



# SRH

# Newsletter

## Pharmaco-therapeutics committee



# **COSMETOVIGILANCE**

**By Dr.K.Karthika**

Cosmetovigilance aims to ensure that cosmetic products are safe, effective and in compliance with regulatory requirements, providing consumers with confidence in the products they use.

In today's fast-paced world, the cosmetics industry stands at a unique juncture of innovation, diversity and increasing consumer demand. The cosmetic industry is dynamic, with new ingredients, formulations and products constantly being introduced. Cosmetovigilance is necessary to keep up with these changes and assess the safety of new ingredients and products before they are marketed; it helps identify potential risks associated with emerging trends or innovations in the cosmetic industry.

Cosmetovigilance ensures that potential risks associated with cosmetics are monitored throughout the entire supply chain, including the identification of unsafe ingredients, detection of counterfeit products, and addressing safety concerns related to manufacturing, packaging or distribution processes. In Europe, the cosmetovigilance system is developing at fast pace. Germany and Sweden are the two countries that have a formal cosmetovigilance system.

Cosmetovigilance covers skin moisturizers, perfumes, lipsticks, fingernail polishes, eye and facial makeup preparations, shampoos, permanent waves, hair colors, toothpastes and deodorants, as well as any material intended for use as a component of a cosmetic product. Hair dye and Kumkum are major causes of contact dermatitis in India.

## **KUMKUM DERMATITIS**



## **HAIRDRESSER HAND WITH CONTACT DERMATITIS**



## **PUBLIC AWARENESS AND CONSUMER EXPECTATIONS**

Consumers expect transparency, accurate labelling and safe products. Monitoring adverse events and implementing measures to ensure safety help build consumer trust in cosmetic products and the industry.

## **SAFETY RECALLS IN THE COSMETICS INDUSTRY**

Many recalls have happened in the recent years, improving the safety of the consumers. Eg: Talc-based powders have been recalled due to contamination with asbestos, a known carcinogen. Cosmetic products containing unsafe levels of heavy metals like lead or mercury have been recalled as heavy metals can accumulate in the body over time, leading to health issues such as neurological damage and developmental problems. Cosmetics that falsely claimed to be "natural" or "organic" while containing synthetic ingredients have been recalled as they lead consumers to believe they are using safer or more natural products than they actually are. The recalls aim to enforce accurate product labelling and prevent consumer deception.

## **COUNTERFEIT COSMETICS**

Counterfeit cosmetics contain huge amounts of lead, arsenic, mercury, beryllium, cadmium, aluminium and different kinds of bacteria like Escherichia coli. Hair technicians in saloons and parlours are at risk of chemicals in counterfeit cosmetics. Hand dermatitis is quite common among them. They are also more prone to development of asthma due to exposure to ammonium persulfate. Female hair technicians are at particular risk for fertility disorders and adverse pregnancy outcomes. Counterfeit cosmetics erode the market share of authentic products, leading to reduced revenues and profitability for genuine manufacturers.

## **HYPOALLERGENIC:**

A study in the United States showed that 89% of children's products labelled as hypoallergenic actually had known allergens or irritants in their formulations. There is currently no regulation on the use of the term hypoallergenic. This allows for unhindered marketing use of the terms "hypoallergenic," "sensitive skin," or "fragrance free" without any consequences. The majority of consumers and physicians are unaware of this and

unfortunately have no way of knowing if a certain product has been known to cause an adverse skin reaction, in particular a contact dermatitis.

Cosmetovigilance then falls on the responsibility of the consumer and their physician. Particular care should be advised for those with a history of atopy, asthma, or atopic dermatitis since this predisposes them to contact dermatitis and adverse skin reactions. There are some organizations, such as the National Eczema Foundation, that perform testing on common skin care products and provide product recommendations, which have passed their testing. Unfortunately, until more consumer-friendly databases are easily available and easy to interpret, adverse skin reactions will continue to be common. They will continue to produce stress in those who suffer from it and cause financial burden due to missed work, cost of physician visits and cost of medical treatments.

#### **CONCLUSION:**

Cosmetovigilance is a new concept of safety monitoring of cosmetic products. Consumers, family medicine physicians and primary care practitioners have an essential role in reporting ADRs induced by cosmetic products. As post marketing surveillance of cosmetics become widespread globally, problems related to these products can be identified and solved and thus safety can be achieved.

#### **REFERENCES:**

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## **CEFIDEROCOL**

**DR.U.KARTHIKEYAN, DR.K.KARTHIKA**

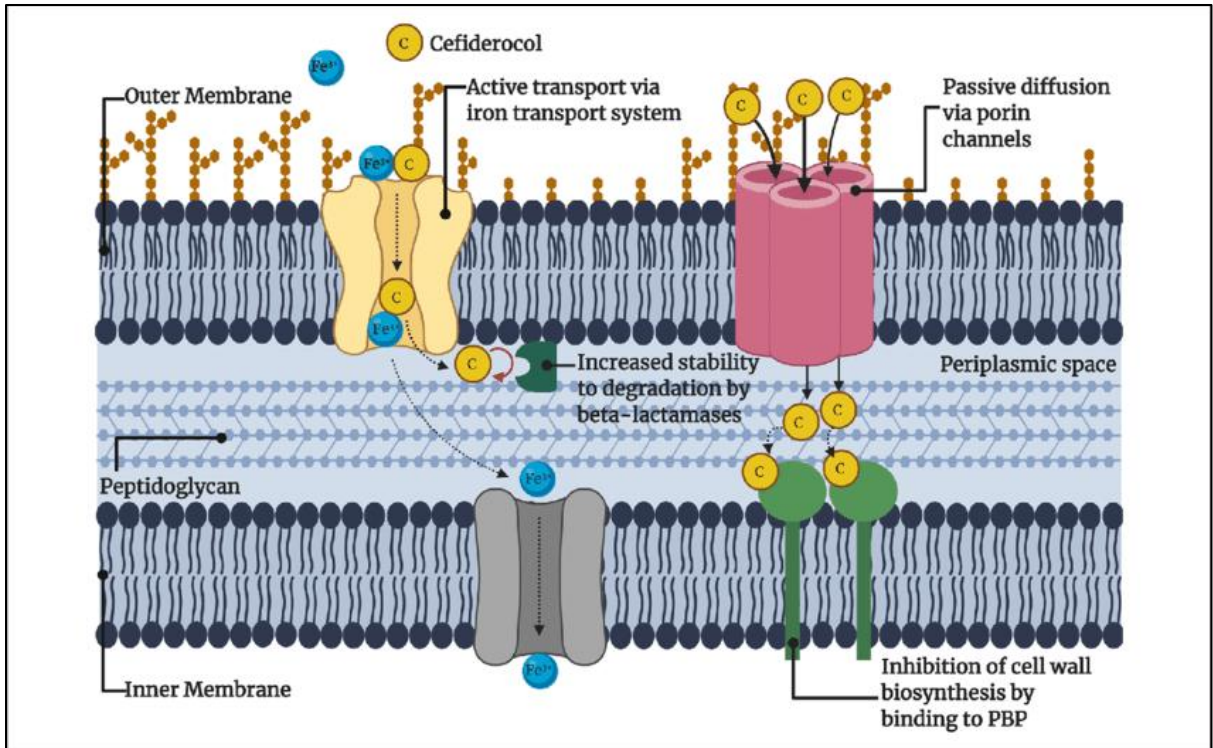
Cefiderocol is a groundbreaking antibiotic that offers a powerful new option for treating Gram-negative bacterial infections, including those caused by multidrug-resistant (MDR) pathogens. As antimicrobial resistance (AMR) continues to challenge healthcare systems worldwide, Cefiderocol provides a novel approach to combating some of the most dangerous resistant organisms.

### **ABOUT CEFIDEROCOL**

Cefiderocol is a siderophore Cephalosporin antibiotic, specifically designed to target Gram-negative bacteria, including carbapenem-resistant strains. Its unique mechanism allows it to utilize the bacteria's own iron transport system to penetrate cell walls more effectively, leading to superior antimicrobial activity even against the toughest pathogens.

### **KEY FEATURES AND BENEFITS:**

- **Broad-Spectrum Coverage:** Cefiderocol exhibits potent activity against a wide range of difficult-to-treat Gram-negative bacteria, including *Pseudomonas aeruginosa*, *Acinetobacter baumannii* and Enterobacteriaceae.
- **Effective Against Carbapenem-Resistant Bacteria:** It is particularly valuable in treating infections caused by carbapenem-resistant Enterobacteriaceae (CRE) and carbapenem-resistant *Acinetobacter*, which are often resistant to most other available antibiotics.
- **Unique Mechanism of Action:** By acting as a siderophore, Cefiderocol hijacks bacterial iron transport systems, enhancing its ability to penetrate bacterial cell membranes and deliver lethal concentrations of the drug where other antibiotics may fail.



- Low Cross-Resistance: Cefiderocol remains effective against bacteria that have developed resistance to other cephalosporins and beta-lactam antibiotics, offering a new lifeline in the treatment of highly resistant infections.

#### CLINICAL EFFICACY:

Cefiderocol has been proven effective in multiple clinical trials:

- APEKS-NP trial: Showed non-inferiority to Meropenem in treating hospital-acquired bacterial pneumonia (HABP), ventilator-associated bacterial pneumonia (VABP) and sepsis.
- CREDIBLE-CR trial: Demonstrated its efficacy in treating patients with carbapenem-resistant infections, including bloodstream infections and complicated urinary tract infections (cUTIs).

#### INDICATIONS FOR USE:

Cefiderocol is indicated for use in adult patients with:

- Complicated Urinary Tract Infections (cUTIs), including pyelonephritis.
- Hospital-Acquired Bacterial Pneumonia (HABP) and Ventilator-Associated Bacterial Pneumonia (VABP).
- Complicated intra-abdominal infections, when caused by susceptible Gram-negative bacteria.

#### **DOSING AND ADMINISTRATION:**

Cefiderocol is available as an intravenous infusion. The recommended dosing regimen is 2 grams every 8 hours, administered over a 3-hour infusion period. Dose adjustments may be necessary in patients with impaired renal function.

#### **SAFETY PROFILE:**

Cefiderocol is generally well-tolerated. The most common side effects reported in clinical trials include diarrhoea, constipation, elevated liver enzymes, and rash. Its safety profile is comparable to other broad-spectrum antibiotics, but it offers the advantage of targeting MDR pathogens more effectively.

#### **WHY CEFIDEROCOL MATTERS:**

With the rise of carbapenem-resistant Enterobacteriaceae (CRE) and other resistant Gram-negative pathogens, the need for innovative antibiotics has never been more urgent. Cefiderocol provides healthcare professionals with a powerful new tool in the battle against some of the most dangerous infections. Its ability to tackle resistant bacteria with a novel mechanism of action makes it a critical option for hospitals dealing with high-risk patients.

#### **CONCLUSION:**

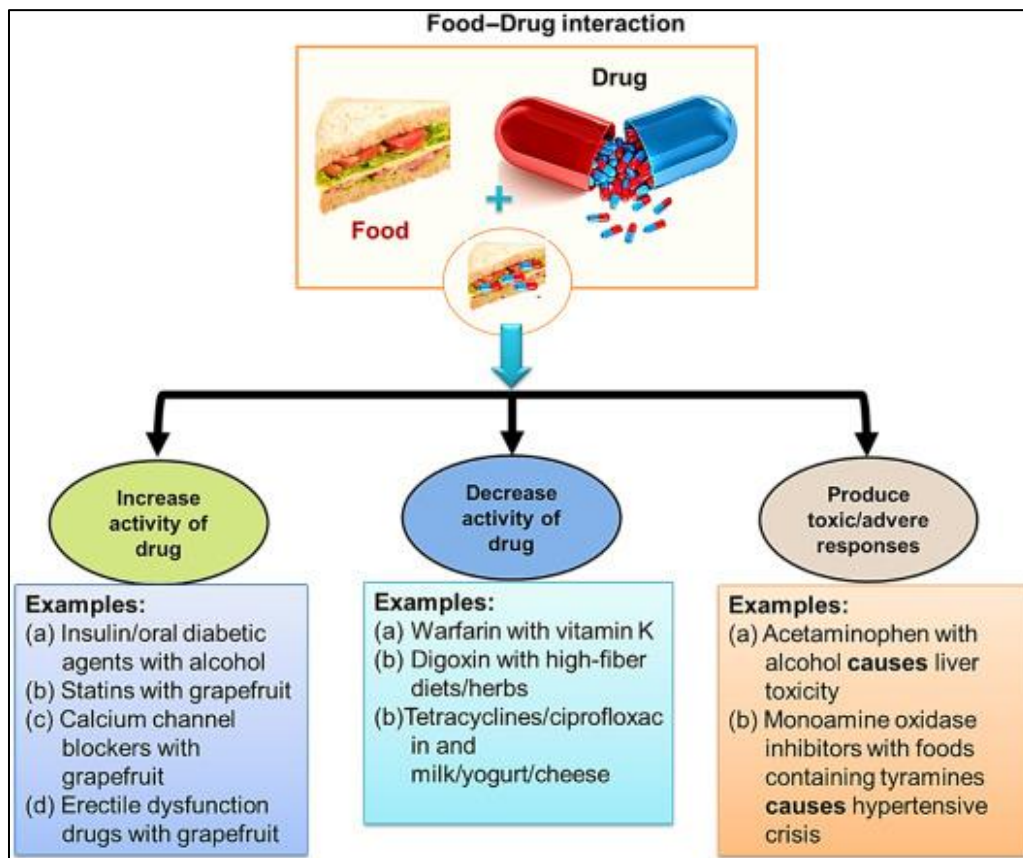
Cefiderocol represents a significant advancement in the treatment of multidrug-resistant Gram-negative infections. It provides an effective, targeted option for patients who have few other alternatives, making it an invaluable addition to the current arsenal of antimicrobial therapies.

## REFERENCES:

- <https://medlineplus.gov/druginfo/meds/a623027.html>
- <https://pubmed.ncbi.nlm.nih.gov/37817422/>
- <https://pubchem.ncbi.nlm.nih.gov/compound/Bexagliflozin>

## DRUG FOOD INTERACTIONS

- MS. RACHEAL DEEPA J, DR.KARTHIKA K



1. Always talk with your doctor and pharmacist about any new medications. Make sure they know about any vitamins, herbal medicines, over the counter medications or supplements you are currently taking.
2. Follow all the dosing instructions listed on each of your medications.

3. You can also use AARP's online drug interaction checker.
4. Read the prescription label on the container. If you don't understand something, ask your doctor or pharmacist.
5. Read all the directions, warnings and interactions. Even over-the-counter medicines can cause problems.
6. Take all medicines with a full glass of water. (Taking Bisphosphonates without water can lead to esophagitis and esophageal rupture).
7. Do not stir medicine into your food or take capsules apart unless your doctor tells you to. This can change the way the drug works.
8. Do not bite enteric coated or sustained release capsules – as it will lead to dose dumping (the entire dose for the day will be released at the same time leading to serious side effects).
9. Do not mix medicine into hot drinks. Heat may keep the drug from working.
10. Do not take vitamins and minerals with other medicines at the same time. Vitamins and minerals can cause problems if taken with some drugs.
11. Never take medicine with alcohol.

# 15 Food-Medicine Interactions to Avoid

## Calcium

- Antibiotics
- Osteoporosis meds



## Green vegetables

- Anticoagulants



## Bitter oranges

- Benzodiazepines
- Calcium chain blockers
- Statins



## Alcohol

- Antibiotics
- Antidepressants
- Paracetamol
- Insulin



## Tyramine foods

- Antidepressants (MAOIs)









## Any food

- Bisphosphonates
- Hypothyroid drugs
- Hyperthyroid drugs
- Digoxin



## Common Food-Drug Interactions

Food	Drug	What happens?
 Kale, broccoli (vitamin K)	<b>blood thinners</b> such as warfarin	Foods that are rich in vitamin K can reduce the effectiveness of blood thinners.
 Grapefruit	<b>statins</b> such as atorvastatin, lovastatin, simvastatin	Grapefruit can increase statin levels in your body, thereby increasing statin-related side effects.
 Bananas (potassium)	<b>ACE inhibitors</b> such as captopril, enalapril and lisinopril	ACE inhibitors increase potassium in your body. Too much potassium can cause an irregular heartbeat and heart palpitations.
 Walnuts, soybean flour (high fiber)	<b>thyroid medications</b> such as levothyroxine	High-fiber foods can prevent the body from absorbing thyroid medications.
 Dairy products (calcium)	<b>quinolone antibiotics</b> such as ciprofloxacin and levofloxacin	Calcium reduces the level of these antibiotics in your blood. Avoid eating dairy and calcium-fortified products alone.
 Salami, aged cheese (tyramine)	<b>oxazolidinone antibiotics</b> (such as linezolid) and <b>MAOI-type antidepressants</b> (such as phenelzine)	Eating a tyramine-rich diet while taking certain meds can cause a sudden, dangerous increase in blood pressure.

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