



# PHARMACY PRACTICE BULLETIN

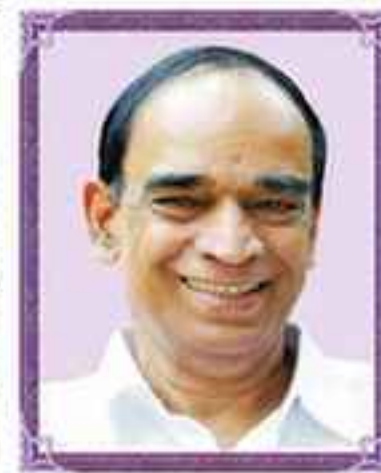
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A Unit of Department of Pharmacy Practice

DEVAKI AMMA MEMORIAL COLLEGE OF PHARMACY, CHELEMBRA, MALAPPURAM, KERALA



*In the remembrance of*  
**Sri. K.V. Sankaranarayanan**  
(01.01.1948 - 12.07.2013)  
Founder, Devaki Amma Memorial Institutions

**With His  
Heavenly  
Blessings**

## INSTITUTION VISION:

To be the ultimate destination for training, practice and research in pharmacy education to cater the health needs of the society.

## INSTITUTION MISSION:

To provide state-of-art infrastructure, research facilities with eminent faculties to disseminate advanced knowledge in pharmacy education through innovative teaching- learning process with human and ethical values.



## The Destination for Excellence

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## ISSUE HIGHLIGHTS

### D) New Drugs Approved by Drug Controlled General of India in the past three months

Sl. No.	Drug Name	Indication
1	Acalabrutinib Capsules 100 mg	For the treatment of patients with mantle cell lymphoma (MCL) who have received atleast one prior therapy.
2	Abemaciclib Film Coated Tablets 50 mg, 100 mg, 150 mg and 200 mg	For the treatment of women with hormone receptor (HR) positive, human epidermal growth factor receptor 2 (HER2) negative locally advanced or metastatic breast cancer in combination with an aromatase inhibitor or fulvestrant as initial endocrine based therapy, or in women who have received prior endocrine therapy. In pre- or perimenopausal women, the endocrine therapy should be combined with a luteinising hormone-releasing hormone (LHRH) agonist.  As monotherapy for the treatment of adult patients with HR-positive, HER2- negative advanced or metastatic breast cancer with disease progression following endocrine therapy and prior chemotherapy in the metastatic setting.
3	Ripasudil Hydrochloride Hydrate Bulk Drug and Ripasudil Eye Drops 0.4% w/v	To treat glaucoma and ocular hypertension when other medicines for glaucoma have insufficient effect or cannot be used.
4	Diperoxochloric Acid Concentrate and Diperoxochloric Acid Topical Solution	Indicated for wound healing in diabetic neuropathic ulcers of skin and subcutaneous tissues reduction
5	Endoxifen Citrate Bulk and Endoxifen Tablets 8 mg.	For the acute treatment of manic episodes with or without mixed features of Bipolar I disorder.
6	Azelnidipine Bulk and Azelnidipine Tablets 16 mg	For the treatment of Stage II Hypertension.
7	Genopep bulk and Genopep cream 0.05% w/w	Indicated for treatment of burn wound, antimicrobial therapy, scar prevention/reduction.
8	Alalevonadifloxacin Mesylate Bulk and Levonadifloxacin Tablets 500 mg	Indicated in adults ( $\geq 18$ years of age) for the treatment of Acute Bacterial Skin and Skin Structure Infections (ABSSSI) including diabetic foot infections and concurrent bacteraemia caused by susceptible isolates of the following: Gram-positive organisms- Staphylococcus aureus (methicillin-resistant, methicillinsusceptible, quinolone-resistant, quinolone-susceptible isolates), Streptococcus pyogenes, Enterococcus faecalis, Streptococcus dysgalactiae ssp. dysgalactiae, Streptococcus agalactiae.



Sl. No.	Drug Name	Indication
9	Lorlatinib Film Coated Tablets 25 mg and 100 mg	For the treatment of ALK fusion gene-positive unresectable advanced and/or recurrent non-small cell lung cancer with resistance or intolerance to ALK tyrosine kinase inhibitor(s).
10	Levonadifloxacin L-Arginine Tetrahydrate Bulk and Levonadifloxacin Injection 800 mg/100ml	Indicated in adults ( $\geq 18$ years of age) for the treatment of Acute Bacterial Skin and Skin Structure Infections (ABSSSI) including diabetic foot infections and concurrent bacteraemia caused by susceptible isolates of the following: Gram-positive organisms: Staphylococcus aureus (methicillin-resistant, methicillin susceptible, quinolone-resistant, quinolone-susceptible isolates), Streptococcus pyogenes, Enterococcus faecalis, Streptococcus dysgalactiae ssp. dysgalactiae, Streptococcus agalactiae.

*Prepared by,  
Sikha P., Fifth Pharm D.*

## II) Medical Hearsay

### 1. Bedtime may be best time for blood pressure meds

Taking blood pressure medications at bedtime rather than in the morning nearly halves the risk of dying from a heart attack, stroke or heart failure. Researchers in Spain found that people who took blood pressure meds at night had lower blood pressure compared to volunteers who took their medication in the morning. The findings are regardless of sex, age, presence of diabetes or kidney disease, and other major known factors of increased risk. Most patients ingest their medication in the morning although no single trial ever documented this to be preferable. No guidelines are currently in place regarding the best time to take the drugs. Swings in blood pressure due to non-compliance is worse than an elevated blood pressure. Factors such as emotions and simultaneous use of other medications can affect a drug's effectiveness.



In a Chronotherapy study, the investigators found that those who always took their meds at night saw their risk of dying as a result of heart or blood vessel problems plunge by two-thirds, compared with those who always took them in the morning. A bedtime drug regimen was also linked to a 44% drop in heart attack risk; a 40% drop in the risk for surgery to widen arterial pathways (coronary revascularization); a 42% lower risk for heart failure; and a 49% dip in stroke risk. Asleep blood pressure is the most significant marker of cardiovascular risk. Patients who took their meds at night had "significantly reduced" blood pressure while asleep.

### 2. Advances against diabetes

A new artificial pancreas system, drugs that help control blood sugar and protect the heart and the kidneys, a new medication that delays type 1 diabetes, and a new way to track blood sugar throughout the day was developed in 2019. Delaying type 1 diabetes: An immunotherapy treatment, teplizumab delays the onset of type 1 diabetes in people who were at high risk of developing the disease. Anti-thymocyte globulin (ATG) was given to people with



newly diagnosed type 1 diabetes, it helped to preserve the function of insulin-producing beta cells and lowered blood sugar levels.

The buzz on diabetes technology: U.S. Food and Drug Administration approved the Tandem Control-IQ, an algorithm that can be used with the Tandem t: slim X2 insulin pump and the Dexcom G6 continuous glucose monitoring system. Patients have to enter the amount of carbohydrates they eat into the machine so it can calculate the proper insulin dose. The iLet by Beta Bionics develops "Breakthrough Device" an artificial pancreas system, designed to be fully automatic. The input need to provide is their weight. Continuous glucose monitors (CGM), the Eversense sensor is implanted under the skin and is worn for 90 days. Information from the sensor is sent to an app on the user's phone via a transmitter worn on the body.



Managing heart and kidney complications: New classes of medications such as SGLT2s and GLP1s. The drugs not only help lower blood sugar levels, they also help protect the heart and kidneys, SGLT2s appeared to offer more kidney protection. A GLP1 medication liraglutide, it's the first drug besides metformin and insulin that's been approved for treating pediatric type 2 diabetes. Treating severe low blood sugar: Two new versions of glucagon, one is called Baqsimi, administered through the nose via a special device. It's the first non-injectable type of glucagon. The second version approved is an auto-injector called GVOKE, designed to be easier for caregivers to use.

### **3. Obesity might weaken some drugs' effectiveness against atrial fibrillation**

Many patients in America have the potentially dangerous irregular heartbeat known as atrial fibrillation (AFib). Being obese might undercut the effectiveness of certain drugs meant to treat AFib. A study found that a class of medicines called sodium channel blockers (quinidine, procainamide, flecainide and propafenone), which are often used to treat AFib, were less effective in obese patients. The recurrence rate for the heart arrhythmia was 30% for obese patients taking sodium channel blockers, compared with 6% for non-obese patients. Another class of drugs, called potassium channel blockers, worked better in obese patients.

Most antiarrhythmic drugs distribute throughout the body and are absorbed by many organs, since these drugs require a large dose to reach a steady level in the blood. The obese patients may be under-treated, they may require increased dosing compared to thinner patients. But upping the dose could lead to unwanted side effects, so doctors may want to consider other treatment options in obese patients. The obesity epidemic is increasing having treatment options to better manage AFib would greatly improve quality of life and could prevent the risk of serious complications, like stroke, which can cause early death.

### **4. Study casts doubt on use of common heart failure drugs**

A new study found that taking beta-blockers was associated with an increased risk of hospitalization for patients with a certain form of heart failure. It's commonly called as the "stiff heart" subtype of heart failure, and it accounts for about half of the 6 million cases of heart failure in the United States. Most patients with the subtype do take a beta blocker, even though it's uncertain if they are of benefit in these cases. As the researchers explained, the drugs work by lowering heart rate and blood pressure, and they're typically recommended for treatment of patients with another form of heart failure, the "weak heart" subtype, because they're known to help those patients.





However, "a big problem with 'stiff heart' heart failure is that we don't have effective drug therapies. So, instead, we use the same medications that work for 'weak heart' heart failure. Because beta blockers save lives in 'weak heart' heart failure, we assume they are also effective in 'stiff heart' heart failure patients. New study suggests that this assumption may be wrong. U.S. Food and Drug Administration-approved beta blockers to treat heart failure include bisoprolol, carvedilol and metoprolol. While it wasn't designed to prove a cause-and-effect relationship, the new analysis found beta blocker use to be a risk factor for hospitalization for heart failure in these patients. The findings are not proof that beta blockers are harmful among patients with 'stiff heart' heart failure, it is just a concerning signal. If a patient had recurring hospital admissions with heart failure and preserved heart function and were on beta blockers, a discussion should take place with their physician about whether to continue with the drugs. However, withdrawing beta blockers can cause 'rebound' hypertension and arrhythmias. And there are also other situations such as atrial fibrillation, recovered heart function, recent heart attack, and angina in which beta blockers are beneficial.

### **5. Acetaminophen in pregnancy might raise children's odds of attention-deficit/hyperactivity disorder (ADHD) or autism**

New research shows that women who took acetaminophen at the end of their pregnancies were much more likely to have child with attention-deficit/hyperactivity disorder (ADHD) or autism.

After testing blood from the mother and the umbilical cord soon after birth, the odds of these developmental disorders were more than twice as high in children exposed to acetaminophen near the time of birth. The association was strongest between exposure to acetaminophen and ADHD in the child. Two previous studies have suggested a connection between acetaminophen in pregnancy and ADHD and autism in children. But those studies were based only on the mothers' memory of taking acetaminophen. It's important to note that while the study found an association between an expectant mothers use of acetaminophen and the development of ADHD and possibly autism in her child, it cannot prove a definitive cause-and-effect link. Acetaminophen has been shown to cross the placenta during pregnancy. That means if an expectant mom takes acetaminophen, some of the drug gets into the baby's system. There were almost 1,000 children in this new study. Their average age was 10 and slightly more than half were boys. Nearly 26% of the children had ADHD only. Close to 7% had autism, while 4% had both ADHD and autism. Just over 30% had another developmental disability. Almost 33% had no developmental concerns. Although acetaminophen is a very safe and effective medication when taken as recommended in general, it may not be as safe as presumed if it is taken during pregnancy.

*Prepared by,  
Muhammed Adhil P., Fifth Pharm D.*

## **DEPARTMENT HIGHLIGHTS**

### **I) Publications**

1. Suresh Arumugam, Sneha Prakash, Sreerag Azhakath, Lydia Abraham, Lakshmi Prakashan, Anusree Anaparakkal. Interventional Study Based on Prescription Errors in the Inpatient Units of a Tertiary Care Hospital in Calicut. Indian Journal of Pharmacy Practice, 12 (4), Oct-Dec, 2019.



## II) Guest Talk

Mr. Sanjay Sreekumar gave a talk on "Antibiotic Resistance" for the continuing education class organized by the Kerala State Pharmacy Council at Edapal Hospital Private Limited on 6<sup>th</sup> October 2019.



## III) Seminars & Conferences Attended

Dr. Siraj Sundaran, Mrs. Binjusha, Ms. Neethu Dasan, and Fourth Pharm. D students attended Indian Association of Colleges of Pharmacy - 2<sup>nd</sup> Pharmaceutical Sciences Congress held at St. Peter's Institute of Pharmaceutical Sciences, Warangal, Telangana on 1<sup>st</sup> and 2<sup>nd</sup> November 2019.



## IV) Hospital Educational Visit

Fifth Pharm. D students made a hospital visit to the Department of Pharmacy Practice, Manipal College of Pharmaceutical Sciences, Manipal on 22<sup>nd</sup> October 2019. The teaching faculties who accompanied the students were Mr. Sanjay Sreekumar, Mr. Shantiya K and Ms. Athira.





## V) Community Activities & Services

1. **Scientific exhibition** and a free medical screening was conducted by the Department of Pharmacy Practice on 1st October 2019 at **Farook College, Calicut.**

2. **Scientific exhibition** and a free medical screening was conducted by the Department of Pharmacy Practice on 1st October 2019 in **Narayanan Nair Memorial Higher Secondary School, Chelembra, Malappuram.**



3. **DISHA (Drug Information Service and Health Assessment)**, a public oriented health information and counseling service was initiated by the Department of Pharmacy Practice in **Devaki Amma Memorial College of Pharmacy**. DISHA was inaugurated on 18<sup>th</sup> of October 2019 by **Mr. C. Rajesh, President of Chelembra Grama Panchayath.**



4. **Community health survey** was conducted from 1<sup>st</sup> October 2019 to 10<sup>th</sup> November 2019 in ward number 14 of Chelembra Grama Panchayath using a specially designed questionnaire in order to assess the community's health status and medical issues. Mr. C. Rajesh, President of Chelembra Grama Panchayath, Fifth Pharm D, the outgoing Pharm. D Batch (2013-2019) and the non-teaching staffs of Devaki Amma Memorial College of Pharmacy were actively involved with the survey.





## Courses Offered

**M. Arch.**  
**B. Arch.**

**Ph.D.**  
**Pharm. D.**  
**M.Pharm.**  
**B. Pharm.**  
**D.Pharm.**

**M. Ed.**  
**B. Ed.**  
**D.Ed. (TTC)**

For Admission details Contact: **9847 77 33 77, 9847 82 20 80**



# DEVAKI AMMA MEMORIAL INSTITUTIONS



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Mrs. Shaimol T.  
Mr. Sanjay Sreekumar K.

### We Acknowledge:

The doctors and other health care professionals of PVS Hospital (P) Ltd., Calicut for their support and training given to our students.

### For Suggestion, Feedback and Interaction

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