



# CLINICAL PHARMACY

## News Letter

PROMOTES HEALTH BY PROVIDING PHARMACEUTICAL PATIENT CARE

Vol 2, Issue 1

NIRMALA COLLEGE OF PHARMACY

January - March 2015

### TIME LINE :

- ★ National level work shop organized on "career awareness programme on Medical coding & Pharmacovigilance in current Pharmaceutical Market Scenario" on 1<sup>st</sup> April 2015. A total no. of 245 no's were participated from various places such as Chennai, Bangalore, Hyderabad, Bheemavaram, Guntur, etc.,
- ★ Alumni Meeting was held on 28<sup>th</sup> February, 2015. On this occasion a total no. of 74 alumni was participated.
- ★ Annual Day celebrations – 2015 was organized on forenoon of 28<sup>th</sup> February, 2015.
- ★ NSS volunteers of Nirmala College of Pharmacy participated in pulse polio programme with association of Govt. Hospitals, Mangalagiri on 18<sup>th</sup> & 19<sup>th</sup> January 2015.
- ★ Pharm D students of our Institution participated in Filariasis Eradication programme organized by Central Govt. with association of Govt. Hospital, Mangalagiri on 13<sup>th</sup> & 14<sup>th</sup> December, 2014.



NPW Celebrations - 2014



National level work shop organized on "Career awareness programme on Medical coding & Pharmacovigilance in Current Pharmaceutical Market Scenario" with an Association of IKYA Global Education, Hyderabad on 1<sup>st</sup> April 2015



Alumni Meet - 2015 held on 28th February 2015



### Flash News :

- ★ **Career Guidance Fair - 2015** is to be organizing by **Supr Innovations Pvt Ltd** on 18<sup>th</sup> & 19<sup>th</sup> April, 2015, 9 AM – 6 PM at Sri Sessa Sai Kala Vedika, Bandar Road, Vijayawada. Around 15 Pharma Companies participating & conducting a placement drive (Job Fair) in the same occasion. All the Pharma students can participate the drive and have a jobs.

## COURSES OFFERED B.Pharmacy, Pharm.D, M.Pharmacy & D.Pharmacy

COLLEGE CODE – B.Pharmacy, Pharm.D & M.Pharmacy – **NRML**; D.Pharmacy - **NCPA**



## NIRMALA COLLEGE OF PHARMACY

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### DRUG INFORMATION OF ORLISTAT (TETRAHYDROLIPSTATIN)

It is a drug designed to treat obesity. It is marketed as a prescription drug under the trade name Xenicalin most countries, and is sold over-the-counter as Alli by GlaxoSmithKline in the United Kingdom and the United States. Its primary function is preventing the absorption of fats from the human diet by acting as a lipase inhibitor, thereby reducing caloric intake. It is intended for use in conjunction with a healthcare provider-supervised reduced-calorie diet

Orlistat is the saturated derivative of lipstatin, a potent natural inhibitor of pancreatic lipases isolated from the bacterium *Streptomyces toxytricini*. Orlistat also modestly reduces blood pressure, and appears to prevent the onset of type 2 diabetes, whether due to weight loss itself or to other effects; in a large randomized controlled trial, orlistat was found to reduce the incidence of diabetes by nearly 40% in obese people. This medication is used along with a doctor / Pharmacist-approved reduced-calorie diet, exercise, and behavior modification program to help significantly overweight (obese) persons lose weight.

### MECHANISM OF ACTION:

**Orlistat** works by inhibiting gastric and pancreatic lipases, the enzymes that break down triglycerides in the intestine. When lipase activity is blocked, triglycerides from the diet are not hydrolyzed into absorbable free fatty acids, and are excreted undigested instead. Orlistat was also recently found to inhibit the thioesterase domain of fatty acid synthase (FAS), an enzyme involved in the proliferation of cancer cells but not normal cells.

### USUAL ADULT DOSE FOR OBESITY:

120 mg orally three times a day with each main meal containing fat. The dose may be taken during the meal or within 1 hour of completing the meal.

### USUAL PEDIATRIC DOSE FOR OBESITY:

12 years or older 120 mg orally three times a day with each main meal containing fat. The dose may be taken during the meal or within 1 hour of completing the meal.

### SIDE EFFECTS:

Orlistat is notorious for its gastrointestinal side effects, which can include steatorrhea (oily, loose stools)

**Source:** composed by **Dr.Sk. Abdul Rahaman**

<http://vibeforall.in/home-health-aid-our-brands-scholl>.

## Students selected in Campus Interview :

### AGS HELATH CARE SOLUTIONS AND TNQ Chennai



**SAI PALLAVI**  
IV/ IV B. Pharm



**SHAIK. ASVIYA PARVEEN**  
IV/ IV B. Pharm



**D. LEELA SRAVANI**  
IV/ IV B. Pharm



**R.V.V.S. PPRASANNA KUMARI**  
IV/ IV B. Pharm

### BISPHENOL-A: BOTTLE AND CAN LINING COULD INCREASE BLOOD PRESSURE ...

Many people drink and eat food from cans and plastic bottles, but this may be having an impact on their health. A new study reports that cans and bottles lined with the chemical bisphenol A could lead to increased blood pressure.

Bisphenol A is a common chemical, found in products such as plastic bottles and the inner lining of food cans. According to the authors of the study, BPA exposure has been detected in more than 95% of the US population. There is also evidence that BPA can leach into food and drinks from the lining of containers. An earlier randomized crossover trial demonstrated that eating canned soup for 5 days running increased urinary BPA concentration by more than 1000%, in comparison with eating soup made from fresh ingredients.

"A 5 mmHg increase in systolic blood pressure by drinking two canned beverages may cause clinically significant problems, particularly in patients with heart disease or hypertension," says study author Dr. Yun-Chul Hong of Seoul National University College of Medicine in South Korea. "A 20 mmHg increase in systolic blood pressure doubles the risk of cardiovascular disease."

**Source:** <http://www.medicalnewstoday.com/articles/286642.php>

### NITROFURANTOIN NOW CONTRAINDICATED IN MOST PATIENTS WITH AN ESTIMATED GLOMERULAR FILTRATION RATE (EGFR) OF LESS THAN 45 ML/MIN/1.73M<sup>2</sup>

Nitrofurantoin is an oral antibiotic for the treatment and prevention of urinary tract infections. The antibacterial efficacy in this infection depends on the renal secretion of nitrofurantoin into the urinary tract. It is now contraindicated in patients with an estimated glomerular filtration rate (eGFR) of less than 45 ml/min/1.73m<sup>2</sup>. However, a short course (3 to 7 days) may be used with caution in certain patients with an eGFR of 30 to 44 ml/min/1.73m<sup>2</sup>. Only prescribe to such patients to treat lower urinary tract infection with suspected or proven multidrug resistant pathogens when the benefits of nitrofurantoin are considered to outweigh the risks of side effects. Consider checking renal function when choosing to treat with nitrofurantoin, especially in the elderly.

**Source:** composed by **Mr. Haroled Peter P.L.**

Article citation: Drug Safety Update September 2014 vol 8, issue 2: A3

### FDA APPROVED DRUGS FOR ONCOLOGY IN 2014:

**Akynzeo (netupitant and palonosetron); Helsinn;** For the prevention of chemotherapy-induced nausea and vomiting, Approved October 2014

**Beleodaq (belinostat); Spectrum Pharmaceuticals;** For the treatment of relapsed or refractory peripheral T-cell lymphoma, Approved July 2014

**Blincyto (blinatumomab); Amgen;** For the treatment of Philadelphia chromosome-negative relapsed /refractory B cell precursor acute lymphoblastic leukemia, Approved December 2014

**Cyramza (ramucirumab); Eli Lilly;** For the treatment of gastric cancer, Approved April 2014

**Imbruvica (ibrutinib); Pharmacyclics;** For the treatment of chronic lymphocytic leukemia, Approved February 2014

**Keytruda (pembrolizumab); Merck;** For the treatment of unresectable or metastatic melanoma, Approved September 2014

**Lynparza (olaparib); AstraZeneca;** For the treatment of previously treated BRCA mutated advanced ovarian cancer, Approved December 2014

**Opdivo (nivolumab); Bristol-Myers Squibb;** For the treatment of unresectable or metastatic melanoma, Approved December 2014

**Zydelig (idelalisib); Gilead;** For the treatment of relapsed CLL, follicular B-cell NHL and small lymphocytic lymphoma, Approved July 2014

**Zykadia (ceritinib); Novartis;** For the treatment of ALK+ metastatic non-small cell lung cancer, Approved April 2014



**N. JYOTHI**  
IV/ IV B. Pharm



**SD. SIPAI BABU**  
M. Pharm, Pharmacology  
**RCC LABORATORIES**  
**INDIA PRIVATE LIMITED**  
Genome Valley, Hyderabad

### GPAT - 2015 TOPPERS



**B. RAMYA SRI**  
IV/ IV B. Pharm  
All India Rank : 170



**G. SIVA NAGESWARA RAO**  
IV/ IV B. Pharm  
All India Rank : 314

### DO YOU KNOW STEM CELLS THAT REGENERATE BONES AND CARTILAGE?

Researchers, including one of Indian-origin, have identified stem cells capable of regenerating both bone and cartilage in mice. Researchers at Columbia University Medical Center (CUMC) discovered the cells, called osteochondroreticular (OCR) stem cells, in bone marrow of mice by tracking a protein expressed by the cells. Using this marker, the researchers found that OCR cells self-renew and generate key bone and cartilage cells, including osteoblasts and chondrocytes. Researchers also showed that OCR stem cells, when transplanted to a fracture site, contribute to bone repair. If you make a fracture in the mouse, these cells will come alive again, generate both bone and cartilage in the mouse-and repair the fracture. The researchers believe that OCR stem cells will be found in human bone tissue, as mice and humans have similar bone biology. Further study could provide greater understanding of how to prevent and treat osteoporosis, osteoarthritis, or bone fractures.

"Our findings raise the possibility that drugs or other therapies can be developed to stimulate the production of OCR stem cells and improve the body's ability to repair bone injury - a process that declines significantly in old age," said Timothy C Wang, the Dorothy L and Daniel H Silberberg Professor of Medicine at CUMC, who initiated the research. The study also showed that the adult OCRs are distinct from mesenchymal stem cells (MSCs), which play a role in bone generation during development and adulthood.

Researchers presumed that MSCs were the origin of all bone, cartilage, and fat, but recent studies have shown that these cells do not generate young bone and cartilage. The CUMC study suggests that OCR stem cells actually fill this function and that both OCR stems cells and MSCs contribute to bone maintenance and repair in adults.

**Source:** composed by **Mrs. Swapna G**

1. [www.pharmatutor.org](http://www.pharmatutor.org)

2. <http://www.cumc.columbia.edu>.

### NSS SPECIAL CAMP ORGANIZED AT ZILLA PRAJA PARISHAD, GOVT HIGH SCHOOL, ATMAKURU VILLAGE.



Filariasis eradication programme organized by the collaboration with Govt. Hospital, Mangalagiri

National Seminar for Pharm D students organized on "Clinical Pharmacist Perception & Therapeutic approaches in Special Clinical Condition" on 15<sup>th</sup> November, 2014