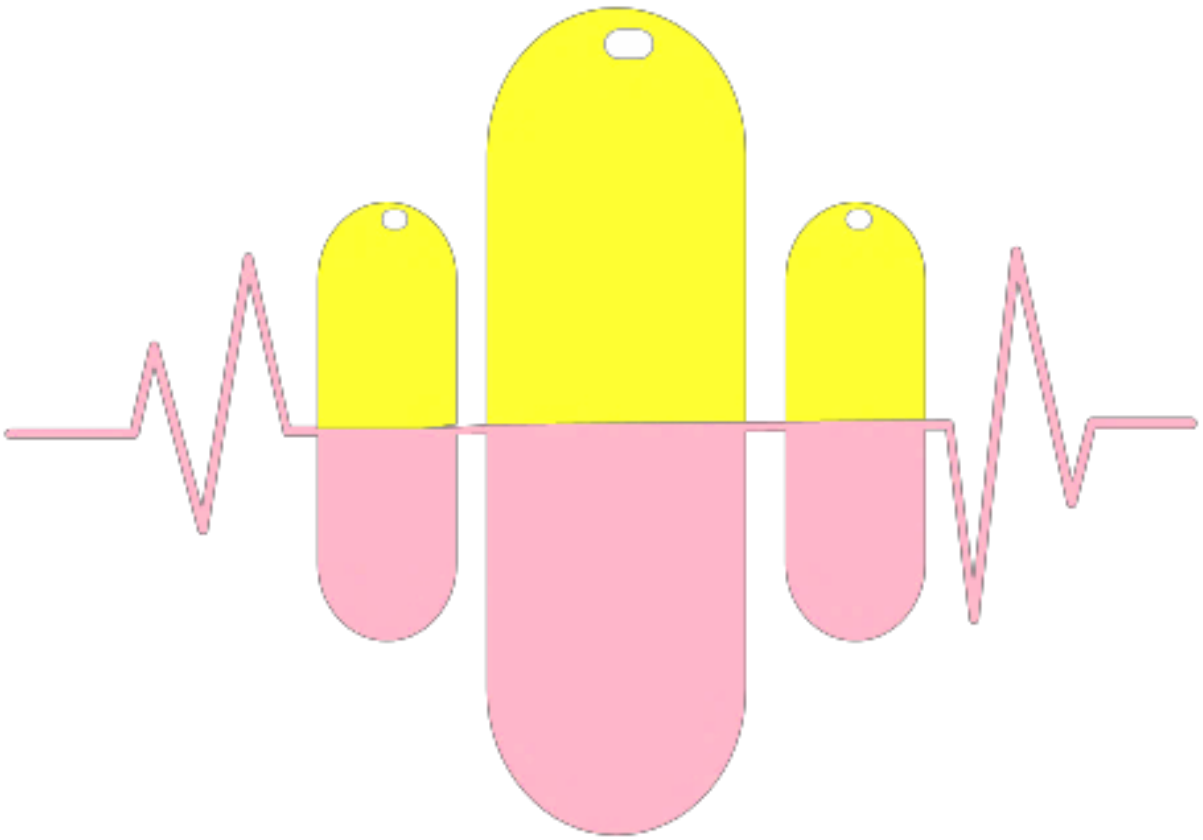
PHARMA NEWS



2018-19

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Bharati Vidyapeeth
College of Pharmacy, Kolhapur

AVISHKAR 2018 -2019

Event Organized by Shivaji University

Third Prize

Computer Assisted Screening of Dietary Spices Targeting Progesterone Receptor In Breast Cancer Therapy

RadhikaPatil*, Dr. Mrs. Neela Bhatia, SnehalAshtekar, SnehaNalawade

Department of Pharmaceutical Chemistry

Bharati Vidyapeeth College of Pharmacy,

Kolhapur, Maharashtra State, India-416013

ABSTRACT

Breast cancer is the common cancer found in women worldwide, in most cities in India, and 2nd most common in the rural areas. Amongst all types of breast cancer, the ER, PR hormonal imbalance is the major cause. Mechanism based screeningwith the aid of Insilico research is a new approach used for finding lead compounds as part of the drug discovery process, which has potential to speed the rate of discovery. It also helps to reduce the chemicals wastage and expensive lab work. Traditional Knowledge of using herbs and spices for medicinal purposes provides promising new leads that could be utilized for developing new therapies for breast cancer treatment. Use of spices could prove to be a natural way of treating breast cancer and can help to provide a way for living a better life for sufferers of breast cancer. Systematic studies on spices could help to have greater health benefits and improved quality of life to breast cancer patients. Hence, combining the traditional knowledge of spices with new methods of drug discovery and design will led to development of good candidate against some potential targets in breast cancer treatment.

The present research envisages with identification of dietary spice against breast cancer. In this perspective, 30 spices were selected from the literature including turmeric, ginger, garlic, clove, dill, asafoetida, cinnamon, cumin, pepper etc. The chemical actives of these spices were docked with progestin receptor PR (PDB id-4OAR) having reference ligand ulipristalusing software VLifeMDSver 4.6. Docking and interaction analysis was carried out using Biopredicta module. On the basis of interaction studies, the spices involved in the interactions of amino acid residues like hydrogen bond, charge and aromatic interactions essential for anti-progesterone activity with respect to ulipristalwere identified. These analyses could lead to the further formulation development of anti-progesterone dietary spices for the treatment of breast cancer using mechanistic studies

AVISHKAR 2018 -2019

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Third Prize

Experimental Approach In Development of Nanostructured Drug Delivery System For Dengue Management

Miss. N. N. Patil*, Mr. R. P. Dhavale

Department of Pharmaceutics

Bharati Vidyapeeth College of Pharmacy,

Kolhapur, Maharashtra State, India-416013

ABSTRACT

The prevalence of Dengue in India is severe due to transmission of virus by arthropod-borne vector. Flavivirus is the main vector for spreading dengue among humans. Dengue Human Fever is antibody-dependent, T cell and Th-1 to Th-2 response which releases cytokines in body fluids. Mast cells are "master regulators" of the immune system located in all tissues containing secretory granules as mediators. Mediators are released after triggering of mast cells to lead allergic and inflammatory diseases. The papain isolated from *Carica papaya* Linn. is a cysteine protease enzyme responsible for increasing immunity by increasing platelet count. The development of nanostructured lipidic system of papain and cromolyn sodium can bring blockage of mast cell stabilizer thereby preventing viral leakage and activation of immunological response. The present study aims at entrapment of papain and cromolyn sodium in lipidic system containing phospholipid, cholesterol and sodium deoxycholate. The papain from latex of unripe papaya fruit were isolated and purified sequentially by salt precipitation and by dialysis. The determination of protein by Lowry assay from Papaya latex, salt precipitated and dialysate was found to be 1.497, 1.110 and 3.410 mg/ml. The protease activity in terms of unit per mole was found to be 296.32, 233.93 and 224.83 respectively for Papaya latex, salt precipitated and dialysate. The recovery of protease activity was determined to observe the protease activity at each purification step. The liposomal formulations containing papain and cromolyn sodium prepared by thin film hydration technique were optimized at various phospholipid, cholesterol and sodium deoxycholate (edge activator) ratio. The optimized batch of formulation was characterized for by entrapment efficiency, particle size determination, zeta potential and microscopic studies. Thus, theeffective herbal formulation containing papain from available plants and cromolyn sodium in nanostructured form will serve to potentiate dengue management.

AVISHKAR 2018 -2019

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Third Prize

Development of ElectrospunSilk Fibers for Modified Release of Lafutidine

S.D. Dugam*, S.N. Nangare and Dr. N.R. Jadhav

Department of Pharmaceutics

Bharati Vidyapeeth College of Pharmacy,

Kolhapur, Maharashtra State, India-416013

ABSTRACT

Development of tailor-made pharmaceutical nanofibers has gained vital prominence due to ease of fabrication and versatility as it has number of advantages like low density, high pore volume, high surface to volume ratio, high charge to volume ratio, large surface area for solvation and dissolution process. Nanofibers can be fabricated by self-assembly, phase separation, and electrospinning. We prepared floating silk fibroin (SF) nanofibers by electrospinning technique as its more efficient process and it provides limitless opportunity to modify physico-technical properties of the nanofibers towards desired floating and release behavior by altering the electrospinning process parameters. Altering the electrospinning parameters tune crystallinity of nanofibers which leads to modification of release profile of drug. Lafutidine (LF) is an excellent proton pump inhibitor belonging to BCS II class, mainly used in the treatment of gastric ulcer needs long term treatment, thus it is necessary to prepare the modified release dosage form of LF. Hence we have prepared LF loaded SF nanofibers as processing technology for the floating drug delivery system. This nanofiber formulation, may be useful for treatment of gastric ulcers.

LF loaded SF nanofibers were successfully prepared by electrospinning and characterized for drug content, percent entrapment efficiency, spectral, thermal and diffractometric analysis, scanning electron microscopy (SEM), floating profile studies, uptake of 0.1 N HCl, in vitro degradation study, mucoadhesive test, anti-oxidant activity and invitro dissolution studies. Lafutidine loaded SF nanofibers showed good entrapment efficiency, spectral, thermal and diffractometric analysis reveals changes in conformations of SF inducing crystallinity in nanofibers, it showed excellent floating behavior, 0.1N HCl uptake, degradation, mucoadhesive strength, antioxidant activity. Invitro dissolution shown appreciable floating time >18 hrs. Appreciable percent buoyancy with sustained release up to 24 h in 0.1 N HCL and FSSGF. Thus Essential floating and drug release profile can claim this drug delivery system as novel dosage form.

AVISHKAR 2018 -2019

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Third Prize

Multi-targeted Antimalarial Drug Design and Development

Raviraj.V.Mule*, Dr.M.S.Bhatia

Department of Pharmaceutical Chemistry
Bharati Vidyapeeth College of Pharmacy,
Kolhapur, Maharashtra State, India-416013

ABSTRACT

Malaria is one of the most serious parasitic infection, which has emerged as global health problem Number of natural products are available to treat malaria especially for *plasmodium falciparum* species Quinine, Artemisinin, Febrifugene, Betulinic acid, Cryptolepine and all their analogs effectively treat malaria by targeting various critical enzymes in life cycle of parasite*Cysteineproteases and Dihydroorotate dehydrogenase (DHODH)* are two important enzymes for the growth and survival of malaria parasite and there is no any drug currently available to target this enzymes which served as motivation to develop molecules.This work focuses on by using modern drug discovery methods of the specific molecules targetting conserved proteins in the plasmodium life cycle based on various computational tools which may be active against all type of malarial species. In this work further targetting Cysteine protease and DHODH enzymes work is carried out by designing of probable molecules by selecting quinoline as nucleus.The developed protocol would be beneficial in targeting multiple enzymes in malarial parasite, which are responsible for virulence and also it will help to overcome spreading of resistance of compound. Antimalarial lead compounds which after subsequent optimization for appropriate pharmacokinetic and toxicological profile may yield drug like candidates.

AVISHKAR 2018 -2019

Event Organized by Shivaji University

Third Prize

Development of ElectrospunSilk Fibers for Modified Release of Lafutidine

S.D. Dugam*, S.N. Nangare and Dr. N.R. Jadhav

Department of Pharmaceutical Chemistry

Bharati Vidyapeeth College of Pharmacy,

Kolhapur, Maharashtra State, India-416013

ABSTRACT

Development of tailor-made pharmaceutical nanofibers has gained vital prominence due to ease of fabrication and versatility as it has number of advantages like low density, high pore volume, high surface to volume ratio, high charge to volume ratio, large surface area for solvation and dissolution process. Nanofibers can be fabricated by self-assembly, phase separation, and electrospinning. We prepared floating silk fibroin (SF) nanofibers by electrospinning technique as its more efficient process and it provides limitless opportunity to modify physico-technical properties of the nanofibers towards desired floating and release behavior by altering the electrospinning process parameters. Altering the electrospinning parameters tune crystallinity of nanofibers which leads to modification of release profile of drug. Lafutidine (LF) is an excellent proton pump inhibitor belonging to BCS II class, mainly used in the treatment of gastric ulcer needs long term treatment, thus it is necessary to prepare the modified release dosage form of LF. Hence we have prepared LF loaded SF nanofibers as processing technology for the floating drug delivery system. This nanofiber formulation, may be useful for treatment of gastric ulcers. LF loaded SF nanofibers were successfully prepared by electrospinning and characterized for drug content, percent entrapment efficiency, spectral, thermal and diffractometric analysis, scanning electron microscopy (SEM), floating profile studies, uptake of 0.1 N HCl, in vitro degradation study, mucoadhesive test, anti-oxidant activity and invitro dissolution studies. Lafutidine loaded SF nanofibers showed good entrapment efficiency, spectral, thermal and diffractometric analysis reveals changes in conformations of SF inducing crystallinity in nanofibers, it showed excellent floating behavior, 0.1N HCl uptake, degradation, mucoadhesive strength, antioxidant activity. Invitro dissolution shown appreciable floating time >18 hrs. Appreciable percent buoyancy with sustained release up to 24 h in 0.1 N HCL and FSSGF. Thus Essential floating and drug release profile can claim this drug delivery system as novel dosage form.

International Conference on Multidisciplinary Healthcare Research

Challenges, Opportunities and Newer Directions

Organized by

P. E. Society's Modern College of Pharmacy, Nigadi, Pune

Chitosan and GlycerylMonooleate Nanostructures Containing Gallic acid Isolated from Amla fruit: Potential Delivery System

Poournima S Patil*, Dr. Suresh G. Killedar

Department of Pharmaccognosy

Bharati Vidyapeeth College of Pharmacy,

Kolhapur, Maharashtra State, India-416013

ABSTRACT

Purpose: Nanotechnology is a promising technique to increase the bioavailability of herbal medicines. This paper presents the nanosuspension approach for increasing aqueous solubility and thereby bioactivity of herbal extract.

Method: Nanoparticles of gallic acid which is isolated from amla fruit (*Emblicaofficinalis*) was prepared by using polaxomer 407, Chitosan and GMO. The delivery system was prepared by multiple emulsion solvent evaporation method by using high pressure homogenizer.

Result: Prepared nanoparticles were characterized by using particle size, zeta potential and scanning electron microcopy. Our results showed that the encapsulation efficiency of gallic acid was approximately 85%. The average size of quercetin loaded nanoparticles was 185 nm, while the zeta potential was 25 mV.

Conclusion: The information obtained from this study will facilitate the design and fabrication of nanoparticles for protection and controlled release of flavonoids aimed to prevent oxidative stress in human body.

PRIZES WON (2018-19)

Sr. No.	Event	Name of student	Class	Prize	Certificate/ Trophy
1.	IPA-IPC National Pharma Quiz Competition 2K18 organized by IPA at ChebroluHanumaiah Institute of Pharmaceutical Sciences, Guntur, Andhra Pradesh on 8th Dec 2018.	Mr. Suraj Kutre Mr. Sambhaji Masal Miss VarshaKhadke	Final Year B. Pharmacy	Third prize	03 Certificates + 03 Trophies + Cash Prize
2.	Research Oral Presentation at CSIR sponsored 1st International Conference on Materials and Environmental Science at Shivaji University, Kolhapur on 7th& 8th Dec 2018	Miss SnehaRochlani MrAjinkyaThanekar	M. Pharmacy	Third Prize	02 Certificate
3.	Research Poster Presentation at CSIR sponsored 1st International Conference on Materials and Environmental Science at Shivaji University, Kolhapur on 7th& 8th Dec 2018	Mr. ChinmayJanganure Mr. Sagar Jadhav	M. Pharamcy	Second Prize	02 Certificates
4.	National Level Quiz Competition: Mind Expedition 2k18: The Pharma Quiz organized by Krishna Institute of Pharmacy Krishna Institute of Pharmacy, Karad on 21st Dec 2018	Mr. Suraj Kutre Mr. Sambhaji Masal	Final Year B. Pharmacy	Second Prize	02 Certificates + 1 Trophy
AVISHKAR 2018-19: Research Project Competition at District Level round for UG, Organized by Shri Vijaysinha Yadav Arts and Science College, PethVadgaon on 27th Dec. 2018					
5.	Medicine and Pharmacy category (UG Level)	Miss Neha N. Patil	Final Year B. Pharmacy	Third Prize	01 Certificate + 01 Trophy
6.	Pure Science Category (UG Level)	Miss Radhika H. Patil	Final Year B. Pharmacy	Third Prize	01 Certificate
AVISHKAR 2018-19: Research Project Competition at University Level (Central Round), Organized by Yashwantrao Chavan School of Rural Developmemnt, Shivaji University Kolhapur on 28th Dec. 2018					
7.	Medicine and Pharmacy Category (PG Level)	Mr. Shailesh S. Dugam	M. Pharmacy	Third Prize	01 Certificate

8.	Pure Science Category (PG Level)	Mr. Raviraj Mule	M. Pharmacy	Second Prize	01 Certificate
9.	Oral Presentation: International Conference on Multidisciplinary Healthcare Research: Challenges, Opportunities and Newer Directions organized by P. E. Society's Modern College of Pharmacy, Nigadi, Pune on 4th and 5th Jan 2019.	Miss SnehaRochlani	M. Pharmacy	First Prize	01 Certificate
10.	Poster Presentation: International Conference on Multidisciplinary Healthcare Research: Challenges, Opportunities and Newer Directions organized by P. E. Society's Modern College of Pharmacy, Nigadi, Pune on 4th and 5th Jan 2019.	Miss LalitaDahiwade	M. Pharamcy	First Prize	01 Certificate
11.	Poster Presentation: International Conference on Multidisciplinary Healthcare Research: Challenges, Opportunities and Newer Directions organized by P. E. Society's Modern College of Pharmacy, Nigadi, Pune on 4th and 5th Jan 2019	Ms. Poornima Patil	Ph. D. Scholar	First Prize	01 Certificate
12.	Elocution competition organized on occasion of Jayanti Celebration of Hon'ble Dr. Pantanrao Kadam Founder Bharati Vidyapeeth at MatoshreeBayabaiShripatrao Kadam KanyaMahavidyalaya, Kadegaon on 18th Jan 2019	Miss Jahanara Nadaf	Second Year B. Pharmacy	Third Prize	01 Certificate + 01 Trophy
13.	Research Poster presentation at: One day National Symposium on Novel Trends in Drug Design and Natural Product Chemistry organized by YashwantraoBhonsale College of Pharmacy, Sawantwadi on 2nd Feb 2019. (Chemistry Category)	Miss SadafMutwalli Mr. Deepak Shanbhag	M. Pharmacy	First Prize	02 Certificates + 01 Trophy
14.	Research Poster presentation at: One day National Symposium on Novel Trends in Drug Design and Natural Product Chemistry organized by YashwantraoBhonsale College of Pharmacy, Sawantwadi on 2nd Feb 2019. (Pharmaceutics Category)	Ms. Poornima Patil	Ph. D. Scholar	First Prize	01 Certificates + 01 Trophy
15.	Research Poster presentation in One Day State Level Conference on Recent Job Avenues for Pharma Graduates Under Lead College Scheme of Shivaji University (Satara	Miss Mayuri D. Mane	M. Pharmacy	Second Prize	01 Certificate + 01 Trophy

	Zone) on 4th Feb. 2019				
16.	Research Poster presentation in One Day State Level Conference on Recent Job Avenues for Pharma Graduates Under Lead College Scheme of Shivaji University (Satara Zone) on 4th Feb. 2019	MsPoornima Patil	Ph. D. Scholar	First Prize	01 Certificates + 01 Trophy
17.	All India Pharmacy Quiz 2019 organized by College of Pharmacy, Madras Medical College, Chennai.	Mr. Suraj Kutre Mr. Sambhaji Masal	Final Year B. Pharmacy	Consolation Prize	02 Certificates + Book
18.	Poster Presentation Competition on Addiction and Cancer organized at Warna Science & Innovation Activity Centre, Warnanagar on 6th Feb 2019	Miss SonaliRamchandraKoli	Final Year B. Pharmacy	Third Prize	01 Certificate + 01 Trophy
19.	Research Poster presentation at: State level Poster and Model Competition organized by Rajarambapu College of Pharmacy, Kasegaon on 16th Feb 2019	Mr. Vaibhav Khade	M. Pharmacy	Second Prize	01 Certificate + 01 Trophy
20.	Research Poster presentation at: State level Poster and Model Competition organized by Rajarambapu College of Pharmacy, Kasegaon on 16th Feb 2019	Mr. Abodh Salvi Mr. Vivek Patil	Final Year B. Pharmacy	Second Prize	02 Certificates + 01 Trophy
21.	Poster Presentation at International Conference held at Bhujjbal Knowledge City, Nasik	Ms. Poournima Patil	Ph. D. Scholar	Second Prize	01 certificate
22.	Research Paper Presentation in Two Days 6th International Conference on Recent Advances in Nanotechnology & Radiopharmaceutical Drug Discovery & Development at Shree Dhanvantary Pharmacy College, Kim, Gujrat on 16-17th Feb 2019	Mr. Shailesh S Dugam	M. Pharamcy	Second Prize	01 Certificate + 01 Trophy
23.	Research Poster presentation at: One Day National Conference on Applications of Computational Chemistry in Pharmaceutical Research organized by Channabasweshwar Pharmacy College, Latur on 15th March 2019	Mr. Sachin P. Mulgir Mr. Aniket A. Gosavi Mr. Nikhil D. Suryawanshi Mr. Vishal A. Dahiphale	M. Pharmacy & Final Year. B. Pharamcy	Second Prize	04 Certificates + 01 Trophy

24.	H & B Campus Connect Soft skill Training for T. Y. B. Pharmacy	Miss. Rutuja Chougule	T. Y. B. Pharmacy	--	64 Certificates
25.	H & B Campus Connect Soft skill Training for Final Year B. Pharmacy	Mr. Suraj Kutre	Final Year B. Pharmacy	--	58 Certificates
26.	Research Poster presentation at: First National Conference on Recent Trends in Pure and Applied Sciences organized by Dr. Patangrao Kadam Mahavidyalaya, Sangli on 23rd March 2019	Miss. Vrushali V. Sonar Miss. Shreya M. Durgule	M. Pharmacy	Second Prize	02 Certificates
27.	Research Poster presentation at: First National Conference on Recent Trends in Pure and Applied Sciences organized by Dr. Patangrao Kadam Mahavidyalaya, Sangli on 23rd March 2019	Mr. Pramod A. Ramane Mr. RushikeshShirgaonkar	M. Pharmacy	Third Prize	02 Certificates
28.	Poster Presentation at 3rd Pharm Tech IAPST International Conference on Molecular Mechanism of Diseases and Novel Therapeutic Approaches organized by Centurion University Bhubaneshwar.	Mr. Vaibhav Khade	M. Pharmacy	Third Rank	01 Certificate + 01 Trophy
29.	Quiz Competition Pharma Talent Hunt 2019 Organized by SantGajananMaharaj College of Pharmacy, Mahagaon on 2nd April 2019	Mr. Suraj Kutre Mr. Sambhaji Masal	Final Year B. Pharmacy	Second Prize	02 Certificates + 01 Trophy
30.	Quiz Competition Pharma Talent Hunt 2019 Organized by SantGajananMaharaj College of Pharmacy, Mahagaon on 2nd April 2019	Miss Aishwarya Chougule Miss Sakshi Patil	Final Year B. Pharmacy	Consolation Prize	02 Certificates
31.	Poster presentation Competition Pharma Talent Hunt 2019 Organized by SantGajananMaharaj College of Pharmacy, Mahagaon on 2nd April 2019	Mr. Vishal Khade Mr. ShubhamBavkar	Final Year B. Pharmacy	Consolation Prize	02 Certificates