



# PSG NEWS DIGEST

A news letter from PSG College of Pharmacy, Department of Pharmacy Practice,

Pulse of the Issue Pharmacist's Desk Drugs Approved News Room Department Activities

## FROM THE PHARMACIST'S DESK



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### ***“CLINICAL PHARMACIST: IN THE MANAGEMENT OF HEART FAILURE”***

What is heart failure?

Heart failure is a chronic, progressive condition in which the heart muscle is unable to pump enough blood to meet the body's needs for blood and oxygen

#### **Clinical Pharmacist**

Clinical pharmacists are health professionals who work directly with physicians, other health professionals, to make sure your medicines help you to get better and stay well.

They are frequently granted patient care privileges

By collaborating physicians and/or health systems that allow them to perform a full range of medication decision-making functions as part of the patient's health care team.

#### **Roles of Clinical Pharmacist in Heart Failure management**

##### **Making Recommendations**

Clinical pharmacists can make interventions such as recommending, intravenous Loop diuretics versus oral diuretics, up titrating diuretic dose in a timely manner, avoiding the use of NSAIDs, initiation of beta blocker therapy, restrictions on instituting sodium-based fluids, daily monitoring of renal function and electrolytes, daily strict charting of fluid intake and output, and daily weighing of the patient. This will prevent diuretic resistance, maximize diuretic efficacy, prevent electrolyte derangements, reduce length of hospital stay and decrease the overall cost of in-patient management of the sepatients.

##### **Patient Education**

Clinical Pharmacists must also actively participate in patient education activities. Should focus on the importance of compliance with dietary (sodium/volume) and drug therapy (Avoidance of NSAID containing non-prescription drug products) restrictions, since these have been scientifically proven to increase the risk of decompensation in chronic heart failure patients. In addition, Clinical Pharmacists should provide a patient information brochure, medicine details and weight log booklet to Heart Failure patients.

##### **Discharge Medicines Reconciliation**

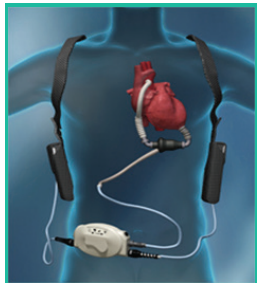
Clinical Pharmacists should get involved in all discharge planning activities for decompensated heart failure patients who meet the criteria for discharge. During these discharge planning encounters, they can seize the opportunity to help clinicians optimize the doses of certain drug therapies that have been scientifically proven to reduce morbidity and mortality in heart failure patients: Angiotensin Converting Enzyme Inhibitor (ACEIs) or Angiotensin II Receptor Blockers (ARBs), Aldosterone Receptor Antagonist (ARAs) and Beta Blockers (BB).

#### **Post Hospital Discharge Follow-up**

Clinical Pharmacist should follow-up the patients with Heart Failure, during review or should call the patients through telephone, two weeks after discharge. If any emergency, patient should contact Clinical pharmacist.

### Clinical Pharmacist in Heart Transplantation and Mechanical Circulatory Support

A left ventricular assist device (LVAD) is a pump that we use for patients who have reached end-stage heart failure. This is a life-saving therapy for patients awaiting a heart transplant. It is also able to restore the failing heart, eliminating the need for a transplant and prolongs survival in end-stage HF.



Patients with VAD and an artificial heart have unique pharmacotherapeutic requirements in terms of anticoagulation, appropriate antibiotic selection, and continuation of HF medications. Because evidence available in managing this patient population is still sparse compared with other areas of HF management, Clinical Pharmacist should expertise in pharmacology and therapeutics which can really contribute to both acute care and community settings in optimizing patients' medication care.

**CDSCO Approved Drugs from  
April 2018 to August 2018**

*Ref: [www.cdsc.nic.in](http://www.cdsc.nic.in) (Miss. N. Saranya, V- Pharm.D)*

**FDA APPROVED DRUGS FROM MAY TO AUGUST 2018**

DRUG NAME	INDICATION
Riociguat bulk & 0.5mg/1.0mg/1.5mg/2.0mg/2.5 mg tablet	For the treatment of persistent/ recurrent chronic Thromboembolic pulmonary Hypertension (CTEPH) WHO Group 4. After surgical treatment or imoperable CTEPH to improve exercise capacity and WHO function
Vortioxetine Hydrochloride 5mg/10 mg/15mg/20mg film coated tablets	For the treatment of major depressive disorder in adult
Baricitinib 2mg/4mg film coated tablets	For the treatment of moderate to severe active rheumatoid arthritis in adult patients who have responded inadequately to, or who are intolerant to one or more disease modification anti-rheumatic drugs. Baricitinib may be used as monotherapy or in combination with methotrexate
Vardenafil Hydrochloride Trihydrate(BULK) & Vardenafil 2.5mg/5mg/10mg/20mg tablet	For the Treatment of erectile dysfunction in adult men.
Trientine Hydrochloride bulk & 250mg caspule	For the treatment of Wilson's disease (hepatolenticular degeneration) in patients intolerant to Penicillamine. It should be used when continued treatment with Penicillamine is no longer possible because of intolerable or life endangering side effect
Emtricitabine 200mg and tenofovir alafenamide 25mg tablets	In combination with other antiretroviral agents for the treatment of adults and adolescents (aged 12 years and older with body weight at least 35kg) infected with human immunodeficiency virus I (HIV-I).

Gadoteridol - 279.3mg/ml for injection Pack size – 10ml, 15ml and 20ml	For the treatment of Lesions with abnormal vascularity in the brain (intracranial lesions ), spine and associated tissues in adults and paediatric patients over 2 years of age Lesions in the head and neck in adults
Apremilast bulk & Apremilast 10mg, 20mg, 30mg - film coated tablets	Indicated for the treatment of patients with moderate to severe plaque psoriasis who are candidates for phototherapy or systemic therapy

S.NO	DRUG NAME	ACTIVE INGREDIENT	FDA-APPROVED USE
1	Omegaven	Fish Oil Triglycerides	As a source of calories and fatty acids in pediatric patients with parenteral nutrition-associated cholestasis
2	Krintafel	Tafenoquine	For the radical cure (prevention of relapse) of Plasmodium vivax malaria
3	TPOXX	Tecovirimat	To treat smallpox
4	Braftovi	Encorafenib	To treat unresectable or metastatic melanoma
5	Zemdri	Plazomicin	To treat adults with complicated urinary tract infections
6	Epidioloex	Cannabidiol	To treat rare, severe forms of epilepsy
7	Olumiant	Baricitinib	To treat moderately to severely active rheumatoid arthritis
8	Palynziq	Pegvaliase-Pqpz	To treat adults with a rare and serious genetic disease known as phenylketouria (PKU)
9	Doptelet	Avatrombopag	To treat low blood platelet count (thrombocytopenia) in adults with chronic liver disease who are scheduled to undergo a medical or dental procedure
10	Lokelma	Sodium Zirconium Cyclosilicate	To treat hyperkalemia
11	Aimovig	Erenumab-Aooe	For the preventive treatment for migraine

Ref: <https://www.fda.gov/Drugs>. (Miss. V.Divya,V- Pharm.D)

## News room

### CIPROFLOXACIN RESISTANT BACTERIA IN A LEECH'S GUT

This issue came to light when plastic surgeons reported that their patients developed infections caused by ciprofloxacin resistant Aeromonas bacteria. These patients had been treated with leeches to improve blood supply after plastic surgery. Aeromonas is one of the major type bacteria found in leech's gut. Uconn microbiologists found ciprofloxacin resistant

bacteria in leech's gut. A further look down the road showed that these leeches have been fed with poultry blood which contained antibiotics like ciprofloxacin and enrofloxacin. Just around 0.01 micrograms per milliliter, four hundred times less than the concentration a bacteria must survive in order to be considered "resistant". The isolated Aeromonas strains contained three bits of DNA, two genes with mutations and a plasmid necessary for ciprofloxacin resistance. This suggests even low level of antibiotics in environment matters. This provides proof that the cost of not cleaning up our environment is the loss of valuable antibiotics.

**Ref:** <https://www.sciencedaily.com/releases/2018/07/180724110127.htm>  
**(Miss. R. Keerthana, V- Pharm.D)**

## Krintafel

Krintafel (Tefenoquine succinate) an 8-amino quinoline antimalarial drug is indicated for radical cure of P.vivax affected patients of age 16 and elder. It is the first ever single dose for the indication and it is expected to play significant role in eradication of malaria. It is active against the liver stages including the hypnozoite (dormant stage). They act against the pre erythrocytic stage and helps in prevention of erythrocytic stage which is responsible for relapse of P.vivax. It is given along with the appropriate antimalarial therapy in single dose of 300mg on first or second day. Available dose is 150mg given as two tablets at once along with food to increase the systemic absorption. Contraindications: G6PD deficiency (hemolysis). It is mandatory to check the G6PD enzyme before the administration of the drug and it should be monitored.

**Ref: New Drug Application : 210795, <https://www.fda.gov/> approved on 20/7/201**  
**(Miss. A. Dharani, V- Pharm.D)**

- Dr.Prudence A Rodrigues , Professor published a research paper on “ Prospective comparative observational study on safety, efficacy and cost effectiveness of insulin and their analogues”. IJPPS 2018/ Vol 10/ Issue 7/62-65.
- Dr.Prudence A Rodrigues , Professor published a research paper “A Study on Carvedilol versus Metoprolol in the Management of Atrial Fibrillation in Post Operative Coronary Artery Bypass Graft Surgery. International Journal of Pharmaceutical Sciences and Drug Research .2018,Vol 10,Issue 4

## CPE Programme – June 22, 2018

Department of Pharmacy Practice conducted Continuing Pharmacy Education Programme on 22nd June, 2018. The theme of this programme was “Role of Pharmacist in Patient Care”. Three Clinical Pharmacists from different hospitals were invited to deliver talk on Drug dosing and Handling of drugs by Mr.Mohammed Faizal, Department of Clinical Pharmacy, ASTER MIMS, Kerala., Antibiotic Stewardship by Dr. Vrindha Namboodri, Clinical Pharmacist ,Amrita Institute of Medical Sciences and Research, Cochin, Kerala and Pharmacotherapy Management by Dr. Grace Mary John, Clinical Pharmacist, Believers Church Medical College Hospital, Tiruvalla, Kerala .The delegates of this session were Pharm D students from different colleges . As a part of this session a quiz competition was conducted.

## Department Activities

### PAPER PUBLICATION



## CAREER GUIDANCE PROGRAMME

A Career guidance programme was held on 13th August , 2018 for V Pharm D students. Mr.Ravikumar , Professor of Practice , PSG IAS ,conducted the session in a very interactive manner discussing about the communication skills and resume preparation.



### Programme



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