March 2016
Volume 1, Issue 1

Sultan-ul-Uloom College of Pharmacy, Hyderabad

PRIDE

Pharmaceutical Research in Drug Evolution

Lead Story Headline

This story can fit 175-225 words.

The purpose of a newsletter is to provide specialized information to a targeted audience. Newsletters can be a great way to market your product or service, and also create credibility and build your organization's identity among peers, members, employees, or vendors.

First, determine the audience of the newsletter. This could be anyone who might benefit from the information it contains, for example, employees or people interested in purchasing a product or requesting your service.

You can compile a mailing list from business reply cards, customer information sheets, business cards collected at trade shows, or membership lists. You might consider purchasing a mailing list from a company.

If you explore the Publisher catalog, you will find many publications that match the style of your newsletter.

Next, establish how much time and money you can spend on your newsletter. These factors will help determine how frequently you publish the newsletter and its length. It's recommended that you publish your newsletter at least quarterly so that it's considered a consistent source of information. Your customers or employees will look forward to its arrival.

Secondary Story Headline

This story can fit 75-125 words.

Your headline is an important part of the newsletter and should be considered carefully.

In a few words, it should accurately represent the contents of the story and draw readers into the story. Develop the headline before you write the story. This way, the headline will help you keep the story focused.

Examples of possible headlines include Product Wins Industry Award, New Product Can Save You Time!, Membership Drive Exceeds Goals, and New Office Opens Near You.

Inside this issue

Special points of interest

- Briefly highlight your point of interest here.
- Briefly highlight your point of interest here.
- Briefly highlight your point of interest here.
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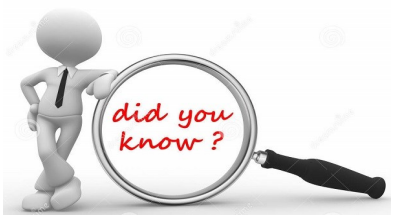
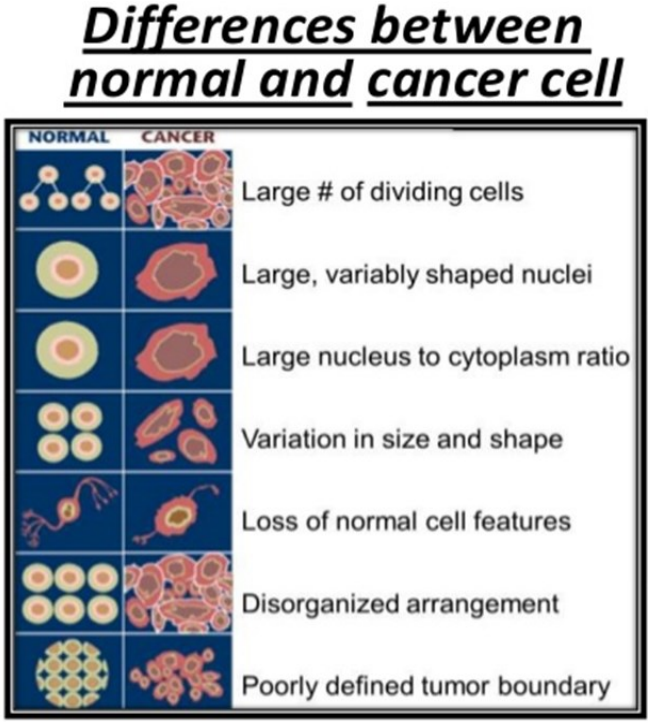


Amazing Drug Facts

- Indomethacin (Indocin®) is given intravenously to premature infants who have persistent fetal circulation with a patent ductus arteriosus. The mode of action is still mysterious.
- Horses get gastric ulcers too! Now omeprazole is available in cinnamon flavored oral paste under the trade name GASTROGARD® just for horses.
- The trade name Rhinocart® is a combination of rhino (the Greek word for nose and cort for corticosteroid. (rhinoceros has a large horn on its nose)
- Nystatin was discovered in 1950 by two physicians who named the drug for their employer-the New York State Department of Health.
- Fentanyl (Actiq®) is used to treat breakthrough pain in cancer patients. The drug comes as a Lozenge on a stick. Informally, it is known as the Actiq lollipop.
- The belladonna plant was original source of atropine and scopolamine. Belladonna means beautiful lady in Italian. "Sixteen Century Italian women… squeezed the berries of these plants into their eyes to widen and brighten them."
- ODT stands for *orally disintegrating tablet*
- Cytarabine was developed from a substance found in Carribean sea sponges.

The differences between normal and neoplastic cells and tissues can now be summarized (Figure). Each of these differences is a potentially target for therapeutic exploitation. They emphasize that the simplistic view of cancer as no more than 'abnormally rapidly dividing cells' is inadequate. To illustrate this point, consider why the proliferative skin disorder psoriasis is not a neoplastic disorder. The hyperactive basal cells do more or less what their more sedate cousins, normal basal cells, do: they become prickle cells, which move upwards through the epidermis, become keratinized, and are shed.



Isolation and Characterization of β-isomer of methacarbamol as process related impurity during synthesis of Methocarbamol from Guaifenesin

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Abstract:

β-isomer of methocarbamol as process related impurity ranging from 0.09%-0.32% by peak area in Methocarbamol active pharmaceutical ingredient was detected by simple isocratic reverse-phase high performance liquid chromatogra- phy (HPLC). The impurity was isolated by prep-HPLC and characterized by LC-MS/MS and NMR experimental data. Based on the results obtained from different spectro- scopic experiments, the impurity has been characterized as Beta- methocarbomol. Methocarbamol was prepared from Guafenisin by carbamoylation reaction. During the amination of guafenisin using phosgene in ethanol, β-isomer of methocarbamol as potential process related impurity was observed consistently in HPLC analysis, along with the end product and starting material. To the best of our knowledge, the formation, identification, isolation and characterization of β-isomer of methocarbamol observed potential process related impurity was not mentioned in the literature till date. Hence, the present work was initiated to investigate the nature and origin of the impurity and to characterize it by NMR and MS. The HPLC analysis of methocarbamol sample has been performed. As per regulatory requirement, it is mandatory to identify and characterize the impurities in the pharmaceutical products, if present above the accepted limit of 0.1%. This investigation deals with isolation, structure elucidation, relative response factor determination and formation of the impurity during synthesis of methacarbamol from guafenisin.

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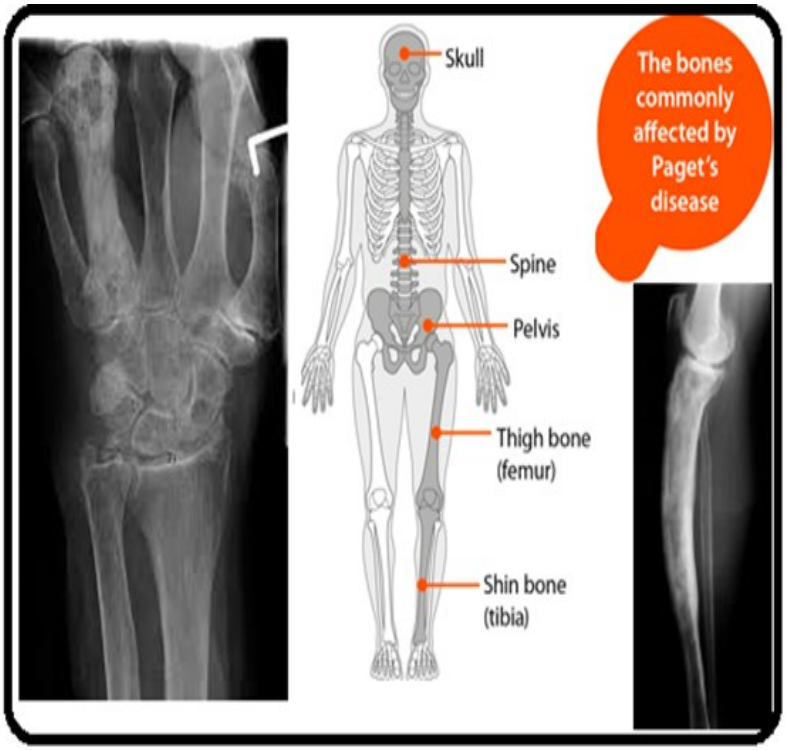
Formulation development and evaluation of nifedipine osmotic pump tablets

Abstract: Osmotic drug delivery systems are new approach for a controlled release dosage form.Nifedipine is a calcium channel blocker used in the treatment of hypertension. Controlled release of drug is achieved by adding a suitable polymer in dosage form. In present studied we prepared different dosage form using a hydroxypropyl methylcellulose (HPMC).The amounts of cellulose acetate and triethyl citrate in the coating solution, and the coat weight were selected as the causal factors. The drug release through the 1mm depth orifice by osmogen i.e; mannitol incorporated in the formulation. The compatability of the drug nifedipine and excepients were determined by FTIR results. Both the average drug release rate v for the first 12 hr and the correlation coefficient r of the accumulative amount of drug released and time were obtained as release parameters to characterize the release profiles. The release kinetics of prepared formulation was correlated with the marketed formulation.

Paget's disease is often asymptomatic and picked up on plain bone films. Patients with Paget's disease should have their serum calcium level determined, their serum alkaline phosphatase measured as a marker of new bone formation, a bone scan to determine whether other bones are involved, and a 24-hour urinary hydroxyl proline measurement to assess bone resorption. The patient who has minimal involvement and is biochemically normal does not need pharmacological therapy. No studies indicate that early treatment slows progression in individuals with the more severe form of this disorder.



Evaluation of hematological parameters, antihyperlipidemic and hepatoprotective activities of *Vigna unguiculata subsp. Sesquipedalis* in preclinical models.

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Abstract:

Vigna unguiculata ssp. Sesquipedalis (family: Fabaceae) was found to have good anti-diabetic, anti-sickling and anti-nociceptive activity. This study aims to investigate possible hepatoprotective, hypolidemic activities along with hematological evaluation of ethanolic and aqueous extracts of *Vigna unguiculata.* The hepatoprotective activity was evaluated against paracetamol-induced hepatotoxicity in preclinical models.Rats were randomly divided into 7 groups each comprising 6 rats. The ethanolic and aqueous extracts of *Vigna unguiculata* was administered orally at doses of 200mg/kg and 500mg/kg body weight daily for 7 days. Hepatotoxicity was induced on the 8^{th} day with paracetamol 500mg/kg body weight (p/o). Silymarin, 100mg/kg body weight was used as reference standard.

Serum markers such as ALT, AST, ALP, bilirubin, total protein etc were measured to assess the effect of the extracts on paracetamol induced hepatic damage. Simultaneously, the lipid profile was also assessed for hypolidemic activity. Liver samples were also sent for histopathological examination.The blood samples from rats treated with ethanolic and aqueous extracts of *Vigna unguiculata* had significant reduction in their lipid profile, improvement in hematological parameters as well as reduction in the hepatic serum markers in paracetamol-induced animals, indicating the effect of Vigna unguculata extract in restoring normal functional ability of hepatocytes.

ZIKA VIRUS: A BRIEF NOTE

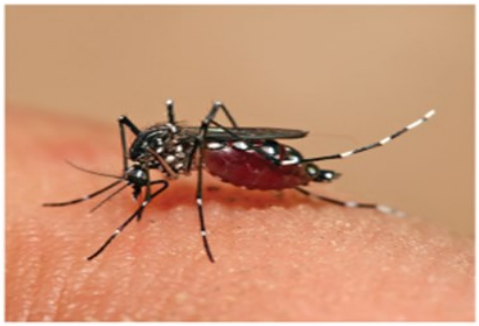
Zika virus is an emerging mosquito-borne virus that was first identified in Uganda in 1947 in rhesus monkeys through a monitoring network of sylvatic yellow fever (Genre: Flavivirus). Recently in Brazil, local health authorities have observed an increase in Guillain-Barré syndrome which coincided with Zika virus infections in the general public, as well as an increase in babies born with microcephaly in northeast Brazil.

Signs and Symptoms— are similar to other arbovirus infections such as dengue, and include fever, skin rashes, conjunctivitis, muscle and joint pain, malaise, and headache.

Treatment

Zika virus disease is usually relatively mild and requires no specific treatment. There is no vaccine to prevent or medicine to treat Zika virus. Get plenty of rest. Drink fluids to prevent dehydration. Take medicine such as acetaminophen or paracetamol to reduce fever and pain. Do not take aspirin and other non-steroidal anti-inflammatory drugs (NSAIDS) until dengue can be ruled out to reduce the risk of bleeding. If you are taking medicine for another medical condition, talk to your healthcare provider before taking additional medication.

Facts about the Zika virus



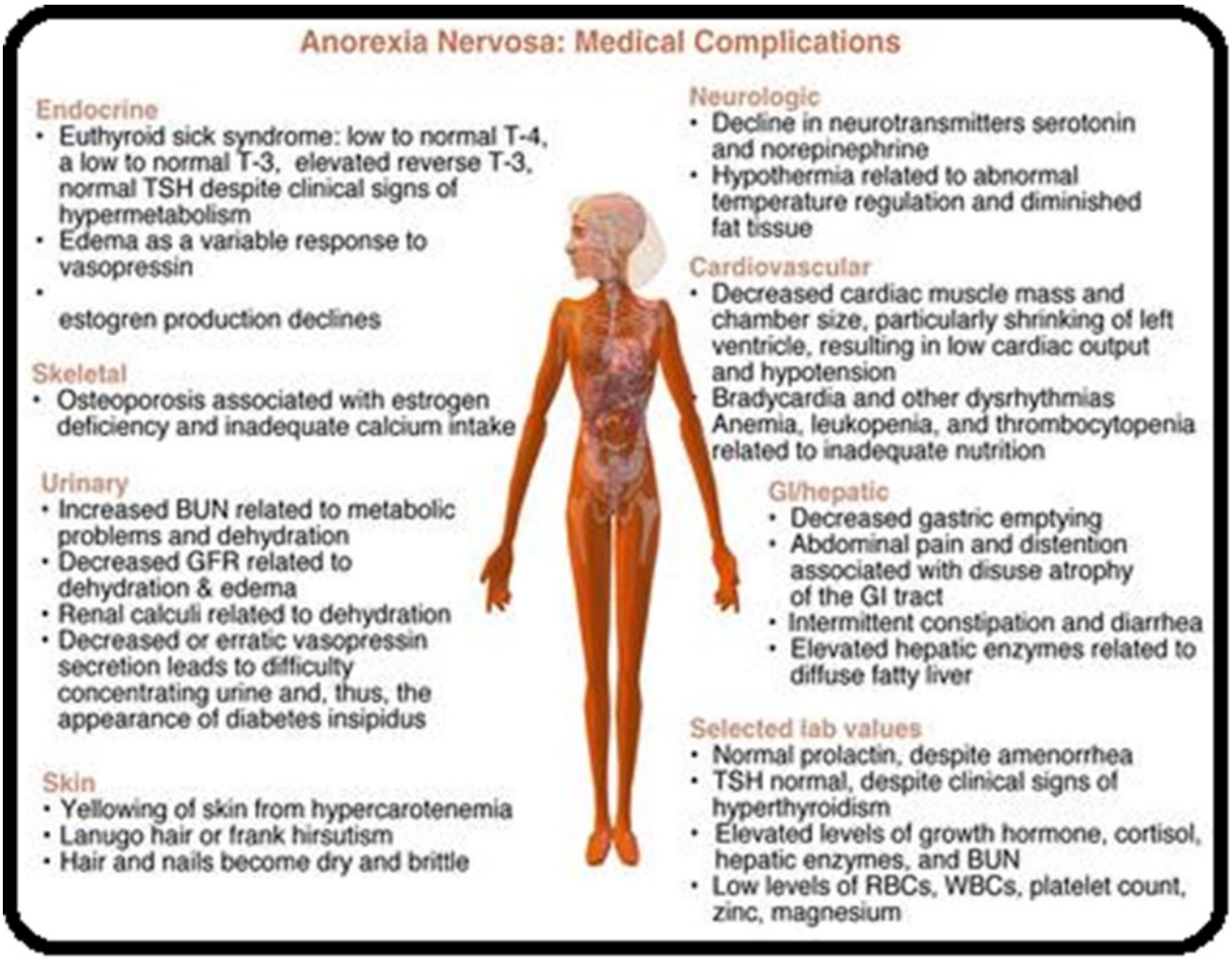
- Zika virus disease is caused by a virus transmitted by Aedes mosquitoes.
- People with Zika virus disease usually have a mild fever, skin rash (exanthema) and conjunctivitis. These symptoms normally last for 2-7 days.
- There is no specific treatment or vaccine currently available.
- The best form of prevention is protection against mosquito bites.
- The virus is known to circulate in Africa, the Americas, Asia and the Pacific.

EATING DISORDER—ANOREXIA NERVOSA
AN UPDATE

Eating disorders are characterized by sever disturbances in eating behaviors. The two most common disorders, anorexia ner vosa and bulimia ner vosa, put the patient at risk for severe cardiovascular and GI complications and can ultimately result in death. Patients with these disorders exhibit severe disturbances in body image and self-perception. Their behavior may include self-starvation, binge eating, and purging. The causes of eating disorders aren't fully under-stood.

ANOREXIA NERVOSA: Important signs and symptoms

- Decreased blood volume, evidenced by lowered blood pressure and orthostatic hypotension
- Electrolyte imbalance, evidenced by muscle weakness, seizures, or arrhythmias
- Emaciated appearance
- Need to achieve and please others
- Obsessive rituals concerning food
- Refusal to eat



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Review on *In-Vivo* Nutritional and Toxicological Evaluation of Nano Iron Fortified Biscuits as Food Supplement for Iron Deficient Anemia

Abstract

Iron deficiency anemia (IDA) is a global nutritional metabolic disorder affecting majority of healthy people rather than those suffering from chronic diseases. The main reason for IDA is not the existence quantity of iron in food but its bioavailability form. The present work represents new modality to increase the intestinal absorptivity of iron through biosynthesis of biocompatible iron nanoparticles (Fe3O4) capped with vitamin C. Intestinal villi will absorb the nano particles as Vitamin C not as iron because Iron particles are coated with Vitamin C in order to overcome the limited absorptivity of iron in gut. Biocompatible magnetite nanoparticles (Fe3O4) of size range 20 ± 5 nm were synthesized and characterized by Transmission Electron Microscope (TEM) and X-Ray Diffraction (XRD). Iron Deficient anemic rats were treated with an iron free basal diet for long period and hematological indices were tested for establishing the anemic state. Three levels Nano Iron Fortified Biscuits (10 ppm, 30 ppm and 60 ppm iron) were prepared and one level of Ferric Chloride (FeCl3) fortified biscuits, 10 ppm, in addition to untreated control group nourished iron free basal diet. Results reveals that, the nano iron form promoted the growth rate and increased the nutritional quality of protein and enhance the erythropoiesis process where Hemoglobin concentration increased from 9.9 ± 1.2 g/dl to be 14.6 ± 1.1 g/dl, 16.7 ± 1.6 g/dl and 18.2 ± 2.1 g/dl For the tree levels of 10 ppm, 30 ppm and 60 ppm, respectively. While for RBCs count increased to be 6.7 ± 1.4 x 106/mm3, 7.3 ± 1.6 x 106/mm3 and 7.8 ± 1.8 x 106/mm3, respectively. Toxicological evaluation show no apparent toxicological sings with no mortality. Based on the Histopathological and biochemical examinations The present work recommend the use of 10 ppm Nano iron fortified biscuits for mild iron deficiency anemia and the 30 ppm level for more sever one to manage and control Iron deficient anemia and extra toxicological testing are still required.

Graduate Program Outcomes of Sultan-ul-Uloom College of Pharmacy, Hyderabad

At the end of the program the graduates shall

a.Acquire fundamental knowledge of pharmaceutical, clinical and life sciences, their practical applications, relevant historical landmarks and political issues.

b.Learn the basic principles of drug treatment, disease modifications, formulation development, manufacturing, quality assurance and analytical techniques.

c.Understand drug designing, cellular mechanism, molecular biology and molecular modelling.

d.Demonstrate knowledge of current regulatory guidelines and intellectual property rights.

e.Have thorough knowledge of pharmacovigilance, ADR–monitoring and pharmacogenetics.

f.Master the key concepts in modern pharmaceutical tools, software, equipments and their validation.

g.Greatly enhance their practical skills, scientific approach, analytical and critical thinking potential accomplishing the real time requirements of all stake holders.

h.Immensely benefit in organizing proficiency and knowledge dissemination in seminars, symposia and workshops.

i.Interact with industries, academic, clinical and research organizations widening their intellectual horizons and entrepreneurial skills.

j.Gain ability for sustainable development through team participation, communication, planning, time management, leadership and interpersonal skills.

k.Be groomed on societal, health and environmental safety, legal, cultural, ethical, moral and social practices for a better professional identity and lifelong learning.

l.Training graduates to achieve global competence to succeed competitive examinations in employment and higher education.

Complete New List Of Banned Fixed Dose Combination (FDC) Drugs 2016

The Government of India has issued gazette notification, listing the medicines of fixed drug combination, which have been banned by the Ministry of Health and Family Welfare.

- Aceclofenac + Paracetamol + Rabeprazole
- Nimesulide + Diclofenac
- Nimesulide + Cetirizine + Caffeine
- Nimesulide + Tizanidine
- Paracetamol + Cetirizine + Caffeine
- Diclofenac + Tramadol + Chlorzoxazone
- Dicyclomine + Paracetamol + Domperidone
- Nimesulide + Paracetamol dispersible tablets
- Paracetamol + Phenylephrine + Caffeine
- Diclofenac + Tramadol + Paracetamol
- Diclofenac + Paracetamol + Chlorzoxazone + Famotidine
- Naproxen + Paracetamol
- Nimesulide + Serratiopeptidase
- Paracetamol + Diclofenac + Famotidine
- Nimesulide + Pitofenone + Fenpiverinium + Benzyl Alcohol
- Omeprazole + Paracetamol + Diclofenac
- Nimesulide + Paracetamol injection
- Tamsulosin + Diclofenac
- Paracetamol + Phenylephrine + Chlorpheniramine + Dextromethorphan + Caffeine
- Diclofenac + Zinc Carnosine
- Diclofenac + Paracetamol + Chlorpheniramine Maleate + Magnesium Trisillicate
- Paracetamol + Pseudoephedrine + Cetrizine
- Phenylbutazone + Sodium Salicylate
- Lornoxicam + Paracetamol + Trypsin
- Paracetamol + Mefenamic Acid + Ranitidine + Dicyclomine
- Nimesulide + Dicyclomine
- Heparin + Diclofenac
- Glucosamine + Methyl Sulfonyl Methane + Vit D3 + Manganese + Boron + Copper + Zinc
- Paracetamol + Tapentadol
- Tranexamic Acid + Proanthocyanidin
- Benzoxonium Chloride + Lidocaine
- Lornoxicam + Paracetamol + Tramadol
- Lornoxicam + Paracetamol + Serratiopeptidase
- Diclofenac + Paracetamol + Magnesium Trisilicate
- Paracetamol + Domperidone + Caffeine

- Combikit of 3 tablets of Serratiopeptidase (enteric coated 20000 units) + Diclofenac Potas sium & 2 tablets of Doxycycline
- Nimesulide + Paracetamol Suspension
- Aceclofenac + Paracetamol + Famotidine
- Aceclofenac + Zinc Carnosine
- Paracetamol + Disodium Hydrogen Citrate + Caffeine
- Paracetamol + DL Methionine
- Disodium Hydrogen Citrate + Paracetamol
- Paracetamol + Caffeine + Codeine
- Aceclofenac (SR) + Paracetamol
- Diclofenac + Paracetamol injection
- Azithromycin + Cefixime
- Amoxicillin + Dicloxacillin
- Amoxicillin 250 mg + Potassium Clavulanate Diluted 62.5 mg
- Azithromycin + Levofloxacin
- Cefixime + Linezolid
- Amoxicillin + Cefixime + Potassium Clavulanic Acid
- Ofloxacin + Nitazoxanide
- Cefpodoxime Proxetil + Levofloxacin
- Combikit of Azithromycin, Secnidazole and Fluconazole
- Levofloxacin + Ornidazole + Alpha Tocopherol Acetate
- Nimorazole + Ofloxacin
- Azithromycin + Ofloxacin
- Amoxycillin + Tinidazole
- Doxycycline + Serratiopeptidase
- Cefixime + Levofloxacin
- Ofloxacin + Metronidazole + Zinc Acetate
- Diphenoxylate + Atropine + Furazolidone
- Combikit of Fluconazole Tablet, Azithromycin Tablet and Ornidazole Tablets
- Ciprofloxacin + Phenazopyridine
- Amoxycillin + Dicloxacillin + Serratiopeptidase
- Combikit of Fluconazole Tablet, Azithromycin Tablet and Ornidazole Tablets
- Ciprofloxacin + Phenazopyridine
- Amoxycillin + Dicloxacillin + Serratiopeptidase
- Azithromycin + Cefpodoxime
- Lignocaine + Clotrimazole + Ofloxacin + Beclomethasone
- Cefuroxime + Linezolid
- Ofloxacin + Ornidazole + Zinc Bisglycinate

For further details please visit: http://mynahcare.com/national/new-list-of-medicine-drugs-banned-in-india-2016-fdc/

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Programme Educational Objectives

Academic Excellence: Graduates of this program shall gain profound knowledge in various disciplines viz., applied mathematics & sciences, anatomy, physiology, pharmacology, pharmaceutics, pharmaceutical chemistry, pharmaceutical analysis, phytochemistry, biotechnology and regulatory affairs to cater to the requirements of pharmaceutical industries, professional pharmacy practice, clinical research organizations, medical transcription and data management companies.

Core Competence: Graduates to be developed into highly competent individuals with practical skills by igniting scientific temper and promoting intellectual quest to gear ahead towards competitive examinations and diverse careers in the field of pharmaceutical sciences through the process of continuous learning.

Personality Development and Professionalism: To inculcate discipline, professionalism, team spirit, communication skills, social and ethical commitment in the graduates in order to adorn leadership roles facilitating improvement in healthcare sector with a distinct professional identity, business acumen, global recognition and sustainable development.

Collaboration: To benefit graduates through industry – institute interface and collaboration works with other academic, clinical and research organizations resulting in confidence building, knowledge advancement and entrepreneurial competencies.

Regulatory Affairs: Graduates to be trained in current acts and regulations governing good manufacturing practices, good laboratory practices, good clinical practices and environmental safety, thereby enhancing integrity and ethical values in their profession.

Courses Offered:

B.Pharm (4 Years)

M.Pharm (2 Years)

- Quality Assurance
- Pharmaceutical Chemistry
- Pharmaceutics
- Pharmacology

Pharm.D. (6 Years)

Pharm.D. (PB)

MoUs with:

- **Prime Hospitals, Hyderabad**
- **Central Research Institute of Unani Medicine (CRIUM), Hyderabad**
- **KIMS Foundation and Research Center, Hyderabad**
- **Omdurman Islamic University, Sudan**