

FARMACIA PRACTIA LETTRE

July –December 2019

News letter from Department of Pharmacy Practice

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Principal's Message

It gives me immense pleasure that our department of pharmacy practice, Sri Venkateswara College of Pharmacy is releasing its news letter. I am sure that news letter will motivate Pharm.D students, health care professionals. I this occasion, I congratulate the staff and students of department of pharmacy practice staff, and students for their efforts in bringing this colorful news letter. The clinical pharmacy activity of our pharmacy practice department has gained strength in the last couple of years with the start of Pharm.D programme and our faculty and students are involved in patient services activities in Government Hospital, Chittoor. The college has adequate facilities to train the students, conduct research facilities, consultancy services to obtain job opportunities to the students. This news letter is very much required in present scenario as it educates the health care professionals, students and academicians. I will extend my help and support in making the forcoming newsletter a rand success. I congratulate all the students and staff for bringing this educative news letter.

HIGHLIGHTS OF CURRENT ISSUE

XCOPRI

FDA approved on: 11/21/2019

Xcopri is a prescription medication used to treat partial-onset seizures in adults.

Mechanism of action:

Cenobamate inhibits voltage gated sodium channels and is a positive GABA_A modulator. However, the exact mechanism of action remains unknown.³ Inhibition of voltage gated sodium channels increases the threshold for generating action potentials and decreases the number of action potentials.¹

Uses of Xcopri

Xcopri is a prescription medication used to treat partial-onset seizures in adults.

Generic name: Cenobamate

Side Effects of Xcopri

Common side effects include:

- feeling sleepy and tired
- dizziness
- double vision
- headache

Xcopri Interactions

- carbamazepine
- clobazam

- lamotrigine
- phenobarbital
- phenytoin
- sedatives
- sleeping pills
- tranquilizers

Dosage

The recommended maintenance dosage is 200 mg once daily. The maximum daily dosage is 400 mg once daily.

IBSRELA

FDA approved on: 9/12/2019

Tenapanor is an NHE3 inhibitor indicated for the treatment of constipation-predominant irritable bowel syndrome (IBS-C). Ibsrela is a prescription medication used to treat irritable bowel syndrome with constipation (IBS-C). Ibsrela belongs to a group of drugs called sodium/hydrogen exchanger 3 (NHE3) inhibitors. By inhibiting NHE3 on the surface of certain intestinal cells, Ibsrela reduces absorption of sodium from the small intestine and colon, resulting in an increase in water secretion into the intestines, which accelerates the movement of food through the intestines and results in a softer stool consistency.

Mechanism of action

Tenapanor is a locally-acting small molecule inhibitor of the sodium/hydrogen exchanger isoform 3 (NHE3), an antiporter expressed on the apical surface of enterocytes in the small intestine and colon which is involved in sodium-fluid homeostasis. By inhibiting this antiporter tenapanor causes retention of sodium within the lumen of the intestine - this results in an osmotic gradient that draws water into the lumen and softens stool consistency.

There is some evidence that tenapanor can inhibit the uptake of dietary phosphorus in the gastrointestinal tract, though the exact mechanism of this activity has yet to be elucidated.

Generic

Tenapanor

For more information on this medication choose from the list of selections below.

- Brand Name
- Drug Class

Side Effects:

The other most common side effects of Ibsrela include:

- swelling, or a feeling of fullness or pressure in your abdomen (distension)
- gas (flatulence)
- dizziness

Dosage

The recommended dosage of Ibsrela in adults is 50 mg orally twice daily.

MOST NOTABLE DISEASE OUTBREAKS OF 2019

Some disease outbreaks have plagued humanity since antiquity, while others are relatively new such as an outbreak of Legionnaires' disease that was linked to hot tubs, for instance. Here's a look at some of the most notable outbreaks consisting of both old and new threats that made headlines in 2019.

Measles

In 2019, the U.S. experienced its worst measles outbreak in more than 25 years. From Jan. 1 to Dec. 5, there were 1,276 confirmed cases of measles reported in 31 states, according to the Centers for Disease Control and Prevention (CDC). That's the highest number of cases in any year since 1992. For comparison, last year there were 375 U.S. cases of measles, and in 2010 there were just 63 cases. The majority of this year's cases, 75%, were linked to measles outbreaks in New York within Orthodox Jewish communities, according to the CDC. Most people who

caught the disease were not vaccinated against measles. These outbreaks were so severe and lasted for so long that they threatened to take away the country's "measles elimination" status, which the U.S. has held since 2000. Measles elimination means there is no "indigenous" transmission of the disease. In other words, all of the measles outbreaks that have happened since 2000 have had their source in foreign countries and have lasted less than a year. But if a chain of measles transmission continues for more than a year, then the disease is no longer considered eliminated.

Hot tubs

Hot tubs can spread diseases even if you don't get in them. That's what happened in a North Carolina outbreak of Legionnaires' disease linked to hot tubs. The outbreak sickened nearly 140 people who attended a North Carolina state fair in September, according to the North Carolina Department of Health and Human Services. Four people died in connection with the outbreak.

Preliminary findings from the investigation showed that people who were diagnosed with Legionnaires' disease were much more likely to report walking by hot tubs — which were on display at an event center at the fair — compared with people who did not get sick, the statement said. Legionnaires' disease is a serious lung infection, or pneumonia, caused by *Legionella* bacteria, according to the CDC. This bacterium lives in watery environments, such as cooling towers and air conditioning systems, as well as in hot tubs. People become infected when they inhale airborne water droplets (within vapor or mist) containing the bacteria. The disease does not spread from person to person.

Foodborne illness

The 2019 outbreak involved romaine lettuce harvested from Salinas, California. Americans were told to throw away their romaine lettuce if it said "Salinas" on the label. The outbreak also led the U.S. Department of Agriculture to recall more than 75,000 lbs. of salad products containing romaine lettuce. So far, the *E. coli* outbreak has sickened 138 people in 25 states, according to the CDC. Of these, 72 people have been hospitalized and 13 have developed a serious kidney condition called hemolytic uremic syndrome. No deaths have been linked with the outbreak so far. The CDC is continuing to investigate the source of this illness.

Eastern Equine Encephalitis

This was a particularly bad year for infections with a rare but deadly illness known as eastern equine encephalitis (EEE). The viral illness, which is spread by mosquitoes, can cause brain inflammation. About 30% of patients who develop this brain inflammation die from the disease, and those who survive often have brain damage, according to the CDC. Typically, there are only about seven cases of EEE in the United States each year. But in 2019, that number rose to an alarming 38 the highest number of cases reported in more than half a century, according to STAT news. Fifteen people died from the disease.