

# PHARMACY NEWSLETTER

Volume 1, Issue 3  
January 1,  
2022

A quarterly e-newsletter of the General Administration of Pharmaceutical Care, Ministry of Health

## In this issue:

1. Central Pharmacy and Therapeutics (P&T) Committee Updates
2. Top 5 Most Frequently Reported Medication Errors
3. A Common Error of Paracetamol
4. Tips for Safe and Appropriate Use of Paracetamol
9. Medication Mail Order Service

5. What You Should Know about Medications-induced Osteoporosis
6. Medication Use and the Risk of Stevens- Johnson Syndrome
7. Warfarin: Myth and Fact
8. Quick Facts on Newly added Medications



# وزارة الصحة Ministry of Health

## 1.1 Formulary New Additions

ketorolac trometamol 30 mg/mL injection, vial  
For short-term (up to 3 days) management of moderate to severe acute pain in adults requiring analgesia at an opioid level

## 1.2 Temporary Formulary

Sofosbuvir 400 mg + velpatasvir 100 mg tablet

## 1.3 Formulary Deletions

- Diclofenac sodium 75 mg/3 mL injection, ampoule
- Indometacin 50 mg injection, vial
- Lornoxicam 8 mg intramuscular injection, vial

## 1.4 Change Indications

Ibuprofen 400 mg/100 mL injection: intravenous infusion, 100 mL bottle  
For pediatrics use

## 1.5 MOH Formulary Application



For IOS



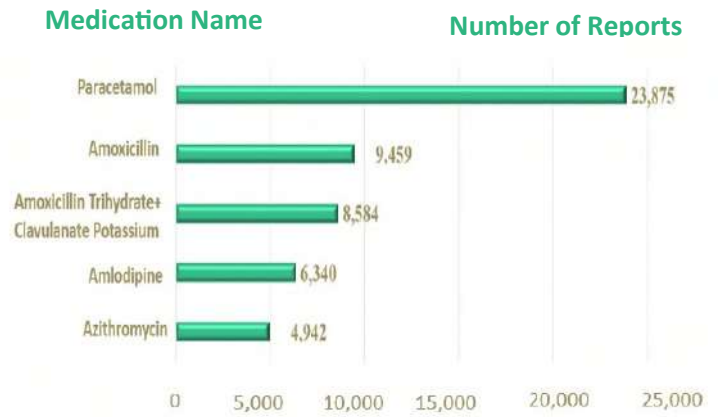
For Android



## 2

## Top 5 Most Frequently Reported Medication Errors

Top 5 medications reported through Ministry of Health Medication Error Reporting System :



## 3

## A Common Error of Paracetamol

A child presented to the ER with symptoms of a respiratory infection. The physician diagnosed him with viral upper respiratory infection and explained that antibiotics are not necessary in the meantime. He prescribed paracetamol 120 mg/5 ml, (5 ml, four times per day when needed) .

The mother returned with the child the day after, concerned because he is lethargic and sweaty. She reveals that she gave him the paracetamol as instructed, but also had some "Pediamol" at home and gave that too. In addition, she mentioned that she gave one suppository for fast relief. The mother was not aware that all of these products contained paracetamol.

Over the past 24 hours the child had four (5 ml) doses of paracetamol (120 mg/5 ml), two (5 ml) doses of Pediamol paracetamol (100 mg/ml) and one suppository (125 mg). In total of 1605 mg of paracetamol, giving a dose of 160 mg/kg for the 10 kg child.

The child was admitted and observed for suspected paracetamol toxicity.



# وزارة الصحة Ministry of Health

4

## Tips for Safe and Appropriate Use of Paracetamol

### Check for allergy

It is important to ask the patient or caregiver if there is any allergy to medications and don't rely on the system since it may not be updated.

### Confirm the pediatric patient's weight is correct

Verify and write the weight in each prescription and make sure that weight-based doses are within the recommended range.

### Choose the correct strength

Liquid paracetamol products for children come in different strengths and product forms such as baby drops and suspensions that are intended for infants and children of different ages and weights. Always check the strengths available before prescribing or dispensing and don't mix up between them as certain strengths are only suitable for certain age groups.

### Take the time to calculate the patient's total Paracetamol intake during 24 hours

Check the patient's prescription and OTC medications to determine the total amount of Paracetamol that's being taken from all routes, to make sure it didn't exceed the maximum dose since paracetamol is available in a wide range of formulations including liquid, oral tablets, oral disintegrating tablets, chewable tablets, controlled-release tablets, dispersible tablets, injectable, and rectal preparations.

### Check the last dose given

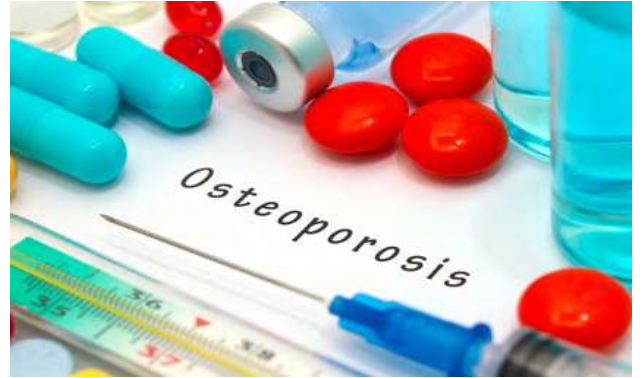
Before administering, check when paracetamol was last administered and the cumulative dose over the previous 24 hours. Bear in mind there may be multiple administration routes and Paracetamol preparations in use. Particular caution is needed in patients with multiple administration records.

### Some generic brands of Paracetamol are sometimes combined with antihistamines, caffeine, codeine, and more

Pay attention to any contraindication the patient might have before prescribing or dispensing them.

5

## What You Should Know about Medications -induced Osteoporosis?



1- Try to avoid prescribing medications associated with increased risk of secondary osteoporosis (if possible) in patients with risk factors .

2- Prophylactic therapy should be considered for patients who are on these medications, and for those who may need these medications.

### Medications -induced osteoporosis:

- Antiepileptic medications: phenobarbital, phenytoin, primidone, valproate, and carbamazepine
- Aromatase inhibitors: letrozole, exemestane and anastrozole
- Medroxyprogesterone acetate: Depo-Provera®
- Glucocorticoids
- Gonadotropin-releasing hormone agents
- Heparin
- Lithium
- Proton pump inhibitors
- Selective serotonin reuptake inhibitors
- Thiazolidinediones
- Thyroid hormone (in supraphysiologic doses)



# وزارة الصحة Ministry of Health

## 6 Medication Use and the Risk of Stevens-Johnson Syndrome

**Stevens-Johnson syndrome (SJS)/ toxic epidermal necrolysis (TEN):** Is a rare serious disorder that affects the skin, mucous membrane, genitals and eyes .

### Causative medications:

- Allopurinol
- Aromatic antiepileptic drugs and lamotrigine
- Antibacterial sulfonamides (including sulfasalazine)
- Nevirapine
- Oxicam nonsteroidal anti-inflammatory drugs (NSAIDs)

**Treatment** aims to identify and stop the underlying cause (Medications are the leading trigger), Control the symptoms and prevent complications.

## 7 Warfarin : Myth and Fact

### Myth:

You should avoid food that contain vitamin K while you are on Warfarin.

### Fact:

You can eat food that contain vitamin K while you are on warfarin, but you should consume the same amount every day. Pay attention to the portion and serving size to know how much vitamin K you eat.

Vitamin K is important for a healthy diet. Warfarin works against vitamin K, so it is important to learn how much vitamin K you eat. Changing the amount you eat can change how much warfarin you need .

Increase in vitamin K = Decrease in INR

## 8 Quick Facts on Newly added Medications



### Lomitapide:

- Restriction\privilege by specialty: Endocrinology consultants
- Prescribe only to patients with a clinical or laboratory diagnosis consistent with Homozygous Familial Hypercholesterolemia (HoFH).
- Don't use in patients with hypercholesterolemia who do not have Homozygous Familial Hypercholesterolemia (HoFH), including those with Heterozygous Familial Hypercholesterolemia.
- It is hazardous medication , should use appropriate precautions for receiving, handling, administration, and disposal.
- Don't prescribe or increase the dose before measuring transaminases (ALT, AST), alkaline phosphatase, and total bilirubin.
- Don't prescribe in pregnancy; coadministration with moderate or strong CYP3A4 inhibitors; moderate or severe hepatic impairment and patients with active liver disease, including unexplained persistent elevations of serum transaminases.

### Ezetimibe:

- Use as adjunctive therapy to diet and a statin if a statin is not tolerated for the reduction of total-cholesterol and LDL.
- Do not use with a statin in patients with: active hepatic disease or unexplained persistent elevations in serum transaminases; pregnancy and breastfeeding.
- Discontinue ezetimibe and statin or fibrate immediately if myopathy including rhabdomyolysis is suspected or confirmed (symptomatic patient with CPK >10 x ULN)

### Ocrelizumab:

- Restriction\privilege by specialty: Neurology consultants
- Use for primary progressive multiple sclerosis (MS) and relapsing forms of MS.
- Don't prescribe Ocrelizumab until Hepatitis B virus screening is done.
- Must prescribe pre-medications : methylprednisolone (or an equivalent corticosteroid) and an antihistamine (e.g., diphenhydramine) prior to each infusion.



# وزارة الصحة Ministry of Health

- Monitor patients closely during and for at least one hour after infusion.
- Don't initiate Ocrelizumab for patients with an active infection until the infection is resolved.
- Don't give live-attenuated vaccine during treatment with Ocrelizumab and after discontinuation, until B-cell repletion.

## Benzotropine:

- Use for Acute treatment drug-induced extrapyramidal symptoms and adjunctive therapy of all forms of parkinsonism.
- Do not use for children <3 years of age.
- The risk of Anhidrosis/hyperthermia is increased in hot environments. If there is evidence of anhidrosis, consider decreasing the dose so the ability to maintain body heat equilibrium by perspiration is not impaired.

## Mirabegron:

- Restriction\privilege by specialty: restricted to urologist
- Use for neurogenic detrusor overactivity in pediatric patients  $\geq 3$  years of age (granules) and weighing  $\geq 35$  kg (tablets), and overactive bladder in adults.
- Do not prescribe to severe uncontrolled hypertensive patient who has (systolic blood pressure  $\geq 180$  mm Hg and/or diastolic blood pressure  $\geq 110$  mm Hg).
- The patient must monitor BP periodically during therapy.

## 9 Medication Mail Order Service

Medication mail order is a service provided to patients at Ministry of Health hospitals that enables them to get their medications through Saudi Post without the need to visit the hospital.

The service covers all regions and governorates in the Kingdom of Saudi Arabia through 201 hospitals that activated the service until now.

## Service path:

1. At the time of refilling the medications, the patient contacts the pharmacy through the numbers that were provided in the last visit.
2. The pharmacist will verify the patient's information and records.
3. Prepare the medications and double check it.
4. The medications will be delivered to the patient's home.
5. If the patient is one of the target groups for medications counseling, the patient's data will be sent to the person responsible for medications counseling.

Number of  
shipments:  
692,818

Number of  
patients  
served:  
352,000



## Don't Forget your Flu Vaccine this Year

Temperatures are dropping, and the flu season has started. For healthcare workers it is important to get the flu shot which can help keep you from getting sick and help protect others around you