE SOLUBILITY, DISSOLUTION AND BIOAVAILABILITY OF POORLY WATER- SOLUBLE DRUGS	CP-108
9	MACHANI SRAVANI, KOLKURI SHRUTHI, MUDDAM DEEPA, SHANKARAIAH PULIPAKA, M. RAVI KUMAR	GEETHANJALI COLLEGE OF PHARMACY	NANOMEDICINE-BASED APPROACHES FOR IMPROVED DELIVERY OF PHYTO- THERAPEUTICS FOR CANCER THERAPY	CP-109
10	PRECISION	SAROJINI NAIDU	PRECISION MEDICINE: A NEW	CP-110

	MEDICINE: A NEW VISION IN THERAPEUTICS	VANITA PHARMACY MAHA VIDYALAYA	VISION IN THERAPEUTICS	
11	REDDIPALLI BHAVANA, SANDIRI SWATHI, ALLAM DIKSHITHA, SHANKARAIAH PULIPAKA, M. RAVI KUMAR	GEETHANJALI COLLEGE OF PHARMACY	ANTI-DIABETIC NANO- FORMULATION FROM HERBAL SOURCE	CP-111
12	SARODE JYOTHIRMAI BAI, DR. S. HEMALATHA	SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA	GREEN CHEMISTRY IN PHARMACY: A SUSTAINABLE APPROACH FOR PHARMACEUTICAL INNOVATION	CP-112
13	NELIKANTI VAISHNAVI, N. MADHAVI	CMR COLLEGE OF PHARMACY	BLOCKCHAIN TECHNOLOGY	CP-113
14	P. RITHIKA NAIDU, ANJALI DHEERAVATH, SHANKARAIAH PULIPAKA, M. RAVI KUMAR, T. ANOOSHA	GEETHANJALI COLLEGE OF PHARMACY	PHARMACOGENOMICS AND PERSONALIZED MEDICINE	CP-114
15	PATHURI SOUNDARYA, S. NIVEDITHA, SHANKARAIAH PULIPAKA, M. RAVI KUMAR	GEETHANJALI COLLEGE OF PHARMACY	3D PRINTING TECHNOLOGY	CP-115
16	DEVELOPMENT OF POTENTIAL INHBITORS FOR MPRO TARGET	MNR COLLEGE OF PHARMACY	DEVELOPMENT OF POTENTIAL INHBITORS FOR MPRO TARGET OF SARS- COV- 2: COMPUTATIONAL	CP-116

	OF SARS- COV-2:		APPROACH	
	COMPUTATIONA			
	L APPROACH			
17	GUGULOTH	MNR COLLEGE	OVERVIEW ON	CP-117
	MAMATHA	OF PHARMACY	SPINOCEREBELLAR ATAXIA	
18	SIREESHA D,	ANURAG	DEVELOPMENT AND	CP-118
	NIKETH N,	UNIVERSITY	VALIDATION OF	
	GANESH N, SAI		SPECTROPHOTOMETRIC	
	DEEPYA P,		METHOD FOR THE	
	VAISHNAVI P		ESTIMATION OF PREGABALIN	
			AND EPALRESTAT IN	
			PHARMACEUTICAL	
			FORMULATIONS	
19	MAMINDLA	GEETHANJALI	ROLE OF AI IN DRUG	CP-119
	RISHITHA,	COLLEGE OF	DISCOVERY AND DRUG	
	MINDA	PHARMACY	DELIVERY SYSTEM	
	KESHWARI,			
	KAVALI			
	SRILAKSHMI,			
	BADHAVATH			
	VINISHA,			
	SHANKARAIAH			
	PULIPAKA, M.			
	RAVI KUMAR			
20	CHANDRAGOUNI	HOLY MARY	3D PRINTING IN	CP-120
	POORNIMA	COLLEGE OF	PHARMACEUTICALS	
		SCIENCE AND		
		TECHNOLOGY		
21	P. USHA SREE,	VIJAYA	EVALUATION OF CATARACT	CP-121
	ANITHA, VEERA	COLLEGE OF	PREVENTIVE ACTION OF	
	BABU	PHARMACY	HYDRO ALCOHOLIC EXTRACT	
			OF LEAVES OF	
			ALTERNANTHERA SESSILIS	
22	BHUMIKA	JSS COLLEGE OF	TO CHECK THE	CP-122
	PRASAD SATAM	PHARMACY	INVITRO ANTIMITOTIC	
			ACTIVITY AND PERFORM	
			MOLECULAR DOCKING	
			STUDIES OF ISOLATED	
			COMPOUNDS FROM HERBAL	
			PLANT RHYCHOSIA	

			BEDDOMEI	
23	P. SMITHA, M. NAVYA, SHABNAM SULTANA, M. SUSHMAJA		FORMULATION AND EVALUATION OF THE RISPERIDONE SOLID DISPERSION USING DIFFERENT CARRIERS	CP-123
24	P. JYOTHI1, DR.P. NEERAJA, DR. M. RAVIKUMAR, DR. S. NAGA LAKSHMI	GEETHANJALI COLLEGE OF PHARMACY	ROLE OF HYDROGELS IN CANCER THERAPY	CP-124
25	B. ARCHANA, S. ESTHER, SHAREEF, AJAY KUMAR, M. SATISH KUMAR	GEETHANJALI COLLEGE OF PHARMACY	VALIDATION AND METHOD DEVELOPMENT OF ANALYTICAL METHODS AS PER ICH	CP-125
26	SYEDA NAZIA JABEEN, KAVYA KATA, GUNDLAPALLY YOKSHITA, BURGULA EUNICE, P. NAGA CHANDRIKA	GEETHANJALI COLLEGE OF PHARMACY	THE INNOVATIVE APPROACH TO TREATING ULCERATIVE COITUS THROUGH CHRONOPHARMACEUTICS	CP-126
27	V. SRIHAAS, S. ABHISHEK	GEETHANJALI COLLEGE OF PHARMACY	NOOTROPICS – SMART DRUGS	CP-127
28	YEDDULA VISWA TEJA1, MOHANRAJ RATHINAVELU	RAGHAVENDRA INSTITUTE OF PHARMACEUTIC AL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS	PERCEPTION OF PHARMACY STUDENTS TOWARDS BLENDED PEDAGOGY IN 21ST CENTURY PHARMACY EDUCATION	CP-128
29	GOUTHAMI THUMMA KASULA UZMA	GEETHANJALI COLLEGE OF PHARMACY RAGHAVENDRA	DESIGN, DEVELOPMENT AND EVALUATION OF NANOPARTICULATE DRUG DELIVERY SYSTEMS A FIVE-YEAR RETROSPECTIVE	CP-129

	KOUSAR, B.	INSTITUTE OF	STUDY ASSESSING	
	SAHITHI	PHARMACEUTIC	ANTIMICROBIAL SENSITIVITY	
30		AL EDUCATION	PATTERN AND FINANCIAL	
		AND RESEARCH	EXPENSES AMONG DIABETIC	
		(RIPER)	FOOT ULCER PATIENTS IN A	
		AUTONOMOUS	RURAL SETTING OF SOUTH	
			INDIA	
31	NETHALA	GEETHANJALI	PERSONALISED	CP-131
	SRAVIKA	COLLEGE OF	MEDICINE:AN EMERGING	
	KEYURA	PHARMACY	PHARMACEUTICAL TREND	
	VENUTURUPALLI			
32	KODURU	GEETHANJALI	RECENTLY BANNED DRUGS	CP-132
	SRINIJA,PULIPAT	COLLEGE OF	IN INDIA	
	I BHARGAVI	PHARMACY		
33	DHARAVATH	GEETHANJALI	HERBAL FACE CREAM	CP-133
	AHALYA,LAGUS	COLLEGE OF	OVERVIEW	C1-133
	ANI.YASHWANT	PHARMACY	OVERVIEW	
	H			
	GOUD,SUNKARA			
	RENUKA DEVI			
	SHANKARAIAH			
	PULIPAKA, M.			
	RAVI KUMAR,			
	DR. BHARATH			
	BHUSHAN			
34	K. HANUNYA	GEETHANJALI	AI IN ORTHOPEDIC	CP-134
		COLLEGE OF	RADIOGRAPHY: ASSESSING	
		PHARMACY	THE POTENTIAL FOR	
			AUTOMATED	
			BONEFRACTURE DETECTION	
35	DR.SHEIK NASAR	GEETHANJALI	EVALUATE THE ANTI-	CP-135
		COLLEGE OF	UROLITHIATIC ACTIVITY OF	
		PHARMACY	HYDRO-ALCOHOLIC	
			EXTRACT OF SEEDS OF	
			CAESALPINIA PULCHERRIMA	
			IN ETHYLENE GLYCOL	
0.5	36 3747777	GDDWY 133343	INDUCED RENAL CALCULI.	GD 101
36	M. NAVYA, P.	GEETHANJALI	FORMULATION AND	CP-136
	SMITHA,	COLLEGE OF	EVALUATION OF THE	
	SHABNAM	PHARMACY	RISPERIDONE SOLID	

	SULTANA, M. SUSHMAJA, B. MAMATHA		DISPERSION USING DIFFERENT CARRIERS	
37	MUVVALA SRI PRAHARSHITHA REDDY, CHANDRAGOUNI POORNIMA, CHITLA DIVYA	HOLY MARY COLLEGE OF SCIENCE AND TECHNOLOGY	3D PRINTING PHARMACEUTICAL TECHNOLOGY	CP-137
38	R V VALLI KUMARI	MALLA REDDY INSTITUTE OF PHARMACEUTIC AL SCIENCES	METHOD DEVELOPMENT AND VALIDATION FOR TAMSULOSIN HYDROCHLORIDE BY ICP-MS	CP-138
39	J. SANGEETHA	MALLA REDDY INSTITUTE OF PHARMACEUTIC AL SCIENCES	FORMULATION & EVALUATION OF POLYHERBAL SHAMPOO	CP-139
40	B.RAMA	MALLA REDDY INSTITUTE OF PHARMACEUTIC AL SCIENCES	DEVELOPMENT OF CLOZAPINE TASTE MASKING SACHETS: INVITRO CHARACTERIZATION	CP-140
41	REDDIPALLI BHAVANA, SANDIRI SWATHI, ALLAM DIKSHITHA, SHANKARAIAH PULIPAKA, DR.M. RAVI KUMAR	GEETHANJALI COLLEGE OF PHARMACY	ANTI-DIABETIC NANO- FORMULATION FROM HERBAL SOURCE	CP-141
42	GUGULOTH MAMATHA	MNR COLLEGE OF PHARMACY	OVERVIEW ON SPINOCEREBELLAR ATAXIA	CP-142
43	V. LAVANYA AND G. S ANNAMMADEVI	PRINCETON COLLEGE OF PHARMACY	ADVANCED FORMULATION TECHNIQUES TO ENHANCE SOLUBILITY, DISSOLUTION AND	CP-143

44	SRUJAN GUNTI AARATHI KESAPRAGADA , U S V R HYMAVATHI,	ST. PIOUS X DEGREE & PG COLLEGE FOR WOMEN	BIOAVAILABILITY OF POORLY WATER- SOLUBLE DRUGS  INTELLECTUAL PROPERTY RIGHTS: AN OVERVIEW AND CHALLENGES IN THE PHARMACEUTICAL SECTOR	CP-144
	ARCHANA JUYAL			
45	ASWATHY MELEL SOMARAJAN, BALAIAHGARI MANI RAJA RAO, DONTHULA PUSHPA, ANKE SAI KUMAR, DR. VENKATA RAMANA, DR. G. NARAYANA, DR. A. SUDHEER	RAGHAVENDRA INSTITUTE OF PHARMACEUTIC AL EDUCATION AND RESEARCH	APPROPRIATENESS ANALYSIS OF PROTON PUMP INHIBITOR USE AMONG GENERAL MEDICINE INPATIENTS OF A SECONDARY CARE HOSPITAL: A HOSPITAL BASED CROSS- SECTIONAL STUDY	CP-145
46	AKSHITHA ,CH.NIKITHA ,L.SOWMYA T. ANOOSHA	GEETHANJALI COLLEGE OF PHARMACY	STEREOLITHOGRAPHIC (SLA) 3D BIOPRINTING	CP-146
47	CH.SRINIDHI, M ISHWARYA , SWARGAM ANJANA	GEETHANJALI COLLEGE OF PHARMACY	THE LC-MS TECHNIQUE AND ITS APPLICATIONS	CP-147
48	NAHIDA SIDDIQUI	GEETHANJALI COLLEGE OF PHARMACY	THE SIGNIFICANCE OF HERBALS AND AYURVEDIC MEDICINES IN ALLEVIATING SYMPTOMS OF ACUTE TONSILLITIS IN PEDIATRIC PATIENTS	CP-148

INDEX FOR EXHIBITS ABSTRACTS				
Sl. No	Name of the Authors	Name of the Institution	Title of the Abstract	ID Number
1	ELISHA JHONSON, P. PRAVALIKA REDDY, Y. ADARSH KUMAR P. NAGA CHANDRIKA	Geethanjali College of Pharmacy	LIGHT ACTIVATED MOLECULAR JACKHAMMERS: A NANO EVOLUTION IN THE WORLD OF CANCER KILLING PHENOMENON	CE-101
2	G. VENKAT RAMANA REDDY, E.VYSHNAVI, M.ABHINITHA, CH.SATHWIKA, P. NAGA CHANDRIKA. R.UMADEVI,NAVEEN	Geethanjali College of Pharmacy	A REVIEW ON IDENTIFICATION OF CANCER CELLS: THE ROLE OF NANOSENSORS	CE-102
3	CH. SHIRISHA, V. ANUSHA, CH.PUJITHA, T. CHAITANYA, NAGA CHANDRIKA, DR.P. NEERAJA, DR. M. RAVIKUMAR	Geethanjali College of Pharmacy	REVIEW OF DRUG DISCOVERY PROCESS	CE-103
4	K. CHARITHA, P. TAPASYA, K. PRANATHI, K.SAI PRASANNA	Geethanjali College of Pharmacy	TISSUE TECH MARVEL: NEXT-GEN 3D ORGAN PRINTING	CE-104
5	MANTRALA VENKATA SATYA SAI KALYANI, DAVATH SOWMYA, DEVASATH GEETHA, M.SHIRISHA R.UMA DEVI	Geethanjali College of Pharmacy	RADIOPHARMACEUTICAL THERAPY IN CANCER: CLINICAL ADVANCES AND CHALLENGES	CE-105
6	G.MAHALAKSHMI, K.HIMABINDU, S.VARSHINI	Geethanjali College of Pharmacy	MEDICINE VENDING MACHINE- (MEDICAL ATM)	CE-106

#### CO-101 ROLE OF SUPERDISINTEGRANTS IN ORAL DOSAGE FORMS

#### SAROVAR REDDY VANTIMITTA

ANNAMACHARYA COLLEGE OF PHARMACY, RAJAMPET, ANDHRA PRADESH

Email.id: sarovar.ancp@gmail.com

The oral dosage forms is one of the most oldest and most acceptable dosage forms in the drug delivery systems for many ailments. The advances in the oral dosage forms and its drug release mechanisms and methods have been increased from day to day to achieve good bioavailability. The usage of superdisintegrants have been introduced to promote the disintegration, dissociation of drug into the medium for quicker initiation of therapy. The ingredient which should posses the following ideal properties such as good tendency on wetting and causes super disintegration, must not form lump, compatible with other agents such as drugs, effective in minimum or lower concentration, must not adhere to the dyes or punches during the process of compression in manufacturing of dosage forms, biodegradable and more effective intragranularly. Both the natural and synthetic source of superdisintegrants are available in the formulation industry. The natural superdisintegrants such as Gellan Gum, Ispaghula Husk Mucilage (Plantago ovata), Xanthan Gum, Locust Bean Gum, Chitin/Chitosan-Silicon di oxide, Soy Polysaccharide and Mango Peel Pectin. The Microcrystalline Cellulose (Avicel), Cross-linked Polyvinyl Pyrrolidone (Crospovidone), Alginates, Modified Celluloses (Croscarmellose Sodium) and Modified Starch (Sodium starch glycolate, Primojel) are commonly used as synthetic superdisintegrants. The fabricated formulation follows the drug release mechanisms like chemical reaction, enzymatic reaction, Porosity and capillary action (wicking). Deformation, heat of wetting, Electrostatic repulsion. These are used in the preparations of fast dissolving tablets or mouth dissolving tablets or dispersible tablets for rapid action. These are incorporated at lower concentrations as compared with the simple disintegrants, around 1%–10% by weight among the total or final weight of the formulation.

### CO-102 DOLUTEGRAVIR SOLID DISPERSIONS AS ORO-DISPERSIBLE TABLETS: TO AMELIORATE THE INTEGRASE INHIBITION EFFECT

LAKSHMI DEVI GOTTEMUKKULA <sup>1</sup>\*, RAGHUVEER PATHURI<sup>2</sup>
GITAM SCHOOL OF PHARMACY, GITAM (DEEMED TO BE UNIVERSITY),
RUDRARAM, HYDERABAD

Email.id: lgottemu@gitam.in

**Background:** Dolutegravir (DTG) is an integrase strand transfer inhibitor that prevents the integration of viral DNA into host cell DNA, which is one of the key phases in the life cycle of HIV, preventing the virus from multiplying inside the host. However, its therapeutic efficacy is constrained by its weak water solubility.

**Objective**: A simple conventional approach using sulfobutylether- $\beta$ -cyclodextrin (SBE  $\beta$ -CD) and Soluplus® as carriers has been used to ameliorate the drug release of DTG.

**Materials and Methods:** Three methods were used to prepare solid dispersions: kneading, rota solvent evaporation, and lyophilization. The ratio of DTG to carrier varied between 1:1, 1:2, 1:3,

and 1:4 w/w. Optimized DTG solid dispersions were then used in the direct compression method to createOro-dispersible tablets with the addition of super disintegrants, i.e., locust bean gum and Croscarmellose Sodium. Prepared tablets were evaluated.

**Results:** The drug release for pure DTG is only 14.6 %. Lyophilization with SBE  $\beta$ -CD and Soluplus® led to the dissolution of DTG up to 100.11% and 88.141.17% after 2 hours. The application of SBE  $\beta$ -CD significantly improved the solubility and dissolving rate of DTG. The Oro-dispersible tablets made with 12% locust bean gum were the best among the tested formulations. They disintegrated rapidly, taking only 11 seconds, and showed the highest dissolution rate of 99.89%, better than the marketed INSTGRA <sup>TM</sup>-50mg tablets. Optimized rapid disintegration tablets of Dolutegravir can target integrase and potentially inhibit HIV.

#### CO-103 PHARMACY IN COLLABORATION WITH ARTIFICIAL INTELLIGENCE

### MOHAMMAD ATIF<sup>1\*</sup>, SHAHEEN SULTANA<sup>2</sup> KVK COLLEGE OF PHARMACY HYDERABAD

Email.id: atifrayeen8090@gmail.com

Artificial intelligence (AI) is used more and more in different societal fields, particularly in the pharmaceutical area. AI is advantageous from an economic and professional standpoint. By imitating human intelligence and combining it with cutting-edge technology to provide the best results, it minimizes the need for human work. This review examines the useful application of AI in the pharmaceutical industry at each stage from drug discovery through drug development as well as in several departments. In addition to requiring less human labor, it also enhances clinical research effectiveness and pharmaceutical productivity while decreasing the possibility of error. The review also looks at the current difficulties in implementing AI in the pharmaceutical industry. Additionally, suggests it assesses current difficulties and solutions. Artificial intelligence is revolutionizing — and strengthening — modern healthcare through technologies that can predict, grasp, learn, and act, whether it's employed to identify new relationships between genetic codes or to control surgery-assisting robots. It can detect minor patterns that humans would completely overlook. This study explores and discusses the various modern applications of AI in the health sector. Particularly, the study focuses on three most emerging areas of AI-powered healthcare: AI-led drug discovery, clinical trials, and patient care. The findings suggest that pharmaceutical firms have benefited from AI in healthcare by speeding up their drug discovery process and automating target identification. Artificial Intelligence (AI) can help also to eliminate time-consuming data monitoring methods. The findings also indicate that AI-assisted clinical trials are capable of handling massive volumes of data and producing highly accurate results. Medical AI companies develop systems that assist patients at every level. Patients' medical data is also analyzed by clinical intelligence, which provides insights to assist them improve their quality of life.

### CO-104 IMPACT OF ANTIOXIDANT-RICH FRACTIONS ISOLATED FROM MOSS FISSIDENS GRANDIFLORA ON ALCOHOL-INDUCED OXIDATIVE STRESS

### V. ARUN REDDY<sup>2</sup>, K. ALEKHYA<sup>1\*</sup>, N. PRAVEEN KUMAR<sup>1</sup> BHARAT SCHOOL OF PHARMACY, IBRAHIMPATNAM HYDERABAD

Email.id: arunoupharma939@gmail.com

The present study aimed to evaluate the antioxidant and hepatoprotective properties of selected ethanolic fractions of Fissidens grandiflora in ethanol-induced oxidative stress in rats. Initially, ethanolic extract of F.grandiflora was fractionated using column chromatography. The preliminary antioxidant screening of these fractions identified two main bioactive fractions (F3 and F4), which had significant radical scavenging and metal ion chelation properties compared with ascorbic acid. Based on the antioxidant profile, F3 and F4 were evaluated for hepatoprotective activity in ethanol-intoxicated rats. The Wistar rats were grouped (n= 6) and treated with F3 and F4 (100 and 200 mg/kg), ethanol (5 g/kg, 20%w/v), and silymarin (100 mg/kg)orally for 28 days. The outcomes of the study found that chronic administration of ethanol significantly (P <0.0001) altered the liver parameters and oxidative stress markers (MDA, SOD, and CAT). The co-administration of F4 prominently ameliorated the oxidative stress induced by ethanol compared to F3. Histopathological studies further supported the significant protective action of F4. The present study demonstrates that F. grandiflora possesses significant antioxidant properties by augmenting the magnitude of the antioxidant enzymes SOD and CAT and further reducing MDA levels.

# CO-105 "EVALUATION OF ANTI-UROLITHIATIC ACTIVITY OF SELECTED MEDICINAL PLANTS AND ITS POLY HERBAL FORMULATION IN EXPERIMENTALLY INDUCED UROLITHIATIC RATS"

E. NIKHIL CHAKRAVARTHY<sup>1</sup>\*

TEEGALA KRISHNA REDDY COLLEGE OF PHARMACY, HYDERABAD

Email.id: e.nikhilchakravarthy@yahoo.com

The pharmaceutical industry contributes significantly to a country's healthcare system. The current challenge is to provide adequate nutritional requirements to the entire population. Malnutrition in patients is one of the main causes of downfall in the health care system of the country. Pharmacists can play a key role in prevention, early identification and treatment of malnutrition. Nutrition support pharmacists compound the parenteral nutrition formulation prescribed and provide direct patient care, they manage the specialized nutrition support program and improve quality by educating other health care professionals, students, patients and caregivers. Malnutrition in patients can be eradicated by introducing parenteral nutrition therapy. Parenteral nutrition, is the medical term for infusing a specialized form of food through a vein (intravenously). The goal of the treatment is to correct or prevent malnutrition. Parenteral nutrition provides liquid nutrients, including carbohydrates, proteins, fats, vitamins, minerals and electrolytes. The use of parenteral nutrition (PN) is essential for patients who are unable to meet their nutrition requirements through oral or enteral nutrition. Many earlier studies have noted that PN is often inappropriately used in the hospital setting, thereby increasing the risk of associated complications and costs. For example: Cancer of the digestive tract may cause an obstruction of the bowels, preventing adequate food intake. Cancer treatment, such as chemotherapy, may cause

the body to poorly absorb nutrients Over the years, PN has become an important primary and adjunctive therapy in various clinical conditions and disease states for both the acutely ill hospitalized patients and in the long-term setting for selected patients in the home. PN formulations can serve as a life-sustaining option for premature infants and critically ill hospitalized patients and for patients who have permanent loss of the GI tract. Nutritional supplements also are extensively used by patients who require adjunctive nutritional sources to meet their dietary needs. Most recently, nutritional supplements are being marketed as mealreplacement products to individuals attempting to lose weight, those with active lifestyles, or those seeking high-protein supplements. For many individuals, the use of nutritional supplements is convenient, and these supplements are a better alternative to eating unhealthy foods or simply skipping a meal. Pharmacists should counsel patients thoroughly on the proper guidelines for using oral nutritional supplements, they are vital for preventing drug-food interactions by thoroughly screening the patient's medication profile. Hence, Nutrition plays a great role in our daily life. The food or liquids affect our body and health because each food or liquid contain particular nutrition which is very necessary for our physical and mental growth. A particular level of any particular nutrition is essential for our body. So, we should know that what kind of nutrition intake one must take and how much quantity is required.

### CO-106 UNDERSTANDING ORPHAN DRUGS: UNVEILING THERAPEUTIC INNOVATIONS FOR RARE DISEASES

### TEJASREE, HEMA SREE SAI ,NIHARIKA, SREEVIDYA GEETHANJALI COLLEGE OF PHARMACY

Email.id: tejutejasree666@gmail.com

Orphan drugs are pharmaceuticals developed to treat rare diseases, often affecting a small number of individuals. Due to the limited market potential, these drugs may face challenges in traditional drug development. However, governments and regulatory bodies provide incentives to encourage their development, aiming to address unmet medical needs for rare conditions. These incentives encompass extended market exclusivity, tax credits, and reduced regulatory fees, creating a more conducive environment for pharmaceutical companies to invest in these specialized therapies. Researchers often focus on innovative approaches, including gene therapies and targeted treatments, to address the unique characteristics of rare diseases. Additionally, patient advocacy groups play a crucial role in raising awareness, supporting research efforts, and influencing policy decisions related to orphan drugs. Despite the hurdles, orphan drugs have proven indispensable in providing treatments for rare diseases that would otherwise lack attention. As advancements in biotechnology and genomics continue, the orphan drug development landscape evolves, offering newfound hope to patients facing previously unmet medical needs. This abstract emphasizes the importance of orphan drugs in diversifying and enriching the pharmaceutical arsenal, ultimately contributing to improved outcomes for individuals with rare.

### CO-107 BREAKING FRONTIERS: AI-DRIVEN NEOEPITOPE PERSONALIZED IMMUNOTHERAPY RESHAPING CANCER TREATMENT

### P AASHRITHA<sup>1</sup>, B.CHATHURYA<sup>2</sup>

KVK COLLEGE OF PHARMACY, HAYATHNAGAR

<sup>2</sup>MALLA REDDY ENGINEERING COLLEGE, DULAPALLY, MAISAMMAGUDA
Email.id: paashritha36@gmail.com

Cancer is an inherently dangerous condition that poses a significant threat to the health and well-being of individuals. The complexity, adaptability and potential for widespread harm makes cancer a formidable adversary, underscoring the urgency and importance of advancing research, treatment plans and prevention strategies to overcome its dangerous impact. The need of the hour is for a fresh approach towards overcoming cancer, and AI driven models in precision medicine are indeed a promising combination. By leveraging cutting edge artificial intelligence, the study shows a transformative approach in reshaping the current traditional cancer treatment. The integration of personalized immunotherapy, specifically targeting neoepitopes, marks a paradigm shift in addressing the intricacies of individual patient profiles. Furthermore the clinical and preclinical investigations showcase that neoepitope based immunotherapy is also compatible with other therapies including adoptive cell therapy. Lastly, we delve into the challenges that accompany the clinical adoption of this therapy and also explore the solutions for the addressed challenges. In conclusion, AI-driven neoepitope-based immunotherapy could be a fresh breath of air in the current paradigm of cancer treatment.

### CO-108 NAVIGATING THE LANDSCAPE OF PHARMACOGENOMICS V. BHAVYA SREE

HOLY MARY INSTITUTE OF TECHNOLOGY AND SCIENCES, BOGARAM Email.id: bhavyasri5141@gmail.com

Pharmacogenomics (PGx) is the study of the genetic basis of variability among individuals in response to drugs. It is the newest discipline of medicine and is becoming a very active area of research, with the pharmaceutical industry gaining experience applying it, integrating it into the drug development process, and also learning to better manage the expectations of the medical community.

**Methodology:** A comprehensive review of the literature on the principles, applications, challenges and prospects of pharmacogenomics was performed.

**Results:** Pharmacogenomics tailor therapies to the genetic makeup of an individual and can therefore offer treatments that are more efficacious and have fewer side effects. Despite these benefits, personalized medicine has not been embraced by large pharmaceutical companies. It is expected that the first wave of successful pharmacogenomics products will be used in acute treatments for which current therapies have and severe side effects. These products should also be good candidates for premium pricing. Personalized medicine (PM), based on the genetic makeup of a patient, may result in not only an improved therapeutic response but also a clinically important reduction in adverse drug reactions. The experience to date is mixed, with a few success but many frustrations.

Conclusion: However, for pharmacogenomics to be truly embraced, the benefits of this

technology must become more widely accepted in terms of economic, public, regulatory and ethical issues.

### CO-109 FORMULATION AND ASSESSMENT OF HERBAL EMULGELS IN THE MANAGEMENT OF ACNE: IN VITRO AND IN VIVO INVESTIGATIONS

SWAPNA NEELA<sup>1,2\*</sup>, MAKULA AJITHA<sup>3</sup>, VIJAYA KUCHANA<sup>4</sup>
<sup>1</sup>RESEARCH SCHOLAR, JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, KUKATPALLY, HYDERABAD

<sup>2</sup>DEPARTMENT OF PHARMACEUTICS, NALLA NARASIMHA REDDY EDUCATION SOCIETY'S GROUP OF INSTITUTIONS-SCHOOL OF PHARMACY,(M),HYDERABAD <sup>3</sup>DEPARTMENT OF PHARMACEUTICAL CHEMISTRY, JNTUH COLLEGE OF PHARMACY, SULTANPUR-502273 SANGAREDDY, TELANGANA, <sup>4</sup>DEPARTMENT OF PHARMACEUTICAL CHEMISTRY, TEEGALA KRISHNA REDDY COLLEGE OF PHARMACY,MEERPET, HYDERABAD-

Email.id: swapnaneela1982@gmail.com

**Objective:** The main objective of the current research was to prepare herbal emulgel and analyze the effect of herbal formulation in the treatment of acne.

**Methods:** The plants *Tabernaemontana coronaria* and *Thunbergia alata* were selected for the study because of folklore for their medicinal values. The *T.coronaria* and *T.alata* test extracts were prepared by soxhlet extraction procedure and subjected to physico-chemical evaluation. The formulated herbal emulgels prepared by dispersion technique were investigated for anti-acne properties by *in vitro* and *in vivo* methods. The prepared emulgel formulations were assessed for parameters like viscosity, spreadability, pH, content uniformity, stickiness, zeta potential, particle size, surface morphology, and *in vitro* diffusion studies.

Results: The physico-chemical evaluation of herbal gel revealed that emulgel appeared light green in colour, opaque, and odourless with smooth texture. The emulgels of both the test extracts showed no stickiness, and revealed pH ranging from 5.467±0.13 to 5.889±0.1. When the shear rate was increased, there was a decrease in the viscosity of the test emulgels, with good extrudability. The content uniformity of F5 emulgel for *T.coronaria* and *T.alata* was 99%, and spreadibilty was more with F7 formulation of *T.coronaria* and F6 formulation of *T.alata*, respectively. In the stability testing studies, amongst all the formulations prepared, F5 was found to be stable upon storage for six months. *In vitro* studies, F5 formulation of both the test extracts had a remarkable zone of inhibition; whereas F5 formulation treated histopathological sections in *in vivo* investigation displayed a decline in the overall damage induced by *Propionibacterium acnes*. The results showed no statistical significant difference for measurement of zone of inhibition and histopthological studies between the test formulations and standard drug.

**Conclusion:** The study concludes that both herbal formulations were promising agents for the treatment of acne vulgaris.

## CO-110 ANTI CATARACT ACTIVITY OF CRESSA CRETICA ON STZ INDUCED DIABETIC CATARACT IN RATS

#### **MUKKA DIVYA**

MNR COLLEGE OF PHARMACY, HYDERABAD

Email.id: divyaguptha9@gmail.com

**Introduction:** Glycemic-induced stress is a primary factor contributing to oxidative insult that has far-reaching effects on diabetic cataract worldwide. Current evidence states that cataractogenesis is a multifactorial process in which oxidative stress, non-enzymatic glycation, polyol pathway contributes to its development. In an attempt to prevent/ delay cataract, many therapeutic agents have been identified, and among these, natural sources have gained pharmacological significance. This study aims to evaluate the effect of ethanolic extract of *Cressa cretica* in Streptozotocin (STZ) induced diabetic cataract in rats.

**Methods:** Diabetes was induced in rats by Streptozotocin (35mg/kg) intraperitoneally. After being confirmed diabetic, rats were divided into different groups (groups II-IV). Group I was kept as control and received only vehicle. Group II was kept as diabetic control. Group III and IV received two different doses of ethanolic extract of *Cressa cretica* (EECC-200mg/kg and 400 mg/kg p.o) for 8 weeks. Glucose levels were measured every week of the study. At the end of 8 weeks, the animals were sacrificed, and the biochemical pathways involved in the pathogenesis of cataract, such as oxidative stress, polyol pathway, and alterations in protein content in the lens were estimated.

**Results:** The results of the present study showed an increase in glucose levels, MDA levels, polyol enzymes, protein content and alteration in antioxidant enzymes, indicating oxidative damage in the lens leading to cataract development in STZ- induced diabetic rats. EECC administration in diabetic rats might have minimized hyperglycemia-induced oxidative stress and polyol pathway-induced oxidative stress because there was a significant hypoglycemic effect, changes in antioxidant enzymes and decreased polyol pathway activity.

**Conclusion:** Treatment with EECC showed the protective effect by reducing the progression of cataract through significant hypoglycemic and antioxidant properties.

## CO-111 CASEIN NANOSCALED PARTICLES USED IN DRUG DELIVERY APPLICATIONS

#### **D.ANITHA**

KUMARAGURU COLLEGE OF TECHNOLOGY COIMBATORE, TAMILNADU

Email.id: danithaaut@gmail.com

Nanoparticles and nano dispersions have received much attention in the pharmaceutical industry over the past decade. This is mainly due to the ability of the nanoparticles and nano dispersions to control drug release and distribution as well as reduce the inherent limitations of slow and incomplete dissolution of water-insoluble drugs. We are attempting to demonstrate that a drug belonging to the quinone class (antimalarial) also having anti-inflammatory properties. Calcium Caseinate is more advantageous as a matrix for drug delivery, because it is inexpensive, has better amphiphilicity, good dispersibility and rapid reconstruction in aqueous systems. Using calcium

caseinate as a matrix, we have developed various nanoparticle formulations containing a quinone class of drug(antimalarial). The formulation of calcium caseinate and a quinone class(antimalarial) of drug nano particle is characterized by FT-IR, DLS and SEM. FT-IR identified the presence of compatible groups. The crystalline morphology and size of the nanoparticles were determined by XRD and DLS. The anti-inflammatory property was found by using various invitro assays. The formulation was optimized by considering smaller droplet size, higher zeta potential, and faster rate of drug release and found to be robust to different pH media and dilution volumes.

## CO-112 FORMULATION AND EVALUATION OF DEXTROMETHORPHAN HYDROBROMIDE EXTENDED-RELEASE SUSPENSION

#### Dr. NELLUTLA SANDEEPTHI

VIGNAN INSTITUTE OF PHARMACEUTICAL SCIENCES

Email.id: sandeepthi06@gmail.com

Dextromethorphan hydrobromide is a synthetic anti tussive agents. Biological half-life of this drug is 2-4hrs. Due to its half-life, the dose is employed 4times a day. To reduce the dose frequency and to improve the patient compliance, the extended-release suspension of dextromethorphan polistirex was formulated with PEG coating and Enteric coating. In the present study the extended-release suspension of dextromethorphan polistirex was prepared and physical mixture of the drug and polymer was found to be compatible after the comparative study of three months. The extended-release suspension of dextromethorphan polistirex was evaluated by FTIR, DSC and other parameters. Difference factor (f2) was used as a statistical method in this work. The formulation showed advantages in the terms of patient compliance, safety, and better transportation over existing suspension formulation.

# CO- 113 THE GENDER HEALTH GAP – A BARRIER FOR BETTER HEALTH CARE K.LAKSHMI BHAVANA\* & DR.S. HEMALATHA

SAROJINI NAIDU VANITHA PHARMACY MAHAVIDYALAYA, TARNAKA, SECUNDERABAD, TELANGANA

Email.id: lakshmibhavana.kopparthi@gmail.com

Gender health gap simply put is the bias created in the field of health on the bases of gender. It can range from simple negligence to straight up exlusion of half of the population in studies related to health care advancements. This gap is causing a host of health problems that we as a community can not make it better. Wrong Diagnosis, negligence, wrong prescription of drugs, no proper research has set us back from our goal of proper individualized medicine. This gap can be divided mainly into two types. One is systematic denial into professional spaces. This causes less number of women working in either research or on the front end of the healthcare system. Less number of women in these spaces, decreases representation which hence decreases questions that we need to find answers to. Second is systemic denial and bias in patient care. A female patient is treated more differently than a male patient, which is not in a positive way.

Many research done female patients were done only in the reporductive realm, but it is also important to note that these tests are half-hazard and inaccurate on most part. It is important we as a community take step in correcting the mistakes of the past and understand this is not a Man Vs Women issue, but rather a Past VS Future issue.

# CO-114 ALZHEIMER'S DISEASE: AN OVERVIEW NOOR US SABAH SULTAN UL ULOOM COLLEGE OF PHARMACY

Email.id: noorfans06@gmail.com

Dementia incidence may have reduced in the western world due to better vascular treatment and enhanced brain health, despite the fact that dementia prevelance is still rising globally. Alzheimer's disease (AD) is the most common form of dementing illness, and the prevalence increases with each decade of life. The aetiology is still unknown, and current pharmacotherapy neither cures nor arrests the pathophysiology. Neuritic plaques and neurofibrillary tangles are the hallmarks of; the definitive cause of the disease is yet to be determined. AD affects multiple areas of cognition and is characterised by a gradual onset with slow, progressive decline. A thorough physical examination, laboratory and imaging studies such as MRI & PET is required to rule out other disorders and diagnose AD before considering drug therapy. Although validity and cost effectiveness have yet to be proven, PET gaining popularity in therapeutic settings. Non drug therapy and social support for the patient and family are the primary treatment interventions. A thorough behavioural assessment and plan with careful examination of environmental factors

should be conducted before initiation of drug therapy. Acetylcholinesterase inhibitors and (NMDA) receptor antagonist falls under the category of symptomatic treatments, amyloid binders, and tau therapeutics fall under aetiology-based medicines. Strategies for prevention of the AD through nonpharmacological therapies include lifestyle interventions including exercise, mental stimulation and socialising. AD is significant health concern, is crucial that everyone is aware of, so that prophylactic measures may be taken to reduce the likelihood of its occurrence.

# CO-115 TRANSETHOSOMES AND ITS THERMODERMAL EFFECTS ON SKIN E.VYSHNAVI<sup>1</sup>,M.ABHINITHA<sup>1</sup>,CH.SATHWIKA<sup>1</sup>, P. NAGA CHANDRIKA<sup>2</sup>.R.UMADEVI<sup>2</sup> GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: vyshnavi2885@gmail.com

In the past few decades, an emerging drug delivery system that came into light is transdermal drug delivery system. It has become the talk of the town in the field of drug delivery of its better and easy accessibility. Though it is one of attractive roots, transport of drug through the skin has remained a challenge. To overcome the challenge, vesicular system has been adopted so as to have skin penetration bio-active agents. Vesicular system like liposome has shown inefficiency to cross the layer of skin. Then transethosomes and nanoethosomes are employed for delivery drug into the deeper layer of skin. Nanoethosomes and transethosomes have the same composition that is water, ethanol and phospholipid. Additionally transethosoms contain edge activators. Due to the presence of ethanol and edge activator, it displays enhanced skin permeation. Vesicular system gives a better patient compliance, being a non-invasive method of drug administration. Systemic

lupus erythematosus is an autoimmune disorder (SLE), transethosomes and nano ethosomes are theoretically discovered for the treatment of autoimmune disorders like Rheumatoid arthritis and SLE. Practical use of these kind of drugs has not yet been approved due to lack of knowledge about the cause of the disease in the respective subject.

#### **CO-116 REVIEW OF DRUG DISCOVERY PROCESS**

# CH.SHIRISHA<sup>1</sup>, V. ANUSHA<sup>1</sup>, CH.PUJITHA<sup>1</sup>, T.CHAITANYA<sup>1</sup>, NAGA CHANDRIKA, DR.P. NEERAJA, DR. M. RAVIKUMAR

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: chpujitha01@gamil.com

Drug discovery is a process which aims at identifying a compound therapeutically useful in curing and treating disease as per regulatory authority's guidelines. This process is a lengthy, risky, time consuming, economic, a lot people, equipments, raw materials, guidelines, involves the identification candidates, synthesis, validation, optimization, screening and assays for therapeutic efficacy. Once a compound has shown its significance in this investigation, it will initiate the process of drug development earlier to clinical trials. New drug development process must continue through several stages in order to make a medicine that is safe, effective, and has approved all regulatory requirements. Preclinical studies using animal to study the potential of a therapeutic drug or strategy are important steps before translation to clinical trails. One overall theme of our articles is that the process is sufficiently long, complex, and expensive so that many biological targets must be considered for every new medicine ultimately approved for clinical use and new research tools maybe needed to investigate each new target from initial discovery to a marketable medicine is a long, challenging task. It take about 12-15 years from discovery to the approved medicine and requires an investment of about US \$1 Billion on an average, a million molecules screened but only a single is explored in last stage clinical trials and finally made obtainable for patients. The present investigation provides a information about the processes of new drug discovery and development.

# CO-117 A REVIEW ON INNOVATIVE APPROACHES FOR BRAINTARGETED DRUG DELIVERY SYSTEM

# JELLA CHAITHANYA¹, VADAPALLY SWETHA¹, ERAKIPATI NIKITHA¹, P. NAGA CHANDRIKA², DR. P. NEERAJA³, DR. M. RAVI KUMAR⁴ GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: chandrika.pallam@gmail.com

The leading neurological disorder in the world, Alzheimer's disease becomes increasingly common as the population ages. Now, significant medication side effects, immunological defects, and inadequate blood-brain barrier permeability are the primary barriers to Alzheimer's disease treatment. The three modes of administration are transporter-, adsorption-, and receptor-mediated. The leading cause of dementia in the elderly is Alzheimer's disease, which impacts 5% of Americans over 65 and 20% over 80. It is characterized by an excess of senile plaques and neurofibrilary tangles, ventricular hypertrophy, and cortical atrophy characterizes it. The transport

mechanism might be modified by the physicochemical characteristics of the nanoparticles under different surfactant concentrations, stabilizers, and amyloid-affinity agents. After systemic delivery, the therapeutic potential for multiple nanopharmaceuticals for AD has already been shown in-vivo. We covered in detail the latest developments in the use of polymeric and lipidic nanoparticles as a medication delivery method to treat Alzheimer's disease.

### CO-118 A REVIEW ON FORMULATION AND INNOVATIVE APPLICATION OF HYDROGELS

# S. ESTHER<sup>1</sup>, AKUBATTINI BALAJI<sup>1</sup>, AJAY KUMAR<sup>1</sup>, ARUKONDA GANESH<sup>1</sup>, P. NAGA CHANDRIKA<sup>2</sup>, DR. P. NEERAJA<sup>3</sup>, DR. M. RAVI KUMAR<sup>4</sup>

#### GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: chandrika.pallam@gmail.com

As a result of their physical and chemical crosslinking, hydrogels are three-dimensional networks made of polymers that can absorb vast volumes of water and still stay insoluble in it. They react to changes in temperature, ionic strength, and pH. Natural polymers like dextran, pectin, and alginate, as well as synthetic polymers like polyvinyl alcohol, polyethylene oxide, and polyhydroxyethylmethacrylate, can be used to manufacture them. most of the drugs are converted various into hydrogels. By approaches including physical irradiation. polymerization, complicated coacervation, etc., are used to create them. Hydrogels have discovered multiple applications in optics, tissue engineering, imaging, wound dressings, localized drug delivery, and drug delivery systems. Hydrogel morphology has been evaluated by FTIR, x-ray diffraction, and atomic force microscopy. Their flexibility, swelling behavior, and invitro drug release have also assessed.

# CO-119 A REVIEW ON FORMULATION AND EVALUATION OF EMULGELS BANOTH ARUNA<sup>1</sup>, BOINI HARI PRIYA<sup>1</sup>, BUDHI PAVAN<sup>1</sup>, BYRAVENI ABHINAY<sup>1</sup>, P. NAGA CHANDRIKA<sup>2</sup>, DR. P. NEERAJA<sup>3</sup>, DR. M. RAVI KUMAR<sup>4</sup>

#### GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: chandrika.pallam@gmail.com

Emulgels' is a controlled drug delivery system with a release control mechanism—which combines both gel and emulsion and that made them one of the most fascinating topical delivery technologies. Pharmaceutical professionals are currently interested in Emulgel systems due to its significant potential to function as a drug delivery vehicle through the incorporation of a wide range of medicinal chemicals. These are either oil-in-water emulsions or water-in-oil emulsions that have been gelled by adding a gel excipient. Emulsion incorporation into a product. It transforms into a dual control release mechanism for the gel, increasing its stability. The words "emulsion" and "gel" are combined to create emulgels. Emulgel is a novel treatment for psoriasis, inflammation, arthritis, fungal infections, acne, and other skin problems. A topical system is created by making an emulsion of medication and placing it into an emulgel. Emulgel is a combination of a co-surfactant and a surfactant that has a low interfacial tension and

thermodynamic stability. Some of its many characteristics are excellent thermodynamic stability and increased permeability.

### CO-120 A REVIEW ON A CLINICAL PERSPECTIVE OF CYSTIC FIBROSIS FARIDA FARIDA<sup>1</sup>, D. AKHIL NAYAK<sup>1</sup>, ENDLA POOJA<sup>1</sup>, GANESH CHOUDARY<sup>1</sup>, P. NAGA CHANDRIKA<sup>2</sup>, DR. P. NEERAJA<sup>3</sup>, DR. M. RAVI KUMAR<sup>4</sup>

#### GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: chandrika.pallam@gmail.com

A genetic condition known as cystic fibrosis causes a multi-organ disease with a progressive respiratory decline that eventually results in early mortality. mutations in the CFTR anion channel-coding cystic fibrosis transmembrane conductance regulator gene cause cystic fibrosis. Established CF medications focus on the modulators' downstream manifestations. These innovative drugs enhance CFTR activity and have been licensed in the last five years to lessen the impact of many CF disease-causing mutations. As of April 2017, this review covers phase II and III clinical trials that describe novel modulator therapy and reviews presently approved CFTR modulators on clinicaltrials.gov. The main obstacles to the successful implementation of CF gene therapy include the airway transduction vectors, large animal CF models, the complexity of CF pathophysiology, and the heterogeneity of CFTR expression in airway epithelium. These factors also emphasize the opportunities and prospects for the future.

#### CO-121 A REVIEW ON A CLINICAL PERSPECTIVE OF ALZHEIMER'S DISEASE

CHEEDU MEENAKSHI REDDY<sup>1</sup>, CHIRADI PRASANNAAKUBATTINI BALAJI<sup>1</sup>, AJAY KUMAR<sup>1</sup>, ARUKONDA GANESH<sup>1</sup> , P. NAGA CHANDRIKA<sup>2</sup>, DR. P. NEERAJA<sup>3</sup>, DR. M. RAVI KUMAR<sup>4</sup>

#### GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: chandrika.pallam@gmail.com

Any cognitive impairment that is severe enough to interfere with day-to-day activities is referred to be dementia in general. The majority of dementia cases in individuals 65 years of age and beyond are caused by Alzheimer's disease (AD), which makes up at least two thirds of all dementia cases. This review covers current treatments for AD as well as potential future treatments, including natural chemicals, chaperones, and disease-modifying therapeutics (DMT). The pathologic features of the disease include extracellular plaques containing the peptide  $\beta$ -amyloid and neurofibrillary tangles, which contain the hyperphosphorylated version of the microtubular protein tau. The  $\alpha,\,\beta,$  and  $\gamma$  secretases split the bigger protein known as  $\beta$ -amyloid precursor protein into smaller pieces to form  $\beta$ -Amyloid. The  $\gamma$  secretases cleave to A $\beta$ 42, an amyloid protein with a 42-amino acid sequence, which produces insoluble fibrils that build up in senile plaques found in AD patients' autopsies. Although lifestyle choices have no direct impact on the pathophysiology of Alzheimer's disease, they can still help those who have the condition live well. Pharmacological therapies with anti-inflammatory, anti-tau, and anti-amyloid  $\beta$  properties are in advanced phases of clinical studies and show promise.

#### CO-122 INVITRO DENTAL GEL PRODUCTS AND THEIR ACTIVITY

#### **DR.S.JANET BEULA**

#### TEEGALA RAM REDDY COLLEGE OF PHARMACY

Email.id: pharmjanet123@gmail.com

Dental products are those substances which prevent the dental caries, dental decay and give the freshness and cleanness to the mouth and teeth. In market it is mainly available in the form of toothpaste, tooth powder, mouthwash, tooth gel, dentifrice etc. In dental products many abrasive is used for abrading, granding or polishing. Abrasive are most often found as crystals, small and small particles that are preferred to avoid tooth wear. Hydrated silica is a common abrasive in dentifrice, alumina and calcium carbonate may also be used. The main objective of this review is to aid dental professionals in the selection of the appropriate type of dental products based on the invitro pathological condition being treated, as well as the relevant factors to consider involving such decisions.

### CO-123 UNDERSTANDING ORPHAN DRUGS: UNVEILING THERAPEUTIC INNOVATIONS FOR RARE DISEASES

TEJASREE, HEMA SREE SAI, NIHARIKA, SREEVIDYA GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: kompalliniharika@gmail.com

Orphan drugs are pharmaceuticals developed to treat rare diseases, often affecting a small number of individuals. Due to the limited market potential, these drugs may face challenges in traditional drug development. However, governments and regulatory bodies provide incentives to encourage their development, aiming to address unmet medical needs for rare conditions. These incentives encompass extended market exclusivity, tax credits, and reduced regulatory fees, creating a more conducive environment for pharmaceutical companies to invest in these specialized therapies. Researchers often focus on innovative approaches, including gene therapies and targeted treatments, to address the unique characteristics of rare diseases. Additionally, patient advocacy groups play a crucial role in raising awareness, supporting research efforts, and influencing policy decisions related to orphan drugs. Despite the hurdles, orphan drugs have proven indispensable in providing treatments for rare diseases that would otherwise lack attention. As advancements in biotechnology and genomics continue, the orphan drug development landscape evolves, offering newfound hope to patients facing previously unmet medical needs. This abstract emphasizes the importance of orphan drugs in diversifying and enriching the pharmaceutical arsenal, ultimately contributing to improved outcomes for individuals with rare.

# CO-124 INSILICO DOCKING, MSD ANALYSIS AND ADME (T) STUDIES OF PLANT BASED PHYTOCONSTITUENTS AGAINST THE ESTROGEN ALPHA RECEPTOR OF BREAST CANCER

# M. T. SULTHANA \*, V. ALAGARSAMY, B. NARENDHAR, MALLICK MAIDUL ISLAM, SANGEETHA DHANWAR

MNR COLLEGE OF PHARMACY, HYDERABAD

Email.id: mtsulthana@gmail.com

The scope of the study focused to identify the potential inhibitors against the influential target of breast cancer by insilico computational studies of 150 phytochemicals from various herbals. The molecular docking investigation was carried out by a Auto Dock Vina program. Among the all phytochemicals some of them displayed good to high binding interactions with the target, Amyrin acetate (-10.7 kcal/mol) was identified as potential inhibitor when compared with tamoxifen by displaying equal biding affinity. All the phytoconstituents possess high stability and good safety profile. Hence, these phytochemicals can be further studied and used as a parent essential molecule to develop novel lead molecules for breast cancer therapy

## CO-125 SYNTHESIS, BIOLOGICAL EVALUATION AND INSILICO PREDICTION OF IMIDAZOLE DERIVATIVES

#### DR.S.HEMALATHA

S.N. VANITA PHARMACY MAHAVIDYALAYA, SECUNDERABAD

Email.id: hemalathasattu0@gmail.com.

A series of some novel imidazole derivatives were prepared by acetylation of Imidazole and Acetyl chloride to give respective N-acetyl imidazole, which was further reacted with different substituted aromatic aldehydes in the presence of ethanol and NaOH used as base. All the synthesized compounds are confirmed by physicochemical data and spectral analysis <sup>1</sup>H NMR, IR and MASS spectra. All the synthesized compounds were predicted using various software's like Molinspiration, Molsoft and OSIRIS. The compounds showed good pharmacokinetic and pharmacodynamics properties. All the compounds are screened for antibacterial, antifungal and antioxidant activity, the anti-bacterial activity determined using agar medium by cup plate method. The anti-bacterial activity chalcone derivatives were compared with the standard oflaxacin at concentration of 100µg against two gram positive and two gram negative bacteria, methanol is used as control. The compound 5a, and 5c have significant activity against b.subtilis at conc. 10 and 30 µg/ml. The anti-fungal activity is determined by using potato dextrose agar medium by cup plate method, anti-fungal activity of chalcone derivatives were compared with the standard griseofulvin at concentration of 100µg/ml against fungi pencillinium chrysogenum taking methanol as control. The compound 5c has significant activity against pencillium chrysogenum at conc. of 200µg/ml. Anti-oxidant activity is determined by stable free radical method, ascorbic acid is used as the standard, DPPH is used as a control. All the synthesized compounds showed potent antioxidant activity.

### CO-126 MICROBIOME THERAPEUTICS: UNRAVELING THE HUMAN MICROBIOME'S IMPACT ON DRUG DEVELOPMENT

#### K PREETHI REDDY<sup>1</sup>, V.SHALINI<sup>2</sup>

#### GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: kpreethireddy77@gmail.com

The term "human microbiota" pertains to the 10-100 trillion symbiotic microbial organismsprimarily gut bacteria—that are present in every human being. The phrase "human microbiome" refers to the genes that these cells contain. Studies on the human gut microbiome have improved our knowledge of microbial colonization, maturation, and dysbiosis in disease and health-related subgroups. It is recognized that traditional medicines have led to pathogens developing resistance to antibiotics, non-responsiveness to drugs and poor specificity which can be resolved by microbial therapy. There are growing opportunities to employ gut microorganisms as therapeutic agents to treat human diseases due to their enormous metabolic potential and significance in maintaining human health. By utilizing native or synthetic bacteria, antibiotics, bacteriophages, and bacteriocins, microbiome treatments seek to modify the gut microbiome through additive, subtractive, or modulatory therapy. This strategy could provide personalized, standardized, reliable, and long-lasting treatments. Microbiome-based treatments hold promise for treating a broad range of ailments like cancer, diabetes mellitus, autoimmune disorders like Crohn's disease, ulcerative colitis, inflammatory bowel disease (IBD) and many more. Microbiome treatments, despite their potential therapeutic and financial benefits, are still in their early stages of research and face numerous administrative and technological challenges that require further exploration.

#### **CO-127GENOMIC TECHNOLOGY IN MEDICINE**

#### MERLIN T BABU\*, N.MADHAVI

CMR COLLEGE OF PHARMACY, HYDERABAD

Email.id: merlintbabu@gmail.com

Numerous industries, including bioenergy production, synthetic biology, environmental science, computational science, information technology, medicine, and health and wellness management have all benefited greatly from the development of genomic technologies. The traditional laboratory genetic techniques of microscopic cytogenetics, fluorescence in situ hybridization (FISH), Southern blotting, denaturing gel electrophoresis, single stranded conformation, and many other non-sequencing genetic laboratory methods have rapidly given way to next generation genome sequencing technologies. While Sanger sequencing has continued to play a significant role in genome sequencing, it is no longer the only method used. Several other methods, such as whole exome sequencing, array comparative genome hybridization, and whole genome sequencing, are now well established. Genomic medicine was revolutionised by the sequencing of the entire human genome. Nevertheless, little is known about the intricate interactions between genes, environments, and lifestyles, as well as the impact of non-coding genomic areas on human health. The field of genomic medicine has significant promise for the diagnosis, prognosis, and tailored therapy of diseases. However, a lot of the promising technologies in genomic medicine are still in their early stages of development, and our poor understanding may limit their use, preventing it from being used in many clinical contexts. Clinicians across all specialties can employ genomic technologies to diagnose individuals with high-risk genetic defects causing illness. Genetic data can be used to forecast a person's response to a given medication, including whether or not they will respond well to it and whether or not using it would cause any negative effects.

### CO-128 VALIDATION AND METHOD DEVELOPMENT OF ANALYTICAL METHODS AS PER ICH GUIDELINES

# B. ARCHANA<sup>1</sup>, S. ESTHER<sup>1</sup>, SHAREEF<sup>1</sup>, AJAY KUMAR<sup>1</sup>, M. SATISH KUMAR<sup>2</sup> GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: mudhirajarchana88@gmail.com

Methods need to be validated or revalidated, newlineThe International Conference of Harmonization (ICH) of technical requirements for the registration of pharmaceutical for human use has developed and provided a consensus text on validation of analytical procedures. The proposed analytical methods are simple, accurate and reproducible. The advantages lie in the simplicity of sample preparation and the cost economic reagents used. The contribution is the limit of detection for all the methods. Results from statistical analysis of the experimental results for all the methods were indicative of satisfactory precision and reproducibility. The advantages lie in the simplicity of sample preparation and the cost economic reagents used. Consequently, it was demonstrated that the suggested techniques could be effectively used to estimate the commercial pharmaceutical formulations including aspirin and rosuvastatin, metolazone and spirolactone, metoprolol and olmesartan, and doxofylline and ambroxol hydrochloride. Thus the above studies findings would be helpful to the analytical chemists to apply the analytical methods for the routine analysis of the analytes in pharmaceutical dosage forms after their approval from FDA. However the following aspects of the method may also be tried for future analysis: HPTLC, Gas Chromotragraphic analysis, liquid Chromatography Coupled to Tandem Mass Spectrometry, High Performance Liquid Chromatography with Fluorescence, and Colorimetric method development.

## CO-129 AUGMENTING THE BIOAVAILABILITY OF POORLY SOLUBLE DRUG - VALSARTAN USING DIFFERENT TECHNIQUES

**Dr. T. NAGA APARNA\*, Dr. A. SAMBASIVA RAO**SRI INDU INSTITUTE OF PHARMACY, IBRAHIMPATNAM

Email.id: nagaaparna4@gmail.com

**Objective**: Using different techniques, this study sought to improve the Solubility, Dissolution rate, and Bioavailability of the weakly water-soluble drug Valsartan.

Materials and Methods: Valsartan Solid Dispersions were prepared using various polymers in varying proportions. All formulations were examined for solubility, practical yield, drug content, and drug release in vitro. On the basis of drug release, the optimal formulation was selected and further characterised with FTIR, XRD, and SEM analyses. Sublingual tablets were prepared with best formulation and were compared with marketed product for invitro drug release. Bioavailability studies in rats were also performed for pure drug and best formulation to know the invivo performance.

Results and Conclusions: The solid dispersions of Valsartan were prepared by three different

techniques namely surface solid dispersion (SSD) (SSD1-SSD24), melt granulation (MG1-MG12) and liquisolid compacts (LSC1-LSC9). Prepared solid dispersions have been evaluated for various properties. The best optimised formulation was chosen based on in-vitro release studies and the optimized formulation, which showed the highest dissolution rate was further characterized for FTIR, XRD, DSC and stability studies. The study showed that prepared solid dispersion has shown satisfactory results for all the evaluated parameters. The solubility of Valsartan was found to be more from solid dispersions. The rate of drug release was found to be higher in all the prepared solid dispersions and among all, solid dispersions prepared by Melt Granulation technique with highest drug release exhibited by MG 11 of 99.90% and the hierarchy from the dissolution results follows the rank order MG11>LSC1>SSD23. The optimised formulation MG11 was then characterised for FTIR which disclosed no specific interactions between drug and excipients and XRD, DSC results showed the amorphous form of Valsartan in the formulation. The stability studies proposed that MG 11 formulation was stable over 3 months. In vivo Bioavailability studies in rats indicated higher amount of drug concentration in blood of Valsartan from optimised solid dispersion formulation as compared to the drug suspension formulation. The study concludes that the solid dispersion of Valsartan can be effectively prepared using Melt Granulation technique.

# CO-130 FORMULATION, OPTIMIZATION AND EVALUATION OF SELF NANO EMULSIFYING DRUG DELIVERY SYSTEM OF BOSENTAN

CHANDAN NAYAK<sup>1\*</sup>, RAJLAXMI PATRO<sup>1\*</sup>,

\*SCHOOL OF PHARMACEUTICAL EDUCATION AND RESEARCH,BERHAMPUR UNIVERSITY ,BERHAMPUR,ODISHA.

Email.id: nayakchandan279@gmail.com, rajlaxmi442@gmail.com

The purpose of the investigation was Formulation and Evaluation of Modified release matrix tablet of Model Drug X, for which Bioequivalence will be proved with reference product and a better bioavailability, may be expected than reference product. Drug polymer compatibility was studied by Physical observation and FTIR study. The drug and polymer in the optimized formulation was found to be compatible. Model tablet was prepared by Direct compression method.750mg of Model drug was taken in a single tablet of 1200mg. The evaluation parameter such as Weight variation, Thickness, Hardness, Friability, Drug content uniformty, In-vitro drug release studies in different dissolution medias i.e, 0.1 N HCL, 0.01 N HCL, 4.5 AB, 6.8 PB, Comparative in-vitro drug release studies of innovator and in-house matrix tablet. Effect of hardness on different formulation parameters of matrix tablet, Effect of speed of agitation on drug release from matrix tablet, stability testing of matrix tablets using ICH accelerated stability conditions were performed. The results were within the limit. From the release profile, F7 was selected to be the best formulation as it showed complete and most comparable release with respect to reference product. The order of release was zero order, mechanism of release was diffusion controlled and exponent of release was Non- fickian type diffusion controlled. In vivo study is the future scope of this investigation.

CO-131 METHOD DEVELOPMENT AND VALIDATION FOR THE SIMULTANEOUS

### ESTIMATION OF GASTRO ESOPHAGEAL REFLUX DISEASE AND PEPTIC ULCER BY USING RP - HPLC IN ITS BULK AND PHARMACEUTICAL DOSAGE FORM

### <sup>1\*</sup>MANORANJAN SAHU

\*SCHOOL OF PHARMACEUTICAL EDUCATION AND RESEARCH, BERHAMPUR UNIVERSITY , BERHAMPUR, ODISHA.

Email.id: man.enter@gmail.com

A simple, precise, reliable, rapid, sensitive and validated RP-HPLC method has been developed to determine Esomeprazole and Levosulpiride in Tablet dosage form. Esomeprazole and Levosulpride are used for Gastro Esophageal Reflux. Chromatogram was run through Octadecyl-silica (ODS). Mobile phase containing Buffer and Acetonitrie in the ratio of 32; 68A was pumped through column at a flow rate of 1ml/min. Buffer used in this method was 0.01N KH2PO4 pH 5.4 buffer. Temperature was maintained at 30°C. Optimized wavelength for Esomeprazole and Levosulpiride was 291nm. Retention time of Esomeprazole and Levosulpiridewere found to be 2.9 min and 4.6 min. %RSD of the Esomeprazole and Levosulpiride were and found to be 0.90 and 0.53 respectively. %Recover was Obtained as 100% and 101.20% for Esomeprazole and Levosulpiride respectively. LOD, LOQ values are obtained from regression equations of Esomeprazole and Levosulpiride were 0.12ppm, 0.32ppm and 1.03ppm, 0.30ppm respectively. Regression equation of Esomeprazole is y = 10568.x + 307.3, and of Levosulpiride is y = 11649.x + 1207. Developed method was found to be accurate, precise, selective and rapid for simultaneous estimation of Esomeprazole and Levosulpride.

# CO-132 ANTIMICROBIAL AGENTS UTILIZATION IN THE GENERAL INTENSIVE CARE UNIT OF A SECONDARY CARE REFERRAL HOSPITAL IN SOUTH INDIA

MUNAGALA VENKATA KRISHNA SHARVANI<sup>1\*</sup>, DASARI NANDINI <sup>1</sup>, YEDDULA VISWA TEJA<sup>1</sup>, GUNDRE JOSEPH REDDY<sup>1</sup>, HARISH HANDYAL<sup>2</sup>, MOHANRAJ RATHINAVELU<sup>3</sup>

Email id: sharvani.munagala2000@gmail.com

Antimicrobial utilization research is critical, especially in the general intensive care unit of hospital setting where the risk of bacterial resistance establishment and transmission is greatly increased. Long-term surveillance and stewardship of antimicrobial agents will reduce resistance while increasing effectiveness. However, Indian literature on this subject is scarcely available.

<sup>&</sup>lt;sup>1</sup> RESIDENT INTERN, DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU A.P

<sup>&</sup>lt;sup>2</sup> CHIEF INTENSIVIST AND HEAD, DEPARTMENT OF CRITICAL CARE, RURAL DEVELOPMENT TRUST HOSPITAL, BATHALAPALLI, ANANTHAPURAMU, A.P <sup>3</sup>ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU – A.P

Thus, the current research study was designed to assess the antibiotic utilization in a seven-bedded general intensive care unit of a secondary referral healthcare setting in south India. Measuring drug utilization in prescribed daily dose corresponded to the defined daily dose is proposed by the WHO to analyze and compare the utilization of drugs. Our study observed two-third distribution of female with mean age of 35 years. The study included 100 patient prescription with a total of 216 antimicrobial agents in orthopaedics, obstetrics and gynaecology, general medicine and general surgery as indications for admission; with mean antimicrobial per prescription of 2.01. 96.35% of antimicrobial agents were generic prescription with 93.81% of parenteral route of administration. The most common antimicrobial agent prescribed in our study on an average was ceftriaxone (34.97%) found no discrepancies between prescribed daily doses and WHO defined daily doses.

### CO-133 PEDIATRIC SEPSIS: CLINICAL OUTCOME AND PREDICTORS OF MORTALITY FROM A SECONDARY REFERRAL HEALTHCARE SETTING OF SOUTH INDIA

### SIDDAVARAM VARSHITHA<sup>1\*</sup>, MOHANRAJ RATHINAVELU<sup>2</sup>

- <sup>1</sup> RESIDENT INTERN, DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU 515721, ANDHRA PRADESH, INDIA.
- <sup>2</sup> ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU 515721, ANDHRA PRADESH, INDIA.

Email id: varshi04.201@gmail.com

Sepsis in children is a significant cause of morbidity and mortality worldwide. Patient's outcome in a PICU of a developing country is affected not only by clinical diagnosis at admission but also by demographic characteristics of the population, available infrastructure,

and admission policies of PICU. Pediatric Risk of Mortality (PRISM III) scoring is a steadfast prognostic marker for mortality prediction in the pediatric cohort admitted to PICU. The study was conducted in a five bedded pediatric intensive care unit of a secondary referral healthcare setting in south India. The six months mixed study which involves both prospective and retrospective data collection included demographics, detailed history of clinical data, laboratory parameters, and PRISM III score was calculated. The final outcome was recorded in terms of survivor and non-survivor at the time of discharge. In a total of 69 pediatric patients, 65.21% of infants were diagnosed with sepsis. PRISM III score of 24 variables was applied to assess the outcome and quality function of pediatric ICU; in which 12 patients were having score > 30, in whom only 2 (16.17%) survived and 10 (83.33%) were dead. In conclusion, PRISM III takes 24 hours to complete and cannot be used in adapting PICU admissions. They are largely used to assess the relation between severity of illness and length of stay or cost.

### CO-134 EVIDENCE -BASED PRACTICE AMONG COMMUNITY PHARMACISTS AND PHARMACY STUDENTS IN SOUTH INDIA

### PORAKALA IASHWARYA<sup>1\*</sup>, MOHANRAJ RATHINAVELU<sup>2</sup>

- <sup>1</sup> RESIDENT INTERN, DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU 515721, ANDHRA PRADESH, INDIA.
- <sup>2</sup> ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU 515721, ANDHRA PRADESH, INDIA.

Email id: iashwaryap@gmail.com

To enable the millennial graduating pharmacy students and current professional practitioners, to satisfy the 21st-century healthcare and pharmacotherapy need with clinical expertise and patient values based on research evidence and attain seven-star pharmacist's principle. The current study was designed to assess the knowledge, attitude, and perception regarding evidence-based pharmacy practice among pharmacy students and practitioners at community settings of south India, through a validated standardized 15 inventories self-administered questionnaire. The study observed a very good knowledge among pharmacy practice students and community pharmacists, but was lacking its perception, due to failure in establishing the relationship between quality professional development and continuous learning process. Implementation of novel approach from the start of teaching-learning process to realistic practice called evidence-based practice in profession of pharmacy, for which the research evidences are very limited and the practice is at still infancy in developing countries. To achieve the mission of pharmacy practice the study necessitates the implementation of quality teaching-learning, research, and practices in pharmacy through evidence-based practice by the statutory bodies, regulating agencies, and policymakers as a problem-solving tool; and also recommends the millennial students and practitioners as an obligation to improve their competencies and skills, to promote excellence in practice for the benefit of those served.

### CO-135 PROGNOSTIC RELEVANCE OF SERUM LACTATE: A RETROSPECTIVE ANALYSIS OF PATIENTS ADMITTED TO ICU AT A RURAL HOSPITAL IN SOUTH INDIA

# JALADI PAVANI<sup>1\*</sup>, INAGANDLA SRUTHI<sup>1</sup>, SIDDAVARAM VARSHITHA<sup>1</sup>, PORAKALA IASHWARYA<sup>1</sup>, HARISH HANDYAL<sup>2</sup>, MOHANRAJ RATHINAVELU<sup>3</sup>

- <sup>1</sup> RESIDENT INTERN, DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU 515721, ANDHRA PRADESH, INDIA.
- <sup>2</sup> CHIEF INTENSIVIST AND HEAD, DEPARTMENT OF CRITICAL CARE, RURAL DEVELOPMENT TRUST HOSPITAL, BATHALAPALLI 515661, ANANTHAPURAMU, ANDHRA PRADESH, INDIA.
- <sup>3</sup>ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH

### (RIPER) AUTONOMOUS, ANANTHAPURAMU - 515721, ANDHRA PRADESH, INDIA. Email id: pavanijaladi010@gmail.com

Multiple studies link serum lactate levels with increased mortality in patients with sepsis, trauma, and other critical illnesses; evidence on the general context of intensive care remains dwarf in Indian healthcare settings. A retrospective study was carried out to determine the prognostic value of serum lactate in patients admitted in a seven-bedded, general intensive care unit of a secondary referral hospital in south India. Patient's data over the age of 18 years with tissue hypoperfusion symptoms were included in the study. Complementary tests performed and many physiological data were obtained within the first 6 hours of admission to the ICU. The averages of serum lactate and all the analytical values and physiological variables recorded during the admission were computed from two samples obtained, one at admission and another at 6 hours following the initial resuscitation. High level of serum lactate levels and the highest chance of death in the ICU were substantially associated to traumatic (p = 0.05) and infectious (p = 0.041) causes, as well as the distribution of the APACHE II prognostic score (p 0.001). The Kaplan-Meier curve presented in patients with serum lactate  $\leq 2$ mmol / 1 had a higher probability of survival with a median stay of 3 days in the ICU; and higher mortality in patients with increased serum lactate levels > 2mmol/l. In conclusion, early recognition and management of hyperlactatemia in critically ill patients may help improve outcomes and reduce the risk of morbidity and mortality.

### CO-136 CASE-BASED LEARNING IN PHARMACY PRACTICE: OBSERVATIONS FROM AN INDIAN PHARMACY COLLEGE

### INAGANDLA SRUTHI<sup>1\*</sup>, MOHANRAJ RATHINAVELU<sup>2</sup>

- <sup>1</sup> RESIDENT INTERN, DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU 515721, ANDHRA PRADESH, INDIA.
- <sup>2</sup> ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU 515721, ANDHRA PRADESH, INDIA.

Email id: sruthiinagandla1711@gmail.com

Today, it's getting harder to learn a career in pharmacy. In addition to self-guided individual learning, pharmaceutical educators are required to find and adopt ways that support higher-level thinking, collaborative learning, and student motivation. One strategy to achieve these aims is to develop and use case-based learning as an addition to traditional teaching techniques. They support learner-centered, small-group, interactive learning experiences as opposed to large-group, teacher-centered, didactic instruction. A cross-over study between two groups equally exposed to both didactic lectures and case-based pedagogy musculoskeletal system diseases and drug therapy; which involves assessment of perception and small group responses towards case-based learning. The outcome of which is further investigated by administering an objective structured clinical examination. The vast majority of the students reported satisfaction with case-basedlearning sessions and highly appreciated this method of teaching pharmacotherapy of

musculoskeletal system diseases. In our study, more than 93.22% of the students opined that they enjoyed sessions and it held their interest and motivated them to learn better. The 't-test between post-test 1 and post-test 2 scores was statistically significant with a P value of 0.0001. This suggests that CBL is effective in students' learning, and reinforces important concepts, strengthening information retention and long-term memory. In conclusion, the perception of pharmacy practice students towards case-based learning is highly contented and encountered a very positive impact on understanding and retention of knowledge in musculoskeletal system diseases and drug therapies.

### CO-137 THE INNOVATIVE APPROACH TO TREATING ULCERATIVE COITUS THROUGH CHRONOPHARMACEUTICS

# SYEDA NAZIA JABEEN, KAVYA KATA, GUNDLAPALLY YOKSHITA, BURGULA EUNICE, P. NAGA CHANDRIKA, DR. P. NEERAJA, DR. M. RAVIKUMAR. GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: snazia522@gmail.com

The current advances in chronobiology and the knowledge gained from chronotherapy of elected disorders explosively suggest that "the one size fits each at all times" approach to medicament delivery is no longer substantiated, at least for opted bioactive agents and disease curative. Ulcerative colitis (UC) is a long-term relapsing and blinking gastrointestinal illness of uncertain etiology. The pathogenicity of ulcerative colitis is believed to be an aberrant susceptible response in which antibodies are formed against colonic epithelial protein(s). The last two decades have seen an expansion in the remedial magazine used to treat UC. This has resulted in bettered clinical remission and response rates. Nonetheless, millions in our current medical operations appear from trials conducted in the early 20th century. This is the first large-scale gene expression study of inflamed mucosa from cases with UC treated withanti-IL23p19 remedy. These results deliver molecular evidence for mucosal recovery from a broad check of changes in transcriptions that enrich our understanding of the molecular effects of IL- 23p19 inhibition in UC. In this review, we aim to outline the vital milestones in the history of the medical operation of UC in addition to promising remedial developments for the future.

## CO-138 CLEARUP SINUS PAIN RELIEF- MEDICAL DEVICE P. AKHI L ,P. DEEKSHITHA

#### GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: pittalaakhil886@gmail.com, deekshi1125@gmail.com.

Clear Up Sinus Relief devices is a transcutaneous electrical nerve stimulator that electrically stimulates the skin overlying the paranasal sinuses and is intented to be used for temporary relief of moderate to severe congestion. ClearUp Sinus Relief is a treatment to be used at home by individuals 18 and older. ClearUp is clinically proven, drug free, non invasive, and proveds rapid relief. ClearUp is classified as a US FDA class II and EU class IIa medical devices. Sinusitis is present when the tissue lining the sinuses become swollen or inflamed. It occurs as the result of

an inflammatory reaction or an infection from a virus, bacteria, or fungus. Medical devices is an apparatus, appliance, software material, or other article whether used alone or in combination, including the software intented by its manufacturer to be used specifically for diagnostic or therapeutic purposes and necessary for its proper application.

### CO-139 A REVIEW ON FORMULATION AND INNOVATIVE APPLICATION OF HYDROGELS

# AKHILA PARVEEN<sup>1</sup>, AKUBATTINI BALAJI<sup>1</sup>, SRIVANI<sup>1</sup>, ARUKONDA GANESH<sup>1</sup>, P. NAGA CHANDRIKA<sup>2</sup>, DR. P. NEERAJA<sup>3</sup>, DR. M. RAVI KUMAR<sup>4</sup> GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: chandrika.pallam@gmail.com

As a result of their physical and chemical crosslinking, hydrogels are three-dimensional networks made of polymers that can absorb vast volumes of water and still stay insoluble in it. They react to changes in temperature, ionic strength, and pH. Natural polymers like dextran, pectin, and alginate, as well as synthetic polymers like polyvinyl alcohol, polyethylene oxide, and polyhydroxyethylmethacrylate, can be used to manufacture them. most of the drugs are converted into hydrogels. By various approaches including physical irradiation, bulk polymerization, complicated coacervation, etc., are used to create them. Hydrogels have discovered multiple applications in optics, tissue engineering, imaging, wound dressings, localized drug delivery, and drug delivery systems. Hydrogel morphology has been evaluated by FTIR, x-ray diffraction, and atomic force microscopy. Their flexibility, swelling behavior, and invitro drug release have also assessed

### CO-140 A REVIEW ON A CLINICAL PERSPECTIVE OF ALZHEIMER'S DISEASE

# CHEEDU MEENAKSHI REDDY<sup>1</sup>, CHIRADI PRASANNA, DEGALA AMULYA RANI<sup>1</sup>, D.SOWMYA<sup>1</sup>, P.NAGACHANDRIKA<sup>2</sup>, Dr.P.NEERAJA<sup>3</sup>, Dr.M.RAVI KUMAR<sup>4</sup> GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id:chandrika.pallam@gmail.com

Any cognitive impairment that is severe enough to interfere with day-to-day activities is referred to be dementia in general. The majority of dementia cases in individuals 65 years of age and beyond are caused by Alzheimer's disease (AD), which makes up at least two thirds of all dementia cases. This review covers current treatments for AD as well as potential future treatments, including natural chemicals, chaperones, and disease-modifying therapeutics (DMT). The pathologic features of the disease include extracellular plaques containing the peptide  $\beta$ -amyloid and neurofibrillary tangles, which contain the hyperphosphorylated version of the microtubular protein tau. The  $\alpha$ ,  $\beta$ , and  $\gamma$  secretases split the bigger protein known as  $\beta$ -amyloid precursor protein into smaller pieces to form  $\beta$ -Amyloid. The  $\gamma$  secretases cleave to A $\beta$ 42, an amyloid protein with a 42-amino acid sequence, which produces insoluble fibrils that build up in senile plaques found in AD patients' autopsies. Although lifestyle choices have no direct impact on the pathophysiology of Alzheimer's disease, they can still help those who have the condition live well. Pharmacological therapies with anti-inflammatory, anti-tau, and anti-amyloid  $\beta$  properties are in advanced phases of clinical studies and show promise.

### CO-141 A NOVEL DRUG DELIVERY SYSTEM: HYODEOXYCHOLIC ACID-MODIFIED METFORMIN LIPOSOMES FOR TYPE 2 DIABETES TREATMENT

# RAKSHITA RAJ TALARI 1\*, SAI HASITA VEDULA 2\*, B SUPRAJA 3 , NEERAJA PODICHETY 3 ,RAVIKUMAR MADDALI 3

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: rakshitarajt@gmail.com,hasitavedula@gmail.com

Metformin is commonly prescribed as a primary medication for treating type 2 diabetes, but its use is often associated with gastrointestinal issues, low bioavailability, and a short half-life. Liposomes serve as an effective drug delivery system, offering a means to mitigate side effects and enhance bioavailability. Hyodeoxycholic acid, a compound with a structure similar to cholesterol, has demonstrated the ability to regulate glucose levels. Incorporating hyodeoxycholic acid into liposomes can address the limitations of metformin while bolstering its hypoglycemic effects. In this study, three variations of liposomes were created using different ratios of hyodeoxycholic acid and metformin (HDCA:ME-(0.5:1)-Lips, HDCA:ME-(1:1)- Lips, and HDCA:ME-(2:1)-Lips) through the thin-film dispersion method. Characterization of these liposomes revealed distinct properties, with excessive hyodeoxycholic acid leading to reduced encapsulation efficiency and drug loading. In vivo experiments conducted on type 2 diabetic mice demonstrated that all three types of liposomes effectively lowered fasting blood glucose levels, improved glucose tolerance, regulated oxidative stress markers, and protected liver tissues. Notably, HDCA:ME-(1:1)-Lips emerged as the most effective among the liposome variations, surpassing the effects of metformin alone. The findings suggest that hyodeoxycholic acid enhances the hypoglycemic impact of metformin, serving a beneficial role as an excipient in liposome formulations.

### CO-142 STONEMAN SYNDROME- A DISORDER CAUSING SECOND SKELETON IN THE BODY

#### V.KAVYA, A.ELWIN

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: elwinamarlapudi@gmail.com,kavyavadapalli4029@gmail.com

Fibrodysplasia ossificans progressiva is an ultrarare autosomal dominant disorder and disabling syndrome characterized by postnatal progressive heterotopic ossification of the connective tissue and congenital malformation of the big toes. Fibrodysplasia ossificans progressiva has worldwide prevalence of about 1 in 2 million births. Nearly 90% of patients with fibrodysplasia ossificans progressiva are misdiagnosed and mismanaged and thus undergo unnecessarily interventions. So far, the number of reported existing cases worldwide is about 700. Clinical examination, radiological evaluation, and genetic analysis for mutation of the ACVR1 gene are considered confirmatory tools for early diagnosis of the disease. Association of fibrodysplasia ossificans progressiva with heterotopic ossification is well documented; however, postsurgical exaggerated response has never been reported previously, to the best of our knowledge.

Fibrodysplasia ossificans progressiva is a very rare and disabling disorder that, if misdiagnosed,

can lead to unnecessary surgical intervention and disastrous results of early disability. We need to spread knowledge to physicians and patients' family members about the disease, as well as its features for early diagnosis and how to prevent flare-up of the disease to promote better quality of life in these patients.

### CO-143 NANOPARTICLE POLYMERS INFLUENCE ON CARDIAC HEALTH: GOOD OR BAD FOR CARDIAC PHYSIOLOGY?

### SUMAYYA PARVEEN, BIRADAR AJAY KUMAR, K.SAIKUMAR GOUD, SUNIL JUNAPUDI

#### GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email.id: suniljunapudi@gmail.com

Cardiovascular diseases (CVD) are one of the leading causes of death and morbidity worldwide. Lifestyle modifications, medications, and addressing epidemiological factors have long been at the forefront of targeting therapeutics for CVD. Treatments can be further complicated given the intersection of gender, age, unique comorbidities, and healthcare access, among many other factors. Therefore, expanding treatment and diagnostic modalities for CVD is absolutely necessary. Nanoparticles and nanomaterials are increasingly being used as therapeutic and diagnostic modalities in various disciplines of biomedicine. Nanoparticles have multiple ways of interacting with the cardiovascular system. Some of them alter cardiac physiology by impacting ion channels, whereas others influence ions directly or indirectly, improving cellular death via decreasing oxidative stress. While embedding nanoparticles into therapeutics can help enhance healthy cardiovascular function in other scenarios, they can also impair physiology by increasing reactive oxidative species and leading to cardiotoxicity. This review explores different types of nanoparticles, their effects, and the applicable dosages to create a better foundation for understanding the current research findings.

### CO-144 RP-HPLC METHOD DEVELOPMENT AND VALIDATION OF RELUGOLIX

#### DR.MERUVA SATHISH KUMAR,

MNR COLLEGE OF PHARMACY, MNR NAGAR, SANGAREDDY.

Email id: sathishmeruva85@gmail.com

Zobrax stationary conditions are used in chromatography (160mm x5.5 mm, 5m). , portable stage ACN:Ammonium was used in a 55:45 ratio, with a detection wavelength of 310 nm, a column temperature of 30°C, and mobile phase as the diluent. A 2.79-minute retention time was discovered. Between 25% and 150% levels, a linearity research was conducted, and an R2 value was discovered.0.999 is to be. The results showed that the method precision was 0.5 and the intermediate precision was 0.2. The corresponding LOD and LOQ values are 0.4 g/ml and 1.2 g/ml.

### CO-145 CARDIOPROTECTIVE ACTIVITY AND ANTIOXIDANT ACTIVITY OF CURCUMIN AGAINST DRUG INDUCED TOXICITY

#### RAVI KUMAR VEMULAPALLI

MNR COLLEGE OF PHARMACY

Email id: vemulapalli234@gmail.com

In this study, we investigated the cardiotoxic effects of Levophed or Norepinephrine, an antihypotensive drug, and explored the potential of natural cardio-protective compounds as an alternative approach to reduce NE-induced toxicity. The study focused on NE-induced concentration and time-dependent cellular responses in H9C2 cardio myoblasts to identify critical doses of NE that can be regulated in cardiac pathologies. Results showed that NE levels above the hypertrophic concentration can have deleterious effects on cardio myoblasts, leading to cell death and heart failure in vitro. A transition checkpoint of 50 μM NE concentration was chosen, and time-dependent studies of cell viability showed that 48 hours was the optimum induction time for further experiments. We studied the effect of Curcumin with hypertrophic and transition doses of NE and found cardio-protective doses of Curcumin for hypertrophy and transition to be 10 and 15 μM, respectively. Curcumin treatment significantly reduced NE-induced hypertrophy and cell death at 2.5 μM NE and reversed NE-induced cell death and transition at 50 μM concentration. These findings confirmed the protective effects of Curcumin in cardio myoblasts against NE-induced cardiac stress.

### CO-146 DOLUTEGRAVIR SOLID DISPERSIONS AS ORO-DISPERSIBLE TABLETS: TO AMELIORATE THE INTEGRASE INHIBITION EFFECT

#### GOTTEMUKKULA LAKSHMI DEVI, P. RAGHUVEER

GITAM SCHOOL OF PHARMACY, HYDERABAD

Email id: lgottemu@gitam.in

**Background:** Dolutegravir (DTG) is an integrase strand transfer inhibitor that prevents the integration of viral DNA into host cell DNA, which is one of the key phases in the life cycle of HIV, preventing the virus from multiplying inside the host. However, its therapeutic efficacy is constrained by its weak water solubility.

**Objective**: A simple conventional approach using sulfobutylether- $\beta$ -cyclodextrin (SBE  $\beta$ -CD) and Soluplus® as carriers has been used to ameliorate the drug release of DTG.

**Materials and Methods:** Three methods were used to prepare solid dispersions: kneading, rota solvent evaporation, and lyophilization. The ratio of DTG to carrier varied between 1:1, 1:2, 1:3, and 1:4 w/w. Optimized DTG solid dispersions were then used in the direct compression method to create Oro-dispersible tablets with the addition of super disintegrants, i.e., locust bean gum and roscarmellose Sodium. Prepared tablets were evaluated.

**Results:** The drug release for pure DTG is only 14.6 %. Lyophilization with SBE  $\beta$ -CD and

Soluplus® led to the dissolution of DTG up to 100.11% and 88.141.17% after 2 hours. The application of SBE  $\beta$ -CD significantly improved the solubility and dissolving rate of DTG. The Oro-dispersible tablets made with 12% locust bean gum were the best among the tested formulations. They disintegrated rapidly, taking only 11 seconds, and showed the highest dissolution rate of 99.89%, better than the marketed INSTGRA  $^{TM}$ -50mg tablets. Optimized rapid disintegration tablets of Dolutegravir can target integrase and potentially inhibit HIV.

### CO-147 FORMULATION AND EVALUATION OF CAFFEINE LOADED COPPER NANOPARTICLES

### S. SIVAPRASAD\* AND V. ALAGARSAMY MNR COLLEGE OF PHARMACY, TELANGANA

Email id: sagiliprasad2003@gmail.com

This study aims to develop and evaluate caffeine-loaded copper nanoparticles as a potential drug delivery system. Copper nanoparticles have gained attention in recent years due to their antimicrobial and anticancer properties. By incorporating caffeine, a widely consumed psychoactive substance, into the copper nanoparticles, its therapeutic effects could be enhanced, opening up new possibilities for drug formulation. The formulation process involves synthesizing copper nanoparticles and loading them with caffeine through a simple and cost-effective method. The resulting caffeine-loaded copper nanoparticles will be characterized for their physicochemical properties, including particle size, morphology, and drug loading efficiency. Furthermore, in vitro and in vivo evaluations will be conducted to assess the drug release kinetics, cytotoxicity, and therapeutic efficacy of the caffeine-loaded copper nanoparticles. This study holds promise for developing a novel drug delivery system capable of utilizing the unique properties of copper nanoparticles and the pharmacological benefits of caffeine.

# CO-148 DEVELOPMENT AND VALIDATION OF A NEW STABILITY INDICATING HPLC METHOD FOR SIMULTANEOUS ESTIMATION OF MONTELUKAST AND BILASTINE

# PARIJATHA BANDIGARI & KRISHNA MOHAN CHINNALA NALLA NARASIMHA REDDY EDUCATIONAL SOCIETY AND GROUP OF INSTITUTIONS

Email id: parijatha.pharmacy@gmail.com

A simple, Accurate, precise method was developed for the simultaneous estimation of the Bilastine and Montelukast in Tablet dosage form. Chromatogram was run through Std BDS C18 (150mm 4.6mm, 5μ). Mobile phase containing OPA Buffer and Acetonitrile in the ratio of 60:40 was pumped through column at a flow rate of 1.0 ml/min. Temperature was maintained at 30°C. Optimized wavelength for Bilastine and Montelukast was 220nm. Retention time of Bilastine and Montelukast were found to be 2.903 min and 2.264 min. %RSD of the Bilastine and Montelukast were and found to be 1.1 and 0.3 respectively. %Recover was Obtained as 99.71% and 99.80% for Bilastine and Montelukast. LOD, LOQ values were obtained from regression equations of

Bilastine and Montelukast were 0.05ppm, 0.16 ppm and 0.01ppm, 0.04ppm respectively. Regression equation of Bilastine is y = 115259x + 14295, and of Montelukast is y = 96186x + 3504. Retention times are decreased and that run time was decreased so the method developed was simple and economical that can be adopted in regular Quality control test in Industries.

### CO-149 VALIDATION AND DEVELOPMENT METHOD FOR THE ESTIMATION OFTEMOZOLOMIDE BY UV- SPECTROSCOPY

#### N.JHANCY LAXMI BAI

MNR COLLEGE OF PHARMACY

Email.id: nellutla.jhancy@gmail.com

Pharmaceutical analysis simply means analysis of pharmaceuticals. Webster' dictionary defines a pharmaceutical is a medical drug. A more appropriate term for a pharmaceutical is active pharmaceutical ingredient (API) or active ingredient to distinguish it from a formulated product or drug product is prepared by formulating a drug substance with inert ingredient (excipient) to prepare a drug product that is suitable for administration to patients. Research and development (R&D) play a very comprehensive role in new drug development and follow up activities to ensure that a new drug product meets the established standards is stable and continue to approved by regulatory authorities, assuring that all batches of drug product are made to the specific standards utilization of approved ingredients and production method becomes the responsibility of pharmaceutical analysts in the quality control (QC) or quality assurance department. The methods are generally developed in an analytical R&D department and transferred to QC or other departments as needed. At times they are transferred to other divisions. By now it should be quite apparent that pharmaceutical analysts play a major role in assuring the identity, safety, efficacy, and quality of drug product, safety and efficacy studies required that drug substance and drug product meet two critical requirements. Established identity and purity. Established bio availability/dissolution

### CO-150 MAGNETIC MICROSPHERE

J.VASANTHA
SANTHIRAM COLLEGE OF PHARMACY

Email.id: jillellavasanths@gmail.com

Recently a number of novel drug delivery system have emerged to minimize drug dose and loss to prevent harmful side effects, excess drug bioavailability and to achieve controlled and targeted drug delivery. Microspheres constitute an important part of this particulate drug delivery system by virtue of its small size and efficient carrier characteristics Magnetic microspheres has been alternatively traditional method for delivery of drug to the targeted site by reducing the amount of free drugs circulating the whole body by reducing excess dose dumping for limiting toxicity and for reducing the side effects of the drug. The magnetic microspheres are delivered using an external magnetic energy to help and reach the carrier to the targeted site. This review gives an overview of the size, properties, mechanism, benefits, drawbacks, different preparations and applications of the magnetic microspheres.

### CO-151 ENHANCING THE AQUEOUS SOLUBILITY AND DISSOLUTION OFIVERMECTIN USING FREEZE – DRYING

#### JAVAJI MADHU SRI HARI

#### SANTHIRAM COLLEGE OF PHARMACY

Email.id: javajimadhusrihri@gmail.com

The aim of the present study was to develop an olanzapine freeze-dried tablet (FDT). The solubility and dissolution rate of poorly water-soluble olanzapine was improved by preparing a freeze-dried tablet of olanzapine using the freeze-drying technique. The FDT was prepared by dispersing the drug in an aqueous solution of highly water-soluble carrier materials consisting of gelatin, glycine, and sorbitol. The mixture was poured in to the pockets of blister packs and then was subjected to freezing and lyophilisation. The FDT was characterised by DSC, XRD and SEM and was evaluated for saturation solubility and dissolution. The samples were stored in a stability chamber to investigate their physical stability. Results obtained by DSC and X-ray were analysed and showed the crystalline state of olanzapine in FDT transformation to the amorphous state during the formation of FDT. Scanning electron microscope (SEM) results suggest reduction in olanzapine particle size. The solubility of olanzapine from the FDT was observed to be nearly four and a half times greater than the pure drug. Results obtained from dissolution studies showed that olanzapine FDT significantly improved the dissolution rate of the drug compared with the physical mixture (PM) and the pure drug. More than 90% of olanzapine in FDT dissolved within 5 minutes, compared to only 19.78% of olanzapine pure drug dissolved over the course of 60 minutes. In a stability test, the release profile of the FDT was unchanged, as compared to the freshly prepared FDT after 90 days of storing.

### CO-152 FORMULATION AND EVALUATION OF LIQUISOLID COMPACTION OF APIXABAN

#### **BOYA LAKSHMIKANTH**

SANTHIRAM COLLEGE OF PHARMACY NANDYAL

Email.id: boyakanth0@gmail.com

Liquisolid compact technique is a novel concept for delivery of drug through oral route. This approach of delivering drug is mostly suitable for lipophilic drug and poorly or water insoluble drugs. The main objective of present study was to increase the solubility of water in soluble BSc class II drug Apixaban. Apixaban is alipophilic drug that is practically insoluble in water and exhibit an excessively slow dissolution rate in class II compound in biopharmaceutics classification system. The liquid solid compacts were prepared using PEG 400 as non volatile solvent, microcrystalline cellulose as carrier, aerosil 200 as coating material and Sodium starch glycolate was used as super disintegrating agent. Several formulations of liquid solid compacts having different drug concentration in PEG 400 (non volatile solvent) with varying ratio of career to coating material were prepared. The liquid solid compacts were evaluated for Bulk characterization, Flow properties, solubility studies, drug content, FTIR studies, DSC studies and in vitro drug release studies. The saturated solubility studies and in vitro drug release studies shows that the increase in solubility of drug and enhanced drug release rate in liquisolid compacts

compared to pure drug. The Formulation F5 and F4 is considered as best formulation as it has shown highest drug release in short time (1 hr). Our studies showed that the solubility of the drug can be significantly enhanced with increase in the carrier content there is increase in the solubility resulting and enhanced drug release rate.

### CO-153 EVALUATE THE ANTI-UROLITHIATIC ACTIVITY OF HYDRO-ALCOHOLIC EXTRACT OF SEEDS OF CAESALPINIA PULCHERRIMA IN ETHYLENE GLYCOL INDUCED RENAL CALCULI.

#### DR.SHEIK NASAR I

#### EAST POINT COLLEGE OF PHARMACY

Email.id: sheiknasar25@gmail.com

Urolithiasis is a condition in which crystals form in the urinary tract. Caesalpinia pulcherrima can be used as potential treatment agent for urolithiasis. Adult wistar male rats will be given regular food and drinking water ad libitum, Disease group were given Ethylene glycol(0.75% V/V) in drinking water is fed to induce renal calculi till 28 day. Standard treatment group was given with Ethylene glycol(0.75% V/V) in drinking water is fed and treated with a standard anti-urolithiasis drug Cystone(750mg/kg body wt) from 15th day to 28th day. The groups of Preventive Regimen were treated with Ethylene glycol(0.75% V/V) in drinking water is fed and treated with hydroalcoholic(1:1) extract of CP high dose and low dose from 1 day to 28 day. various samples like blood, urine and kidney were collected at the end of the treatment period for the analysis of different parameters. The levels of Urolithiasis promoters(calcium, oxalate, uric acid and inhibitors (magnesium and inorganic phosphate), urolithiasis citrate), nitrogen, creatinine) were shown significant effect compared to disease control group. Therefore, these results reveal that Caesalpinia pulcherrima effectively inhibits the development of Ethylene glycol induced urolithiasis in rats.

#### CO-154 SYNTHESIS OF HYDROXYL PROPYLENE ADENINE

# 1 SHAIK.MAHMMAD RAJA, 1RUBY SINGH, 1RAMA S. LOKHANDE,2 PRADEEP KUMAR SWAIN, 2 SAYABOINA SANTHOSH KUMAR,

1 SCHOOL OF BASIC SCIENCES, DEPARTMENT OF CHEMISTRY, JAIPUR NATIONAL UNIVERSITY (RAJASTHAN), 2MEDESSE LABORATORIES PRIVATE LIMITED (TELENGANA). PLACE OF WORK: MEDESSE LABORATORIES PRIVATE LIMITED

Email id: rjmahmmad786@gmail.com

Hydroxyl Propylene Adenine (Hpa) Is The Main Precursor In Synthesizing Of Anti-Viral Drugs Such As Tenofovir Disoproxil Hemifumarate And Tenofovir Alafenamide Hemifumarate. Hpa Was Synthesized By Using R-Propylene Carbonate In Dmf In The Presence Of Basic Catalyst. The Reaction Was Monitored By Using Thin Layer Chromatography (Tlc) And The Synthesized Molecule Was Characterized By Using Nmr, Mass Spectroscopy And Infrared Spectrum.

#### Structure

Figure-1: Structure of Hydroxyl Propylene Adenine

### CO-155 MICRONEEDLE FOR TRANSDERMAL DRUG DELIVERY; CURRENT TRENDS AND FABRICATION

## **D. MAHESWARA REDDY**SANTHIRAM COLLEGE OF PHARMACY

Email id: dagadamahesh@gmail.com

Background Transdermal delivery has the advantage of bypassing the first-pass effect and allowing sustained release of the drug. However, the drug delivery is limited owing to the barrier created by the stratum corneum. Microneedles are a transdermal drug delivery system that is painless, less invasive, and easy to self-administer, with a high drug bioavailability. Area covered The dose, delivery rate, and efficacy of the drugs can be controlled by the microneedle design and drug formulations. This review introduces the types of microneedles and their design, materials used for fabrication, and manufacturing methods. Additionally, recent biological applications and clinical trials are introduced. Expert opinion With advancements made in formulation technologies, the drug-loading capability of microneedles can be improved. 3D printing and digital technology contribute to the improvement of microneedle fabrication technology. However, regulations regarding the manufacture of microneedle products should be established as soon as possible to promote commercialization.

## CO-156 ADVANCEMENTS IN SCAFFOLD-BASED DRUG DELIVERY SYSTEMS: A COMPREHENSIVE OVERVIEW AND RECENT DEVELOPMENTS

#### SAMPATH KUMAR K

#### SRM COLLEGE OF PHARMACY

Email id: sampathkatakam@gmail.com

In the field of tissue engineering, there is a growing focus on developing strategies for the reconstruction of dysfunctional tissue models through the transplantation of cells using stable scaffolds and biomolecules. Recently, significant attention has been focused towards the expansion of dynamically responsive platforms that mimic the extracellular environment, leading to the integration of tissues and organs. The successful regeneration or restoration of tissues relies on the presence of a scaffold that serves as a temporary framework for cell proliferation and extracellular matrix formation. Various methods, including solvent abstraction, freeze drying/abstraction/gelation, particle compression, and phase reversal, can be employed to

fabricate scaffolds. In the context of drug delivery systems utilizing polymeric scaffolds, careful consideration of optimal parameters such as drug loading capacity is crucial. Biodegradable polymers and bioceramics are commonly utilized to fabricate scaffolds. This review provides an overview of the significance of scaffolds, the materials employed, and the fabrication techniques utilized in the expansion of scaffolds for sustained drug delivery and tissue engineering applications.

# CO-157 FORMULATION DEVELOPMENT AND INVITRO EVALUATION OF EXTENDED RELEASE TABLETS OFAZILSARTAN USING DIFFERENT POLYMERS

## DR L. JYOTHI RANI,G.MANOHAR MALLAREDDY INSTITUTE OF PHARMACEUTICLA SCIENCES

Email id: ladejyothirani@gmail.com

The aim of the present work is to develop and evaluate Azilsartan extended release tablets using various natural polymers, such as tamarind gum, grewia gum, and fenugreek, with varyingdegrees of concentrations. Azilsartan can be used alone or in combination with other medicationsfor treatment of hypertension. The prepared tablets were evaluated for various *in vitro* parameters.FTIR studies revealed that there is no interaction between drug and polymer. Both the pre formulation and post formulation studies were found to be within the limits. *In vitro* dissolution studies were carried out for 12 hours. Out of all formulations tablets prepared with Grewia gum showed maximum release of 99.87% in 12 hours. The drug release studies followed zero order kinetics and release mechanism is super case II transport.

# CO-158 A COMPREHENSIVE OVERVIEW OF INTELLECTUAL PROPERTY RIGHTS (IPR) AND DRUG REGULATORY AFFAIRS

**K.DHANUSHA\*, M.K.VIJAYALAKSHMI, DR.R.SRINIVASAN**BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH, SELAIYUR, TAMBARAM

Email id: dhanushadiv@gmail.com

Legal safeguards for intangible works of human intellect are included in intellectual property rights, or IPR. There are various forms of intellectual property protection, including trademark, copyright, and patents. A patent is an acknowledgment for an invention that meets the requirements of worldwide uniqueness, non-obviousness, and practical use. Better invention or creative protection requires intellectual property rights (IPR) for identification, planning, commercialization, and rendering. Different industries should have different IPR policies, management styles, strategies, and so forth based on their areas of expertise. In the upcoming era, the pharmaceutical industry's evolving IPR strategy will need a stronger focus and approach. In a particular industry, regulatory affairs refers to the administration of protocols that ensure compliance with laws, regulations, and guidelines. Acquiring authorizations, permits, and certifications are among the things it entails. It also requires staying current with and adapting to regulatory requirements that change. In the food, technology, and pharmaceutical industries, among others, regulatory affairs specialists play a crucial role in navigating the intricate

regulatory landscape and ensuring that products adhere to safety and legal requirements. In numerous industries, the amalgamation of Intellectual Property Rights (IPR) and Regulatory Affairs is imperative. While IPR protects intellectual property, regulatory affairs specialists make sure that processes and products adhere to legal requirements. All of them work together to protect innovations, guide companies through complex regulatory environments, and guarantee moral and legal standards are followed during the creation, licensing, and marketing of goods and services.

## CO-159 BREAKING FRONTIERS: AI-DRIVEN NEOEPITOPE PERSONALIZED IMMUNOTHERAPY RESHAPING CANCER TREATMENT

P AASHRITHA<sup>1</sup>, B.CHATHURYA<sup>2</sup>

KVK COLLEGE OF PHARMACY, HAYATHNAGAR, ABDULLAPURMET, <sup>2</sup>MALLA REDDY ENGINEERING COLLEGE, DULAPALLY, MAISAMMAGUDA.

Email id: paashritha36@gmail.com

Cancer is an inherently dangerous condition that poses a significant threat to the health and well-being of individuals. The complexity, adaptability and potential for widespread harm makes cancer a formidable adversary, underscoring the urgency and importance of advancing research, treatment plans and prevention strategies to overcome its dangerous impact. The need of the hour is for a fresh approach towards overcoming cancer, and AI driven models in precision medicine are indeed a promising combination. By leveraging cutting edge artificial intelligence, the study shows a transformative approach in reshaping the current traditional cancer treatment. The integration of personalized immunotherapy, specifically targeting neoepitopes, marks a paradigm shift in addressing the intricacies of individual patient profiles. Furthermore the clinical and preclinical investigations showcase that neoepitope based immunotherapy is also compatible with other therapies including adoptive cell therapy. Lastly, we delve into the challenges that accompany the clinical adoption of this therapy and also explore the solutions for the addressed challenges. In conclusion, AI-driven neoepitope-based immunotherapy could be a fresh breath of air in the current paradigm of cancer treatment.

# CO-160 DESIGN, CHARACTERISATION, MOLECULAR DOCKING STUDIES AND IN SILICO EVALUVATION

**B, AMBIKA1. K ANITHA<sup>2</sup>, P.SHANUMUKA RAO<sup>3</sup>**DEPARTMENT OF PHARMACY, JNTUA –OTPRI, ANANATAPUR.

Email id: billeambikaa@gmail.com

Isatin-1H-Indole-2, 3-dione. Isatin and its derivatives belongs to the class of Indole fused hetero atoms. The present work detailed account synthesis of piperazine substituted Isatin and its derivatives. They may be utilized for the production of a broad range of heterocyclic molecules. It can be used as precursor for drug synthesis and lot of research work has been done regarding the synthesised and chemical properties. The piperazine substituted Isatin moiety shows the wide spectrum of biological and pharmacological activities such as analgesic, anti-helmentic, antioxidant activities. Their structure of compound conformed by <sup>1</sup>H, <sup>13</sup>C-NMR data, Mass, IR spectroscopy and Elemental analysis.

#### **CO-161 ANTIBIOTIC RESISTANCE GENES FROM LIVESTOCK WASTE:**

#### MARISETTI. TEJASRI

#### KGR INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Email id:nagaraju4marisetti@gmail.com

Antibiotic resistance is when microbes change there structure to resist for antibiotics that used to effectively treat them. They makes certain microbial infections difficult to treat. Overuse and misuse of antibiotics cause antibiotic resistance this is becoming global health problem. We can overcome this global health problems by taking these drugs only when the providers says that is Necessary

Antibiotic resistance occurs when microbes change so that antibiotic medicines can't kill them or stop their growth. As a result, various infections extremely difficult to treat.

Antibiotic-resistant infections can affect anyone. But certain groups are at risk due to their health status or living environment. People more vulnerable to these types of dangerous infections include:

Babies, especially those born early ,Adults over age 65,People experiencing homelessness or living in crowded conditions, People who have compromised immune system ,People who take antibiotics for more long term.

Antibiotics are widely used in animal husbandry, and various types of antibiotic resistance genes (ARGs) are frequently detected in livestock waste around the world. Conventional livestock waste treatment processes do not completely remove ARGs, resulting in their release to soil and water environments. Various exposure routes of these ARGs to humans, including inhalation and ingestion of antibiotic-resistant bacteria (ARB) that harbour them, may be contributing to the rise in resistant clinical infections that are increasingly difficult to treat with antibiotics. In this review, we assess the occurrence and variability of ARGs in livestock wastes and their potential propagation pathways to human pathogens. We also review the mechanisms and environmental factors that influence the dissemination of ARGs through these pathways, and evaluate the ARG removal efficiency of common livestock waste management approaches. Challenges and research needs for assessing and mitigating the risk of antibiotic resistance dissemination from livestock waste are also presented.

#### CO-162 TRANSDERMAL DRUG DELIVERY SYSTEM

#### G.MAMATHA

### TEEGALAKRISHNA REDDY COLLEGE OF PHARMACY

Email id: mamathaganta0@gmail.com

Transdermal applications, relative to other routes, are noninvasive, requiring the simple adhesion of a "patch" resulting in better patient compliance, improved bioavailability of a drug and easy treatment termination. Therapeutically these dosage forms provide constant plasma drug levels constantly duplicating the benefits of I.V. infusion.

The transdermal route has been recognized as one of the highly potential routes of systemic drug delivery and generated lot of interest since last three decades. Transdermal drug delivery systems deliver medicines via the skin portal to the systemic circulation at a predetermined rate and

maintain clinically effective concentrations over a prolonged period of time. This realization of clinical benefits of the transdermal delivery of therapeutic agents has now brought transdermal delivery to the forefront. However, the application of transdermal delivery to a wider range of drugs is limited due to the significant barrier to penetration across the skin, in particular the stratum corneum (SC). In this view, we discribe different types of available TDDS methods, along with a critical discussion with of the specific advantage and disadvantage, characterization methods and potential of each method. Progress in research on these alternative methods has established high efficiency inherent to TDDS, which is expected to find applications a wide range of field.

#### **CO-163 BILAYERED TABLETS**

### K.DIVYA LAXMI, AVULA KAVYA CHAITANYA DEEMED TO BE UNIVERSITY

Email id: kanaladivya91@gmail.com

Bi-layer tablet is a new era for successful development of controlled release formulation along with various features to provide successful drug delivery. Bilayer layer tablets have been consist of two layers which is slow release and immediate release layer. As well as improved beneficial technology to overcome the shortcoming of the single layer tablets. The preparations of bilayer tablet were needs due to separate incompatible active pharmaceutical ingredient (APIs) for each other. Bilayer tablets material involves both the compressibility and consolidation. The bilayer tablets preparing by using different techniques such as OROS® push pulls Technology, L-OROSTM Technology, EN SO TROL Technology. Various types of bilayer tablet press currently available in the market, various approaches used in bilayer tablet system, characterization as well as evaluation of the bilayer tablet system. Bi-layer tablet is suitable for sequential release of two drugs in combination, separate two incompatible substances and also for sustained release tablet in which one layer is immediate release as initial dose and second layer is maintenance dose.

# CO-164 PERCEPTION OF PHARMACY STUDENTS TOWARDS BLENDED PEDAGOGY IN 21<sup>ST</sup> CENTURY PHARMACY EDUCATION

### YEDDULA VISWA TEJA<sup>1\*</sup>, MOHANRAJ RATHINAVELU<sup>2</sup>

- <sup>1</sup> RESIDENT INTERN, DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU ANDHRA PRADESH, INDIA.
- <sup>2</sup> ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACEUTICAL PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU ANDHRA PRADESH, INDIA.

Email id: vishwatejareddy15@gmail.com

**Background:** In industrialized and developing economic countries like India, the technology transfer has significantly enhanced the quality of higher education, where the tentacles of digitalization have deeply entered education system, which opened the gateway of blended

pedagogy, enabling a greater access to course content, learning preparation in peers and interactions. Across the globe, blended learning is applied in pharmaceutical education but it gained momentum in Indian pharmacy education during the global threat, COVID-19 pandemic. **Aim and Objectives:** The current experimental study of six months duration was performed to investigate the perception of pharmacy students towards blended pedagogy in pharmacy education at undergraduate level.

**Methodology:** In the current experiment survey, a validated standard self-administered questionnaire with 28 inventories under 7 categories was administered to students pursuing undergraduate pharmacy programs in a pharmacy institute located at rural Andhra Pradesh for a period of six months, through online mode; data collection was performed in students showing willingness and further collected data was assessed through excel spreadsheet.

**Results:** The study observed a two-third satisfaction on an average in terms of all the indicators which influence the blended pedagogy (teacher 71.8%, course content 74.8%, technology transfer 58.7%, interactions 78.8%, and constructive knowledge 73.7%).

**Conclusion:** In conclusion, our study envisaged effective student engagement, with more facilitator-student interactions and adaptability; through blended learning which enabled, enhanced and transformed students to active learners.

# CO-165 TRINITY TIES: THE EVOLUTION OF THREE-PARENT FAMILIES SHAKTHI VANDANA, P.SHRUTHI REDDY,PALAMAKULA.BHAVANI,DIVYAVARMA GEETHANJALI COLLEGE OF PHARMACY,HYDERABAD

Email id: vandanavandana8943@gmail.com

The objective of this abstract is to review "Three parent" IVF Technique in Baby designing. As mitochondrial diseases and genetic disorders are common in one in 6500 babies it can be avoided by this three parent IVF technique. The technique involves transferring genetic material from the nucleus of an egg or embryo from a woman carrying a mitochondrial disease into an egg or embryo from a healthy donor that has had its nuclear DNA removed. This means the resulting embryo will have the affected mother's nuclear DNA but will not inherit the mitochondrial disease, allowing a woman carrying defective mitochondria to have healthy children. The resulting embryo has the nuclear DNA of the mother and father, but the mitochondrial DNA of the donor which explains the label "three-parent" IVF treatment. This technique would help families with serious mitochondrial diseases to have healthy children and as fertility treatment for women who, because of their age, have difficulty becoming pregnant naturally or by conventional IVF.

### CO-166 SYNTHESIS METHOD OF 8-BROMO-3-METHYL-3,7-DIHYDROXY-1H-PURINE-2,6-DIONE

### 1YAKANNA CHARY SALLOJU, 1RUBI SINGH, 1RAMA S. LOKHANDE, 2PRADEEP KUMAR SWAIN

1SCHOOL OF BASIC SCIENCES, DEPARTMENT OF CHEMISTRY, JAIPUR NATIONAL UNIVERSITY, JAIPUR (RAJASTHAN),

2MEDESSE LABORATORIES PRIVATE LIMITED, HYDERABAD (TELANGANA).

#### PLACE OF WORK: MEDESSE LABORATORIES PRIVATE LIMITED

Email id: yakannas21@gmail.com

8-Bromo-3-Methyl-3,7-Dihydroxy-1H-Purine-2,6-Dione was synthesized by Bromination of 3-Methyl Xanthine using Bromine (Br2) in Acetic acid medium at cooling condition. This product was monitored by Thin layer chromatography (TLC) and characterized by NMR, Mass Spectra and IR. 8-Bromo-3-Methyl-3,7-Dihydroxy-1H-Purine-2,6-Dione is the key intermediate in synthesizing of Linagliptine.

#### **Scheme:**

# CO-167 HEPATOPROTECTIVE ACTIVITY OF MANSOA ALLIACEA LAM LEAF EXTRACT AGAINST CARBON TETRACHLORIDE INDUCED LIVER DAMAGE MODEL

#### DR.GUNDA SRILAKSHMI

TEEGALA RAM REDDY COLLEGE OF PHARMACY

Email id: sri312005@gmail.com

Leaves of *Mansoa alliacea* was extracted using Hexane and Ethanol consecutively and the extracts were screened for hepatoprotective activity using ccl<sub>4</sub> induced liver damage model. The action was assessed by comparing the serum enzyme levels such as serum glutamic pyruvic transaminase, serum glutamic oxaloacetic transaminase, total bilirubin and alkaline phosphatase of plant extracts treated group with carbon tetrachloride treated animals. Results confirmed that ethanolic extract-treated animal group is showing highly significant activity, while the hexane extract-treated group has shown giant action however much less compare to ethanolic extract. The effects were further supported by the process of histopathological studies of liver tissues.

#### **CO-168 NIPAH VIRUS: DIAGNOSIS AND THERAPY**

#### M. SUCHITRA SRI BHARGAVI, N. SRIVIDYA

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: sribhargavimendu@gmail.com, srividya.legacy@gmail.com

Nipah virus (NiV) is an emerging zoonotic pathogen with a significant public health impact, causing severe respiratory and neurological diseases in both animals and humans. An overview of the current state of knowledge on the diagnosis and treatment of Nipah virus infection is presented in this abstract.

**Diagnosis:** For the detection of the Nipah virus in clinical samples, various diagnostic methods have been used, including molecular techniques such as reverse transcription chain reaction qPCR and real-time PCR, serological assays, and viral isolation. Advances in point-of-care testing and the development of rapid diagnostic kits have enhanced the speed and accessibility of diagnosis in resource-limited settings.

**Treatment:** There is currently no specific antiviral therapy for Nipah virus infection, and treatment mainly entails supportive care. With promising candidates showing efficacy in preclinical studies, research efforts are ongoing to identify potential antiviral agents. As a potential treatment, immunotherapeutic approaches such as monoclonal antibodies and convalescent plasma therapy are being investigated.

In addition to diagnostic methods, ongoing research explores preventative measures and potential therapeutic interventions. Vaccine development for the Nipah virus is a key focus, with promising candidates in the preclinical stages. The importance of public health measures, including surveillance and control of the virus in both animal and human populations, remains crucial. Collaborative efforts between researchers, healthcare professionals, and policymakers are essential to address the challenges posed by the Nipah virus and mitigate its impact on global health.

## CO-169 BEYOND THE BLUEPRINT: GENE THERAPY'S ROLE IN UNVEILING A HEALTHIER FUTURE

#### SHAMBHAVI JHA

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: akanshajha1406@gmail.com

Gene therapy, once a futuristic concept, is steadily approaching reality and reshaping the narrative of medicine. Envision a world where debilitating diseases like cystic fibrosis, sickle cell anaemia, and certain cancers can be cured rather than merely managed. This exploration delves into the captivating realm of gene therapy, examining its potential to transform healthcare and forge a healthier future for all.

Commencing with an examination of the core of gene therapy, the focus is on comprehending how this technology can manipulate our genetic blueprint to rectify flawed genes and unlock extraordinary possibilities.

However, like any revolutionary technology, gene therapy confronts distinct challenges.

Technical obstacles, ethical considerations, and societal apprehensions surrounding this potent tool will be scrutinized. From ensuring long-term safety to addressing potential disparities, the path forward requires careful navigation and responsible development.

Nevertheless, hope shines bright in the form of artificial intelligence (AI). This technological ally joins the fight by aiding in designing efficient vectors, predicting patient responses, and even personalizing treatments for individuals.

This exploration is not merely a glimpse into the future of medicine; it is a call to action. By comprehending the potential and challenges of gene therapy, we can collectively pave the way for a healthier and more promising tomorrow.

#### **CO-170 NOOTROPICS – SMART DRUGS**

#### V.SRIHAAS, S.ABHISHEK

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: srihaas19vemula@gmail.com

Nootropics, often referred to as "smart drugs" are diverse group of medical substances that act as cognitive enhancers or neuroprotective. These substances aim to improve cognitive function such as human thinking, memory, creativity and focus. They are proposed as class of psychoactive drugs that selectively improve efficiency of higher telencephalic integrative activity. Drugs, nutraceuticals, supplements, functional foods & various synthetic & semi-synthetic agents, material from natural origin such as herbs, animal products and minerals also acts as potent nootropic agents. These agents offer significant relief in various neurodegenerative disorders such as Parkinson disease and Alzheimer disease.

The main features of nootropic profile consists of

- a) Enhancement of learning acquisition
- b) Resistance to impairing agents
- c) Absence of usual pharmacological effects of neuro psychotropic drugs

This abstract explores the pharmaceutical consideration of nootropic agents for future perspective.

# CO-171 SYNTHESIS OF SOME 1,4-DIHYDROPYRIDINE FUSED THIADIAZOLE DERIVATIVES

#### SIRISHA NARAPALLI

### TEEGALA KRISHNA REDDY COLLEGE OF PHARMACY, MEERPET, SAROORNAGAR Email id: sirisha.narapalli@gmail.com

**1**,4-Dihydropyridine is a heteroaromatic compound from the class of pyridines. 1,4-Dihydropyridines were synthesized from substituted aldehydes and ethyl acetoacetate in the presence of concentrated ammonia. Thiadiazoles was synthesized from substituted carboxylic acids and Thiosemicarbazide in the presence of concentrated sulphuric acid. Both 1,4-Dihydropyridines and thiadiazoles are condensed to give final compound. A total of 5 compounds are synthesized.

### CO-172 AN OVERVIEW OF THE G20 NATIONS AND INDIA'S PATENT FRAMEWORK

#### DR.K. RAJKIRAN PRINCIPAL & PROFESSOR

SRI SIVANI COLLEGE OF PHARMACY, CHILAKAPALEM, SRIKAKULAM

Email id: rajkiran.kolakota@gmail.com

The G20, comprising major economies worldwide, plays a pivotal role in shaping global economic policies. This study delves into the patent framework of India within the G20 context, aiming to understand its impact on long-term economic growth. Patents serve as catalysts for innovation, and recent research has shifted its focus to assess the short-term implications of patents and standards across G20 countries. However, this study uniquely pioneers an examination of the extended consequences of formal standards and patents on economic growth within the G20 nations. The patent system in India is intricately tied to procedural provisions outlined in codified rules, facilitating patent registration through standardized forms. These rules encompass three patent types, each eligible for protection, aligning with codified standards that include essential technical features. This ensures transparency and public scrutiny in specific fields of application, contributing to the overall goal of fostering technical and economic growth. The study also highlights a five-year economic report showcasing the increasing number of patent applications filed in India, underscoring the nation's commitment to innovation and its role as a key player in the global economic landscape within the G20 framework.

# CO-173 AN OVERVIEW OF MEDICINAL PLANTS AND THEIR PHARMACOLOGICAL SCREENING FOR HAEMORRHOIDS IN THE ANIMAL MODEL

#### U. SRI VENKATESH

SRI SIVANI COLLEGE OF PHARMACY, CHILAKAPALEM, SRIKAKULAM

Email id: venkateshbalaji230@gmail.com

One of the most prevalent genital illnesses, haemorrhoids afflict millions of individuals worldwide and are a major Source of social, medical and economic issues. The patient experiences expensive charges as well as extremely painful Side effects. The goal of this Study was to evaluate the herbs that are used to treat haemorrhoids. Search engines including Google Scholar, SID, Scopus, PubMed, Science Direct and WOS were used to conduct thorough database Searches for those papers. To find papers that had been published and had the Search terms containing, medicinal plants and haemorrhoids in their titles, a search were conducted. The published papers and articles from 2000 to 2023 were the Subject of this investigation. The results showed medicinal plants Aloe vera, Trigonella foenum-graecum L, Nigella sativa L, Curcuma longa L, Cocos nucifera L, Solanum nigrum L., Alhagi persarum Boiss and Buhse, Plantago lanceolata L, Achillea santolina, Malva neglecta Wallr, Rubus fruticosus L have effects like antibleeding, analgesic, anti-inflammatory and wound-healing and with haemorrhoid-healing effect. Generally Speaking, the traditional Iranian culinary plants under investigation are rich in a variety of chemical compounds and offer unique advantages in the diagnosis and treatment of illnesses. A

review of herbal treatments for haemorrhoids is reported in the current study. Each plant used in traditional medicine was researched for any potential associated scientific evidence.

## CO-174 REGISTRATION STEPS FOLLOWED FOR FILING OF BIOSIMILARS IN REGULATED AND EMERGING MARKETS

#### S. LIKITHA. ASST.PROFESSOR

SRI SIVANI COLLEGE OF PHARMACY, CHILAKAPALEM, SRIKAKULAM Email id: savalapurapulikitha0313@gmail.com

The main aim is to facilitate the regulatory requirements for the approval process of Biosimilar in Regulated and Emerging markets by establishing the foundation for a harmonized regulatory standard to meet common demands of a region. 'Biosimilar' denotes a biological medicine which is highly similar to an already authorized reference biological medicine and also referred to as Bio therapeutic products, Follow on biologics, Subsequent entry biologics, with respect to different Ministry of health. Depends on type of country regulations, and approval process of generic version of biopharmaceuticals is specified. In Health Canada these are approved under new drug submission, In European Union, Centralized Procedure is mandatory for Biosimilar and fall within the scope of Regulation EC 726/2004; Food drug & administration is still in the process of developing guidelines regarding these types of products. Till now case by case approval process is going on in United States. 505 (b) (2) under Food Drug and Cosmetic Act, Biological License Application under 351 Public Health Service Act, Biological Price Competition and Innovation Act provides the regulatory framework for application process of follow- on biologics. In Singapore these are approved under NDA-2, NDA-3 process. In India these products comes under new drugs, and follows the Biological drugs submission requirements and should be submitted in Common technical document.

# CO-175 COMPARISON STUDY FOR DRUG MASTER FILE PROCEDURE IN USA & CANADA WITH REGARD TO REGULATORY TECHNICALITIES

#### G. EKSHITHA.

SRI SIVANI COLLEGE OF PHARMACY, CHILAKAPALEM, SRIKAKULAM Email id: ekshitha97@gmail.com

Drug Master File (DMF) is a document containing complete information on drugs and its related compounds i.e, Active Pharmaceutical Ingredient (API) or finished drug dosage form such as drug product's chemistry, manufacture, stability, purity, impurity profile, packaging of any human drug product, and it is prepared by the pharmaceutical manufacturer and it is submitted completely with its context to the respected regulatory authority to support a third party application without disclosing the information. Generally, a DMF is filed when two or more persons work in partnership or manufacturing a drug product. The DMF filing allows a firm to protect its intellectual property from its partner contexting with regulatory requirements for revealing of processing details. The pharmaceutical industry is one of the highly regulated and exciting industries worldwide with many rules and regulations enacted by government to protect the public health and well being. So without regulatory approval by

the team of medical researchers and other specialists; no drug is marketed. A drug master file comprises two parts: the Applicant's Part (Open Part), which contains all the accessible information, related to administration that the DMF holder needs to assess the quality and submit an amendment application; and the Restricted Part (Closed Part), which contains confidential information about the manufacturing procedure that only needs to be disclosed to the authorities. In USFDA, refer as Drug Master File and in Canada, referred as Master File (MF) respectively. The submission of a DMF is not required by law or FDA regulation. A DMF is submitted solely at the discretion of the holder. The information contained in the DMF may be used to support an New Drug Application (NDA), an Abbreviated New Drug Application (ANDA), Biological License Application another DMF, or amendments and supplements to any of these.

# CO-176 METHOD DEVELOPMENT AND VALIDATION FOR VITAMIN-A AND E IN EGG BY USING HPLC

#### U. UPENDRA RAO

SRI SIVANI COLLEGE OF PHARMACY, CHILAKAPALEM, SRIKAKULAM
Email id: uupendrarao@gmail.com

A simple reversed phase HPLC method was developed for the determination of Vitamin A and Vitamin E present in eggs. Reversed phase C18, 10 m (4.6 x 250 mm) with mobile phase 860 ml of methanol and 140 ml of water was used. The flow rate was 2.0ml/min and effluent was monitored at 328nm. The retention times were 11. 86 min and 12.86 min for vitamin A and vitamin E respectively. The linearity range was found to be 0.lppm to 1.5 ppm for vitamin A and 0.1 ppm to 100 ppm for vitamin E respectively. The proposed method was validated for linearity, precision and accuracy.

### CO-177 QUALITATIVE ANALYSIS OF FOOD ADDITIVES IN FOOD PRODUCTS

#### DR.G.KALYANI

TEEGALA KRISHNA REDDY COLLEGE OF PHARMACY

Email id: kallukln477@gmail.com

Food additives are the substances that are utilized for the processing of food in order improve organoleptic properity, to maintain nutritional quality and to prevent microbial decomposition and other favorable qualities. This article focuses on the qualitative determination of different colorants and preservatives have been performed through various methods. It is found that food products mostly contain a chemical preservative ,Benzoic acid is common in beverages and carbonated soft drinks due to its antibacterial activity. Colorants composed of natural pigments carotenoids that provide natural yellow orange colour and attractive red color of strawberry due to anthocyanin compound called pel-3-glu and cyanidin-3-glucoside. Curcumin is a Phyto polyphenol are used to attract the food products. They also contain anthocyanin. Curcumin is a Phyto polyphenol with a variety of pharmacological properties. Curcumin gives yellow color to turmeric due to the presence of anthocyanin and carotenoids. These Food additives were

determined qualitatively in marketed food products beverages, jellies and turmeric powder according to the procedures mentioned in the literatures with different methods like titrimetric analysis, thin layer chromatography, paper chromatography, etc. and the values were recorded and compared with the standard.

# CO-178 MECHANISTIC UPDATE ON TRISENOX IN BLOOD CANCER K.USHARANI, MOHAMMAD AFSHA SANA,T.K.TARUN

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: aslamarshi115@gmail.com

This abstract provides a mechanistic update on trisenox, exploring its potential implications in blood cancer. Through an in-depth analysis of its molecular interactions and pathways, we unveil novel insights into trisenox's mechanisms of action and its impact on cancer cell behaviour. Acutepromyelocytic leukemia (APL)/blood cancer is M3 type of acute myeloid leukemia (AML) formed inside bone marrow through chromosomal translocation mutation usually between chromosome 15 & 17. It accounts around 10% cases of AML worldwide. Trisenox (TX/ATO) is used in chemotherapy for treatment of all age group of APL patients with highest efficacy and survival rate for longer period. High concentration of TX inhibits growth of APL cells by diverse mechanism however, it cures only PML-RARα fusion gene/oncogene containing APL patients. TX resistant APL patients (different oncogenic make up) have been reported from worldwide. This review summarizes updated mechanism of TX action via PML nuclear bodies formation, proteasomal degradation, autophagy, p53 activation, telomerase activity, heteromerization of pRb & E2F, and regulation of signaling mechanism in APL cells. This update contributes valuable information for further understanding the therapeutic potential of trisenox in the context of blood cancer treatment.

# CO-179 MEDICINAL PLANTS AND BIOACTIVE COMPOUNDS USED IN TREATMENT OF POLYCYSTIC OVARY SYNDROME(PCOS)

#### SUVARNA ALADAKATTI

NALLA NARASIMHA REDDY GROUP OF INSTITUTIONS

Email id: s9391036446@gmail.com

Polycystic ovarian syndrome (PCOS) is distinguished by uneven menstrual cycle—and it is aneuroendocrine metabolic disorder. Therapy for this disorder is done utilizing manmade drugs that are efficacious. Patients inspired by natural remedies used for effective therapeutic results with natural drugs in treating PCOS and the restraint of allopathic medicines. The perspective in important natural remedies, it's considered that the role of—various plants and bioactive compounds in PCOS. We have discussed importance of natural medication in curing PCOS their chemical mixture and mechanism of action in herbal drugs and bioactive compound in this review article. Researchers working and understanding the role of natural medicine in PCOS can get a help from this article which can be resource of good information.

#### CO-180 HERBAL FACE CREAM OVERVIEW

### DHARAVATH AHALYA,LAGUSANI.YASHWANTH GOUD,SUNKARA RENUKA DEVI, SHANKARAIAH PULIPAKA, M. RAVI KUMAR, DR. BHARATH BHUSHAN

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: dharavathahalya@gmail.com

This is an in-depth examination of face creams, exploring their purposes, components, and many revenue streams. Herbal face creams are essential to skincare routines since they provide several advantages for the skin of the face. They are designed to replace moisture, moisturize, and nourish the skin, preventing dryness. Additionally, they serve as a barrier of defense, defending the skin from environmental aggressors like pollution and UV rays. They also help to improve the texture, tone, and elasticity of the skin, giving the appearance of more youthful and radiant skin. The components of face creams vary according to their particular properties, Hyaluronic acid and glycerin are examples of humectants found in moisturizing face creams; these substances draw and hold moisture to the fine lines, wrinkles, and age spots on the skin. Sunscreen-infused face lotion lowers the chance of developing skin cancer and protects against damaging UV radiation. When selecting a face cream, those with acne-prone skin types should look for formulas that are lightweight and oil-free. It is important to take into account variables like sensitivity, allergies, and certain skin conditions while selecting a face cream. To verify compatibility and efficacy, it is advised to do the patch test and speak with dermatologists.

### CO-181 PREPARATION AND EVALUATION OF MULTIPURPOSE CREAM

### SUNKARA RENUKA DEVI,DHARAVARH AHALYA, LAGUSANI YASHWANTH GOUD, SHANKARAIAH PULIPAKA, M. RAVI KUMAR, DR. BHARATH BHUSHAN

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: sunkararenukadevi142@gmail.com

Herbal formulations are preparations that consumers apply to improve their looks. These goods are made from plant components, and the demand for herbal items has skyrocketed in the twenty-first century as consumers become more aware of the uses and consequences of cosmetics. Creams are the most used herbal formulations. These are applied on the skin with friction. Creams are prepared from the herbal extracts of Aloe barbadensis miller, Ocimum tenuiflorum, Curcuma longa, and others. A variety of pharmaceutical properties, including viscosity, spreadability, rheology, pH, electrical conductivity, and stability, were assessed for the cream. They also act as a barrier of defense, protecting the skin from UV radiation and other environmental aggressors. The current study found that herbal creams are a valuable treatment for typical dermatological issues that result in acne, inflammation, localized infections, and anti-aging products.

### CO-182 DESIGN AND DEVELOPMENT OF KETOCONAZOLE NANOSPONGES LOADED GELS FOR TOPICAL DRUG DELIVERY

#### MEGHANA PARASARAM \*, DR . V. SAIKISHORE

BAPATLA COLLEGE OF PHARMACY

Email id: meghanaparasaram@gmail.com

The aim of present research work is to develop a topical gel formulation of Ketoconazole loaded nanosponges to increase the solubility, permeability, stability and to control the Ketoconazole release for a prolonged period. Ketoconazole loaded nanosponges was prepared by cross-linking different concentrations of β- Cyclodextrin with carbonate bonds of di phenyl carbonate in different proportions, which are porous as well as nano sized. Drug was incorporated by solvent evaporation method by dissolving the drug in various solvents like ethanol, acetone and chloroform. The prepared nanosponges were incorporated into carbopol gel. From the encapsulation efficiency of the drug loaded nanosponges formulations, it was observed that as the crosslinking ratio increased the encapsulation efficiency was found to be enhanced. It is also found that the encapsulation efficiency of drug loaded nanosponges were influenced by the solvent used for drug loading by solvent evaporation technique. Based on the drug encapsulation efficiency, drug content and extent of sustained nature, the gel prepared with β- Cyclodextrin and crosslinking agent in 1:1 ratio, chloroform as a solvent and carbopol as a gelling agent (KF12 formulation) was concluded to be the best formulation. All the formulations followed zero order release kinetics and mechanism of drug release was governed by Peppas model. The diffusion exponential coefficient(n) values were found to be in between 0.1202 to 1.1864 indicating non fickian diffusion mechanism.

# CO-183 A FIVE-YEAR RETROSPECTIVE STUDY ASSESSING ANTIMICROBIAL SENSITIVITY PATTERN AND FINANCIAL EXPENSES AMONG DIABETIC FOOT ULCER PATIENTS IN A RURAL SETTING OF SOUTH INDIA

### KASULA UZMA KOUSAR<sup>1</sup>, B. SAHITHI<sup>2</sup>

- <sup>1</sup> RESIDENT INTERN, DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU- 515721, ANDHRA PRADESH.
- <sup>2</sup> ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU- 515721, ANDHRA PRADESH.

#### Email id: kasulakousar78@gmail.com

Diabetic foot ulcers (DFU) are among the most frequent consequences of diabetes mellitus (DM) and if untreated, can result in amputation, infection, and even death. This was a retrospective and the study was conducted in hospital having the duration of 6 months and the study population included Patients of both genders from age group above 18 and below 80, diagnosed with Diabetic Foot Ulcers from 1st grade to 5th grade of Wagner Meggitt classification who had undergone detailed examination, routine investigations and treatment in the surgical ward during the time period of January 2018 to December 2022 were included in our study .Patients with Neurological Pathologies, Immunosuppressed patients, ICU critical cases & comatose patients

were excluded from our study. Psychologically ill patients, pregnant women and paediatrics were excluded in this study. The sample size was set to be total 201

There were 201 people treated for DFU overall between January 2018 and December 2022. Patients average ages ranged from 48.5 to 48.5 years; the youngest were 18 and the oldest were 79. Out of 201 patients, 148 (73.6%) were men and 53 (26.36%) were women. The age categories of those over 48 and 58 had the highest prevalence of ulcers (25.0%). The age group over 58 had the highest debridement frequency (40.21%). The most isolated bacteria were Klebsiella Pneumoniae (15.44%) followed by Escherichia coli (14.47%) and Staphylococcus aureus (13.65%), pseudomonas aeruginosa (10.76%), proteus mirabillis (8.54%), streptococcus pyogen (4.05%). The three bacteria that were most frequently isolated from diabetic foot ulcers were Staphylococcus aureus, E coli, and Pseudomonas sp. Additionally, vancomycin was the antibiotic with the highest level of sensitivity, followed by gentamicin, meropenem, and chloramphenicol. The most resistant medications were ampicillin, amoxycillin/clavulanic acid, cefadroxil, and azithromycin/erythromycin.

## CO-184 DESIGN AND DEVELOPMENT OF FLOATING TABLETS OF METOPROLOL TARTARATE

B. MOUNIKA \* DR. V.SAIKISHORE

**BAPATLA COLLEGE OF PHARMACY** 

Email id: mounikabudatiepu@gmail.com

The present study was to prepare a gastro retentive drug delivery system of Metoprolol Tartarate floating tablets, was designed to increase the gastric residence time, thus prolong the drug release. The different type formulations were prepared by using Losartan Potassium. Gum kondagogu

, Moringa oleifera, Gum karaya, Micro crystalline cellulose, Sodium bicarbonate, Hcl, Talc, Magnesium stearate. In the present study Sodium bicarbonate was incorporated as a gas generating agent. The Floating tablets were evaluated for pre compression and post compression parameters are solubility, uniformity of weight, hardness, friability, drug content, dissolution studies. The drug release profile and floating properties was investigated. The prepared tablets exhibited satisfactory physico-chemical characteristics. From the study it is concluded that the developed formulation has good appearance with good handling condition, therapeutically efficacious and stable.

## CO-185 PERSONALISED MEDICINE: AN EMERGING PHARMACEUTICAL TREND MANASA REDDY, VENUTURUPALLI KEYURA

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: singireddy.manasa3@gmail.com

Personalized medicine, also known as precision medicine, is a rapidly evolving field that aims to tailor medical treatments to the individual characteristics of each patient. By using genetic information, lifestyle factors, and other data, personalized medicine has the potential to greatly improve patient outcomes, reduce adverse effects, and lower healthcare costs. The International Consortium for Personalised Medicine (ICPerMed) has outlined a vision for how personalized medicine will transform healthcare by 2030. This vision focuses on five main perspectives:

informed and empowered citizens, informed and empowered healthcare providers, healthcare systems that enable personalized medicine, available health-related information for optimized treatment, and economic value by establishing the next generation of medicine. To achieve this vision, ICPerMed has identified several key challenges that must be addressed. These include the need for strong investment in research and innovation, the development of adequate regulatory frameworks and data management protocols, the integration of personal health data from a variety of sources, and the establishment of inter-sectorial synergies between healthcare, research, and other sectors that influence health outcomes. Despite these challenges, personalized medicine holds great promise for improving healthcare and transforming the way that medical treatments are developed, delivered, and paid for. By working together, stakeholders from across the healthcare ecosystem can help to realize this vision and create a future where personalized medicine is a reality

# CO-186 A COMPARATIVE STUDY OF MOLECULAR DOCKING AND INVITRO DIFFUSION STUDIES TO SELECT THE SUITABLE VEHICLE FOR IMPROVING THE ORAL BIOAVAILABILITY OF ATENOL

### CHARANYA GURRAM\*, T.E.GOPALA KRISHNA MURTHY

**BAPATLA COLLEGE OF PHARMACY** 

Email id: charanyagurram8@gmail.com

The β blocker Atenolol is having poor oral bioavailability due to its affinity with efflux transporters, and poor gastrointestinal permeability. Active pharmaceutical ingredients, natural constituents, and pharmaceutically inert excipients have been widely studied as P-gp and BCRP inhibitors. Three excipients ghee, badam oil and fenugreek oil were selected as excipients as these materials are enriched with substrates of efflux transporters. Molecular docking studies were conducted to identify the binding energy involved in between the efflux transporters such as pgp,BCRP and the components of selected oils. Badam oil was selected as suitable vehicle as it's relatively enriched with the high substrates content of efflux transporters among the other oils employed in this investigation. The diffusion of selected drug through the intestine membrane was also estimated in presence of the selected oils. Good correlation was observed between the docking score and the estimated diffusion rate from the diffusion data. These studies conclude that the molecular docking studies can be used as an alternative to the costly in vitro experimental diffusion studies to select the suitable vehicles for improving the bioavailability. Solubility studies were conducted in presence various primary and secondary surfactants. Ternary diagrams were constructed to optimise the oil: mix ratio. The optimised formulation was filled into capsule shell and subjected to various quality control tests. The blend containing badam oil: smix ratio 1:9 and smix: composed with tween 80: propylene glycol ratio 1:1Was found to be more suitable to improve the oral bioavailability of Atenolol.

# CO-187 IMPACT OF STRESS, ANXIETY, AND DEPRESSION ON CHRONIC KIDNEY DISEASE AND ITS EFFECTS ON QUALITY OF LIFE

### SHATA RUPA ROY<sup>1</sup>, S.M.G ISHRAR<sup>2</sup>

- <sup>1</sup> Resident Intern, Department Of Pharmacy Practice, Raghavendra Institute Of Pharmaceutical Education And Research (Riper) Autonomous, Anantapuramu-515721, Andhra Pradesh.
- <sup>2</sup> Associate Professor, Department Of Pharmacy Practice, Raghavendra Institute Of Pharmaceutical Education And Research (Riper) Autonomous, Anantapuramu-515721, Andhra Pradesh.

Email id: rupa2781998@gmail.com

Kidney disease is considered one of the major global public health problems affecting more than 750 million people worldwide, CKD is expected to become the 5<sup>th</sup> common cause of year of life lost. The primary objective of this study conducted at KIMS-Saveera in Anantapur, was to assess the levels of stress, anxiety, and depression among individuals diagnosed with chronic kidney disease. Focusing on 400 CKD-diagnosed participants, the research employed an online survey through Google Forms includes questions about health, the DASS-21 scale to understand mental well-being, and the KDQOL scale to evaluate the quality of life related to kidney disease. The study concluded participants had moderate levels of depression (41.3), anxiety (37.5), and stress (31.7) were found to be respectively. Notably, a significant negative correlation was observed between age and psychological health (PHC) (r=-0.198,n=400,p=0.004), indicating that as age increases, psychological health tends to decline in CKD patients. The findings underscore the importance of considering mental health factors in the overall care of individuals and emphasizing a holistic approach to address both physical and emotional well-being.

# CO-188 COMPREHENSIVE APPROACHES OF DENDRIMERS AS MULTIFUNCTIONAL NANO-CARRIERS TO COMBAT BREAST CANCER

# N. NIKITHA<sup>1</sup>, U. HIMABINDU<sup>2</sup>, P. NAGA CHANDRIKA<sup>3</sup>, Y. SHIVA KUMAR<sup>4</sup>, DR. M. RAVI KUMAR

#### GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: nikithavarma2073@gmail.com

In this abstract, I would like to discuss about the development of advanced technique of dendrimers using nano-carriers to fight against breast cancer. Breast Cancer (BC) is a highly heterogeneous malignant carcinoma that is the most frequently occurring cancer in women. The major types of BC are luminal A, basal-like, luminal B, Human Epidermal Growth Factor Receptor 2 (HER2) positive/ Estrogen Receptor (ER) negative, and Triple-Negative BC (TNBC). The conventional therapies against BC include various chemotherapeutic agents in different combinations. Along with the chemotherapeutic drugs, alternatives like hormonal therapy, radiation, and nanotechnology are emerging fields in treating breast carcinoma. Dendrimers are three-dimensional hyper-branched nanosized structures that deal with the toxicity and resistance of chemotherapeutic agents in BC. These nanocarriers can carry drugs on the surface as well as inside the cavity to the desired site. Dendrimers have high loading capacity and exhibit targeted

delivery of drugs resulting in reduced side effects. The current review discusses the utilization of dendrimers for treating BC and conquering the limitations of multidrug resistance.

#### **CO-189 THE ROLE OF PHARMACIST IN MEDICATION SAFETY**

VANISRI.M, DR.R.SRINIVASAN, DR.R. SARAVANAN
BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH,
TAMBARAM, CHENNAI, INDIA

Email id: vanisri.vs20@gmail.com

Pharmacists play a crucial role in ensuring medication safety. They assist other healthcare professionals to prevent medication errors and adverse drug reactions. One of the main responsibilities of pharmacists is to verify and review prescriptions to ensure that the correct medication, dosage, and instructions are provided. They are trained to identify potential drug interactions, allergies, and contraindications that may pose a risk to patients. Pharmacists also play a significant role in medication reconciliation, which involves comparing a patient's current prescription to the prescribed medication information. Furthermore, pharmacists instruct patients about how to use medications properly, including how much to take, possible adverse effects, and how to store them. Patients can receive resources to help them remember to take their prescribed prescriptions on time, as well as counseling on medication adherence. When patients have queries or concerns about their prescriptions, pharmacists are available to assist them. Pharmacists work with healthcare organizations to ensure pharmaceutical safety in addition to their direct patient care obligations. In the process of reporting and analyzing pharmaceutical errors, they assist in identifying flaws in the system and putting preventative measures in place. Pharmacists ensure that best practices in medication management are followed by contributing to medication safety guidelines and regulations. Ultimately, by guaranteeing precise dispensing, educating patients, and actively taking part in pharmaceutical safety activities.

# CO-190 A REVIEW ON INNOVATIVE APPROACHES FOR BRAIN TARGETED DRUG DELIVERY SYSTEM

JELLA CHAITHANYA, VADAPALLY SWETHA, ERIKAPATI NIKITHA NAGA CHANDRIKA PALLAM, DR.P NEERAJA, DR. M RAVI KUMAR

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: harshajella790@gmail.com

The leading neurological disorder in the world, Alzheimer's disease becomes increasingly common as the population ages. At the moment, significant medication side effects, immunological defects, and inadequate blood-brain barrier permeability are the primary barriers to Alzheimer's disease treatment. The three modes of administration are transporter-, adsorption-, and receptor-mediated. The leading cause of dementia in the elderly is Alzheimer's disease, which impacts 5% of Americans over 65 and 20% over 80. It is characterized by an excess of senile plaques and neurofibrilary tangles, ventricular hypertrophy, and cortical atrophy characterizes it. .. The transport mechanism might be modified by the physicochemical characteristics of the

nanoparticles under different surfactant concentrations, stabilizers, and amyloid-affinity agents. After systemic delivery, the therapeutic potential for multiple nanopharmaceuticals for AD has already been shown in vivo. We covered in detail the latest developments in the use of polymeric and lipidic nanoparticles as a medication delivery method to treat Alzheimer's disease.

#### **CO-191 RECENTLY BANNED DRUGS IN INDIA**

### KODURU SRINIJA, PULIPATI BHARGAVI GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: srinijareddy.koduru@gmail.com, bhargavi pulipati04@gmail.com

Taking medicine is a part of life for many people. However, some medicines can be harmful or even deadly, which is why the government bans them. In India, the Central Drugs Standard Control Organization (CDSCO) is responsible for ensuring the safety and efficacy of medicines. It also maintains a list of banned medicines that are no longer allowed to be manufactured, sold, or used in the country.

To safeguard public health and ensure the safety and efficacy of medications, the Indian government periodically bans certain drugs. This article provides a comprehensive guide to the list of banned medicines in India as of 2023, with a focus on clarity and accessibility for the public.List of Banned Single Drugs:

Amidopyrine

Phenacetin

Nialamide

Chloramphenicol (Except for ophthalmic and topical preparations)

Phenylpropanolamine

Furazolidone

### CO-192 A THOROUGH REVIEW ON CHRONOTHERAPEUTIC PULSATILE DRUG DELIVERY APPROACH FOR TREATMENT OF HYPERCHOLETEROLEMIA USING STATINS

V. ANUSHA<sup>1</sup>, M. S. UMASHANKAR<sup>2</sup>, Y. GANESH KUMAR<sup>3</sup>

<sup>1</sup>RESEARCH SCHOLAR, DEPARTMENT OF PHARMACEUTICS, SRM COLLEGE OF PHARMACY, SRM INSTITUTE OF SCIENCE AND TECHNOLOGY,

KATTANKULATHUR, INDIA, <sup>2</sup>DEPARTMENT OF PHARMACEUTICS, SRM COLLEGE OF PHARMACY, SRM INSTITUTE OF SCIENCE AND TECHNOLOGY,

KATTANKULATHUR, INDIA, <sup>3</sup>DEPARTMENT OF PHARMACEUTICS, KVK COLLEGE OF PHARMACY, HYDERABAD, INDIA.

Email id: anuv1709@gmail.com

Pulsatile drug delivery systems - PDDS are utilized for treatment of diseases and conditions which exhibit a circadian rhythm in their symptoms and in their disease pattern. PDDS formulations release the drug after an initial lag time such that the drug release is synchronized with circadian rhythm of disease. These patterns are suitable for disease conditions like asthma, arthritis, hypercholesterolemia, arthritis, cardiovascular disorders, epilepsy, etc. PDDS will

improve the patient compliance as they reduce the dosing frequency of medication, hence they are gaining a lot of attention in pharmaceutical market. The synchronization of the circadian rhythms and medicinal treatment is considered as Chronotherapy, in simpler terms it is time based therapy. These circadian rhythms have a huge role in hepatic cholesterol synthesis and it is explained that synthesis of cholesterol is habitually raised during night when compared to day and extreme production of cholesterol occurs during early morning which is designated as 12 hours after last meal. Research Study indicates that drugs like Hydroxymethylglutaryl-CoA reductase inhibitors-examples; atorvastatin, lovastatin, simvastatin, pravastatin, etc are used for preventing cholesterol synthesis and they are used for hypercholesterolemia treatment. These drugs are more effective as evening dose when compared to morning dose. The research indicates and recommends that statin medication could be administered during the evening meal and bed time such that the drug release will be in coordination with circadian rhythm of cholesterol; synthesis.

### CO-193 SYNTHESIS METHOD OF 5-(3,3-DIMETHYLOXIRAN-2-YL)-3-METHYLPENT-1-EN-3-YL ACETATE

1PRAKASH DAS, 1RUBI SINGH, 1RAMA S. LOKHANDE, 2PRADEEP KUMAR SWAIN
1SCHOOL OF BASIC SCIENCES, DEPARTMENT OF CHEMISTRY, JAIPUR NATIONAL
UNIVERSITY, JAIPUR (RAJASTHAN),

2MEDESSE LABORATORIES PRIVATE LIMITED, HYDERABAD (TELANGANA). PLACE OF WORK: MEDESSE LABORATORIES PRIVATE LIMITED

Email id: dasp8022@gmail.com

**5**-(3,3-dimethyloxiran-2-yl)-3-methylpent-1-en-3-yl acetate was synthesized by the epoxidation of Linalyl acetate using m-Chloroperbenzoic acid (m-CPBA) in Dichloromethane (DCM) as solvent at cooling condition. This product was monitored by Thin layer chromatography (TLC) and characterized by NMR, Mass Spectra and IR. Linalyl acetate is the key starting raw material in synthesizing of Cannabidiol.

#### **Scheme:**

(Linalyl Acetate) (5-(3,3-dimethyloxiran-2-yl)-3-methylpent-1-en-3-yl acetate)

# CO-194 PREPARATION AND OPTIMIZATION OF VILDAGLIPTIN CONTROLLED RELEASE TABLETS

#### DR. Y. GANESH KUMAR

KVK COLLEGE OF PHARMACY.

SURMAIGUDA (V), ABDULLAPURMET (M), RANGA REDDY DISTRICT

Email id: ganesh.yed@gmail.com

The concurrent investigation of this revision hoisted to advance Vildagliptin CR Tablets. Drug excipient compatibility readings by FT-IR accessible substantiation nearby their transparency besides exhibited nope interface about drug moreover certain adjuvants. Several initiations remained advanced through consuming declaration percentage regulatory making adjuvants a like HPMC-K100M, Eudragit RSPO and Guar gum through Wet granulation method. Since amongst exclusively the well-known formulation is VG-8 invention thorough the drug release for extensive era of equated to further designs. So VG-8 remained particular as the exceptional formulating. It remained determined that the proclamation examined zero order kinetics.

#### CO-195 PHARMACOVIGILANCE'S PURPOSE IN PUBLIC HEALTH

S. SHOWBHARNIKHAA, M.K. VIJAYALAKSHMI, DR R. SARAVANAN
FACULTY OF PHARMACY, BHARATH INSTITUTE OF HIGHER EDUCATION AND
RESEARCH SELAIYUR, TAMBARAM CHENNAI

Email id: showbharnikhaas@gmail.com

Pharmacovigilance, which methodically monitors and evaluates the safety of pharmaceutical products, is essential to protecting public health. Pharmacovigilance's main goals are to identify, assess, comprehend, and avoid side effects and other issues associated with drugs.

Pharmacovigilance is the process of gathering and evaluating information from patients, healthcare professionals, and regulatory bodies to identify possible dangers related to pharmaceuticals and to guarantee prompt response to minimize harm. This proactive strategy improves patient safety and advances the ongoing enhancement of healthcare results. Pharmacovigilance data is used to help healthcare providers make educated prescription decisions in addition to providing information that influences regulatory decisions. In the end, pharmacovigilance is essential to preserving the careful equilibrium between the advantages and disadvantages of pharmacological medicines.

### CO-196 FORMULATION AND EVALUATION OF NANO PARTICULATE DRUG DELIVERY SYSTEM

#### **GOUTHAMI THUMMA**

KAKATIYA UNIVERSITY OF PHARMACEUTICAL SCIENCES

Email id: gouthamithumma19@gmail.com

This research delves into the design, development, and evaluation of a nano-particulate drug delivery system with a specific focus on enhancing the bioavailability of Bicaltumide and Methotrexate. The study employs a cutting-edge approach by incorporating silver nanoparticles

into the formulation. Bicaltumide, commonly prescribed for prostate cancer, and Methotrexate, a crucial agent in autoimmune disorder management, often face challenges related to limited bioavailability, impacting their therapeutic effectiveness. The methodology involves the utilization of silver nanoparticles as carriers for the targeted delivery of these drugs. Silver nanoparticles are chosen for their unique properties, including high surface area and tunable surface chemistry, which can enhance drug solubility and stability. The synthesis and characterization of the nano-particulate drug delivery system are meticulously conducted, ensuring optimal particle size, shape, and surface properties to facilitate efficient drug loading and controlled release. In vitro studies assess the release kinetics of Bicaltumide and Methotrexate from the silver nanoparticle-based delivery system, providing insights into the controlled release profiles. Furthermore, in vivo evaluations are performed to investigate the pharmacokinetics and therapeutic efficacy of the developed nano-formulation. The incorporation of silver nanoparticles aims to not only enhance drug bioavailability but also leverage the antimicrobial and antiinflammatory properties associated with silver, potentially providing additional therapeutic benefits. The outcomes of this research are anticipated to contribute to advancements in drug delivery technology, offering a promising avenue for improving the therapeutic outcomes of Bicaltumide and Methotrexate in the treatment of prostate cancer and autoimmune disorders.

### CO-197 A OVER ALL REVIEW OF RILUZOLE IN THE TREATMENT OF LOU'S GEHRIG'S DISEASE

## S. RAVIKUMAR\*, T. ASWINI, M.K.VIJAYALAKSHMI, Dr. R.SARAVANAN, Dr.R. SRINIVASAN

BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH- FACULTY OF PHARMACY. CHENNAI, TAMILNADU.

Email id: proravi07@gmail.com

It is a neurodegenerative disorder which is also termed as the Amyotrophic Lateral Sclerosis (ALS). A nervous system disease that weakens muscles and impacts physical function. In this disease, nerve cells break down, which reduces functionality in the muscles that they supply. ALS is a type of motor neuron disease. As motor neurons degenerate and die, they stop sending messages to the muscles, which causes the muscles to weaken, start to twitch (fasciculations), and waste away (atrophy). Eventually, the brain loses its ability to initiate and control voluntary movements. Thus this may be due to the mutations in the several genes, the main moa of the ALS, the neurons get damaged by the neurotransmitter termed as Glutamate. Excessive use of glutamate results in the atrophy of neurons and leads to poor electric impulses throughout the nervous system. This can be treated with the class of benzothiazole drugs called Riluzole. It inhibits the glutamate binding with the NMDA and Kainate receptors, then formation and release of glutamate from the vesicles at the synapse. There is no cure for the ALS, but the Riluzole may slow progression of ALS but does not cure it. It reduce the mortality and increase the life span of the affected individuals.

## CO-198 FORMULATION AND EVALUATION OF GASTRORETENTIVE DRUG DELIVERY SYSTEM OF AN ANTIHYPERTENSIVE DRUG – TELMISARTAN

#### JYOTHI M

### BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH

Email id: jyothi.epcp@gmail.com

The main objective of this research was to prepare a Floating Drug Delivery System of an Antihypertensive Drug - Telmisartan. The floating tablets of Antihypertensive drug were prepared by direct compression method (effervescent method) using Hydroxy propyl methyl cellulose (HPMC), Polyethylene oxide polymers. The physicochemical parameters like precompression and post compression evaluations were performed as per Pharmacopoeial standard and the compatibility study was performed by FTIR methods. The release data were subjected to different release kinetic models. The compatibility study of the prepared floating tablets implies the information about the compatibility between drug and polymer. HPMC K4M showed better sustained release properties. The floating lag time were found to be significantly increases with the increasing concentration of the polymers. The drug release kinetics was observed by Nonfickian diffusion mechanism. After the dissolution study of prepared floating tablets, it was concluded that the formulations with HPMC K4M showed better sustained release effect than HPMC K100M and Polyox303 in 12hrs. The release kinetics data implies that the release mechanism of the all formulations was Non-fickian. The developed floating tablets of Anti hypertensive drug drug may be used in clinic for prolonged drug release for at least 12hrs, thereby improving the bioavailability and patient compliance.

# CO-199 DESIGN FORMULATION DEVELOPMENT AND EVALUATION OF KETOROLAC EXTENDED RELEASE TABLETS

NITTALA SESHASARVANI<sup>1</sup>, Y. GANESH KUMAR<sup>2</sup>, V. ANUSHA<sup>3</sup>

1, 2, 3 DEPARTMENT OF PHARMACEUTICS, KVK COLLEGE OF PHARMACY,
HYDERABAD, TELANGANA, INDIA.

Email id: nittalasarvani@gmail.com

The present study aimed to Formulate and Evaluate the Extended release tablets of Ketorolac to achieve an extended drug release with reduced frequency of drug administration, reduced side effects and improved patient compliance. Extended release tablets of Ketorolac were formulated by using ethyl cellulose, Eudragit S100, L-100 polymers and the dissolution profiles of extended release tablets were investigated. Tablets were prepared by using wet granulation method. All the batches were evaluated for Pre-Compression such as bulk density, Tapped density, Hausner ratio compressibility Index, Angle of Repose Post Compression Parameters such as weight variation, hardness, thickness, Friability and content uniformity. By observing Dissolution data the F4 Batch tablets shows better extended release property among the all batches so we concluded that F4 Batch (Drug: Polymer- 1:1) was best formulation and it is having better compatibility.

# CO-200 EXPLORING THE THERAPEUTIC POTENTIAL: HERBAL OINTMENT WITH ACHYRANTHES ASPERA LINN LEAF AND ROOT EXTRACTS FOR WOUND HEALING

## ASWINI.T\*,RAVIKUMAR.S,SARAVANAN.R, M.K VIJAYALAKSHMI, SRINIVASAN.R FACULTY OF PHARMACY, BIST-BIHER, CHENNAI 73.

Email id: achunila2002@gmail.com

Wounds are inescapable events in life. Wounds may arise due to physical, chemical or microbial agents. Wound healing is a process by which tissue regeneration occurs. Many herbs have proved to possess significant prohealing properties in different types of wounds. The aim of the study was investigate wound healing activity of herbal ointment containing leaf and root extract of Achyranthes aspera Linn. Herbal ointment containing methanol extract of leaf and root was formulated and tested for pro-wound healing activities. The extract (1, 3 and 5 g) was incorporated into 10 g of a simple ointment base by melting and trituration to give five batches of the ointment formulation. Excision wound measuring about 152 mm<sup>2</sup> was created on the albino rats placed in groups (n = 5) and the ointment applied topically on the wounded area which was measured at intervals of 3 days until epithelialization and complete wound closure. Blank ointment base (P≤0.05) and Gentamycin ointment (2%) served as the control and standard treatments, respectively. Leaf extract containing ointment (5 g/10g- 12 days) showed the highest rate of wound closure compare to root extract containing ointment (5g/10g - 16 days) and blank (25 days). We conclude that formulating Achyranthes aspera extract ointment is effective in wound care and should be explored in harnessing the potentials of the plant in the treatment of topical diseases.

# CO-201 ELEVATING GLOBAL UNDERSTANDING AND EDUCATION TO CONFRONT THE CRITICAL CHALLENGE OF ANTIMICROBIAL RESISTANCE

T.THENMOZHI, DR. R. SARAVANAN\*, DR.R. SRINIVASAN
FACULTY OF PHARMACY, BHARATH INSTITUTE OF HIGHER EDUCATION AND
RESEARCH;

SELAIYUR, TAMBARAM, CHENNAI TAMILNADU Email id: thenmozhithamizharasan17@gmail.com

This abstract proposes a strategic approach to address the urgent and critical challenge of antimicrobial resistance (AMR) by prioritizing global understanding and education. To effectively confront AMR, it advocates for a multifaceted educational strategy spanning community awareness initiatives to advanced training for healthcare professionals. The emphasis is on creating globally accessible educational resources, leveraging technology, and fostering international collaboration. Special attention is given to addressing educational gaps in low-resource settings. The initiative aims to cultivate a nuanced understanding of AMR, incorporating diverse perspectives and encouraging interdisciplinary collaboration. By empowering individuals and communities through education, this approach seeks to mobilize a united global front against AMR, safeguarding the efficacy of antimicrobial treatments for current and future generations.

#### CO-202 TRANSDERMAL DRUG DELIVERY SYSTEMS- A REVIEW

SUSWALA LAKSHMI\*, RAGHAVENDRA KUMAR GUNDA, J.N.SURESH KUMAR RESEARCH SCHOLAR, DEPARTMENT OF PHARMACEUTICS, NARASARAOPETA INSTITUTE OF PHARMACEUTICAL SCIENCES, NARASARAOPET, PALNADU (DT), ANDHRA PRADESH

Email id: suswalaparasuramuni@gmail.com

Transdermal drug delivery system (TDDS) is an integral part of novel drug delivery system. The first transdermal system was approved by FDA in the year 1979 for the prevention of nausea, vomiting associated with travel (motion sickness). Transdermal drug delivery is the administration of therapeutic agents through intact skin for systemic effects. This system was developed to overcome the difficulties that occurred by oral route. A transdermal patch is a medicated adhesive patch that is placed on the skin to deliver controlled release of medication through the skin into blood stream. Patches are active for longer period than tablets. They improve patient compliance. In this present review we will discuss about transdermal patches and their advantages and disadvantages, the polymers which used in the delivery mechanism of TDDS. Transcutaneous permeation of drug in sufficient amount to obtain desirable pharmacological effect leads to the success of TDDS.

#### CO-203 REVIEW ON MICROSPHERES

M. HEMANTH REDDY\*, RAGHAVENDRA KUMAR GUNDA, J.N.SURESH KUMAR RESEARCH SCHOLAR, DEPARTMENT OF PHARMACEUTICS, NARASARAOPETA INSTITUTE OF PHARMACEUTICAL SCIENCES, NARASARAOPET, PALNADU (DT),

#### ANDHRA PRADESH

Email id: malehemanthreddy@gmail.com

The microspheres are one of the novel drug delivery system in which effective therapeutic alternative to conventional or immediate release single-unit dosage forms. Microspheres can be characterized as solid, diameter having between 1–1000µm.there are different types of microsphere explained. These microspheres prepared and fill them in a hard gelatin capsule or compress them directly to obtain Tablets. The microspheres which are prepared by using different technique that are changes their effectiveness and administration of the dosage form as compare to conventional dosage form. Microsphere will be evaluated by using different methods that analyses quality of the microsphere. The microspheres which will get central place in novel drug delivery in future.

## CO-204 THE USE OF ARITIFICAL INTELLIGENCE IN THE PHARMACEUTICAL INDUSTRY

### AKITHA PALLAVI ,AMRUTHA KSVN GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD

Email id: akitha884@gmail.com

Artificial Intelligence plays a very important role in revolutionizing the pharmaceutical industry. It involves explaining the basics of AI tools such as ChatGPT, Answerthepublic.AI, which is mostly used for marketing strategies. Here, the presentation explores how AI expedites drug discovery and development by analysing vast data setsand predicting potential drug candidates. It also explains how AI enables personalised treatment plan based on patient's requirements. This project further delves into AI's impact on drug manufacturing, emphasizing quality control and production optimization.

In conclusion, this topic encapsulates the multifaceted role of AI in the pharmaceutical industry, showcasing its potential to drive innovation, enhance patient care, and if it fundamentally reshapes the dynamics of pharmaceutical word.

# CO-205 ANTHELMENTIC ACTIVITY AGAINST DIFFERENT EXTRACTS OF CALOTROPIS PROCERA

#### **SUNITHA**

#### TKR COLLEGE OF PHARMACY

Email id: sunithapharma2007@gmail.com

Calotropis procera (Asclepiadaceae), a giant milk weed, is known for its pharmacological importance for centuries. The coarse shrub promising is a very source antimicrobial, anticancerous, ascaricidal, schizonticidal, anthelmintic, insecticidal, inflammatory, anti-diarrhoeal, larvicidal with many other beneficial properties. Plant is described as a golden gift for human kind containing calotropin, calotropagenin, calotoxin, calactin, uscharin, amyrin, amyrin esters, uscharidin, coroglaucigenin, frugoside, calotropagenin and voruscharine used in many corotoxigenin, therapeutic applications. Different compounds like norditerpenic esters, organic carbonates, the cysteine sterols and numerous cardenolides made protease procerain. alkaloids. flavonoids. this plant of scientific attraction for centuries. Different extracts of Calotropis procera leaves were found to possess invitro anthelmintic activity against Pheritima posthuma, using levamisole as reference standard. Dose dependent activity was observed in different extracts of plant leaves. Ethanolic extract shown better activity as compared to aqueous and chloroform extract of Calotropis procera leaves.

#### CO-206 SYNTHESIS AND EVALUATION OF CHALCONE AND THEIR DERIVATIVES

#### ARAVIND A

#### EAST POINT COLLEGE OF PHARMACY

Email id: aravindshetty2001@gmail.com

Chalcones are an important constituent of many natural sources and possess a variety of biological activities. The name "Chalcones" was given by Kostanecki and Tambor. They are the most important classes of flavonoids and iso-flavonoids across the whole edible plant kingdom. Chalcone is a fluorescent,  $\alpha$ - $\beta$  unsaturated carbonyl stable compound that contributes to the synthesis of various pharmacologically important heterocyclic structurebased derivatives. Chalcone was synthesized by using two different methods along with one derivative. The compounds were synthesized by Aldol condensation of appropriate aromatic ketones or substituted aromatic ketones with benzaldehydes or substituted benzaldehydes. Specifically, all the Chalcones were synthesized by the reaction between aldehydes and substituted acetophenones in typical base carried Claisen-Schmidt condensation. The compounds synthesized were purified by recrystallization. The determination of the structure of synthesized compounds was done by its physical properties like melting point, Thin-layer chromatography, High-performance liquid chromatography, and spectroscopic analysis like UV spectroscopy and Infrared Radiation spectroscopy.

# CO-207 A STUDY ON DRUG UTILIZATION PATTERN OF ANTIEPILEPTICS AMONG PAEDIATRICS AND RAISING AWARENESS IN PARENTS REGARDING RECURENT SEIZURES

#### Dr. FIZIA MOHAMMADI, HARSHITHA K, SANDHYA A, SNEHA NAGARI V EAST POINT COLLEGE OF PHARMACY

Email id: fiziafaizan@gmail.com

An observational study was conducted to understand the drug utilization pattern of antiepileptics among pediatrics and to raise awareness among parents about recurrent seizures. The study was conducted in the East Point Hospital and Research Center, Bangalore, and included a total of 100 patients, both inpatient and outpatient. The results showed that out of the 100 patients, 59% of males and 41% of females were affected by epilepsy. Of these patients, 28% were infants, 49% were children, and 18% were adolescents. Among the entire population, 52% of patients had febrile seizures, 27% had generalized tonic-clonic seizures, 9% had tonic seizures, 6% had clonic seizures, 3% had status epilepticus, and 3% had unprovoked seizures. According to the study, 46% of the patients were prescribed a single medication for their epilepsy, while 42% were prescribed a combination of medications. The remaining 12% of patients were not prescribed any antiepileptic drugs. Additionally, the study found that 52% of patient caretakers were aware of the seizures, while the remaining 48% were unaware of them.

#### CO-208 SCIATICA

#### **DESHETTY SNEHITHA**

CMR COLLEGE OF PHARMACY

Email id: snehitha159@gmail.com

#### **Definition:**

Sciatica refers to pain that travels along the path of the sciatic nerve. The sciatic nerve travels from the lower back through the hips and buttocks and down each leg. Sciatica most often occurs when a herniated disk or an overgrowth of bone puts pressure on part of the nerve. This causes inflammation, pain and often some numbness in the affected leg.

#### **Abstract:**

Sciatica is a debilitating condition in which the patient experiences pain and/or paresthesias in the sciatic nerve distribution or an associated lumbosacral nerve root. Often, a common mistake is referring to any low back pain or radicular leg pain as sciatica. Sciatica is specific to the pain that is a direct result of sciatic nerve or sciatic nerve root pathology. The sciatic nerve is made up of the L4 through S2 nerve roots, which coalesce at the pelvis to form the sciatic nerve. At up to 2 cm in diameter, the sciatic nerve is easily the largest nerve in the body. Sciatica pain often is worsened with flexion of the lumbar spine, twisting, bending, or coughing. The sciatic nerve provides direct motor function to the hamstrings, lower extremity adductors, and indirect motor function to the calf muscles, anterior lower leg muscles, and some intrinsic foot muscles. Also, indirectly through its terminal branches, the sciatic nerve provides sensation to the posterior and lateral lower leg and the plantar aspect of the foot. It is an important distinction to know that most cases of sciatica result from an inflammatory condition leading to an irritation of the sciatic nerve. Conversely, direct compression of the nerve leads to more severe motor dysfunction, which is often not seen, and if present, would warrant a more meticulous and expeditious workup.

#### **Results:**

Sciatica can be treated by physical therapy, medications, therapeutic injections, alternative therapies. The ultimate goal of therapy is to relieve lower back, buttock, thigh and leg pain. Restore muscle spasm. Restore function of the lumbar spine and the sacroiliac joint. Improve mobility of the lower body. Prevent future pain flareups and reduce fear associated with movement.

#### **Conclusion:**

In the majority of sufferers, the pain of sciatica resolves with time and rest. About half of patients report resolution of symptoms within six weeks. Non-surgical treatment relieves pain in 80-90% of patients. Surgical treatment should be considered in those patients with the worst of symptoms. Prevention of sciatica involves regular exercise, proper posture, and good body mechanics.

#### **CO-209 PERSONALISED MEDICINE**

#### KARAPAT SUSHMA

CMR COLLEGE OF PHARMACY

Email id: sushmakarapat@gmail.com

Personalized medicine (PM) is an approach based on understanding the differences between patients with the same disease and represents a change from the "one size fits all" concept. According to this concept, appropriate therapies should be selected for specific groups of patients. PM makes it possible to predict whether a particular therapy will be effective for a particular patient. PM will still have to overcome many challenges and barriers before it can be successfully implemented in healthcare systems. However, it is essential to remember that PM is not a medical revolution but an evolution. Methods: Three focus groups were conducted, to achieve the purpose of this study, which was to identify the barriers and facilitators existing to the implementation of PM and to highlight existing practices in European countries. Focus group discussions covered the areas of barriers and facilitators to the implementation of personalized medicine. Results: This section describes the results of the focus groups that covered the areas of barriers and facilitators of personalized medicine implementation. Conclusions: Personalized medicine faces many challenges and barriers before it can be successfully implemented in health systems. The translation of PM to European countries, differences in regulations, high costs of new technologies, and reimbursement are the reasons for the delay in PM implementation.

### CO-210 SLEEP DISORDER AND SLEEP DEPRIVATION : AN UNMET PUBLIC HEALTH PROBLEM

#### RAGINI RAUT, K.USHA

CMR COLLEGE OF PHARMACY

Email id: rautragini51@gmail.com

Clinical practice related to sleep problems and sleep disorders has been expanding rapidly in the last few years, but scientific research is not keeping pace. Sleep apnea, insomnia, and restless legs syndrome are three examples of very common disorders for which we have little biological information. A variety of medical disciplines such neurology, pulmonology, pediatrics, psychiatric, otolaryngology, nursing, as well as other medical



practices with an interest in the management of sleep pathology. This area of research is not limited to very young and old patient sleep disorders reach across all ages and ethnicities. Increasing investment in interdisciplinary somnology and sleep medicine research training and mentoring activities Validating and developing new and existing technologies for diagnosis and treatment.

# CO-211 A STUDY ON ASSESSMENT OF CLINICAL PROFILE AND QUALITY OF LIFE IN ACUTE DECOMPENSATED HEART FAILURE PATIENTS AT A TERTIARY CARE HOSPITAL

### SHAN SHAFEEN SULTANA, FAIQUA FATIMA

CMR COLLEGE OF PHARMACY

Email id: shafeensulthana9@gmail.com

Introduction: Heart failure is a widespread chronic condition globally, and acute decompensated heart failure (ADHF) is characterized by the sudden or gradual onset of heart failure symptoms requiring unplanned medical attention. This study investigates the clinical presentation, demographic characteristics, and Quality of Life (QoL) of patients with ADHF in a tertiary care hospital. Data collected through a review of admitted ADHF patients provide insights into the impact on physical and emotional well-being, potential risk factors, and complications.

Methodology: A six-month prospective observational study was conducted in a tertiary care hospital. The study included 75 patients with ADHF.

Results: The majority of patients were female (84%) and male (16%), with Diabetes and Hypertension (25.3%) being the most common past medical illnesses. Predominant presenting symptoms were shortness of breath (56%), orthopnea (41.3%), pedal edema (44%) among others. Ischemic stroke emerged as the most common complication (20%). Quality of life, assessed through the SF-36 questionnaire, showed an overall score predominantly between 51-75 (61.4%), with a mean score of 52.81.

Conclusion: The study reveals heart failure is more prevalent in females, particularly aged 56-65, with common clinical features like shortness of breath and pedal edema. Despite moderate overall quality of life, the study suggests periodic QoL assessments could improve patient management and

outcomes the results should be interpreted with caution and may not be generalizable to the broader population.

#### **CO-212 BLOCKCHAIN TECHNOLOGY**

#### NELIKANTI VAISHNAVI\*, N. MADHAVI

CMR COLLEGE OF PHARMACY

Email.id: nelikantivaishnavi@gmail.com

Blockchain technology is speeding up digital transformation in a number of sectors, including health care. The pharmaceutical sector faces several challenges, including inadequate transparency, challenges in tracing items, low trust, and the supply of outdated goods. Numerous of these issues have been resolved with the use of blockchain technology. Preventing counterfeit drugs was the most often mentioned category, which aligns with the pharmaceutical industry's main goal. Conventional systems usually store data on central servers that are vulnerable to hacking. On the other hand, blockchain disperses data among its users, making it exceedingly difficult for a single party to falsify data. Information is nearly impossible to change or remove once it is stored on a blockchain. Every block has a reference to the one before it, thus changing one block would mean modifying every other block on the network, which is practically impossible. Blockchain improves security against unwanted access by securing data using cryptographic techniques. Protecting sensitive patient data and intellectual property is especially important in the pharmaceutical sector. Blockchain records are chronological and immutable, which makes it feasible to track a product or piece of information through its whole lifecycle. This entails monitoring the source of raw materials, production methods, distribution, and even patient usage in the pharmaceutical industry. Preserving data integrity is crucial in a time when digitalization is the norm. Blockchain records that are transparent and impervious to tampering reduce the possibility of data manipulation, promoting regulatory submissions, clinical trials, and research. Pharma supply chains are global in scope and involve numerous middlemen, making it extremely difficult to track and validate each stage.

## CO-213 CRISPR-CAS9 AND GENE EDITING THERAPIES: A PHARMACIST'S GUIDE TO PERSONALIZED MEDICINE

#### A. KOVIDHA

CMR COLLEGE OF PHARMACY

Email.id: ankemkovidha@gmail.com

CRISPR-Cas9 gene editing therapies involve using the CRISPR-Cas9 system to modify or correct genes within an organism. This revolutionary technology utilizes a guide RNA to target specific DNA sequences, guiding the Cas9 enzyme to cut the DNA at the desired location. This cut triggers the cell's natural repair mechanisms, allowing for gene insertion, deletion, or replacement. In the context of therapies, CRISPR-Cas9 holds great potential for treating genetic disorders by correcting or modifying faulty genes. Researchers are exploring its applications in various medical fields, including oncology, neurodegenerative diseases, and inherited genetic conditions. While promising, challenges such as off-target effects and ethical considerations surrounding germline editing are areas of ongoing research and discussion. As the field advances, CRISPR-Cas9 continues to be a transformative tool with both potential benefits and ethical considerations.

#### **CO-214 TELE MEDICINE**

### $\mathbf{D}.$ ANUPAMA , $\mathbf{D}.\mathbf{R}\mathbf{I}\mathbf{S}\mathbf{H}\mathbf{I}$ PRAMIKA

CMR COLLEGE OF PHARMACY

Email.id: anupamadhatrikar@gmail.com

Telemedicine involves the provision of health care and sharing of medical knowledge using telecommunications technologies. Preventive, diagnostic, and therapeutic services, as well as patient education and assistance with self-management of health, can be provided via telemedicine. The Veterans Health Administration (VHA) has a wide range of telemedicine capabilities. Given limitations on studying its effectiveness, telemedicine is often applied to new patient populations without explicit evaluation of efficacy. Evaluating the potential use of telemedicine services through supporting literature from other disorders may be possible. This paper discusses applying telemedicine to the care of individuals with multiple sclerosis when few published evaluations exist in multiple sclerosis. In this paper, we provide a background on the use of telemedicine in the private sector and in the VHA, discuss the use of current telemedicine literature to management of individuals with multiple sclerosis, and review the strengths and limitations of telemedicine as a care delivery vehicle.

#### **CO-215 MICROSPHERES- REVIEW**

#### K.N.V.L. PADMAJA

NARASARAOPETA INSTITUTE OF PHARMACEUTICAL SCIENCES

Email.id: padmajakaramcheti@gmail.com

The goal of targeted drug delivery is to elevate the medication's relative concentration in the target tissues while lowering it in the non-target tissues. The drug is thereby focused where it is needed. The drug therefore has no impact on the tissues surrounding. Therefore, carrier technology such microspheres, nanoparticles, liposomes, niosomes, etc. that regulates the drug's features of release and absorption. Natural biodegradable powders with a particle size of less than 200 microspheres have garnered a lot of attention. Future drug delivery methods will heavily rely on microspheres, particularly in the areas of diseased cell sorting, diagnostics, gene & amp; genetic diseased organs and tissues in the body.

### CO-216 A NOVEL DRUG DELIVERY SYSTEM -A REVIEW ON NIOSOMES BODEPUDI SANDHYA

NARASARAOPETA INSTITUTE OF PHARMACEUTICAL SCIENCES Email.id: sandhyabodepudi836@gmail.com

Over the past several years, treatment of infectious diseases and immunisation has undergone a revolutionary shift. With the advancement of biotechnology and genetic engineering, not only a large number of disease-specific biological have been developed, but also emphasis has been made to effectively deliver these biologicals. Niosomes are vesicles composed of non-ionic surfactants, which are biodegradable, relatively nontoxic, more stable and inexpensive, an alternative to liposomes. This article reviews the current deepening and widening of interest of niosomes in many scientific disciplines and, particularly its application in medicine. This article also presents an overview of the techniques of preparation of niosome, types of niosomes, characterisation and their applications.

### CO-217 TRANSDERMAL DRUG DELIVERY SYSTEMS- AN EMPHASIS ON TRANSDERMAL PATCHES

#### AINAVALLI BHAVANI SATYA PRASAD

NARASARAOPETA INSTITUTE OF PHARMACEUTICAL SCIENCES

Email.id: ainavallibhavaniprasad@gmail.com

Transdermal drug delivery system was presented to overcome the difficulties of drug delivery especially oral route. A transdermal patch is a medicated adhesive patch that is placed on the skin to deliver a specific dose of medication through the skin and into the bloodstream. It promotes healing to an injured area of the body. An advantage of a transdermal drug delivery route over other types of delivery system such as oral, topical, i.v., i.m., etc. is that the patch provides a controlled release of the medication into the patient, usually through either a porous membrane covering a reservoir of medication or through body heat melting thin layers of medication embedded in the adhesive. The main disadvantage to transdermal delivery systems stems from the fact that the skin is a very effective barrier, as a result, only medications whose molecules are small can easily penetrate the skin, so it can be delivered by this method. This review article describes the overall introduction of transdermal patches including type of transdermal patches, method of preparation of transdermal patches and factor affecting etc.

#### **CO-218 SHORT REVIEW ON SUSTAINED RELEASE TABLETS**

#### **BHANU PRAKASH**

NARASARAOPETA INSTITUTE OF PHARMACEUTICAL SCIENCES

Email.id: yadavallibalaji39@gmail.com

Sustained-release tablets have transformed the field of drug delivery by offering controlled and prolonged release of active pharmaceutical ingredients (APIs), resulting in improved patient compliance and therapeutic outcomes. This detailed article provides an in-depth exploration of the mechanisms underlying sustained release, various formulation techniques, and the wide range of applications of sustained-release tablets. Formulation techniques for sustained-release tablets, such as matrix systems, coating systems, and microsphere systems, are extensively described. These techniques involve the dispersion of drugs within matrices, the application of polymeric coatings, and the incorporation of drug-loaded microspheres to achieve sustained release characteristics. The article also highlights the diverse applications of sustained-release tablets. They are widely used in managing chronic conditions, such as hypertension and diabetes, to maintain consistent therapeutic drug concentrations. Sustainedrelease tablets play a vital role in pain management by ensuring prolonged pain relief while minimizing risks associated with analgesic use. They are also employed in hormone therapy, including hormone replacement therapy and contraception, to maintain controlled hormonal levels. Additionally, sustainedrelease tablets are utilized in the treatment of psychiatric disorders, such as depression and bipolar disorder, to stabilize mood and enhance patient adherence. Through an extensive review of scientific literature, this comprehensive guide provides a valuable resource for researchers, healthcare professionals, and pharmaceutical industry experts. Sustained-release tablets offer a promising avenue for improving drug delivery, and their continued development and application have the potential to significantly enhance patient care and treatment outcomes.

# CO-219 APPROPRIATENESS ANALYSIS OF PROTON PUMP INHIBITOR USE AMONG GENERAL MEDICINE INPATIENTS OF A SECONDARY CARE HOSPITAL: A HOSPITAL BASED CROSS-SECTIONAL STUDY

#### **ASWATHY MELEL SOMARAJAN**

RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH Email id: achu.ash678v2@gmail.com

#### **Introduction:**

Proton pump inhibitors (PPIs) are hydrogen-potassium-ATPase inhibitors that suppress gastric acid secretion. They are among the most routinely prescribed drugs in the world due to their excellent efficacy and low risk of side effects; yet, they are frequently used inappropriately. Although extensive studies are available in Western countries on PPI appropriateness, such data from India are still very limited.

#### **Objectives:**

To analyze appropriateness of PPI prescription among general medicine inpatients.

#### Materials and methods:

This is a hospital based cross-sectional study. A total of 402 patients were participated and appropriateness was assessed primarily by using standard guidelines (FDA, NICE and ACG guidelines). Additionally, MAI assessment was performed in PPI users.

#### **Results:**

Logistic regression was performed and significant variables were observed. Strong relationships between the appropriateness of PPI usage and gender and comorbidity were shown by the logistic regression analysis, while a significant relationship between appropriateness and age was also seen. According to standard guidelines, appropriate usage of PPI was recorded highest during hospitalization (33%) and least during discharge (8%).

#### **Conclusion:**

This study explored appropriateness of PPI prescriptions among general medicine inpatients of a secondary care referral hospital in Andhra Pradesh. Inappropriate PPI usage is still more prevalent in our country which can lead to unnecessary economic expenditure to the patients. Henceforth, it is imperative to enhance appropriate PPI prescription, particularly with regard to minimising misuse, to attain a noteworthy reduction in healthcare expenses and anticipate a decreased occurrence of possible unfavourable outcomes.

# CO-220 NANOTHERANOSTICS IN OVARIAN CANCER: AN INSIGHT C. SHRAVANI, A. NANDINI, B. BHOMIKA, DR. P.NEERAJA, DR.M.RAVIKUMAR GEETHANJALI COLLEGE OF PHARMACY

Ovarian cancer stands as the 6<sup>th</sup> most prevalent cancer among women, causing more mortalities than any other disease of female reproductive system. Due to the lack of early-stage diagnosis resulting in impairment and delay in treatment. Nano particles have been extensively explored as probes for imaging or therapy of cancer. Nano carriers including liposomes, polymer nanoparticles and polymer micelles have unique properties in surface chemistry, morphology and mechanism of action that can distinguish between cancer and normal cells. The present work includes general description of ovarian cancer and important properties of nanostructure and its types that have been used as imaging/therapeutic probe in cancer. As of now the FDA has not approved any particular targeted thernostic probe for ovarian cancer. Here, the underlying symptoms, treatment of ovarian cancer and reasons and challenges faced for nanotheronostics of ovarian cancer are discussed, along with its future prospects.

#### CO-221 THERAPY TARGETS IN GLIOBLASTOMA AND CANCER STEM CELLS

#### **DESHETTY SNEHITHA**

CMR COLLEGE OF PHARMACY Email id:Snehitha159@gmail.com

Despite intense efforts to identify cancer-initiating cells in malignant brain tumours, markers linked to the function of these cells have only very Recently begun to be uncovered. The notion of cancer stem cell gained prominence, several molecules and signalling pathways becoming relevant For diagnosis and treatment. Whether a substantial fraction or only a tiny minority of cells in a tumour can initiate and perpetuate cancer, is still Debated. The paradigm of cancer initiating stem cells has initially been developed with respect to blood cancers where chronic conditions such as Myeloproliferative neoplasms are due to mutations acquired in a haematopoietic stem cell (HSC), which maintains the normal hierarchy to neoplastic haematopoiesis. In contrast, acute leukaemia transformation of such blood neoplasms appears to derive not only from HSCs but also from Committed progenitors that cannot differentiate. This review will focus on putative novel therapy targets represented by markers described to Define cancer stem/initiating cells in malignant gliomas, which have been called 'leukaemia of the brain', given their rapid migration and evolution. Parallels are drawn with other cancers, especially haematopoietic, given the similar rampant proliferation and treatment resistance glioblastoma. Multiforme and secondary acute leukaemias. Genes associated with the malignant conditions and especially expressed in glioma cancer stem cells. Are intensively searched. Although many such molecules might only coincidentally be expressed in cancer-initiating cells, some may function in the oncogenic process, and those would be the prime candidates for diagnostic and targeted therapy. For the latter, combination therapies are. Likely to be envisaged, given the robust and plastic signalling networks supporting malignant proliferation.

# CO-222 FORMULATION AND EVALUATION OF NANOSUSPENSION OF AZELNIDIPINE KARRA GEETHA\*, <sup>1</sup>

1.ASSOCIATE PROFESSOR, CMR COLLEGE OF PHARMACY

Email id: geetabiokarra@gmail.com

The main objective of this study was to design and manufacture an azelnidipine nanosuspension for drug release. The stabilizers used are PVP K30 and Poloxomer 188. Azelnidipine nanosuspension was prepared by the precipitation method using bottom up approach. After preparation, various characterization studies such as yield, chemical content, FTIR, in vitro drug release, and SEM can be performed. The F4 formulation obtained from a separate study containing the stabilizer PVP K30 was chosen as the optimum formulation. Maximum oscillation occurs in 30 minutes. FTIR studies show a good relationship between drug and excipients.

### CO-223 CLOUDING SOLUTION A. VARSHA <sup>1 V.T</sup>. ISWARIYA<sup>2</sup> CMR COLLEGE OF PHARMACY

Email id: atlurivarsha2003@gmail.com

Cloud computing is an emerging area of computer technology that benefits form the processing power and the computing resources of many connected, geographically distanced computers connected via Internet .Cloud computing eliminates the need of having a complete infrastructure of hardware and software to meet users requirements and applications. It can be thought of or considered as a complete

or a partial out sourcing of hardware and software resources. To access cloud applications, a good Internet connection and a standard Internet browser are required. Cloud computing has its own drawback from the security point of view; this paper aims to address most of these threats and their possible solutions.

#### **CO-224 STRUCTURE BASED DRUG DESIGN**

K.USHA<sup>1</sup> S. LAHARI<sup>2</sup>, V.T. ISWARIYA<sup>2</sup> CMR COLLEGE OF PHARMACY

Email id: ushasubbu2002@gmail.com

Structure-based drug design is a wide area of identification of selective inhibitors of a target of interest. From the time of the availability of three dimensional structure of the drug targets, mostly the proteins, many computational methods had emerged to address the challenges associated with drug design process. Particularly, drug-likeness, druggability of the target protein, specificity, off-target binding, etc., are the important factors to determine the efficacy of new chemical inhibitors.

### CO-225 ANALYTICAL METHOD DEVELOPMENT AND VALIDATION FOR THE ESTIMATION OF RILPIVIRINE AND ITS N-OXIDE IMPURITY USING UPLC

### VARADA SOUJANYA 1, REVU BABY NALANDA 2 GITAM SCHOOL OF PHARMACY, GITAM (DEEMED TO BE UNIVERSITY), VISAKHAPATNAM

Email id: iswariyapharma@gmail.com

RP-UPLC method has been developed for the estimation of Rilpivirine and N-Oxide impurity using Waters UPLC Aqcuity SYSTEM with TUV detector integrated with Empower 2 Software with Kromasil (250 × 4.6 mm, 5µm) C18 column (PDA detector) was used for the present study. A mixture of 0.1% ortho phosphoric acid solution and methanol (50: 50, v/v) was used as the mobile phase for the chromatographic study (Flow rate: 1.0 ml/min; Detection wavelength: 279 nm). Stress degradation studies were performed and the method was validated as per ICH guidelines. Developed method was found to be simple, precise, robust and accurate and the method can be applied for the estimating Related Substances of any available pharmaceutical formulations. The percentage decomposition in all the degradation was found to be less than 7% indicating that Rilpivirine is highly resistant towards all degradation conditions.

### CP-101 FORMULATION DEVELOPMENT AND EVALUATION OF ORAL FILMCONTAINING ANTI DEPRESSANTS

### BALASANI PRANITHA\*, DR. S. ROHINI REDDY

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA,INDIA.

Email Id: balasanipranitha1237@gmail.com

Fluvoxamine, an antidepressant belonging to serotonin reuptake inhibitor (SRI) class, exhibits maximum absorption through the oral route of administration. The objective of current research is to formulate mouth dissolving fluvoxamine films by employing super disintegrants. Fluvoxamine mouth dissolving films formulated by employing solventcasting method using HPMC E15, eudragit RL100, and PEG 4000. FF15 with a maximum tensile strength of 55.63  $\pm$  1.37 mg, least disintegration time of 10  $\pm$  1.85 seconds, and highest drug release of  $98.29 \pm 1.87$  % is chosen as an optimal formulation with maximum content uniformity and folding endurance. From in vivo bioavailability studies, Cmax and Tmax of the fluvoxamine optimized mouth dissolving film formulation were significant (p<0.05) compared to fluvoxamine marketed formulation. AUC0-∞ infinity for the optimized formulation was higher (733.84 ± 2.04 ng.h/mL) than the fluvoxamine marketed product formulation (485.67 ± 1.54 ng.h/mL). Statistically, AUC0-t of the optimized mouth dissolving film formulation was significantly higher (p<0.05) than fluvoxamine marketed product formulation. In vivo pharmacokinetic studies in rabbits confirmed the quick release and increase in bioavailability for fluvoxamine from optimized mouth dissolving film formulation as compared to the fluvoxamine marketed product formulation.

### CP-102 THE INNOVATIVE APPROACH TO TREATING ULCERATIVE COITUS THROUGH CHRONOPHARMACEUTICS

SYEDA NAZIA JABEEN, KAVYA KATA, GUNDLAPALLY YOKSHITA, BURGULA EUNICE, P. NAGA CHANDRIKA, DR. P. NEERAJA, DR. M. RAVIKUMAR.

GEETHANJALI COLLEGE OF PHARMACY, CHEERYAL

The current advances in chronobiology and the knowledge gained from chronotherapy of elected disorders explosively suggest that "the one size fits each at all times" approach to medicament delivery is no longer substantiated, at least for opted bioactive agents and disease curative. Ulcerative colitis (UC) is a long-term relapsing and blinking gastrointestinal illness of uncertain etiology. The pathogenicity of ulcerative colitis is believed to be an aberrant susceptible response in which antibodies are formed against colonic epithelial protein(s). The last two decades have seen an expansion in the remedial magazine used to treat UC. This has resulted in bettered clinical remission and response rates. Nonetheless, millions in our current medical operations appear from trials conducted in the early 20th century. This is the first large-scale gene expression study of inflamed mucosa from cases with UC treated withanti-IL23p19 remedy. These results deliver molecular evidence for mucosal recovery from a broad check of changes in transcriptions that enrich our understanding of the molecular effects of IL-23p19 inhibition in UC. In this review, we aim to outline the vital milestones in the history of the medical operation of UC in addition to promising remedial developments for the future.

## CP-103 FORMULATION DEVELOPMENT AND EVALUATION OF FAST DISSOLVING TABLETS

SATU SRUJANA\*, DR. S. ROHINI REDDY

Sarojini Naidu Vanita Pharmacy Maha Vidyalaya, Hyderabad, Telangana, India. Email: srujanasatu12@gmail.com

The patients with sudden increase blood pressure have markedly reduced function ability and extremely restless, in such cases rapid onset of action is of prime importance. So, the patients would be benefited from acute treatment by using fast dissolving drug delivery system. Telmisartan is an anti-hypertensive drug which is insoluble in water, hence the drug may be slowly or incompletely dissolves in the gastro-intestinal tract. So, the rate of dissolution and therefore its bioavailability is less (bioavailability 42%). In the present study an attempt has been made to prepare fast dissolving tablets of telmisartan by using super disintegrants croscarmellose sodium, sodium starch glycolate, level of addition to increase the rate of drug release from dosage form to increase the dissolution rate and hence its bioavailability. The tablets were prepared by direct Compression methods and the prepared blend and tablets were evaluated for their physicochemical properties and in-vitro dissolution study. The prepared tablets were assessed using FTIR spectroscopy, SEM, Pre-formulation, and postformulation evaluations are conducted for all the formulations F1-F6. Importantly, the postformulation parameters of all formulations met the established criteria for quality. The evaluation studies were performed such as weight Variation, thickness, hardness, disintegrating time, and In vitro drug Release. The disintegration time of fast dissolving tablets were increased by the addition of concentration of super disintegrants.

### CP-104 A STEPTOZOTOCIN AND NICOTINAMIDE-INDUCED DIABETIC RAT STUDY EVALUATING THE ANTI-DIABETIC EFFECTS OF ETHANOLIC ROOT EXTRACT OF POLYALTHIA LONGIFOLIA

## \*NIMMA VIJAYA REKHA, S.K. GODASU, D. VARUN, GOPINADH VUYYALA, A. SIRI CHANDANA, B. SRESHTA

SRI INDU INSTITUTE OF PHARMACY

Email: vijjy709@gmail.com

The root of Polialthia Longifolia was selected for the evaluation of antidiabetic potential in STZ-nicotinamide induced diabetic rat model. The root extract was extracted by hot percolation using ethanol as a solvent in Soxhlet apparatus and the preliminary phytochemical screening was performed and it shows that the ethanolic root extract of Polialthia Longifolia contains alkaloids, glycosides, flavonoids, and tannins.

Safety profile is essential for the drugs obtained from the plant origin. The level of toxicity can be evaluated by toxicological studies. From the results it was concluded that the ethanolic root extract of Polialthia Longifolia showed significant anti diabetic activity in a dose dependent manner compared to the standard drug glibenclamide.

The result also showed significant decrease in the liver Alkaline phosphatase (ALP), Aspartate amino transferase (AST), Alanine amino transferase (ALT), serum urea level, cholesterol, triglycerides, VLDL and LDL was in STZ-nicotinamide induced diabetic animals when compared to control group. It is concluded that ethanolic root extract of Polialthia Longifolia showed significant effect in STZ-nicotinamide induced diabetic rats. Further studies are necessary to examine the underlying mechanism of hypoglycemic effect and to isolate the active compound (s) responsible for antidiabetic activities.

### CP-105 INTELLECTUAL PROPERTY RIGHTS: AN OVERVIEW AND CHALLENGES IN THE PHARMACEUTICAL SECTOR

## SRUJAN GUNTI<sup>\*</sup> AARATHI KESAPRAGADA<sup>\*</sup>, U S V R HYMAVATHI, ARCHANA JUYAL

#### ST. PIOUS X DEGREE & PG COLLEGE FOR WOMEN

Email: hyma.svr1807@gmail.com

The pharmaceutical sector relies heavily on Intellectual Property Rights (IPR) to protect and incentivize innovation. This abstract explores the multifaceted role of IPR in this highly regulated industry. IPR, encompassing patents, trademarks, industrial designs, and copyrights, grants creators' exclusive rights to their inventions. In the globalized context, IPR facilitates international trade and is integral to the pharmaceutical industry's identification, planning, commercialization, and protection of innovations.

However, the sector faces challenges in maintaining a delicate balance between protecting intellectual property and ensuring affordable access to essential medicines. Issues such as patent evergreening and the complexities of harmonizing global IPR standards add layers of complexity. Moreover, navigating stringent regulatory affairs is essential to ensure the safety, efficacy, and quality of drugs.

The abstract highlights the need for transparency and cooperation among nations to address the intricate challenges associated with IPR. Additionally, the emergence of biotechnology and personalized medicine introduces new dimensions, demanding ethical considerations in balancing incentives for innovation with access to personalized treatments. In conclusion, IPR serves as a vital tool for the pharmaceutical sector, fostering research and development, but its effective management requires ongoing global collaboration and adaptation to evolving industry dynamics.

# CP-106 REVIEW ON HERBAL HAIR OIL: USED AS A COSMETIC PRODUCT N. DIVYA SRI\*, CH. BHARGAVI

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA, HYDERABAD, TELANGANA, INDIA.

Email: divyasri8970@gmail.com

Human hair is very important to our personalities, and we use a lot of cosmetics to take care of it. Compared to synthetic formulations, herbal formulations always have action and have fewer or no negative effects. Herbal hair oils are hair care products that are used to the hair to cure hair problems. An essential component of natural cosmetics is herbal hair oil. To maintain healthy hair and address common hair issues such baldness, alopecia, hair fall, Gray hair, dryness, and dandruff, this study reviewed the significance of polyherbal hair oil. Coconut oil, till oil, almond oil, hibiscus, and jasmine are the principal ingredients. For the sebaceous glands to continue functioning normally, all substances give vital elements such vitamins, antioxidants, proteins, terpenoids, and numerous essential oils. This review covers the procedure, evaluation tests for herbal hair oil formulations, and advantages of using herbal hair oil. The popularity of using herbal hair oil is rising steadily as people's preferences for certain types of housing evolve. Herbal essences and scents are added to hair oil, along with new Flavors and colourings. More people are interested in and use herbal hair oil for various hair conditions. Herbal goods are favoured since they are less likely to have any kind of adverse effect, which is a big concern with today's beauty products.

# CP-107 ADVANCED FORMULATION TECHNIQUES TO ENHANCE SOLUBILITY, DISSOLUTION AND BIOAVAILABILITY OF POORLY WATER-SOLUBLE DRUGS

### V. LAVANYA\* AND G. S. ANNAMMADEVI PRINCETON COLLEGE OF PHARMACY, MEDCHAL-500088.

Email: lavanyaredde@gmail.com

Bioavailability is the rate and extent (amount) of absorption of an unchanged drug from its dosage form. This is considered as a primary parameter for a drug to show maximum pharmacological response. The poor aqueous-soluble drug can exhibit poor dissolution rates and incomplete absorption resulting in poor bioavailability. The dissolution and solubility parameters of the drug are very important in developing formulation. So, different methods are employed to improve the drugs solubility such as pH adjustment, micronization, solid dispersion, Supercritical fluid recrystallization, complexation, use of surfactants, co-solvency, Precipitation, and nanotechnology etc. The main objective of this study is to give an overview of methods to enhance solubility, dissolution, and bioavailability of low aqueous soluble drugs and the importance of green chemistry in nanotechnology to produce various nanosized formulations.

### CP-108 PHARMACOMETRICS: PHARMACOTHERAPY AND DRUG DEVELOPMENT

#### DR. BHARAT BHUSAN MOHAPATRA

GEETHANJALI COLLEGE OF PHARMACY, HYDERABAD, TELANGANA, INDIA Email: drbbmohapatra07@gmail.com

Pharmacometrics is a new field of study that uses mathematical models to connect biology, physiology, and pharmacology with patient characteristics and disease states to quantify the relationship between medications and patients. To generate an individualised medication schedule, information and data collected from multiple sources are quantitatively connected. Pharmacometrics plays a crucial role in clinical decision making and can be used to prevent adverse drug reactions and interactions through pharmacokinetic modelling, as well as to optimize dosage for individual patients. The accomplishment of five "rights" is necessary for a positive clinical outcome. These rights include giving the appropriate medication to the appropriate patient at the appropriate time in the appropriate dose via the appropriate route of administration. The chemist's clinical decision-making objectives include these five rights. The selection of the appropriate dose is the most crucial factor for a successful therapeutic outcome, following the choice of the appropriate medication for a given condition. Dose individualization is crucial for safe and effective drug therapy because underdosing can lead to both therapeutic failure and, in the case of antibiotics, the emergence of pathogenic microorganism resistance, and excessive drug dosage can be toxic. The pharmacokinetics (PK) of a drug can be affected by the demographics, pathophysiological conditions, and concurrent drug administration of the patients. This can impact the drug's availability at the target site in the body as well as its amount and rate of release. To optimise the dose of a drug, variations can be considered in a quantifiable way using stepwise covariate modelling (SCM) and integrated into population pharmacokinetic (popPK) models. Thus, advances in computational power, mathematical modelling, and the ease of accessing large preclinical and clinical data sets resulted in the establishment of the quantitative systems pharmacology (QSP) field. In order to predict systemic effects, this relatively new field combines PK/PD with biophysically detailed mechanistic models of physiology. Applications for QSP are numerous and include developing and examining novel mechanistic theories of perceived

effects, identifying ideal or substitute targets, achieving confidence in the logic of existing and/or emerging targets, and in-silico modelling using computer software tools to satisfy the therapeutic and regulatory needs for new drug development and clinical judgement. Clinical pharmacometricians employ models for active therapeutic drug management in a prospective manner, which plays a crucial role in optimizing therapeutic outcomes for appropriate pharmacotherapy practice. Beyond models to simulate various trial designs and to aggregate a multitude of preclinical and early clinical data through drug exposure disease models in clinical drug development, pharmacometrics is an indispensable tool. Decide regarding the process's next steps. In certain vulnerable populations, such as children, the elderly, and patients with co-occurring diseases or medications in low- and middle-income countries (LMICs), the practice of pharmacometrics can be crucial in optimising the use of medications through precise dosing. However, because of a lack of experts, competency-related intentions, and regulatory authority support, these practices are being disregarded in LMICs. When used by a qualified clinician or researcher, pharmacometric analysis can offer arguably better insight than any other tool currently available to address these questions. For population-based pharmacometrics analysis, nonlinear mixed effect models (NONMEM) have been widely utilised. Moreover, modelling with NONMEM software is regarded as gold standard by the US FDA. Analysing data that is sparse is a distinctive feature of NONMEM provides a significant benefit to patients, such as neonates and other critically ill paediatric and geriatric patients, from whom sample collection is challenging. It is also essential to choose the right dose for these susceptible patient groups. Clinicians can design the right dosage schedule for each patient, guaranteeing the safe and efficient treatment of underlying clinical conditions, by developing PK models and establishing correlations between PK parameters and patient demographics.

## CP-109 NANOMEDICINE-BASED APPROACHES FOR IMPROVED DELIVERY OF PHYTO-THERAPEUTICS FOR CANCER THERAPY

### MACHANI SRAVANI, KOLKURI SHRUTHI, MUDDAM DEEPA, SHANKARAIAH PULIPAKA, M. RAVI KUMAR

GEETHANJALI COLLEGE OF PHARMACY

A collection of about 100 illnesses collectively known as cancer have plagued humans since prehistoric times. The prognosis for cancer patients has not changed much, even while traditional therapy approaches have improved. Thus, there is a great need for novel, efficient anticancer medications as well as alternative therapy approaches. Since ancient times, various plant components and their extracts have been utilised to treat a wide range of illnesses and alleviate physical suffering. Herbal items have been utilised worldwide in traditional medicine to cure a variety of illnesses and imbalances. It has been discovered that active ingredients in herbal medication, such curcumin, are beneficial against cancer. The field of medicine is undergoing a transformation because to advances in nanomedicine. In recent decades, significant advancements have been achieved in the production of nanocarriers. When employing these innovative nanocarriers, the therapeutic benefits of traditional medications are said to increase significantly thanks to the application of nanotechnology. Safe components such as lipids, polysaccharides, and synthetic biodegradable polymers were used to create the nanocarriers. Nanomedicines can be created as biologically active products or as drug delivery devices. According to available data, nanotechnology is one of the new and fastest-developing Nano formulations, with the greatest potential for high-tech applications.

### CP-110 PRECISION MEDICINE: A NEW VISION IN THERAPEUTICS

### SAI PRIYA\*, DR. S. HEMALATHA, DR. SHIVA RAM KRISHNA SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

Email: priya003311@gmail.com

Precision medicine, also known as personalized medicine, represents a revolutionary approach in healthcare that tailors' medical interventions to the unique characteristics of individual patients. At its core, this methodology relies on a comprehensive analysis of an individual's genetic, molecular, and clinical data to make informed decisions about their healthcare. By understanding the distinct genetic makeup and molecular signatures of patients, healthcare professionals can customize treatments, optimizing their efficacy and minimizing potential side effects. The method involves advanced technologies such as genomic sequencing, which decodes an individual's DNA to identify genetic variations associated with diseases and treatment responses. Precision Medicine endeavours to demarcate diseases using multiple data sources from genomics to digital health metrics to facilitate an individualized yet "Evidence-based" decision regarding diagnostic and therapeutic approaches. In this way therapeutics can be cantered toward patients based on their Molecular presentation rather than grouping them into broad categories with a one-size-fits-all approach.

However, the implementation of precision medicine also presents challenges. It requires sophisticated data analysis, infrastructure for genomic testing, and ethical considerations related to privacy and consent. Despite these challenges, the results of precision medicine hold the promise of transforming healthcare by ushering in an era where treatments are not only effective but also tailored to the unique genetic and molecular characteristics of each individual patient. The aim is to provide a broad overview of the advent and emergence of precision medicine in view of its current implications.

### CP-111 ANTI-DIABETIC NANO-FORMULATION FROM HERBAL SOURCE

## REDDIPALLI BHAVANA, SANDIRI SWATHI, ALLAM DIKSHITHA, SHANKARAIAH PULIPAKA, M. RAVI KUMAR

GEETHANJALI COLLEGE OF PHARMACY Email: bhavanareddipalli04@gmail.com

One of the chronic metabolic disorders that affects millions of individuals worldwide is diabetes. In addition to appropriate medicine selection and dosage, traditional medications cause unfavourable side effects in diabetics. Research using substances with natural origins is Becoming more and more popular because of their low cost, simple accessibility, and few adverse effects. Even though most biologically active ingredients are very soluble in water, their absorption capacity is often limited. Most of them have a limited absorption capacity and are unable to penetrate the lipid bilayers of cells because of their huge molecular sizes, which results in a failure to achieve bioavailability and a subsequent loss of efficacy. Solid lipid nanoparticles [SLNs], liposomes, proliposomes, nanospheres, nanocapsules, and nanoemulsion are just a few of the formulations based on nanotechnology that have given such issues new life in recent years. By making plant extracts or active ingredients more soluble, bioavailable, and effective while also lowering dosage requirements and adverse effects, combining herbal medications with nanotechnology may enhance their therapeutic benefits. Thus, the purpose of this chapter's presentation is to provide an overview of the research on the herbal formulations using nanotechnology that have been shown to be effective against diabetes.

## CP-112 GREEN CHEMISTRY IN PHARMACY: A SUSTAINABLE APPROACH FOR PHARMACEUTICAL INNOVATION

### SARODE JYOTHIRMAI BAI\*, DR. S. HEMALATHA SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

Email: sarodejyothi2004@gmail.com

This abstract provides an overview of Green Chemistry and its relevance to the field of pharmacy. Green Chemistry offers a sustainable framework for redefining traditional pharmaceutical processes, aligning them with environmentally conscious practices. In this presentation, we delve into the introductory aspects of how Green Chemistry principles can reshape. The introduction sets the stage by elucidating the critical need for integrating Green Chemistry principles into pharmaceutical practices. As the global demand for pharmaceuticals rises, so does the urgency to address environmental concerns associated with traditional manufacturing processes. This section will delve into the historical context, emphasizing the impact of pharmaceutical production on ecosystems and the imperative to transition toward sustainable methodologies.

### **CP-113 BLOCKCHAIN TECHNOLOGY**

NELIKANTI VAISHNAVI\*, N. MADHAVI CMR COLLEGE OF PHARMACY, KANDLAKOYA

Email.id: nelikantivaishnavi@gmail.com

Blockchain technology is speeding up digital transformation in a number of sectors, including health care. The pharmaceutical sector faces several challenges, including inadequate transparency, challenges in tracing items, low trust, and the supply of outdated goods. Numerous of these issues have been resolved with the use of blockchain technology. Preventing counterfeit drugs was the most often mentioned category, which aligns with the pharmaceutical industry's main goal. Conventional systems usually store data on central servers that are vulnerable to hacking. On the other hand, blockchain disperses data among its users, making it exceedingly difficult for a single party to falsify data. Information is nearly impossible to change or remove once it is stored on a blockchain. Every block has a reference to the one before it, thus changing one block would mean modifying every other block on the network, which is practically impossible. Blockchain improves security against unwanted access by securing data using cryptographic techniques. Protecting sensitive patient data and intellectual property is especially important in the pharmaceutical sector. Blockchain records are chronological and immutable, which makes it feasible to track a product or piece of information through its whole lifecycle. This entails monitoring the source of raw materials, production methods, distribution, and even patient usage in the pharmaceutical industry. Preserving data integrity is crucial in a time when digitalization is the norm. Blockchain records that are transparent and impervious to tampering reduce the possibility of data manipulation, promoting regulatory submissions, clinical trials, and research. Pharma supply chains are global in scope and involve numerous middlemen, making it extremely difficult to track and validate each stage.

### CP-114 PHARMACOGENOMICS AND PERSONALIZED MEDICINE

P. RITHIKA NAIDU, ANJALI DHEERAVATH, SHANKARAIAH PULIPAKA, M. RAVI KUMAR, T. ANOOSHA

GEETHANJALI COLLEGE OF PHARMACY

Email: rithikanaidu2004@gmail.com

The study of how a person's genetic makeup influences their reaction to medications is known as pharmacogenomics. To create safe, effective pharmaceuticals, this science merges genomics and pharmacology. Pharmacological response variations resulting from genetic variations are addressed, and by customising medication based on a patient's genotype, they have the potential to transform drug therapy. In particular, the Dutch Pharmacogenetics Working Group (DPWG) and the Clinical Pharmacogenetics Implementation Consortium (CPIC) have created established recommendations for a number of drug-gene interactions, which are publicly accessible as an online resource. However, new tools and insights into the clinical use of pharmacogenomics will be made possible by ongoing globally coordinated initiatives designed to remove the current obstacles to pharmacogenomic adoption. Scientists discover genetic loci linked to known drug responses and then test individuals whose reaction is unknown to determine if these gene variations impact an individual's drug response in the same manner as they determine gene variants linked to disorders. When investigating pharmacological action in humans, scientists primarily look at two factors: (1) the amount of a drug required to reach the intended location in the body, and (2) the degree to which the intended target cells—such as neurones or heart tissue—respond to the medication.

### **CP-115 3D PRINTING TECHNOLOGY**

## PATHURI SOUNDARYA, S. NIVEDITHA, SHANKARAIAH PULIPAKA, M. RAVI KUMAR

GEETHANJALI COLLEGE OF PHARMACY Email: soundarya03036@gmail.com

Three-dimensional printing (3DP) is a rapid-prototyping technology that uses a digital model file to construct an object through layer printing. There are several uses for this cutting-edge technology in the fields of industrial, medical, aerospace, and architecture. Though the pharmaceutical business is anticipated to undergo a 3DP revolution, the applications of 3DP technology in this field are still in their infancy. This survey of current developments in the field of 3D-printed pharmaceutical tablets serves as a resource for upcoming research projects and uses of 3DP technology in the pharmaceutics industry.

## CP-116 DEVELOPMENT OF POTENTIAL INHBITORS FOR MPRO TARGET OF SARS- COV-2: COMPUTATIONAL APPROACH

MALLICK MAIDUL ISLAM\*, V. ALAGARSAMY, M. T. SULTHANA, B. NARENDHAR, SANGEETHA DHANWAR

MNR COLLEGE OF PHARMACY, SANGAREDDY, E-mail: mallickmaidul906@gmail.com

Phytoconstituents from various herbal plants were docked with Mpro target of SARS Cov-2 and the affinity towards the receptor was calculated as binding energy (kcal/mol). Among them, four constituents showed highest binding affinity as standard N3 inhibitor. MD studies showed that all four compounds possess comparatively stable ligand-protein complexes with Mpro target compared to the N3-Mpro complex. Based on the above results, the phytochemical constituent, scaftoside (-8.7 kcal/mol) showed similar binding affinity as standard towards the target protein Mpro. ADMET studies for the top 8 highest binding energy phytochemicals showed a better safety profile. Hence, these phytochemicals can be further studied and used as a parent core molecule to develop innovative lead molecules for

breast cancer therapy.

### CP-117 OVERVIEW ON SPINOCEREBELLAR ATAXIA

### **GUGULOTH MAMATHA**

MNR COLLEGE OF PHARMACY, SANGAREDDY

E-MAIL: mamathaguguloth02@gmail.com

Spinocerebellar ataxia (SCA) is a group of inherited brain disorders. It affects your cerebellum, a part of your brain vital to coordination of physical movement, and sometimes your spinal cord. Experts have discovered more than 40 types of SCAs so far, and that number may increase. All types of SCAs have similar causes and symptoms. All SCAs display classic cerebellar signs and many display disabling noncerebellar features, most commonly brainstem dysfunction. Eye movement abnormalities are common, reflecting cerebellar and brainstem degeneration. Visual loss from retinal degeneration is rare in SCA, occurring most commonly and profoundly in SCA7. The numbers indicate the order in which experts discovered the associated mutations. In other words, SCA1 was the first type linked to an inherited chromosomal problem. SCA2 was the second, etc. The condition is usually inherited in an autosomal dominant fashion. This means that it takes only one copy of the mutated gene from one biological parent to cause the condition. Therefore, when a person with SCA has children, each child has a 50% chance of inheriting the mutated gene. Signs and symptoms of SCA usually appear after age 18 and slowly worsen over several years. Genetic testing can confirm many types of SCA. However, some types aren't associated with a specific mutation, so experts can't confirm all types of SCAs this way. here's no known cure for SCA. Treatment aims to reduce symptoms and improve functioning. There aren't any proven strategies to prevent SCA. Some families who know they carry the mutation may choose not to have children. That is the only way to prevent passing down the condition to the next generation.

# CP-118 DEVELOPMENT AND VALIDATION OF SPECTROPHOTOMETRIC METHOD FOR THE ESTIMATION OF PREGABALIN AND EPALRESTAT IN PHARMACEUTICAL FORMULATIONS

### SIREESHA D, NIKETH N, GANESH N, SAI DEEPYA P, VAISHNAVI P ANURAG UNIVERSITY, HYDERABAD

Email: ganeshenavath746@gmail.com

A simple, accurate and sensitive UV spectrophotometric method was developed and validated for the determination of Pregabalin and Epalrestat in pharmaceutical formulation for the first time. The absorbance was measured at 575nm for Epalrestat and 390nm for Pregabalin after derivatization with ninhydrin reagent using ethanol as the solvent. The method was linear in the range of  $5\mu g/ml-15\mu g/ml$  for both the drugs. The method was validated as per ICH guidelines with respect to linearity, accuracy, precision, limit of detection and limit of quantitation. The method was successfully applied for the estimation of pregabalin and epalrestat in the tablet dosage form.

### CP-119 ROLE OF AI IN DRUG DISCOVERY AND DRUG DELIVERY SYSTEM

MAMINDLA RISHITHA, MINDA KESHWARI, KAVALI SRILAKSHMI, BADHAVATH VINISHA, SHANKARAIAH PULIPAKA, M. RAVI KUMAR

GEETHANJALI COLLEGE OF PHARMACY

EMAIL: badhvathvinisha@gmail.com

Artificial intelligence (AI) in medicinal chemistry has recently gained significant attention as an implicit means of revolutionizing pharmaceutical as assiduity. Drug discovery, the process of relating and developing new specifics, is a complex and time-consuming bid that traditionally relies on labor-ferocious ways similar to a trial-and-error trial and high-outturn

webbing. Still, AI methods similar to machine literacy (ML) and natural language processing offer the eventuality to accelerate and ameliorate this process by enabling more effective and accurate analysis of large quantities of data. The part of AI to identify possible medicine-medicine relations. The individualized drug environment is also applicable, enabling the development of custom-made treatment plans that minimize the threat of adverse responses. By using AI algorithms to dissect data from large populations, they can identify trends and Patterns that can help prognosticate the effectiveness of implicit medicine campaigners for specific case Populations, which can help knitter treatments to the requirements of individual cases. One of the crucial operations of AI in medicinal chemistry is the vaticination of the efficacity and toxin of implicit medicine composites.

AI has the implicit to revise the medicine discovery process, offering Advanced effectiveness and delicacy, accelerated medicine development, and the capacity for the Development

### **CP-120 3D PRINTING IN PHARMACEUTICALS**

### **CHANDRAGOUNI POORNIMA**

HOLY MARY COLLEGE OF SCIENCE AND TECHNOLOGY

Email: chandragounipoornima@gmail.com

As we all know that the world undergoes development each day. There always an innovation and introduction of many technologies to the world. One of those technologies is 3d Printing Technology, this technology has many wide ranges of applications and benefit in the pharmaceutical industries. 3D Printing Technology can help in marking the customized and personalized doses a reality.3D Printing, also called as Additive Manufacturing (AM), is a method of creating 3d solid parts from a digital document. By utilizing additive routes, the fabrication of 3D-Printed objects can be made. These layers can be viewed as a gently cut level cross-area of the manifest object.

## CP-121 EVALUATION OF CATARACT PREVENTIVE ACTION OF HYDRO ALCOHOLIC EXTRACT OF LEAVES OF ALTERNANTHERA SESSILIS

P. USHA SREE\*, ANITHA, VEERA BABU VIJAYA COLLEGE OF PHARMACY, MUNAGANOOR

Email: ravulapallyaneetha@gmail.com

The present study has been carried out to evaluate the anticataract activity of hydro alcoholic extract of leaves of *Alternanthera sessilis* (HAAS) using in vitro model such as glucose induced cataract in lens. Fresh goat lens was collected and divided into six experimental groups in model. Lenses were incubated in artificial aqueous humour. In glucose induced model glucose was used as an inducer, vitamin E(75µg/ml) used as standard drug and extract at a dose of 100 mg/ml, 300mg/ml and 500mg/ml were incubated for a period of 72 hours at room temperature. After incubation various biochemical parameters such as total protein content, malondialdehyde (MDA) levels and enzymatic antioxidants like catalase were measured using lens homogenate. model produced mature cataract by increasing MDA levels and decreasing the protein content when compared to normal group. Results of the present study suggest that simultaneous incubation of the plant extract prevent opacification of lens caused by glucose. Thus, hydro alcoholic extract of *Alternanthera sessilis* (HAAS) protected the lens against cataract progression.

# CP-122 TO CHECK THE INVITRO ANTIMITOTIC ACTIVITY AND PERFORM MOLECULAR DOCKING STUDIES OF ISOLATED COMPOUNDS FROM HERBAL PLANT RHYCHOSIA BEDDOMEI

### **BHUMIKA PRASAD SATAM**

JSS COLLEGE OF PHARMACY, MYRSURU.

Email: bhumisatam22@gmail.com

In this article, the goal was to examine the antimitotic activity of the herbal plant Rhynchosia beddomei. The methanolic extract of Rhynchosia beddomei was screened for in vitro antimitotic activity like Allium cepa root tip assay. Molecular docking was carried out between the Bcl-2 Receptor, VEGFR-2 and bioactive compounds like apigenein, vitexin, isovitexin, quercetin, vicenin, orientin, rutin etc. Three different extracts were compared which were the methamolic extract of Rhynchosia beddomei, Methothrexate and water. Extract of Rhynchosia beddomei showed significant antimitotic activity, by decreasing rate of mitosis in comparison to water. Methotrexate (0.1 mg/mL) was used as a standard and shows highest antimitotic activity. Thus, the selected plant displayed significant antimitotic activity by showing good inhibition. Vitexin, rutin and lucenin have showed good binding affinity towards Bcl-2 and biochanin, isovitexin, orientin and apigenin have showed good binding affinity towards VEGFR-2 respectively. Molecular dynamic simulation studies showed that Bcl-2 and VEGFR-2 can act as an attractive molecular target for vitexin, rutin, biochanin, isovitexin, orientin and apigenin respectively.

## CP-123 FORMULATION AND EVALUATION OF THE RISPERIDONE SOLID DISPERSION USING DIFFERENT CARRIERS

### P. SMITHA, M. NAVYA, SHABNAM SULTANA, M. SUSHMAJA

Email: pottabathinismitha51@gmail.com

Solid dispersion (SD) is used in improving drugs' physicochemical properties including solubility and dissolution and it is considered as a smart method of pharmaceutical technology, the drug risperidone (RIS) is prescribed for the short-term management of acute manic linked to bipolar disorder in both (negative and positive) signs. RIS drug states that it has low solubility. Twenty-Eight formulas of RIS were prepared as a solid dispersion using different carrier includes poloxamer 188, polyethylene glycol 6000, polyvinylpyrrolidone(pvpk30), and poloxamer407 at different drug, by using two different preparation method. (solvent evaporation method and fusion method).

The Result indicates that, the used carriers show enhancement in drug solubility in the following rank order i.e. best drug polymer ratio. And the best preparation was solvent evaporation method, and the optimum formula is prepared by solvent evaporation method.

It can be concluded that the solid dispersion can under the selected criteria here can be

It can be concluded that the solid dispersion can under the selected criteria here can be followed to solve the problems of RIS solubility which could possibly result in better RIS bioavailability.

### **CP-124 ROLE OF HYDROGELS IN CANCER THERAPY**

P. JYOTHI<sup>1</sup>, DR.P. NEERAJA<sup>1</sup>, DR. M. RAVIKUMAR<sup>1</sup>, DR. S. NAGA LAKSHMI<sup>2</sup> GEETHANJALI COLLEGE OF PHARMACY, CHEERYAL, HYDERABAD

Email: jo.jyothi121@gmail.com

Hydrogels are water-insoluble, hydrophilic, cross-linked, three-dimensional networks of polymer chains having the ability to swell and absorb water but do not dissolve in it, that comprise the major difference between gels and Hydrogels. The mechanical strength,

physical integrity and solubility are offered by the crosslinks. The different applications of Hydrogels can be derived based on the methods of their synthesis, response to different stimuli, and their different kinds. Hydrogels are highly biocompatible and have properties like human tissues that make it suitable to be used in various biomedical applications, including drug delivery and tissue engineering. Hydrogel materials can be used as a precise and controlled drug release systems, which can continuously and sequentially release chemotherapeutic drugs. Normal cells and tissues may suffer damage from common forms of chemotherapy. In contrast to systemic chemotherapy, localized chemotherapy can reduce side effects by delivering a steady stream of chemotherapeutic drugs directly to the tumour site. This highlights the significance of controlled-release biodegradable Hydrogels as drug delivery methods for chemotherapeutics.

## CP-125 VALIDATION AND METHOD DEVELOPMENT OF ANALYTICAL METHODS AS PER ICH GUIDELINES

B. ARCHANA1, S. ESTHER1, SHAREEF1, AJAY KUMAR1, M. SATISH KUMAR2 GEETHANJALI COLLEGE OF PHARMACY, CHEERYAL, HYD.

Email: mudhirajarchana88@gmail.com

Methods need to be validated. The International Conference of Harmonization (ICH) of technical requirements for the registration of pharmaceutical for human use has developed and provided a text on validation of analytical procedures. The proposed analytical methods are simple and accurate. The advantages in it is simplicity in the sample preparation and the cost economic reagents. The contribution is the limit of detection for all the methods. Results from statistical analysis of the experimental results for all the methods were indicative of satisfactory precision and reproducibility. Simple sample preparation and the use of inexpensive reagents are the main benefits. Consequently, it was demonstrated that the suggested techniques could be effectively used to estimate the commercial pharmaceutical formulations including aspirin and rosuvastin, metolazone and spirolactone, metoprolol and olmesartan, and doxofylline and ambroxol hydrochloride. Thus, the above studies findings would be helpful to the analytical chemists to apply the analytical methods for the routine analysis of the analytes in pharmaceutical dosage forms after their approval from FDA. However, the following aspects of the method may also be tried for future analysis: HPTLC, Gas Chromatographic analysis, liquid Chromatography Coupled to Tandem Mass Spectrometry, High Performance Liquid Chromatography with Fluorescence, and Colorimetric method development.

## CP-126 THE INNOVATIVE APPROACH TO TREATING ULCERATIVE COITUS THROUGH CHRONOPHARMACEUTICS

SYEDA NAZIA JABEEN, KAVYA KATA, GUNDLAPALLY YOKSHITA, BURGULA EUNICE, P. NAGA CHANDRIKA

GEETHANJALI COLLEGE OF PHARMACY

Email: srikavya2002@gmail.com

The current advances in chronobiology and the knowledge gained from chronotherapy of elected disorders explosively suggest that "the one size fits each at all times" approach to medicament delivery is no longer substantiated, at least for opted bioactive agents and disease curative. Ulcerative colitis (UC) is a long-term relapsing and blinking gastrointestinal illness of uncertain etiology. The pathogenicity of ulcerative colitis is believed to be an aberrant susceptible response in which antibodies are formed against colonic epithelial protein(s). The last two decades have seen an expansion in the remedial magazine used to treat UC. This has

resulted in bettered clinical remission and response rates. Nonetheless, millions in our current medical operations appear from trials conducted in the early 20th century. This is the first large-scale gene expression study of inflamed mucosa from cases with UC treated withanti-IL23p19 remedy. These results deliver molecular evidence for mucosal recovery from a broad check of changes in transcriptions that enrich our understanding of the molecular effects of IL- 23p19 inhibition in UC. In this review, we aim to outline the vital milestones in the history of the medical operation of UC in addition to promising remedial developments for the future.

### CP-127 NOOTROPICS – SMART DRUGS V. SRIHAAS, S. ABHISHEK GEETHANJALI COLLEGE OF PHARMACY

Email: abhisheksikha2004@gmail.com

Nootropics, often referred to as "smart drugs" are diverse group of medical substances that act as cognitive enhancers or neuroprotective. These substances aim to improve cognitive function such as human thinking, memory, creativity and focus. They are proposed as class of psychoactive drugs that selectively improve efficiency of higher telencephalic integrative activity. Drugs, nutraceuticals, supplements, functional foods & various synthetic & semi-synthetic agents, material from natural origin such as herbs, animal products and minerals also acts as potent nootropic agents. These agents offer significant relief in various neurodegenerative disorders such as Parkinson disease and Alzheimer disease. The main features of nootropic profile consist of Enhancement of learning acquisition Resistance to impairing agents Absence of usual pharmacological effects of neuro psychotropic drugs This abstract explores the pharmaceutical consideration of nootropic agents for future perspective.

### CP-128 PERCEPTION OF PHARMACY STUDENTS TOWARDS BLENDED PEDAGOGY IN 21<sup>ST</sup> CENTURY PHARMACY EDUCATION YEDDULA VISWA TEJA<sup>1\*</sup>, MOHANRAJ RATHINAVELU<sup>2</sup>

YEDDULA VISWA TEJA<sup>1\*</sup>, MOHANRAJ RATHINAVELU<sup>2</sup>
RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU

Email id: vishwatejareddy15@gmail.com

In industrialized and developing economic countries like India, the technology transfer has significantly enhanced the quality of higher education, where the tentacles of digitalization have deeply entered education system, which opened the gateway of blended pedagogy, enabling a greater access to course content, learning preparation in peers and interactions. Across the globe, blended learning is applied in pharmaceutical education but it gained momentum in Indian pharmacy education during the global threat, COVID-19 pandemic. The current experimental study of six months duration was performed to investigate the perception of pharmacy students towards blended pedagogy in pharmacy education at undergraduate level. In the current experiment survey, a validated standard self-administered questionnaire with 28 inventories under 7 categories was administered to students pursuing undergraduate pharmacy programs in a pharmacy institute located at rural Andhra Pradesh for a period of six months, through online mode; data collection was performed in students showing willingness and further collected data was assessed through excel spreadsheet. The study observed a two-third satisfaction on an average in terms of all the indicators which influence the blended pedagogy (teacher 71.8%, course content 74.8%, technology transfer 58.7%, interactions 78.8%, and constructive knowledge 73.7%). In conclusion, our study envisaged effective student engagement, with more facilitator-student interactions and adaptability; through blended learning which enabled, enhanced and transformed students to active learners.

## CP-129 DESIGN , DEVELOPMENT AND EVALUATION OF NANOPARTICULATE DRUG DELIVERY SYSTEMS

### **GOUTHAMI THUMMA**<sup>1\*</sup>

Email id: gouthamithumma19@gmail.com

This research delves into the design, development, and evaluation of a nano-particulate drug delivery system with a specific focus on enhancing the bioavailability of Bicaltumide and Methotrexate. The study employs a cutting-edge approach by incorporating silver nanoparticles into the formulation. Bicaltumide, commonly prescribed for prostate cancer, and Methotrexate, a crucial agent inautoimmune disorder management, often face challenges related to limited bioavailability, impacting their therapeutic effectiveness. The methodology involves the utilization of silver nanoparticles ascarriers for the targeted delivery of these drugs. Silver nanoparticles are chosen for their unique properties, including high surface area and tunable surface chemistry, which can enhance drug solubility and stability. The synthesis and characterization of the nano-particulate drug delivery system are meticulously conducted, ensuring optimal particle size, shape, and surface properties to facilitate efficient drug loading and controlled release. In vitro studies assess the release kinetics of Bicaltumide and Methotrexate from the silver nanoparticle-based delivery system, providing insights into the controlled release profiles. Furthermore, in vivo evaluations are performed to investigate the pharmacokinetics and therapeutic efficacy of the developed nano-formulation. The incorporation of silver nanoparticles aims to not only enhance drug bioavailability but also leverage the antimicrobial and anti-inflammatory properties associated with silver, potentially providing additional therapeutic benefits. The outcomes of this research are anticipated to contribute to advancements in drug delivery technology, offering a promising avenue for improving the therapeutic outcomes of Bicaltumide and Methotrexate in the treatment of prostate cancer and autoimmune disorders.

# CP-130A FIVE-YEAR RETROSPECTIVE STUDY ASSESSING ANTIMICROBIAL SENSITIVITY PATTERN AND FINANCIAL EXPENSES AMONG DIABETIC FOOT ULCER PATIENTS IN A RURAL SETTING OF SOUTH INDIA

KASULA UZMA KOUSAR<sup>1\*</sup>, B. SAHITHI<sup>2</sup>

<sup>1</sup> RESIDENT INTERN, DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU- 515721, ANDHRA PRADESH.

<sup>2</sup> ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (RIPER) AUTONOMOUS, ANANTHAPURAMU- 515721, ANDHRA PRADESH.

Email id: kasulakousar78@gmail.com

Diabetic foot ulcers (DFU) are among the most frequent consequences ofdiabetes mellitus (DM) and if untreated, can result in amputation, infection, andeven death. This was a retrospective and the study was conducted in hospitalhaving the duration of 6 months and the study population included Patients ofboth genders from age group above 18 and below 80, diagnosed with DiabeticFoot Ulcers from 1st grade to 5th grade of Wagner Meggitt classification who had undergone detailed examination, routine investigations and treatment

in the surgical ward during the time period of January 2018 to December 2022 were included in our study .Patients with Neurological Pathologies, Immunosuppressed patients, ICU critical cases & amp; comatose patients were excluded from our study. Psychologically ill patients, pregnant women and paediatrics were excluded in this study. The sample size was set to be total 201 There were 201 people treated for DFU overall between January 2018 and December 2022. Patients average ages ranged from 48.5 to 48.5 years; the youngest were 18 and the oldest were 79. Out of 201 patients, 148 (73.6%) were men and 53 (26.36%) were women. The age categories of those over 48 and 58 had the highest prevalence of ulcers (25.0%). The age group over 58 had the highest debridement frequency (40.21%). The most isolated bacteria were Klebsiella Pneumoniae (15.44%) followed by Escherichia coli (14.47%) and Staphylococcus aureus (13.65%), pseudomonas aeruginosa (10.76%), proteus mirabillis (8.54%), streptococcus pyogen (4.05%). The three bacteria that were most frequently isolated from diabetic foot ulcers were Staphylococcus aureus, E coli, and Pseudomonas sp. Additionally, vancomycin was the antibiotic with the highest level of sensitivity, followed by gentamicin, meropenem, and chloramphenicol. The most resistant medications ampicillin, amoxycillin/clavulanic cefadroxil, acid. azithromycin/erythromycin.

## CP-131 PERSONALISED MEDICINE: AN EMERGING PHARMACEUTICAL TREND

### NETHALA SRAVIKA1\*KEYURA VENUTURUPALLI 2

Email id: nethalasravika@gmail.com

Personalized medicine, also known as precision medicine, is a rapidly evolving field that aims to tailor medical treatments to the individual characteristics of each patient. By using genetic information, lifestyle factors, and other data, personalized medicine has the potential to greatly improve patient outcomes, reduce adverse effects, and lower healthcare costs. The International Consortium for Personalised Medicine (ICPerMed) has outlined a vision for how personalized medicine will transform healthcare by 2030. This vision focuses on five main perspectives: informed and empowered citizens, informed and empowered healthcare providers, healthcare systems that enable personalized medicine, available health-related information for optimized treatment, and economic value by establishing the next generation of medicine. To achieve this vision, ICPerMed has identified several key challenges that must beaddressed. These include the need for strong investment in research and innovation, the development of adequate regulatory frameworks and data management protocols, the integration of personal health data from a variety of sources, and the establishment of intersectorial synergies between healthcare, research, and other sectors that influence health outcomes. Despite these challenges, personalized medicine holds great promise for improving healthcare and transforming the way that medical treatments are developed, delivered, and paid for. By working together, stakeholders from across the healthcare ecosystem can help to realize this vision and create a future where personalized medicine is a reality for all citizens.

### CP-132 RECENTLY BANNED DRUGS IN INDIA

KODURU SRINIJA1\*,PULIPATI BHARGAVI2

GEETHANJALI COLLEGE OF PHARMACY, CHEERYAL, HYD.

Email id: srinijareddy.koduru@gmail.com bhargavipulipati04@gmail.com

Taking medicine is a part of life for many people. However, some medicines can be harmful or even deadly, which is why the government bans them. In India, the Central Drugs Standard Control Organization (CDSCO) is responsible for ensuring the safety and efficacy of medicines. It also maintains a list of banned medicines that are no longer allowed to be

manufactured, sold, or used in the country. To safeguard public health and ensure the safety and efficacy of medications, the Indian government periodically bans certain drugs. This article provides a comprehensive guide to the list of banned medicines in India as of 2023, with a focus on clarity and accessibility for the public.List of Banned Single Drugs:

Amidopyrine

Phenacetin

Nialamide

Chloramphenicol (Except for ophthalmic and topical preparations)

Phenylpropanolamine

Furazolidone

Oxyphenbutazone

Metronidazole (topical application for acne)

Keywords: Amidopyrine, Nialamide, Furazolidone, oxyphenbutazone, Medicines

### **CP-133 HERBAL FACE CREAM OVERVIEW**

### DHARAVATH AHALYA1\*,LAGUSANI.YASHWANTH GOUD2,SUNKARA RENUKA DEVI3 SHANKARAIAH4PULIPAKA, M. RAVI KUMAR, DR. BHARATH BHUSHAN

DEPARTMENT OF PHARMACY, GEETHANJALI COLLEGE OF PHARMACY, CHEERYAL, HYDERABAD -501301,

Email id: dharavathahalya@gmail.com

This is an in-depth examination of face creams, exploring their purposes, components, and many revenue streams. Herbal face creams are essential to skincare routines since they provide several advantages for the skin of the face. They are designed to replace moisture, moisturize, and nourish the skin, preventing dryness. Additionally, they serve as a barrier of defense, defending the skin from environmental aggressors like pollution and UV rays. They also help to improve the texture, tone, and elasticity of the skin, giving the appearance of more youthful and radiant skin. The components of face creams vary according to their particular properties, Hyaluronic acid and glycerin are examples of humectants found in moisturizing face creams; these substances draw and hold moisture to the fine lines, wrinkles, and age spots on the skin. Sunscreen-infused face lotion lowers the chance of developing skin cancer and protects against damaging UV radiation. When selecting a face cream, those with acne-prone skin types should look for formulas that are lightweight and oil-free. It is important to take into account variables like sensitivity, allergies, and certain skin conditions while selecting a face cream. To verify compatibility and efficacy, it is advised to do the patch test and speak with dermatologists.

Keywords: Hydration, protection, daily skincare routine, healthy, nourished, youthfullooking skin.

## CP-134 AI IN ORTHOPEDIC RADIOGRAPHY: ASSESSING THE POTENTIAL FOR AUTOMATED BONEFRACTURE DETECTION

K. HANUNYA,1\*B. PHARMACY 1ST YEAR,

GEETHANJALI COLLEGE OF PHARMACY, CHEERYAL, HYDERABAD.

Email id: homiereddy@gmail.com

This study delves into the transformative landscape of orthopedic radiography analysis, specifically focusing on the prospect of artificial intelligence (AI) replacing doctors in bone fracture detection. The rapid evolution of deep learning algorithms has fueled optimism in automating diagnostic processes. Our investigation reviews current AI models dedicated to fracture detection, evaluating their performance against traditional diagnostic methods. The

analysis explores key factors such as accuracy, speed, and scalability, shedding light on the capabilities and limitations of AI in this domain. While AI demonstrates remarkable proficiency in detecting fractures from radiographic images, challenges persist in ensuring robustness across diverse patient populations and imaging variations. Ethical considerations regarding patient trust, accountability, and the role of human expertise also come to the forefront. This abstract underscore the need for a balanced approach, advocating for synergies between AI and human clinicians to enhance diagnostic accuracy and efficiency in orthopedic radiography. The study contributes valuable insights to the ongoing discourse on the integration of AI into healthcare, emphasizing the collaborative potential of technology and human expertise in advancing orthopedic diagnostics.

Keywords: Orthopedic Radiography, Automated bone fracture detection, Deep learning algorithms, Diagnostic processes, ethical considerations, patient trust, human expertise, healthcare integration.

### CP-135 EVALUATE THE ANTI-UROLITHIATIC ACTIVITY OF HYDRO-ALCOHOLIC EXTRACT OF SEEDS OF CAESALPINIA PULCHERRIMA IN ETHYLENE GLYCOL INDUCED RENAL CALCULI.

### **DR.SHEIK NASAR1\***

Email id: sheiknasar25@gmail.com

Urolithiasis is a condition in which crystals form in the urinary tract. Caesalpinia pulcherrima can be used as potential treatment agent for urolithiasis. Adult wistar male rats will be given regular food and drinking water ad libitum, Disease group were given Ethylene glycol(0.75% V/V) in drinking water is fed to induce renal calculi till 28 day. Standard treatment group was given with Ethylene glycol(0.75% V/V) in drinking water is fed and treated with a standard anti-urolithiasis drug Cystone(750mg/kg body wt) from 15th day to 28th day. The groups of Preventive Regimen were treated with Ethylene glycol(0.75% V/V) in drinking water is fed and treated with hydroalcoholic(1:1) extract of CP high dose and low dose from 1 day to 28 day. various samples like blood, urine and kidney were collected at the end of the treatment period for the analysis of different parameters. The levels of Urolithiasis promoters(calcium, oxalate, uric acid and inorganic phosphate), urolithiasis inhibitors (magnesium and citrate), BUN, Urea nitrogen, creatinine) were shown significant effect compared to disease control group. Therefore, these results reveal that Caesalpinia pulcherrima effectively inhibits the development of Ethyleneglycol induced urolithiasis in rats.

Key words: Anti-urolithiatic activity, Caesalpinia pulcherrima, Ethylene glycol, Hyperoxaluria and Kidney stones.

## CP-136 FORMULATION AND EVALUATION OF THE RISPERIDONE SOLID DISPERSION USING DIFFERENT CARRIERS.

M. NAVYA1\*, P. SMITHA2, SHABNAM SULTANA3, M. SUSHMAJA4, B. MAMATHA5

GEETHANJALI COLLEGE OF PHARMACY, CHEERYAL, HYDERABAD Email id:maddikuntanavya9876@gmail.com

Solid dispersion (SD) is used in improving drugs' physicochemical properties including solubility and dissolution and it is considered as a smart method of pharmaceutical technology. The drug risperidone is prescribed for the short term management of acute manic linked to bipolar disorder in both negative and positive signs. RIS drug states that it has low solubility. Twenty eight formulas of RIS were prepared as a solid dispersion using different

carriers includes poloxamer188, polyethylene glycol6000, polyvinylpyrrolidone(pvpk30), and poloxamer407 at different drug, by using two different preparation method. (solvent evaporation method, fusion method). The result indicates that, the used carriers show enhancement in drug solubility in the following rank order i.e. best drug polymer ratio. And the best preparation was solvent evaporation method and the optimum formula is prepared by solvent evaporation method. It can be concluded that the solid dispersion can under the selected criteria here can be followed to solve the problems of RIS solubility which could possibly result in better RIS bioavailability.

Keywords: Risperidone, solid dispersion, pvpk30, solvent evaporation, fusion method, solubility.

### **CP-137 3D PRINTING PHARMACEUTICAL TECHNOLOGY**

### MUVVALA SRI PRAHARSHITHA REDDY1\*, CHANDRAGOUNI POORNIMA2, CHITLA DIVYA3

HOLY MARY COLLEGE OF SCIENCE AND TECHNOLOGY

Emailid:muvvalapraharshitha@gmail.com,chandragounipoornima@gmail.com, divyachitla1607@gmail.com

As we all know that the world undergoes development each and every day. There always a new innovation and introduction of many technologies to the world. One of those technologies is 3d Printing Technology, This technology has many wide range of applications and benefit in the pharmaceutical industries. 3D Printing Technology can help in marking the customized and personalized doses a reality.3D Printing ,also called as Additive Manufacturing(AM), is a method of creating 3d solid parts from a digital document. By utilizing additive routes, the fabrication of 3D-Printed objects can be made. These layers can be viewed as a gently cut level cross-area of the manifest object.

## CP-138 METHOD DEVELOPMENT AND VALIDATION FOR TAMSULOSIN HYDROCHLORIDE BY ICP-MS

R V VALLI KUMARI\*

DEPARTMENT OF PHARMACEUTICAL ANALYSIS MALLA REDDY INSTITUTE OF PHARMACEUTICAL SCIENCES

Email id: kanduri.vallikumari@gmail.com

Tamsulosin Hydrochloride is a  $\alpha 1$ -adrenceptr antagonist which is specially designed for the treatment of benign prostatic hyperplasia. The elemental impurities in the Tamsulosin Hydrochloride are determined by the ICP-MS and it is also validated by the quantitative determination of trace elements. Final drug products, excipients, active pharmaceutical components and other pharmaceutical drug products are all subject to strict and acceptable limitations set out by the guideline, precipitates of metallic impurities may be identified by calorimetric techniques Analytical techniques such as inductively coupled plasma mass spectrometry (ICP-MS) may be used to analyse trace elements in biological fluids. In this, the drug test sample is prepared by using the microwave digestion and the instrument used in quadruple-based Agilent 7800 series and the yttrium and bismuth are the internal standards for the drug Tamsulosin hydrochloride. The drug is a selective  $\alpha$ -1A adrenoreceptor antagonist which is used in the treatment of benign prostatic hyperplasia. Specificity, system suitability, linearity, accuracy, and precision, as well as the method's limit of quantification, range, and durability, are all considered throughout the method's development and validation. All seven elements recovered at a rate ranging from 94% to

130%, according to the results. Precision was within 15% of the relative standard deviation, and the calibration plots were linear.

Keywords: ICP-MS, Tamsulosin Hydrochloride, Permitted Daily Exposure, Risk assessment, Microwave Digestion, Method Development and Validation.

### **CP-139 FORMULATION & EVALUATION OF POLYHERBAL SHAMPOO**

### J. SANGEETHA\*

MALLA REDDY INSITUTE OF PHARMACEUTICAL SCIENCES MAISAMMAGUDA, DHULAPALLY, KOMPALLY, SECUNDERABAD

Email id: san\_geethaj@yahoo.co.in

The present study carried out to provide a polyherbal shampoo using natural ingredient like fenugreek (methi), Azadirachta indica (neem), Acacia concinna (shikakai), Sapindus trifoliatus (Soapnut), Ocimum sanctum (tulsi), Hibiscus rosasinensis (Hibiscus), Aloe barbadensis (Aloevera). The aqueous extracts of each ingredient was prepared and formulated and evaluated by measuring the physiochemical controls such as pH, density, Viscosity, surface tension, foam volume, wetting ability. The shampoo showed significant (P<0.01) results when compared with marketed herbal shampoos. The polyherbal shampoo was formulated in view of improving the texture providing soft and manageable human hair after washing and moisturizes.

Keywords: Polyherbal Shampoo, Fenugreek, Neem, cleansing, moisturizer etc.

## CP-140 DEVELOPMENT OF CLOZAPINE TASTE MASKING SACHETS: INVITRO CHARACTERIZATION

B.RAMA\*, PROFESSOR , MALLAREDDY INSTITUTE OF PHARMACEUTICAL SCIENCES

Email id:rama2078@gmail.com

In order to treat schizophrenia that is unresponsive to therapy and reduce the risk ofsuicide in schizophrenia patients, the medicine clozapine(CLZ), an atypical or second-generation antipsychotic, is administered. The bioavailability of CLP is 60–70%, and its half-life is 8 hours. 95 % dose undergoes comprehensive and rapid primary hepatic metabolism, resulting in the formation of an imidazole group, an aromatic system, and a sulfur atom. This has an unpleasant taste and decreases CLP absorption. A SD technique was used with a number of carriers, including mannitol, PEG 6000, and beta-cyclodextrin, to boost its bioavailability and mask its taste. The solubility, melting point estimation, homogeneity of drug concentration, efficiency of the barrier, and in vitro dissolution of CLP SD study findings were given. Numerous analytical methods, including FT-IR analyses, have been used. Mannitol, PEG 6000, and –cyclodextrin ratios must be changed to compare all of the formulations, notably F1 through F9. The formulation with the highest medicine release, 98.84%, at lost of 90 minutes was F9, which contains beta-cyclodextrin (1:3) and produces better outcomes. If we compare the two release kinetics studies at zero and first orders, the ideal CLP formulation is claimed to adhere to the zero-order release kinetics research.

Keynote .clozapine, PEG 6000, beta-cyclodextrin, and mannitol

### CP-141 ANTI-DIABETIC NANO-FORMULATION FROM HERBAL SOURCE

REDDIPALLI BHAVANA, SANDIRI SWATHI, ALLAM DIKSHITHA, SHANKARAIAH PULIPAKA, DR.M. RAVI KUMAR

DEPARTMENT OF PHARMACY, GEETHANJALI COLLEGE OF PHARMACY, CHEERYAL HYDERABAD.

Email id: bhavanareddipalli04@gmail.com

One of the chronic metabolic disorders that affects millions of individuals worldwide is diabetes. In addition to appropriate medicine selection and dosage, traditional medications cause unfavourable side effects in diabetics. Research using substances with natural origins is becoming more and more popular because of their low cost, simple accessibility, and few adverse effects. Even though the majority of biologically active ingredients are very soluble in water, their absorption capacity is often limited. Most of them have a limited absorption capacity and are unable to penetrate the lipid bilayers of cells because of their huge molecular sizes, which results in a failure to achieve bioavailability and a subsequent loss of efficacy. Solid lipid nanoparticles [SLNs], liposomes, proliposomes, nanospheres, nanocapsules, and nano-emulsion are just a few of the formulations based on nanotechnology that have given such issues new life in recent years. By making plant extracts or active ingredients more soluble, bioavailable, and effective while also lowering dosage requirements and adverse effects, combining herbal medications with nanotechnology may enhance their therapeutic benefits. Thus, the purpose of this chapter \$\%#39\$; presentation is to provide an overview of the research on the herbal formulations using nanotechnology that have been shown to be effective against diabetes.

Key Words: Diabetes, Nanotechnology, Bioavailability, Nanospheres, Nanocapsules, Liposomes, Proliposomes, Solid lipid nanoparticles [SLNs], Nano-emulsion

### **CP-142 OVERVIEW ON SPINOCEREBELLAR ATAXIA**

**GUGULOTH MAMATHA\***,

DEPT. OF PHARMACY PRACTICE, MNR COLLEGE OF PHARMACY, SANGAREDDY, GR. HYDERABAD,

TELANGANA-502294

E-mail id: mamathaguguloth02@gmail.com

Spinocerebellar ataxia (SCA) is a group of inherited brain disorders. It affects your cerebellum, a part of your brain vital to coordination of physical movement, and sometimes your spinalcord. Experts have discovered more than 40 types of SCAs so far, and that number mayincrease. All types of SCAs have similar causes and symptoms. All SCAs display classic cerebellar signs and many display disabling noncerebellar features, most commonly brainstemdysfunction. Eye movement abnormalities are common, reflecting cerebellar and brainstemdegeneration. Visual loss from retinal degeneration is rare in SCA, occurring most commonly and profoundly in SCA7. The numbers indicate the order in which experts discovered theassociated mutations. In other words, SCA1 was the first type linked to an inheritedchromosomal problem. SCA2 was the second, etc. The condition is usually inherited in anautosomal dominant fashion. This means that it takes only one copy of the mutated gene from one biological parent to cause the condition. Therefore, when a person with SCA has children, each child has a 50% chance of inheriting the mutated gene. Signs and symptoms of SCAusually appear after age 18 and slowly worsen over several years. Genetic testing can confirmmany types of SCA. However, some types aren't associated with a specific mutation, so expertscan't confirm all types of SCAs this way. here's no known cure for SCA. Treatment aims toreduce symptoms and improve functioning. There aren't any proven strategies to prevent SCA. Some families who know they carry the mutation may choose not to have children. That's theonly way to prevent passing down the condition to the next generation.

Keywords: Brain disorder, Autosomal dominant, Brainstem dysfunction

# CP-143 ADVANCED FORMULATION TECHNIQUES TO ENHANCE SOLUBILITY, DISSOLUTION AND BIOAVAILABILITY OF POORLY WATER-SOLUBLE DRUGS

# V. LAVANYA\* AND G. S ANNAMMADEVI DEPARTMENT OF PHARMACEUTICS, PRINCETON COLLEGE OF PHARMACY, MEDCHAL-500088. Email id:Lavanyaredde@gmail.com

Bioavailability is the rate and extent (amount) of absorption of an unchanged drug from its dosage form. This is considered as a primary parameter for a drug to show maximum pharmacological response. The poor aqueous-soluble drug can exhibit poor dissolution rates and incomplete absorption resulting in poor bioavailability. The dissolution and solubility parameters of the drug are very important in developing formulation. So, different methods are employed to improve the drugs solubility such as pH adjustment, micronization, solid dispersion, Supercritical fluid recrystallization, complexation, use of surfactants, co-solvency, Precipitation and nanotechnology etc. The main objective of this study is togive an overview of methods to enhance solubility, dissolution, and bioavailability of low aqueous soluble drugs and the importance of Green chemistry in nanotechnology to produce various nanosized formulations.

Keywords: Bioavailability; solubility; dissolution; micronization.

## CP-144 INTELLECTUAL PROPERTY RIGHTS: AN OVERVIEW AND CHALLENGES IN THE PHARMACEUTICAL SECTOR

## SRUJAN GUNTI \* AARATHI KESAPRAGADA \* , U S V R HYMAVATHI, ARCHANA JUYAL

ST. PIOUS X DEGREE & AMP; PG COLLEGE FOR WOMEN, SNEHAPURI COLONY, NACHARAM, HYDERABAD-76 Email id:hyma.svr1807@gmail.com

The pharmaceutical sector relies heavily on Intellectual Property Rights (IPR) to protect and incentivize innovation. This abstract explores the multifaceted role of IPR in this highly regulated industry. IPR, encompassing patents, trademarks, industrial designs, and copyrights, grants creators exclusive rights to their inventions. In the globalized context, IPR facilitates international trade and is integral to the pharmaceutical industry&identification, planning, commercialization, and protection of innovations.

However, the sector faces challenges in maintaining a delicate balance between protecting intellectual property and ensuring affordable access to essential medicines. Issues such as patent evergreening and the complexities of harmonizing global IPR standards add layers of complexity. Moreover, navigating stringent regulatory affairs is essential to ensure the safety, efficacy, and quality of drugs. The abstract highlights the need for transparency and cooperation among nations to addressthe intricate challenges associated with IPR. Additionally, the emergence of biotechnology and personalized medicine introduces new dimensions, demanding ethical considerations in balancing incentives for innovation with access to personalized treatments. In conclusion, IPR serves as a vital tool for the pharmaceutical sector, fostering research and development, but its effective management requires ongoing global collaboration and adaptation to evolving industry dynamics.

Keywords: Intellectual property rights, Transparency, Cooperation, Global collaboration, Pharmaceutical sector, Medicine, Ethical, Innovation.

### CP-145 APPROPRIATENESS ANALYSIS OF PROTON PUMP INHIBITOR USE AMONG GENERAL MEDICINE INPATIENTS OF A SECONDARY CARE HOSPITAL: A HOSPITAL BASED CROSS-SECTIONAL STUDY

ASWATHY MELEL SOMARAJAN 1, BALAIAHGARI MANI RAJA RAO 1, DONTHULA PUSHPA 1, ANKE

SAI KUMAR 1\*, DR. VENKATA RAMANA 3, DR. G. NARAYANA 4, DR. A. SUDHEER 2\*

1 DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, ANANTAPUR, ANDHRA PRADESH. 2 \*HEAD OF THE DEPARTMENT, PHARMD, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, ANANTAPUR, ANDHRA PRADESH.

3 HEAD OF THE DEPARTMENT, GENERAL MEDICINE, RURAL DEVELOPMENT TRUST HOSPITAL, BATHALAPALLI, ANDHRA PRADESH.

4 ASSOCIATE PROFESSOR, DEPARTMENT OF PHARMACY PRACTICE, RAGHAVENDRA INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH, ANANTAPUR, ANDHRA PRADESH.

Email id: achu.ash678v2@gmail.com

Introduction: Proton pump inhibitors (PPIs) are hydrogen-potassium-ATPase inhibitors that suppress gastric acidsecretion. They are among the most routinely prescribed drugs in the world due to their excellent efficacyand low risk of side effects; yet, they are frequently used inappropriately. Although extensive studies are available in Western countries on PPI appropriateness, such data from India are still very limited. Objectives: To analyze appropriateness of PPI prescription among general medicine inpatients. Materials and methods: This is a hospital based cross-sectional study. A total of 402 patients were participated and appropriateness was assessed primarily by using standard guidelines (FDA, NICE and ACG guidelines). Additionally, MAI assessment was performed in PPI users.Results:Logistic regression was performed and significant variables were observed. Strong relationships between the appropriateness of PPI usage and gender and comorbidity were shown by the logistic regressionanalysis, while a significant relationship between appropriateness and age was also seen. According tostandard guidelines, appropriate usage of PPI was recorded highest during hospitalization (33%) and leastduring discharge (8%). Conclusion: This study explored appropriateness of PPI prescriptions among general medicine inpatients of asecondary care referral hospital in Andhra Pradesh. Inappropriate PPI usage is still more prevalent in ourcountry which can lead to unnecessary economic expenditure to the patients. Henceforth, it is imperativeto enhance appropriate PPI prescription, particularly with regard to minimising misuse, to attain anoteworthy reduction in healthcare expenses and anticipate a decreased occurrence of possibleunfavourable

Keywords: PPI, FDA, NICE, ACG, MAI, Appropriateness

### CP-146 STEREOLITHOGRAPHIC (SLA) 3D BIOPRINTING

C.AKSHITHA 1, CH.NIKITHA 1, L.SOWMYA 1T. ANOOSHA 2

1 STUDENT, 2 ASSISTANT PROFESSOR, DEPARTMENT OF PHARMACOLOGY, GEETHANJALI COLLEGE OF PHARMACY, CHEERYAL, HYDERABAD Email id: akshithareddychittanuru@gmail.com

Stereolithographic (SLA) 3D bioprinting is a slice- edge technology that merges perfection engineering with biotechnology. This system utilizes photosensitive biomaterials to produce intricate three- dimensional structures at a bitsy position. By employing a subcaste

bysubcaste approach, SLA 3D bioprinting enables the fabrication of complex natural constructs with high spatial resolution. This fashion holds living cells into the printing process opens avenues for creating functional apkins and organs. The absimmense pledge in towel engineering, allowing the customization of pulpits for organ rejuvenescence. also, the capability to incorporate tract highlights the eventuality of SLA 3D bioprinting in revolutionizing regenerative drug and its impact on advancing the field of substantiated healthcare. Its a fashion that uses ultraviolet light to cure layers of a photosensitive liquid resin, creating intricate three-dimensional structures for towel engineering and regenerative drug operations. Its a fashion that uses a ray to solidify layers of bioinks, creating intricate three-dimensional structures for towel engineering andregenerative drug. It enables precise control over the spatial arrangement of cells and biomaterials, easing the fabrication of complex natural constructs.

KEYWORDS: Stereolithographic, photosensitive biomaterials, subcaste-bysubcaste approach, 3D bioprinting, towel engineering, spatial arrangement.

### **CP-147 THE LC-MS TECHNIQUE AND ITS APPLICATIONS**

CH.SRINIDHI, M ISHWARYA, SWARGAM ANJANA
GEETHANJALI COLLEGE OF PHARMACY, CHEERYAL, HYDERABAD
Emailid:swargamanjana147@gmail.com,aishwaryaas2001@gmail.com,
srinidhicheera@gmail.com

For most assays employed in various stages of new drug discovery, high-performance liquid chromatography coupled with mass spectrometry (HPLC-MS) or tandem mass spectrometry (HPLC-MS) has shown to be the preferred analytical approach. This article will provide an overview of the main application areas that use this technique in the drug discovery process, along with an overview of the key components of HPLC-MS systems. Additionally, this will give an overview of the numerous kinds of mass spectrometers that can be chosen for the various activities that can be completed with the analytical tool known as LC-MS. The methods for making the most of this technique's application as well as any potential issues and solutions will be highlighted. The sample components are separated by liquid chromatography (LC), which subsequently adds them to the mass spectrometer (MS). The MS produces and recognizes charged ions. Information regarding the molecular weight, structure, identity, and quantity of particular sample components may be obtained from the LC/MS data.

KEYWORDS: Applications, Components, and Liquid Chromatography/Mass Spectrometry

# CP-148 THE SIGNIFICANCE OF HERBALS AND AYURVEDIC MEDICINES IN ALLEVIATING SYMPTOMS OF ACUTE TONSILLITIS IN PEDIATRIC PATIENTS

### NAHIDA SIDDIQUI 1

ASSOCIATE PROFESSOR. SIDDIQUINAHIDA92@GMAIL.COM. CMR COLLEGE OF PHARMACY, KANDLAKOYA, MEDCHAL ROAD, HYDERABAD-501-401, INDIA.

Emailid: Siddiquinahida92@gmail.com.

Acute tonsillitis including tonsillopharyngitis is an inflammatory process of the palatine tonsils. It is viral or bacterial origin disease and occurs in childhood, mostly in school-aged children. The characteristic clinical symptoms including abrupt onset of sore throat with or without difficulty in swallowing, enlargement of tonsils, hyperemia, and enlargement of cervical lymph nodes, fever and generalized malaise. The current medical landscape lacks

definitive symptomatic therapies for acute tonsillitis. Therefore, complementary, alternative and integrative medicine therapies are also tried to use for the treatment of acute tonsillitis without any adverse events. Literature supports that the herbal alcoholic-aqueous extract BNO 1030 (Impupret®) and EPs® 7630 (Umckaloabo), and Ayurvedic medicine like Kanchnara-Guggulu and Pratisarana of TankanaMadhu were found clinically effective by improving symptoms and they also had good tolerability in the treatment of tonsillitis in childhood. The EPs® 7630 (Umckaloabo) is effective in mitigating of symptoms in tonsillopharyngitis. Additionally, carvacrol has also shown a substantial in-vitro efficacy against bacterial strains resistant to erythromycin. This article concluded that mentioned herbal extracts and Ayurvedic formulations are safe and effective modality for the treatment of tonsillitis. The exploration of these alternative therapies offers a promising dimension in the holistic approach to managing acute tonsillitis, paving the way for further research and integration into clinical practice.

### CE-101 LIGHT ACTIVATED MOLECULAR JACKHAMMERS:

### A NANO EVOLUTION IN THE WORLD OF CANCER KILLING PHENOMENON

## ELISHA JHONSON, P. PRAVALIKA REDDY<sup>1</sup>, Y. ADARSH KUMAR P. NAGA CHANDRIKA<sup>2</sup>

<sup>1</sup>Student, <sup>2</sup>Assist.professor, Department of pharmaceutics, Geethanjali College of pharmacy, Cheeryal, Hyd.

### **ABSTRACT**

In these 21 centuries, Nano engineering and molecular biology are setting a new trend in treatment of cancer and conditions related to cancer. New discoveries in treatment of cancer which are efficient in giving the most appealing results in treatment of cancer are "nanodrills", "nuclear medicine", "nuclear fusion therapy", "photo-immune therapy", "molecular drills", and "Light activated molecular jackhammers". "Light activated molecular jackhammers" are the advanced treatment in the 21st century it works just as jackhammers can penetrate concrete, molecular jackhammers (MJH) are nanoscopic machines capable of creating blows so strong they can crack or rupture the cell membrane, decompensating and killing the cell. The MJHs are turned on by near-infrared (NIR) light that stimulates synchronized delocalized vibrations throughout the cell a mechanical action that can be exploited to rapidly kill cancer cells. The research taps into the emerging field of MOLECULAR PLASMONICS. When certain molecules absorb specific wavelengths of light, they enter an excited state where negatively charged electrons oscillate rapidly in unison, known as a molecular plasmon resonance. This resonance results in concerted molecular vibrations that can perform mechanical work, akin to a jackhammer.

Different than traditional chemotherapy, it is unlikely that a cell could develop a resistance to molecular mechanical forces, thereby providing a new modality for inducing cancer cell death.

The effect is also studied in vivo in murine B16-F10 and human A375 melanoma in mice, underscoring the high efficiency of this approach, achieving a survival rate of 60% at day 120, and 50% of the mice becoming tumor free. The molecules that destroy cell membranes through VDA are termed molecular jackhammers (MJH) because they undergo concerted whole-molecule vibrations.

These MJF was discovered by Research scientist Ciceron Ayala-Orozco poses in James Tour's lab in the Ralph S. O'Connor Building for Engineering and Science at Rice University on Tuesday, Jan. 09, 2024. Ayala-Orozco was the lead author in a study for destroying cancer cells with "molecular jackhammers."

**KEY WORDS:** Molecular jack hammers, Molecular Plasmonics, Near infrared, Vibronic-driven action

## CE-102 A REVIEW ON IDENTIFICATION OF CANCER CELLS: THE ROLE OF NANOSENSORS

**G. VENKAT RAMANA REDDY**<sup>1</sup>, E.VYSHNAVI<sup>1</sup>, M.ABHINITHA<sup>1</sup>, CH.SATHWIKA<sup>1</sup>, P. NAGA CHANDRIKA<sup>2</sup>. R.UMADEVI<sup>2</sup>, NAVEEN<sup>2</sup>

<sup>1</sup>Student, <sup>2</sup>Assist.professor, Department of pharmaceutics, Geethanjali College of pharmacy, Cheeryal, Hyd.

### **ABSTRACT**

Nanosensors are the nanoscale devices that measure the physical and chemical quantities. The nanosensors can be used to detect and analyse the position of the cancer cells in the body. Nanoscale technology has emerged as a beacon of hope in the realm of cancer treatment. Nanosensors inspite of having the nanosize, have a remarkable sensitivity, have revolutionized the landscape of cancer diagnosis, monitoring therapy. The nanosensors in cancer treatment focusing on pivotal role in early detection, targeted drug delivery system. This technology can identify specific cells at the molecular level to deliver medicine and monitor the development of particular places in the body by measuring physical characteristics such as volume, concentration, movement and speed, gravitational, electric, magnetic forces, pressure, temperature, etc. Despite their promising capabilities, challenges like biocompatibility, stability, and scalability need to be addressed for widespread clinical adoption. Ongoing research focuses on refining nanosensor design, improving delivery methods, and ensuring their safety for in vivo applications. In summary, the use of nanosensors in identifying cancer cells holds immense potential for early and accurate diagnosis, offering a pathway towards more effective and personalized cancer management strategies. This review discusses the current state of nanosensor technology, its challenges and future prospects in transforming cancer diagnosis.

**KEY WORDS:** Nanosensors, nanoparticles, biosensors, cancer management, nano carbon tubes

### CE-103 REVIEW OF DRUG DISCOVERY PROCESS

CH. SHIRISHA<sup>1</sup>, V. ANUSHA<sup>1</sup>, CH.PUJITHA<sup>1</sup>,T.CHAITANYA<sup>1</sup>, NAGA CHANDRIKA, DR.P. NEERAJA, DR. M. RAVIKUMAR

Student<sup>1</sup>, <sup>2</sup>Assistant professor, Department of pharmaceutics, Geethanjali college of pharmacy, Cheeryal

### **ABSTRACT**

Drug discovery is a process which aims at identifying a compound therapeutically useful in curing and treating disease as per regulatory authority's guidelines. This process is a lengthy, risky, time consuming, economic, a lot people, equipments, raw materials, guidelines, involves the identification candidates, synthesis, validation, optimization, screening and assays for therapeutic efficacy. Once a compound has shown its significance in this investigation, it will initiate the process of drug development earlier to clinical trials. New drug development process must continue through several stages in order to make a medicine that is safe, effective, and has approved all regulatory requirements. Preclinical studies using

animal to study the potential of a therapeutic drug or strategy are important steps before translation to clinical trails. One overall theme of our articles is that the process is sufficiently long, complex, and expensive so that many biological targets must be considered for every new medicine ultimately approved for clinical use and new research tools maybe needed to investigate each new target from initial discovery to a marketable medicine is a long, challenging task. It takes about 12-15 years from discovery to the approved medicine and requires an investment of about US \$1 Billion on an average, a million molecules screened but only a single is explored in last stage clinical trials and finally made obtainable for patients. The present investigation provides a information about the processes of new drug discovery and development.

**Keywords**: Drug discovery, lead optimization, target validation, identification, clinical trials, and preclinical trials.

### CE-104 TISSUE TECH MARVEL: NEXT-GEN 3D ORGAN PRINTING

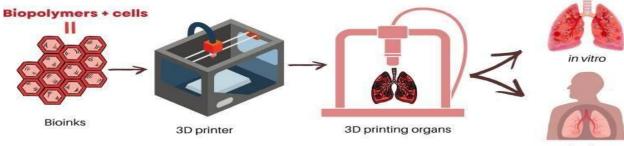
### K. CHARITHA, P. TAPASYA, K. PRANATHI, K.SAI PRASANNA

### GEETHANJALI COLLEGE OF PHARMACY

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

### **ABSTRACT**

This abstract introduces a cutting-edge 3D organ printer designed to revolutionize regenerative medicine. 3D bioprinting is a rapidly evolving technique that has been found to have extensive applications in disease research, tissue engineering, and regenerative medicine. The technology utilizes biocompatible materials and carefully orchestrated cellular patterns to recreate complex tissues with utmost accuracy.3D bioprinting might be a solution to global organ shortages and the growing aversion to testing cell patterning for novel tissue fabrication and building superior disease models. It has the unrivaled capability of layer-by-layer deposition using different types of biomaterials, stem cells, and biomolecules with a perfectly regulated spatial distribution. The tissue regeneration of hollow organs has always been a challenge for medical science because of the complexities of their cell structures. In summary, this abstract provides a comprehensive exploration of 3D organ printing, highlighting its potential to redefine medical practices, improve patient care, and pave the way for a new era in personalized medicine.



in vivo

**KEYWORDS:** bio inks, biomaterials, layer-by-layer, hollow organs

## CE-105 RADIOPHARMACEUTICAL THERAPY IN CANCER: CLINICAL ADVANCES AND CHALLENGES

MANTRALA VENKATA SATYA SAI KALYANI, DAVATH SOWMYA, DEVASATH GEETHA, MANCHALA SHIRISHA R. UMA DEVI GEETHANJALI COLLEGE OF PHARMACY

### **ABSTRACT**

The project aims to integrate radiopharmaceuticals into chemotherapy strategies to optimize treatment outcomes and personalize cancer therapies. Radiopharmaceuticals, infused with radioisotopes, are crucial for diagnostic imaging and allowing precise visualization of therapeutic agents. The research focuses on tailoring treatments to individual patients, maximizing therapeutic benefits while minimizing adverse effects. The project also explores monitoring cellular and molecular changes in response to chemotherapy, using radioisotopes to track drug delivery and study mechanisms of action. Theranostic agents, which combine diagnostic and therapeutic capabilities, are also explored.

Keywords: Radio pharmaceuticals, Radioisotopes, Theranostic agents, Cancer therapy.

### **CE-106 MEDICINE VENDING MACHINE- (MEDICAL ATM)**

### G.MAHALAKSHMI, K.HIMABINDU, S.VARSHINI

GEETHANJALI COLLEGE OF PHARMACY Cheeryal (v), Keesara (M), Medchal (dist)

### **ABSTRACT**

Medicine plays an important role in human's life for every situation. An automated medical system is introduced to reduce the man power time and energy. It is similar to an ATM through which we get the required money at any time & any place. The same system is followed for the pharmaceuticals also. Medicines for B.P, diabetics, cold, fever, headache, and first aid medicineslike bandage, cotton, ointments, and other routinely used tablets can be obtained. When RFID card is inserted, the details of the particular user are read by the RFID reader and displayed.

After the identification of the valid person, list of medicines will be displayed on the TFT display, then user selects the required medicines by entering the corresponding number of selected medicines by using the keypad . After entering the required list, the amount will be calculated according to the medicine and their quantity. The amount will be deducted from theRFID card and immediately the transaction details will be sent through GSM to the user. After payment deduction the selected medicine are delivered automatically from the system. For this delivery system the arduino controller uses a slider arrangement with the help of servo motors which provide rotational mechanism

**Keywords:** TFT, RFID Reader & Cards, GSM, servo motors

# SIGN UP FOR "SUCCESS"

TRUSTED & **ENDORSED BY** 

**12,000+ STUDENTS** 

## study in:





















**ADMISSION AND VISA GUIDANCE** 

**⊘** TRAINING (IELTS | PTE | GRE )

**O LOAN ASSISTANCE** 

### Contact us

S.R NAGAR: 91054 91054

KPHB: 971 971 34 34

SOMAJIGUDA: 73869 11178 **DILSUKHNAGAR: 9776 679 679** 

STUDY VISA EXPERTS SINCE 2011



## **INDIA'S MOST TRUSTED CONSULTANT**





Feb - 2024

2<sup>nd</sup> Vijayawada

3<sup>rd</sup> Hyderabad

4<sup>th</sup> Warangal

## FIND THE COURSE THAT **ELS YOUR CAREER**

FREE ENTRY **REGISTER &** WIN PRIZES



**Prior** Registration Mandatory

- **SESSION BY INDUSTRY EXPERTS**
- **MEET 100+ UNIVERSITIES**
- ON THE SPOT CONFIRMATIONS\*
- STUDY ABROAD IN LESS THAN **20 LAKHS\***
- **SCHOLARSHIPS UPTO 1 MILLION\***













Learn from the Uber Trainers Conquer prodigious Test Prep Scores













**ACCREDITATIONS** 

















## **Programmes Offered**

- Industrial Training Program
- Analytical Training Program
- Job Oriented Program
- Live Project for B.Pharm/ M.Pharm/M.Sc
- Pharmaceutics
- Pharmaceutical Analysis
- Pharmacology
- Pharmaceutical Chemistry
- Regulatory Addairs
- Pharma Biotech/Microbiology
- Pharmacy Practice





### **Health Care Services**

- Pharmacovigilance
- Clinical Data Management
- Clinical Research
- Clinical SAS
- SAS ADMIN
- Regulatory Affairs
- Medical Coding
- Computer System Validation
- \*\* Publication Assistance
- \*\* Research assistance and lab facility provided for Ph.D. scholars

We Conduct on-campus Workshops/Seminars on new technologies & trends.

### **Qualychrome Research Labs**

5-5-35/128, Plot no.177, 2nd floor, Prasanthi nagar, Near Prasanna Venkateswara Swamy temple, Kukatpally, Hyderabad -500072









### About Us

Covalent is a group of Companies which as services and operations in Clinical, Information Technology, Energy, Consumer Products, Power and Infrastructure.

Covalent Trainings is a Subsidiary product of Covalent Group.

Covalent Trainings is a platform which provides training services to pharmaceutical, Clinical and IT fields.

We have highly skilled professional and expert team to teach in a wide range of technologies. That is why we are here to deliver the effective and practical training to the students and professionals.



### **Courses Offered:**

- Clinical Research
- Clinical Data Management
- Clinical SAS
- Pharmacovigilance
- Regulatory Affairs
- Medical Coding
- Digital Marketing (SEO, PPC, SMM)



### Eligibility:

- MBBS, BDS, B.Pharm, Pharm D, DMLT, M.Pharm and Any Life Science Students.
- Any Graduation for Digital Marketing.

### **Benefits of Covalent:**

- Technology Based on Real Time Training
- Exclusive Batches & Professional Training
- Live Class Room or Online Classes with 24/7 Customer Service
- Training will be Scheduled as per Trainee Requirement
- Nurturing Students to become Employees
- 100% Job Support
- Training on Live Projects



### Contact Us



Address: Flat. No: 401, Nandini Residency, Addagutta

Society, HMT Hills Road, Western Hills,

JNTU Circle, KPHB, Hyderabad-500072, India.

Phone : 040 48502230 Mobile : +91 - 9848733309

Email : <a href="mailto:contact@covalenttrainings.com">contact@covalenttrainings.com</a>
Website: <a href="mailto:www.covalenttrainings.com">www.covalenttrainings.com</a>

HYDERABAD BANGALORE CHENN



### **COURSES OFFERED**

**B.Pharmacy** 

Pharm.D

Pharm.D (PB)

**M.PHARMACY** 

**Pharmaceutics** 

**Ph.Analysis** 

Ph. Regulatory Affairs

### FELLOW US ON

YOUTUBE: Geethanjali college of Pharmacy INSTAGRAM: Geethanjali college of Pharmacy

FACEBOOK: GCOP Geethanjali EMAIL US ON:

Geethanjalicollegeofpharmacy@gmail.com

EAMCET: GCPK
PGCET: GCPK1

## Geethanjali College of Pharmacy

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