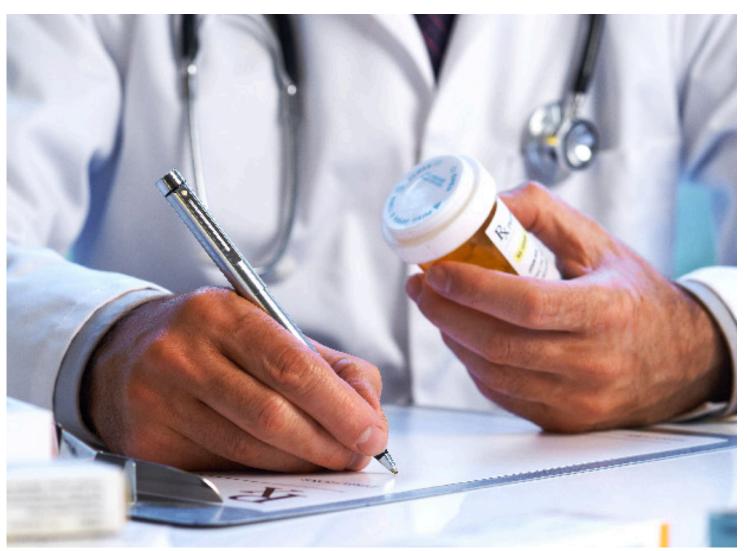


# PHARMACAREPULSE

Pharmaceutical care weekly updates
General medicine

VOLUME 1 | ISSUE 3



# Fenofibrate therapy and diabetic retinopathy progression

In a trial in 1151 adults with mild diabetic retinopathy (median triglyceride level 137 mg/dL, mean A1C 8.2 percent), participants who were randomly assigned to treatment with fenofibrate 145 mg daily had a lower rate of progression to referable retinopathy or maculopathy over a median follow-up of four years compared with those assigned to placebo (22.7 versus 29.2 percent, respectively). Fenofibrate therapy also reduced the incidence of macular edema. These protective effects were evident despite only an approximately 15 percent mean reduction in serum triglycerides. There was no effect on visual function or visual acuity. The main adverse effect of fenofibrate was a modest decline in estimated glomerular filtration rate. These findings add to the evidence reporting a reduction in retinopathy progression with fenofibrate and suggest benefit independent of triglyceride lowering.

For more Information: www.uptodate.com



# Pharmaceutical care weekly updates General medicine

#### Adrenaline Nasal spray for Anaphylaxis.

Epinephrine is the first-line treatment for anaphylaxis and should be given as soon as anaphylaxis is recognized, but needle phobia leads to delayed use of autoinjectors. An epinephrine nasal spray (neffy [brand name]) was approved by the US Food and Drug Administration in August 2024 for use in children and adults weighing ≥30 kg and should be available later this year. The device contains a single dose of 2 mg that is sprayed into one nostril and provides comparable epinephrine blood levels to those achieved with autoinjectors. It is anticipated that needle-free administration will help alleviate barriers to rapid treatment.

For more Information: www.uptodate.com

#### **Aprocitentan- To treat uncontrolled Hypertension.**

The FDA approved Aprocitentan as add on drug to treat hypertension in adults based on evidence from a clinical trial (NCT03541174) of 730 patients with high blood pressure despite taking at least three drugs to treat Hypertension. The trial was conducted at 138 sites in 20 countries located in Asia, Australia, Europe and North America. Approximately 32% of patients were enrolled at sites in North America. Aprocitentan is an endothelin blocker which inhibits endothelin receptor sub groups ETA and ETB thereby opposes the vasoconstrictor actions of endothelin. It may cause harm to an unborn baby and should not be given during pregnancy. A common side effect of Aprocitentan is edema.

For more Information: www.hcplive.com/view/fda-approves-aprocitentan-tryvio-for-treatment-resistant-hypertension#:~:text=The%20US%20Food%20and%20Drug,adequately%20controlled%20on%20other%20drugs.

#### Pivmecillinam - To treat uncomplicated urinary tract infection.

Pivya (Pivmecillinam) is an oral penicillin-type antibiotic that may be used to treat uncomplicated urinary tract infections (UTIs) in females aged 18 years and older that are caused by susceptible isolates of Escherichia coli, Proteus mirabilis, and Staphylococcus saprophyticus. Pivmecillinam approval was based on three controlled clinical trials comparing different Pivmecillinam dosing regimens to placebo, to another oral antibacterial drug. The primary measure of efficacy for the three trials was the composite response rate, which included clinical cure and microbiological response. Pivmecillinam is a prodrug metabolised to Mecillinam. Mecillinam has high specificity for Penicillin binding protein-2 (PBP2) in the cell wall of gram-negative bacteria. The most common side effects of Pivmecillinam included nausea and diarrhea. Pivmecillinam comes with certain warnings and precautions such as hypersensitivity reactions, severe cutaneous adverse reactions, carnitine depletion, Clostridioides difficile-associated diarrhea.

**For more Information:** www.fda.gov/news-events/press-announcements/fda-approves-new-treatment-uncomplicated-urinary-tract-infections.

#### Cefepime 2gm and Enmetazobactam 500mg Dry powder for injection.

Indicated for the treatment of patients 18 years of age and older for complicated urinary tract infection (CUTI) including acute pyelonephritis and Hospital-acquired pneumonia (HAP), including ventilator-associated pneumonia (VAP). Toxicity: Symptoms of overdose may include encephalopathy (disturbance of consciousness including confusion, hallucinations, stupor and coma), myoclonus, seizures, neuromuscular excitability and nonconvulsive status epilepticus. Enmetazobactam can be removed by hemodialysis.

For more Information: https://cdsco.gov.in/opencms/opencms/en/Approval\_new/CT-Approvals



#### Plazomicin injection 500mg/10ml (50mg/ml)

Indicated in patients 18 years of age or older for the treatment of complicated urinary tract infections (cUTI), including pyelonephritis caused by the following susceptible microorganism(s) Escherichia coli, Klebsiella pneumoniae, Proteus mirabilis and Enterobacter cloacae.

#### BLACK BOX **(**)

Ototoxicity, manifested as hearing loss, tinnitus, and/or vertigo, has been reported. Nephrotoxicity reported; risk of nephrotoxicity is greater in patients with impaired renal function, elderly patients and that receiving concomitant nephrotoxic medication. Aminoglycosides, including plazomicin, can cause fetal harm when administered to a pregnant woman.

For more Information: https://cdsco.gov.in/opencms/opencms/en/Approval\_new/CT-Approvals

#### Are the Patients Having Pets at Greater Risk of Carrying Multidrug Resistance Bacteria?

The multidrug resistance (MDR) Bacteria are growing and are a public health problem. The known risk factors for expanding MDR Bacteria are: overuse of antibiotics, hospitalizations, journey in a country at risk. Other risk factors are emitted in hypothesis as the presence of pets. Aim: The primary objective is to study the association between the presence of a pet and the presence of a MDR bacteria. Methods: Cross sectional study will be performed in Reims University hospital in internal medicine ward. Within the framework of the management of patients in internal medicine ward, all the hospitalized patients will be systematically screened for MDR Bacteria. A questionnaire will be handed over to all the patients during their hospitalization as soon as they will be able to answer it. They will be informed about the objectives of the study. If the patient agrees to participate in the study, the questionnaire will then be filled by the patient. It includes essentially closed questions and some open questions. A descriptive analysis will be performed. Bivariate analysis will be performed to investigate the relation between the presence of a pet and the presence of a MDR bacteria and clinical variables. Multivariate logistic regression will be performed to investigate the factors independently related to the presence of a MDR bacteria.

For more Information: www.clinicalkey.com

#### Fixed drug combinations banned

The Central Government has prohibited 156 Fixed drug combinations or so called cocktail drugs in a gazette notification dated August 21, 2024. The move from the government comes after the matter was examined by an expert committee appointed by the Central Government. The expert committee considered the administration of these FDC's as "irrational". The Drugs Technical Advisory Board also examined the said FDCs and recommended that "there is no therapeutic justification for the ingredients contained in these FDCs and may involve risk to human beings. Hence, in the larger public interest, it is necessary to prohibit the manufacture, sale or distribution of this FDC under Section 26A of the Drugs and Cosmetics Act 1940,"

Category wise list is given below

# **Antimicrobials**

- 1. Cefixime+ Acetyl Cysteine
- 2. Cephalexin Monohydrate + Serratiopeptidase
- 3. Amoxicillin Trihydrate + Dicloxacillin Sodium + Lactobacillus
- 4. Doxycycline HCl + Betacyclodextrin + Serratiopeptidase
- 5. Erythromycin stearate eq.to Erythromycin + Lactic acid Bacillus
- 6. Tetracycline + Colistine sulphate.

#### **Drugs for treating hair loss**

- 1 Minoxidil +Aminexil+ Alcohol.
- 2. Minoxidil +Azelaic acid + saw palmetto
- 3. Minoxidil +Aminexil



#### Drugs used for abdominal discomfort, gastritis, pancreatitis, liver protectants and multivitamins.

- 1. Amylase + Protease + Glucoamylase + Pectinase + Alpha Galactosidase + Lactase + Beta-Gluconase + Cellulase + Lipase + Bromelain + Xylanase + Hemicellulase + Malt diastase + Invertase + Papain
- 2. Antimony Potassium Tartrate + Dried Ferrous Sulphate.
- 3. Benfotiamine + Silymarin + L-Ornithine L-aspartate + Sodium Selenite + Folic acid + Pyridoxine hydrochloride
- 4. Bismuth Ammonium Citrate + Papain
- 5. Cyproheptadine HCl + Thiamine HCl + Riboflavine + Pyridoxine HCl + Niacinamide
- 6. Cyproheptadine Hydrochloride + Tricholine Citrate + Thiamine Hydrochloride + Riboflavine + Pyridoxine Hydrochloride
- 7. Rabeprazole Sodium (As enteric coated tablet) + Clidinium Bromide + Dicyclomine HCl + Chlordiazepoxide.
- 8. Fungal Diastase + Papain + Nux vomica Tincture + Cardamom Tincture + Casein Hydrolysed + Alcohol.
- 9. Mefenamic Acid + Paracetamol Injection
- 10. Omeprazole Magnesium + Dicyclomine HCl
- 11. S-adenosyl methionine + Metadoxine + Ursodeoxycholicacid BP + L-Methylfolate Calcium eq. to L-Methylfolate + Choline bitartratee + Silymarin + L-ornithine Laspartate + Inositol + Taurine
- 12. Silymarin + Thiamine Mononitrate + Riboflavin + Pyridoxine HCl + Niacinamide + Calcium pantothenate + Vitamin B12
- 13. Silymarin + Pyridoxine HCl + Cyanocobalamin + Niacinamide + Folic Acid.
- 14. Silymarin + Vitamin B6 + Vitamin B12 + Niacinamide + Folic acid + Tricholine Citrate.
- 15. Sodium Citrate + Citric Acid Monohydrate Flavored with Cardamom Oil, Caraway Oil, Cinnamon Oil, Clove Oil, Ginger Oil + Alcohol.
- 16 Sucralfate + Aceclofenac.
- 17. Sucralfate + Domperidone + Dimethicone.
- 18. Sucralfate + Domperidone.
- 19. Tincture Ipecacuanha + Tincture Urgenia + Camphorated Opium Tincture + Aromatic Spirit of Ammonia + Chloroform + Alcohol
- 20. Ursodeoxycholic Acid + Metformin HCl
- 21. Sucralfate +Domperidone+ Simethicone.

#### Drugs used for eye infections, conjunctivitis, eye allergies.

- 1. Naphazoline HCl + Hydroxy Propyl Methyl Cellulose + Boric Acid + Borax + Menthol + Camphor.
- 2. Naphazoline HCl + Hydroxy Propyl Methyl Cellulose + Chlorpheniramine Maleate +Boric Acid + Nacl + ZnS
- 3 Naphazoline HCl + Hydroxy Propyl Methyl Cellulose + Chlorpheniramine Maleate +Boric Acid.
- 4. Naphazoline HCl + Chlorpheniramine Maleate + Methyl Cellulose.
- 5. Naphazoline HCl + Hydroxy Methyl Cellulose + Boric Acid + Menthol + Camphor.
- 6. Naphazoline HCl + Boric Acid+Menthol+Camphor +Methyl Cellulose + Chlorpheniramine Maleate + Zinc Sulphate + Sodium Chloride S.O.3370(E) 12.08.2024
- 7. Naphazoline HCI + Phenylephrine HCI+ HPMC + Chlorpheniramine Maleate + Menthol+ Camphor.
- 8. Naphazoline HCl + Hydroxy Propyl Methyl Cellulose + Chlorpheniramine Maleate + Boric Acid + Sodium Chloride + Zinc Sulphate + Menthol + Camphor S.O.3372 (E) 12.08.2024
- 9. Naphazoline HCl+ Hydroxy Propyl Methyl Cellulose +Chlorpheniramine Maleate +Boric Acid +ZnS
- 10. Naphazoline HCl + Azelastine HCl+ Sodium Carboxy Methyl Cellulose + Menthol + Camphor + Stabilized Oxychlorocomplex.
- 11. Naphazoline HCl+Sodium Carboxy Methyl Cellulose+Menthol+ Camphor + Oxychloro complex.
- 12. Naphazoline Nitrate + Chlorpheniramine Maleate + Phenylephrine HCl + Hydroxy Methyl Cellulose + Boric Acid+ Menthol+ Camphor.
- 13. Naphazoline Nitrate + Chlorpheniramine Maleate + Zinc Sulphate + Boric Acid + Sodium Chloride.



#### Drugs used for Skin infection, skin wounds, dermatitis, eczema, Acne, skin allergies

- 1. Povidone Iodine+ Metronidazole + Aloe
- 2. Azelaic acid + Tea Tree Oil + Salicylic acid + Allantoin + Zinc oxide + Aloe vera + Jojoba oil + Vitamin E + Soap noodles
- 3. Azithromycin + Adapalene
- 4. Calamine + Aloes + Allantoin
- 5. Calamine + Diphenhydramine Hydrochloride + Aloe + Glycerine + Camphor.
- 6. Chlorphenesin + Zinc oxide + Starch.
- 7. Clindamycin Phosphate + Zinc acetate.
- 8. Gamma Benzene Hexachloride + Benzocaine.
- 9. Salicyclic acid +Aloe vera+ Allantoin +D-Panthenol
- 10. Hydroxyquinone 2.0%w/w + Octyl Methoxycinnamate 5.0% w/w + Oxybenzone 30 % w/w
- 11. Ketoconazole +Zinc Pyrithione +D-Panthenol +Tea Tree Oil +Aloe
- 12. Ketoconazole +Aloe vera+ Vitamin A Acetate.
- 13. Ketoconazole +Aloes + ZPTO
- 14. Menthol +Lignocaine HCl +Aloe vera gel +Clotrimazole +Diphenhydramine.
- 15. Miconazole nitrate + Gentamicin + Fluocinolone Acetonide +Zinc Sulphate.
- 16. Miconazole + Tinidazole.
- 17. Silver sulphadiazine +Chlorhexidine Gluconate solution +Allantoin + Aloe vera gel +Vitamin E acetate
- 18. Sodium salicylate + Zinc gluconate + Pyridoxine HCl

#### Drugs used for osteoarthritis, inflammatory joint disorders, muscle damage.

- 1. Glucosamine sulphate potassium chloride 410 mg + Chondroitin Sulphate 100 mg.
- 2. Glucosamine sulphate potassium chloride+ Methyl Sulphonyl Methane (MSM) + Sodium Borate + Copper Sulphate pentahydrate+ Manganese Sulphate + Vitamin D3.
- 3. Glucosamine Sulphate + Sodium chloride+ Manganese +Boron + Zinc + Copper .
- 4. Glucosamine sulphate + Chondroitin sulphate + Methylsulfonylmethane + Vitamin D3 + Vitamin E + .Vitamin C + Selenium +Elemental Zinc +Elemental Manganese + Elemental Chromium + Elemental Copper +Elemental Boron.
- 5. Glucosamine sulphate + Methyl sulfonyl methane + manganese sulphate + Vit E acetate + calcium Carbonate .
- 6. Glucosamine Sulphate + Vitamin E acetate + Calcium Pantothenate + Vitamin D3.
- 7. Glucosamine Sulphate Potassium chloride + Calcium Carbonate from an organic source (oyster shell) eq. to elemental Calcium + Vitamin D3.
- 8. Cetyl Myristoleate + Glucosamine Sulphate Potassium chloride + Methyl sulfonyl methane.
- 9. Glucosamine Sulphate Potassium chloride + Methyl sulfonyl methane +Calcium carbonate +Vitamin E+ Manganese.
- 10. Glucosamine Sulphate Potassium chloride + Calcium carbonate + Methyl sulfonyl methane + Vit D3.
- 11. Glucosamine Sulphate Potassium + Methyl sulphate Sodium+ Sulphonyl Methane + Chondroitin Sulphate Sodium+ Calcium Carbonate + Vitamin D3+Sodium Borate+ Cupric Oxide+ Colloidal Silicon Dioxide+ Manganese Chloride.
- 12. Glucosamine hydrochloride + Diacerein + Menthol + Camphor + Capsaicin.



## **Drugs for cold, Rhinitis, ANTIHISTAMINES**

- Cetirizine HCl + Paracetamol + Phenylephrine
  HCl
- 2. Cetirizine HCl + Phenylephrine HCl
- 3. Levocetirizine + Phenylephrine HCI.
- 4. Levocetirizine + Phenylephrine HCl + Paracetamol
- 5. Phenylephrine HCl + Paracetamol + Levocetirizine HCl + Menthol.
- 6. Levocetirizine HCl + Ambroxol HCl + Paracetamol
- 7. Levocetirizine HCl + Ambroxol HCl + Phenylephrine HCl
- 8. Paracetamol + Chlorpheniramine Maleate + Phenyl Propanolamine
- 9. TrithioparamethoxyphenylPropene+ Chlorpheniramine Maleate

#### Miscellaneous drugs

- 1. Divalproex sodium +Levetiracetam
- 2. Divalproex sodium +Oxcarbamazepine
- 3.Ergotamine+Caffein +Paracetamol +Prochlorperazine
- 4. Clomiphene citrate +N-acetylcysteine.
- 5.Sldenafil citrate+ Papaverine +L arginine
- 6. Tranexamic acid+ Mefenamic acid+VitaminK1.
- 7. Diethylcarbamazine citrate + Chloropheniramine
  - 8. Diethylcarbamazine citrate +Levocetirizine.

# Analgesics, anti-inflammatory,

- 1. Aceclofenac 50mg + Paracetamol 125mg oral liquid
- 2. Paracetamol+ Diclofenac Potassium + Caffeine Anhydrous.
- 3. Diclofenac sodium + Thiocolchicoside Injection
- 4. Aceclofenac 50mg + Paracetamol 125mg tablet
- 5. Diclofenac sodium + Thiocolchicoside Injection
- 6. Etodolac + Paracetamol + Serratiopeptidase
- 7. Flupirtine Maleate 400 mg + Paracetamol 325 mg tablet.
- 8. Tramadol HCl + Dicyclomine HCl + Domperidone.
- 7. Tramadol HCl +Paracetamol +Caffeine +Taurine
- 8. Paracetamol + Pentazocin.
  - 9. Meclzine +Paracetamol+ Caffeine.

# Drugs for Cough, Bronchial Asthma, COPD. (RESPIRATORY SYSTEM DRUGS)

- 1. Ambroxol HCl + Phenylephrine HCl + Guaiphenesin
- 2. Bromhexine HCl + Phenylephrine HCl
- 3. Etofylline + Theophylline anhydrous eq. to Theophylline hydrate + Ambroxol HCI.
- 4. Etofylline + Theophylline anhydrous eq. to Theophylline hydrate+ Montelukast
- 5. Ambroxol HCl + Terbutaline Sulphate + Ammonium Chloride + Guaiphenesin + Menthol 6.Ambroxol HCl + Salbutamol Sulphate + Ammonium Chloride + Guaiphenesin + Menthol
- 6. Cetirizine HCl + Terbutaline Sulphate + Ambroxol HCl + Guaiphenesin.
- 7. Dextromethorphan Hydrobromide + Chlorpheniramine Maleate + Ammonium Chloride + Sodium Citrate + Menthol
- 8. Salbutamol Sulphate + Bromhexine HCl + Guaiphenesin + Ammonium Chloride + Menthol.
- 9. Terbutaline Sulphate + Bromhexine HCl + Chlorpheniramine Maleate.
- 10. Chlorpheniramine Maleate + P.G Sulphonate + Ammonium Chloride + Sodium Citrate + Menthol.
- 11. Aminophylline + Ammonium Chloride + Sodium Citrate.



#### **Editorial board**

L-R: Dr.sr. Ashitha, Dr. Lakshmi.R, Mr. Naveen Kumar Panicker, Dr. Siby Joseph, Dr. Akash Jose, Dr. Jeny Samuel, Sr. Binu Jose

#### **Student contributors**





Ms. Rini

Ms. Farisa