



SRI VENKATESWARA COLLEGE OF PHARMACY

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FARMACIA PRACTIA LETTRE JANUARY – JUNE 2019, VOL III ISSUE I 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. 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 clinical departments of RVS hospitals, a tertiary care super specialty hospital. It is indeed a matter of great pride and pleasure to share some of our experiences in patient care with everyone of you. Practice directions and other documents will be drafted and approved with the assistance of the standards of practice committee. The mandate of the college is to train high caliber health care professionals, offer specialized pharma services to the community, conduct research, offer consultancy services and participate in health policy formulation. The college has adequate and modern facilities to execute its mandate. The faculty and student editorial team deserve special appreciations and offer this news letter to our beloved chairman and vice chairman.

Dr. K. Bhaskar Reddy

Principal

Sri Venkateswara College of Pharmacy

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DRUG PROFILE

ALPELISIB

FDA approved on : 5/24/2019

Brand Names : Piqray

Indications :

Alpelisib is indicated in combination with fulvestrant to treat postmenopausal women, and men, with advanced or metastatic breast cancer. This cancer must be hormone receptor (HR)-positive, human epidermal growth factor receptor 2 (HER2)-negative, and PIK3CA \rightarrow mutated. The cancer must be detected by an FDA-approved test following progression on or after an endocrine-based regimen.

Mechanism of action:

Phosphatidylinositol-3-kinase- (PI3K) is responsible for cell proliferation in response to growth factor-tyrosine kinase pathway activation. In some cancers PI3K 's p110 catalytic subunit is mutated making it hyperactive. Alpelisib inhibits (PI3K), with the highest specificity for PI3K .

Side effects:

- Low blood counts.
- High blood sugar.
- Decreased kidney function.
- Skin rash
- Change in liver function.
- Fatigue
- Nausea and vomiting
- Diarrhea
- Mouth sores
- Loss of appetite

Dosage Forms & Strengths:

Tablet

- 50mg
- 150mg
- 200mg

SIPONIMOD

FDA approved on: 3/26/2019

Brand Names: Mayzent 0.25 Mg Starter Pack

Indications:

This drug is indicated for the treatment of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease in adults.

Mechanism of action:

Inflammation of the white and gray matter tissues in the central nervous system caused by localized immune cell infiltration and their cytokines are the initial cause of damage in MS. B lymphocytes and their cytokines are other factors in the pathogenesis of MS. Lymphotoxin [or transforming growth factor beta (TGF-)] and TNF- produced by these cells encourage inflammation. The S1P receptor is an important receptor related to the function of lymphocytes and can be found in the central nervous system 4. S1P receptor (S1PR) signaling is associated with a wide variety of physiological processes for lymphocytes, including their egress and recirculation.

Indications :

Multiple sclerosis: Treatment of relapsing forms of multiple sclerosis (MS), including clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults.

Administration :

Oral: Administer with or without food. Swallow tablets whole; do not chew, crush, or split.

Storage :

Store unopened containers in a refrigerator between 2°C to 8°C (36°F to 46°F); may be stored at 20°C to 25°C (68°F to 77°F) for ≤3 months after dispensing to the patient.

Adverse Reactions :

Hypertension, Headache, Hepatic, Dizziness, seizure, Lymphocytopenia

DISEASE BASED INFORMATION:**STROKE**

A stroke occurs when a blood vessel in the brain ruptures and bleeds, or when there's a blockage in the blood supply to the brain. The rupture or blockage prevents blood and oxygen from reaching the brain's tissues.

Stroke symptoms**Stroke symptoms can include:**

- Paralysis
- Numbness or weakness in the arm, face, and leg, especially on one side of the body
- Trouble speaking or understanding speech
- Confusion
- Slurring speech
- Vision problems, such as trouble seeing in one or both eyes with vision blackened or blurred, or double vision
- Trouble walking
- Loss of balance or coordination
- Dizziness
- Severe, sudden headache with an unknown cause

Types of stroke :

Strokes fall into three main categories: transient ischemic attack (TIA), ischemic stroke, and hemorrhagic stroke. These categories are further broken down into other types of strokes, including:

- Embolic stroke
- Thrombotic stroke
- Intracerebral stroke
- Subarachnoid stroke

Ischemic stroke:

During an ischemic stroke, the arteries supplying blood to the brain narrow or become blocked. These blockages are caused by blood clots or blood flow that's severely reduced. They can also be caused by pieces of plaque due to atherosclerosis breaking off and blocking a blood vessel.

The two most common types of ischemic strokes are thrombotic and embolic. A thrombotic stroke happens when a blood clot forms in one of the arteries supplying blood to the brain. The clot passes through the bloodstream and becomes lodged, which blocks blood flow. An embolic stroke is when a blood clot or other debris forms in another part of the body and then travels to the brain.

Embolic stroke :

An embolic stroke is one of two types of ischemic strokes. It occurs when a blood clot forms in another part of the body often the heart or arteries in the upper chest and neck and moves through the bloodstream to the brain. The clot gets stuck in the brain's arteries, where it stops the flow of blood and causes a stroke. An embolic stroke may be the result of a heart condition. Atrial fibrillation, a common type of irregular heartbeat, can cause blood clots to develop in the heart. These clots may dislodge and travel through the bloodstream and into the brain.

Transient ischemic attack (TIA) :

A transient ischemic attack, often called a TIA or ministroke, occurs when blood flow to the brain is blocked temporarily. Symptoms, which are similar to those of a full stroke, are typically temporary and disappear after a few minutes or hours.

Hemorrhagic stroke :

A hemorrhagic stroke happens when an artery in the brain breaks open or leaks blood. The blood from that artery creates excess pressure in the skull and swells the brain, damaging brain cells and tissues. The two types of hemorrhagic strokes are intracerebral and subarachnoid. An intracerebral hemorrhagic stroke, the most common type of hemorrhagic stroke, happens when the tissues surrounding the brain fill with blood after an artery bursts. The subarachnoid hemorrhagic stroke is less common. It causes bleeding in the area between the brain and the tissues that cover it.

Risk factors for stroke :

Risk factors for stroke include :

Diet :

An unhealthy diet that increases your risk of stroke is one that's high in :

- Salt
- Saturated fats
- Trans fats
- Cholesterol

Inactivity:

Inactivity, or lack of exercise, can also raise your risk for stroke. Regular exercise has a number of health benefits. The CDC recommends that adults get at least 2.5 hours ^{Trusted Source} of aerobic exercise every week. This can mean simply a brisk walk a few times a week.

Alcohol consumption :

Alcohol consumption should be done in moderation. This means no more than one drink per day for women, and no more than two for men.

Tobacco use :

Using tobacco in any form also raises your risk for stroke, since it can damage your blood vessels and heart. This is further increased when smoking, because your blood pressure rises when you use nicotine.

Personal background

There are certain personal risk factors for stroke that you can't control. Stroke risk can be linked to your:

- Family history
- Sex
- Age
- Race and ethnicity
- Health history

Certain medical conditions are linked to stroke risk. These include:

- a previous stroke or TIA
- high blood pressure
- high cholesterol
- heart disorders, such as coronary artery disease
- heart valve defects
- enlarged heart chambers and irregular heartbeats
- sickle cell disease
- diabetes

Tests to diagnose strokes

- MRI and CT scan
- Electrocardiogram (EKG)
- Cerebral angiogram
- Carotid ultrasound
- Echocardiogram

Stroke treatment:

Antiplatelet and anticoagulants

Over-the-counter aspirin is often a first line of defense against stroke damage.

Clot-breaking drugs:

Thrombolytic drugs can break up blood clots in your brain's arteries, which still stop the stroke and reduce damage to the brain. One such drug, tissue plasminogen activator (tPA), or Alteplase IV r-tPA, is considered the gold standard in ischemic stroke treatment.

Mechanical thrombectomy

During this procedure, the doctor inserts a catheter into a large blood vessel inside your head. They then use a device to pull the clot out of the vessel. This surgery is most successful if it's performed 6 to 24 hours after the stroke begins.

Surgery :

This may be done with a catheter, or if the clot is especially large, your doctor may open an artery to remove the blockage.

Hemorrhagic stroke :

Strokes caused by bleeds or leaks in the brain require different treatment strategies. Treatments for hemorrhagic stroke include:

Medications:

The most common stroke medications include:

- **Tissue plasminogen activator (tPA):** This emergency medication can be provided during a stroke to break up a blood clot causing the stroke. It's the only medication currently available that can do this, but it must be given within 3 to 4.5 hours after symptoms of a stroke begin. This drug is injected into a blood vessel so the medication can start to work as quickly as possible, which reduces the risk of complications from the stroke.
- **Anticoagulants:** These drugs reduce your blood's ability to clot. The most common anticoagulant is warfarin (Jantoven, Coumadin). These drugs can also prevent existing blood clots from growing larger, which is why they may be prescribed to prevent a stroke, or after an ischemic stroke or TIA has occurred.
- **Antiplatelet drugs:** These medications prevent blood clots by making it more difficult for the blood's platelets to stick together. The most common antiplatelet drugs include aspirin and clopidogrel (Plavix). They can be used to prevent ischemic strokes and are especially important in preventing secondary stroke.
- **Statins.** Statins, which help lower high blood cholesterol levels, are among the most commonly prescribed Trusted Source medications in the United States. These drugs prevent the production of an enzyme that can turn cholesterol into plaque — the thick, sticky substance that can build up on the walls of arteries and cause strokes and heart attacks.
- **Blood pressure drugs:** High blood pressure can cause pieces of plaque buildup in your arteries to break off. These pieces can block arteries, causing a stroke.

Recovering from a stroke:

Stroke is a leading cause of long-term disability in the United States. However, the National Stroke Association reports that 10 percent of stroke survivors make an almost-complete recovery, while another 25 percent recover with only minor impairments.

Stroke recovery focuses on four main areas :

Speech therapy:

A stroke can cause speech and language impairment. A speech and language therapist will work with Patient to improve the patient health condition.

Cognitive therapy:

After a stroke, many survivors have changes to their thinking and reasoning skills. This can cause behavioral and mood changes. An occupational therapist can help you work to regain your former patterns of thinking and behavior and to control emotional responses.

How to prevent a stroke

This includes the following measures:

- Quit smoking
- Consume alcohol in moderation
- Keep weight down

DEPARTMENTAL ACTIVITIES

Breast cancer Awareness rally & camp, Date: 04.02.2019

We conducted rally on the theme “Breast cancer Awareness Rally & Camp” the programme is inaugurated by Dr. K. Bhaskar Reddy sir near collector bungalow from there to we went PCR circle by showing some placards on the theme. Awareness speeches given by principal sir and also actively faculties, NSS volunteer are participated.



RVS MEDICAL CAMP “MEDICAL CAMP ON HEALTH AND NUTRITION”, DATE: 26.03.2019

Medical camp conducted in RVS Hospital, in these view students started a rally from RVS hospital to Murukambattu Circle. Public came to hospital and attended camp, students and staff members gave tips to pregnant ladies regarding nutrition's and the quality of food. Also, gave details about daily requirement of nutrition in food.



Suggestions and comments may kindly be sent to Editorial Board, Department of Pharmacy Practice, SVCOP, Chittoor.

Phone: 7729999181 Email: editorsvcopnewsletter@svcop.in