

Current Health News

Computer models provide new understanding of sickle cell disease

Date: July 28, 2017

Source: Brown University

Summary: Simulations developed by mathematicians provide new details of how sickle cell disease manifests inside red blood cells, which could help in developing new treatments.

Artificial light from digital devices lessens sleep quality

Date: July 28, 2017

Source: University of Houston

Summary: Blue light emitted from digital devices could contribute to the high prevalence of reported sleep dysfunction, suggests new research.

Dementia: BACE inhibitor improves brain function

Date: July 28, 2017

Source: Technical University of Munich (TUM)

Summary: The protein amyloid beta is believed to be the major cause of Alzheimer's disease. Substances that reduce the production of amyloid beta, such as BACE inhibitors, are therefore promising candidates for new drug treatments. Scientists have recently demonstrated that one such BACE inhibitor reduces the amount of amyloid beta in the brain. By doing so, it can restore the normal function of nerve cells and significantly improve memory performance.

Green tea ingredient may ameliorate memory impairment, brain insulin resistance, and obesity

Date: July 28, 2017

Source: Federation of American Societies for Experimental Biology

Summary: A new study involving mice, suggests that EGCG (epigallocatechin-3-gallate), the most abundant catechin and biologically active component in green

tea, could alleviate high-fat and high-fructose (HFFD)-induced insulin resistance and cognitive impairment.

Walnuts may promote health by changing gut bacteria

Date: July 28, 2017

Source: Louisiana State University Health Sciences Center

Summary: A new study has found that walnuts in the diet change the makeup of bacteria in the gut, which suggests a new way walnuts may contribute to better health.

Estrogen regulates pathological changes of bones via bone lining cells

Date: July 28, 2017

Source: University of Veterinary Medicine -- Vienna

Summary: The female sex hormone estrogen plays an important role in the structural stability of bones. To date, however, it had been unclear exactly which cells were involved in the hormone's protective function. Researchers have now shown for the first time that estrogen uses bone lining cells to regulate the expression of the protein RANKL. Estrogen deficiency leads to uncontrolled expression of RANKL, which can trigger pathological changes in the bones.

Source: sciencedaily.com/news

Information collected and compiled by:
Mr. Md. Akbar Hossain
Assistant Professor
Department of Pharmacy
ASA University, Dhaka

New Drugs Approval

Sofosbuvir, velpatasvir and voxilaprevir

Date of Approval: July 18, 2017

Treatment for: **Chronic Hepatitis C**

Vosevi (sofosbuvir, velpatasvir and voxilaprevir or SOF/VEL/VOX) is a fixed-dose combination of a nucleotide analog NS5B polymerase inhibitor (SOF), a pangenotypic NS5A inhibitor (VEL), and a pangenotypic NS3/4A protease inhibitor (VOX) for the treatment of genotype 1-6 chronic hepatitis C virus (HCV) infection.

Neratinib

Date of Approval: July 17, 2017

Treatment for: **Breast Cancer -- Adjuvant**

Company: Puma Biotechnology, Inc.

The U.S. Food and Drug Administration (FDA) has approved Nerlynx (neratinib), a once-daily oral tyrosine kinase inhibitor for the extended adjuvant treatment of adult patients with early stage HER2 overexpressed/amplified breast cancer, following adjuvant trastuzumab-based therapy.

Guselkumab

Date of Approval: July 13, 2017

Treatment for: **Plaque Psoriasis**

The U.S. Food and Drug Administration (FDA) has approved Tremfya (guselkumab), an interleukin-23 blocker for the treatment of adult patients with moderate-to-severe plaque psoriasis who are candidates for systemic therapy or phototherapy.

L-glutamine

Date of Approval: July 7, 2017

Treatment for: **Sickle Cell Anemia**

Endari (L-glutamine) is orally-administered pharmaceutical grade L-glutamine (PGLG), an amino acid formulation to relieve pain, swelling and other complications of sickle cell anemia.

Triptorelin

Date of Approval: June 29, 2017

Treatment for: **Precocious Puberty**

Triptodur (triptorelin) is a gonadotropin releasing hormone (GnRH) agonist indicated for the treatment of pediatric patients with central precocious puberty.

Betrixaban

Date of Approval: June 23, 2017

Treatment for: **Prevention of Venous Thromboembolism**

Bevyxxa (betrixaban) is an oral, once-daily Factor Xa inhibitor anticoagulant for the extended-duration prophylaxis of venous thromboembolism (VTE) in at-risk adult patients hospitalized for an acute medical illness.

C1 esterase inhibitor (human) Subcutaneous Injection

Date of Approval: June 22, 2017

Treatment for: **Hereditary Angioedema**

Haegarda (C1 esterase inhibitor (human)) is a low-volume subcutaneous (SC) C1-esterase inhibitor (C1-INH) replacement therapy to prevent Hereditary Angioedema (HAE) attacks.

Rituximab and hyaluronidase

Date of Approval: June 22, 2017

Treatment for: **Follicular Lymphoma; Diffuse Large B-Cell Lymphoma; Chronic Lymphocytic Leukemia**

Rituxan Hycela (rituximab and hyaluronidase human) is a subcutaneous monoclonal antibody and hyaluronidase human formulation for the treatment of adult patients with follicular lymphoma, diffuse large B-cell lymphoma (DLBCL), and chronic lymphocytic leukemia (CLL).

Delafloxacin

Date of Approval: June 19, 2017

Treatment for: **Skin and Structure Infection**

Baxdela (delafloxacin) is a fluoroquinolone antibacterial indicated for the treatment of acute bacterial skin and skin structure infections (ABSSSI) caused by designated susceptible bacteria.

Source: drugs.com

Information collected and compiled by:

Mr. Md. Akbar Hossain

Assistant Professor

Department of Pharmacy

ASA University, Dhaka

New Applications Approval

Abiraterone acetate

Approved date: July 20, 2017

Treatment for: **Prostate Cancer**

Abiraterone acetate is an improved ultramicrosize formulation of the oral CYP17 inhibitor abiraterone acetate (approved as Zytiga) in development for the combination treatment of metastatic castration-resistant prostate cancer.

Buprenorphine

Approved date: July 20, 2017

Treatment for: **Opiate Dependence**

Buprenorphine is a long-acting partial opioid agonist formulation in development for the treatment of opioid dependence.

Erenumab

Approved date: July 20, 2017

Treatment for: **Migraine Prophylaxis**

Erenumab is a human monoclonal antibody that inhibits the receptor for calcitonin gene-related peptide (CGRP) in development for the prevention of episodic and chronic migraine.

Romozosumab

Approved date: July 16, 2017

Treatment for: **Osteoporosis**

Romozosumab is an anti-sclerostin monoclonal antibody in development for the treatment of osteoporosis in postmenopausal women at increased risk of fracture.

Abemaciclib

Approved date: July 12, 2017

Treatment for: **Breast Cancer**

Abemaciclib is a selective ATP-competitive inhibitor of cyclin dependent kinases (CDK) 4 and 6 in development for the treatment of metastatic breast cancer.

Migalastat

Approved date: July 11, 2017

Treatment for: **Fabry Disease**

Migalastat is an investigational pharmacological chaperone in development for the treatment of Fabry disease.

Dexamethasone (Intracanalicular Depot)

Approved date: July 11, 2017

Treatment for: **Postoperative Ocular Inflammation**

Dexamethasone is an investigational intracanalicular depot corticosteroid formulation designed to deliver sustained release dexamethasone to the ocular surface for up to 30 days after ophthalmic surgery for the treatment of post-surgical ocular inflammation and pain.

Entrectinib

Approved date: July 10, 2017

Treatment for: **Neuroblastoma**

Entrectinib is a potent, novel, orally available, selective tyrosine kinase inhibitor in development for the treatment of neuroblastoma.

Cyclobenzaprine hydrochloride

Approved date: July 10, 2017

Treatment for: **Post Traumatic Stress Disorder**

Cyclobenzaprine is a sublingual formulation of an approved skeletal muscle relaxant in development for the treatment of patients with post-traumatic stress disorder (PTSD).

Treprostinil

Approved date: June 30, 2017

Treatment for: **Pulmonary Arterial Hypertension**

Treprostinil is a preservative-free, parenteral formulation of the approved vasodilatory prostacyclin analogue treprostinil delivered via the proprietary

PatchPump infusion system for the treatment of pulmonary arterial hypertension (PAH).

Levodopa (Inhalation Powder)

Approved date: June 29, 2017

Treatment for: **Parkinson's disease**

Levodopa is an oral inhalation formulation of the approved drug levodopa in development as a treatment for symptoms of OFF periods in people with Parkinson's disease taking a carbidopa/levodopa regimen.

Fostamatinib

Approved date: June 19, 2017

Treatment for: **Immune Thrombocytopenia**

Fostamatinib is an investigational oral spleen tyrosine kinase (SYK) inhibitor in development for the treatment of patients with chronic and persistent immune thrombocytopenia (ITP).

Bictegravir, Emtricitabine & Tenofovir Alafenamide

Approved date: June 12, 2017

Treatment for: **HIV Infection**

Bictegravir, emtricitabine and tenofovir alafenamide is an investigational integrase strand transfer inhibitor and emtricitabine/tenofovir alafenamide (FTC/TAF) combination in development for the treatment of HIV-1 infection in adults.

Source: drugs.com

Information collected and compiled by:

Mr. Md. Akbar Hossain

Assistant Professor

Department of Pharmacy

ASA University, Dhaka

Uncorrected Proof

Herbal and Alternative Medicine News

Depression May be Linked with Changing Brain Structures, Try these Herbal Remedies

Updated: July 22, 2017

Depression is one of the most common ailments in India and around the world and now it has been directly linked with changing structures of the brain. According to a new study published in Scientific Reports conducted by University of Edinburgh depression could lead to changes in brain's structure.

- **Ashwagandha** is believed to relieve you from stress and anxiety due to the presence of active compounds like steroidal lactones and alkaloids that provide antidepressant properties.
- **Brahmi** acts as an adaptogen, which simply means that it helps the body adapt to new or stressful situations. It keeps you calm and give some respite from anxiety and nervousness.
- **Jatamasi** is known to have anti-depressant, anti-stress and anti-fatigue properties. The roots of

Jatamasi give therapeutic effect to mood swings and stress disorders.

- **Pudina** or peppermint has menthol in it which helps keep mind calm and further gives it a cooling effect.

Take a coffee or tea break to protect your liver

Updated: June 6, 2017

New study indicates that drinking even a few cups a day may prevent hardening of the liver

Source: sciencedaily.com

Information collected and compiled by:

Mr. Md. Akbar Hossain
Assistant Professor
Department of Pharmacy
ASA University, Dhaka