

harmahorizon A panorama in the world of health sciences



NEWSLETTER FROM DEPARTMENT OF PHARMACY, SUMANDEEP VIDYAPEETH APR-JUN 2016 | Vol II Issue 2

PATRON

Dr. A K Seth, M.Pharm, Ph.D.

EDITOR-IN-CHIEF

Dr. R Balaraman, Ph.D. FAMS

ASSOCIATE EDITORS

Dr. Dipen Sureja, M.Pharm, Ph.D

Dr. Girish Sailor, M.Pharm, Ph.D

Dr. Dhanya B Sen, M.Pharm, Ph.D

Dr. Chintan Aundhia, M.Pharm, Ph.D

MANAGING EDITORS

Dr. Vikas R Chandrakar, PharmD

Dr. Kushal Gohel, PharmD

Dr. Vasa Siva Sankar, PharmD

STEERING COMMITTEE

Dr. D G Desai, M.Pharm, Ph.D

Dr. Rajesh Maheshwari, M.Pharm, Ph.D

Dr. Ashim Kumar Sen, M.Pharm, Ph.D

Dr. Nirmal Shah, M.Pharm, Ph.D

Mrs. Aarti Zanwar, M.Pharm

Dr. Ankur Javia, M.Pharm, Ph.D

Mr. Ghanshyam Parmar, M.Pharm

Mr. Vinod Ramani, M.Pharm

Mr. Ashish Shah, M.Pharm

Ms. Disha Shukla, M.Pharm

Mr. Kirtan Sanghvi, M.Pharm

Dr. Chainesh Shah, M.Pharm, Ph.D.

STUDENT EDITORS

Ms. Megha Patel, PharmD, III Year Mr. Jeremiah Christi, B.Pharm, III Year

CARTON

I stopped taking the medicine because I prefer the original disease to the side effects!





ASSOCIATE EDITOR'S VIEW

Two more months have gone by and I take pride in bringing back a fresh issue of Pharmahorizon. Contributing towards this newsletter as the Associate Editor has been a great privilege for me as this newsletter acts as an excellent medium to propagate the various ideas and innovations in the field of Pharmacy.

A single glance at this newsletter will notify the readers regarding any change in the world of pharmacy. And what's more is that a lay man can understand every technical advancement in the field of medicines and can take advantage of this information for their well being, which ultimately is the aim of Pharmahorizon.

Pharmahorizon is the combined effort of the management, staff and students and I would be lying if I said that editing this newsletter is an easy task. I am, truly, thankful to all those people who have contributed towards the making of Pharmahorizon and I sincerely hope that it fulfils your purpose of picking it up from a desk or a newsstand.

Dr. Chintan Aundhia, M.Pharm, Ph.D Asst. Prof., DoP, SV



A tribute to Discoverer of the **Human Immunodeficiency** Virus (HIV) Nobel Prize: 2008

Luc Antoine Montagnier (born 18 August 1932) is a French virologist and joint recipient with Françoise Barré-Sinoussi and Harald zur Hausen of the 2008 Nobel Prize in Physiology or Medicine for his discovery of the human immunodeficiency virus (HIV). A long-time researcher at the Pasteur Institute in Paris, he currently works as a fulltime professor at Shanghai Jiao Tong University in China

Montagnier is the co-founder of the World Foundation for AIDS Research and Prevention and co-directs the Program for International Viral Collaboration. He is the founder and a former president of the Houston-based World Foundation for Medical Research and Prevention. He has received more than 20 major awards, including the National Order of Merit (Commander, 1986) and the Légion d'honneur (Knight: 1984; Officer: 1990; Commander: 1993; Grand Officer: 2009). He is a recipient of the Lasker Award and the Scheele Award (1986), the Louis-Jeantet Prize for Medicine (1986), the Gairdner Award (1987), King Faisal International Prize (1993) (known as the Arab Nobel Prize), and the Prince of Asturias Award (2000). He is also a member of the Académie Nationale de Médecine.

https://en.wikipedia.org/wiki/Luc_Montagnier

MOLECULE OF THE MILLENNIUM

IXEKIZUMAB

The U.S. Food and Drug Administration has approved Taltz (Ixekizumab) to treat adults with moderate-to-severe plaque psoriasis. Psoriasis is a skin condition that causes patches of skin redness and flaking. Psoriasis is an autoimmune disorder that occurs more commonly in patients with a family history of the disease, and most often begins in people between the ages of 15 and 35. The most common form of psoriasis is plaque psoriasis, in which patients develop thick, red skin with flaky, silver-white scales.

Taltz's active ingredient is an antibody (ixekizumab) that binds to a protein (interleukin (IL)-17A) that causes inflammation. By binding to the protein, ixekizumab is able to inhibit the inflammatory response that plays a role in the development of plaque psoriasis.

Taltz is administered as an injection. It is intended for patients who are candidates for systemic therapy, phototherapy (ultraviolet light treatment) or a combination of both.

Taltz's safety and efficacy were established in three randomized, placebo-controlled clinical trials with a total of 3,866 participants with plaque psoriasis who were candidates for systemic or phototherapy therapy. The results showed that Taltz achieved greater clinical response than placebo, with skin that was clear or almost clear, as assessed by scoring of the extent, nature and severity of psoriatic changes of the skin.

Because Taltz is a medicine that affects the immune system, it is being approved with a Medication Guide to inform patients that they may have a greater risk of an infection, or an allergic or autoimmune condition. Serious allergic reactions and development or worsening of inflammatory bowel disease have been reported with the use of Taltz. The most common side effects include upper respiratory infections, injection site reactions and fungal (tinea) infections.

Taltz is marketed by Indanapolis, Indiana-based Eli Lilly and Company.

Source: http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm491872.htm



WHO RECOMMENDATIONS

Acceptable medical reasons for use of breast-milk substitutes

A list of acceptable medical reasons for supplementation was originally developed by WHO and UNICEF as an annex to the Baby-friendly Hospital Initiative (BFHI) package of tools in 1992. WHO and UNICEF agreed to update the list of medical reasons given that new scientific evidence had emerged since 1992, and that the BFHI package of tools was also being updated.

Infant conditions

- 1 Infants who should not receive breast milk or any other milk except specialized formula
- Infants with classic galactosemia, maple syrup urine disease and infants with Phenylketoneuria
- Infants for whom breast milk remains the best feeding option but who may need other food in addition to breast milk for a limited period

- Infants born weighing less than 1500 g (very low birth weight).
- Infants born at less than 32 weeks of gestational age (very pre-term).
- Newborn infants who are at risk of hypoglycaemia by virtue of impaired metabolic adaptation or increased glucose demand

Maternal conditions

- Maternal conditions that may justify permanent avoidance of breastfeeding: HIV Infection
- Maternal conditions that may justify temporary avoidance of breastfeeding: Severe Ilness, Herpes Simpex Virus or any Maternal Medication

Source:

http://www.who.int/nutrition/publications/infantfeeding/WHO_NMH_NH D_09.01/en/

NEW DRUG APPROVAL

Nivolumab (Opdivo) for Hodgkin Lymphoma

On May 17, 2016, the U. S. Food and Drug Administration granted accelerated approval to nivolumab (Opdivo, marketed by Bristol-Myers Squibb) for the treatment of patients with classical Hodgkin lymphoma (cHL) that has relapsed or progressed after autologous hematopoietic stem cell transplantation (HSCT) and post-transplantation brentuximab vedotin (Adcetris).

The approval was based on two single-arm, multicenter trials of nivolumab in adults with relapsed or refractory cHL. The trials enrolled patients regardless of PD-L1 expression status on Reed-Sternberg cells. The primary efficacy endpoint was objective response rate (ORR) as determined by an independent radiographic review committee. Additional outcome measures included duration of response (DOR).

Efficacy was evaluated in 95 patients previously treated with autologous HSCT and post-transplantation brentuximab vedotin. Patients had a median of 5 prior systemic regimens (range: 3, 15) and received a median of 17 doses of nivolumab (range: 3, 48). Single-agent nivolumab produced a 65% ORR (95% CI: 55%, 75%), with 58% partial remission and 7% complete remission. The median time-to-response was 2.1 months (range: 0.7 to 5.7 months). The estimated median DOR was 8.7 months.

The most common (reported in at least 20%) adverse reactions of any grade were fatigue, upper respiratory tract infection, cough, pyrexia, and diarrhea. Additional common adverse reactions (reported in at least 10%) included rash, pruritus, musculoskeletal pain, nausea, vomiting, abdominal pain, headache, peripheral neuropathy, arthralgia, dyspnea, infusion-related reactions, and hypothyroidism or thyroiditis.

Source: http://www.fda.gov/Drugs/InformationOnDrugs/ApprovedDrugs/ucm501412.htm

DRUG SAFETY COMMUNICATION

The U.S. Food and Drug Administration (FDA) is warning that taking higher than recommended doses of the common over-the-counter (OTC) and prescription diarrhea medicine loperamide (Imodium), including through abuse or misuse of the product, can cause serious heart problems that can lead to death. The risk of these serious heart problems, including abnormal heart rhythms, may also be increased when high doses of loperamide are taken with several kinds of medicines that interact with loperamide.

The majority of reported serious heart problems occurred in individuals who were intentionally misusing and abusing high doses of loperamide in attempts to self-treat opioid withdrawal symptoms or to achieve a feeling of euphoria. WHO continue to evaluate this safety issue and will determine if additional FDA actions are needed.

Health care professionals should be aware that use of higher than recommended doses of loperamide can result in serious cardiac adverse events. Consider loperamide as a possible cause of unexplained cardiac events including QT interval prolongation, Torsades de Pointes or other ventricular arrhythmias, syncope, and cardiac arrest. In cases of abuse, individuals often use other drugs together with loperamide in attempts to increase its absorption and penetration across the blood-brain barrier, inhibit loperamide metabolism, and enhance its euphoric effects. If loperamide toxicity is suspected, promptly discontinue the drug and start necessary therapy. If loperamide ingestion is suspected, measure blood levels, which may require specific testing. For some cases of Torsades de Pointes in which drug treatment is ineffective, electrical pacing or cardioversion may be required.

Advise patients taking loperamide to follow the dosing recommendations on the label because taking higher than recommended doses, either intentionally or unintentionally, may lead to abnormal heart rhythms and serious cardiac events leading to death. Also advise patients that drug interactions with commonly used medicines also increase the risk of serious cardiac adverse events. Refer patients with opioid use disorders for treatment.

Patients and consumers should only take loperamide in the dose directed by their health care professionals or according to the OTC Drug Facts label. Do not use more than the dose prescribed or listed on the label, as doing so can cause severe heart rhythm problems or death. If your diarrhea lasts more than 2 days, stop taking loperamide and contact your health care professional. Seek medical attention immediately if you or someone taking loperamide experiences any of the following:

- Fainting
- Rapid heartbeat or irregular heart rhythm
- Unresponsiveness, meaning that you can't wake the person up or the person doesn't answer or react normally

Loperamide is approved to help control symptoms of diarrhea, including Travelers' Diarrhea. The maximum approved daily dose for adults is 8 mg per day for OTC use and 16 mg per day for prescription use.

Source: http://www.fda.gov/Drugs/DrugSafety/ucm504617.htm

DRUGS IN CLINICAL TRIALS

The FDA just approved the first human trials of a Zika vaccine

The US Food and Drug Administration (FDA) has approved the first human tests of an experimental Zika virus vaccine, the makers of the drug announced. Called GLS-5700, the medication will be used in a clinical trial involving 40 healthy people, and represents the first major step towards ultimately immunising people against Zika – which was declared a global public health emergency by the World Health Organisation (WHO) in February. GLS-5700 works by stimulating the body's immune system to defend itself against Zika. Synthetic fragments of viral DNA are injected into the skin, prompting the immune system's T cells to generate antibodies to fight the infection.

Source: http://www.sciencealert.com/the-fda-just-approved-the-first-human-trials-of-a-zika-vaccine

FDA grants fast track designation to promising metastatic breast cancer treatment

On the merit of promising results in earlier combination studies, Cascadian Therapeutics' HER2+ metastatic breast cancer study has recently been given fast track designation by the U.S. Food and Drug Administration (FDA).

The program, called HER2CLIMB, will move into phase two shortly, evaluating the effectiveness of a highly selective small molecule inhibitor of HER2 called ONT-380.

Source: https://lifesciencedaily.com/innovation/18384-fda-grants-fast-track-designation-promising-metastatic-breast-cancer-treatment/

DIETARY RESEARCH

Fruit Consumption in Pregnancy Tied to Kids' Cognitive Outcomes

Fruit consumption during pregnancy is linked to improvements in infant learning - and not just in humans but also in Drosophila, or fruit flies. Drosophila is known for its importance as a model of learning and memory, an intriguing fact that suggests that the new findings are valid. The study included 688 participants in the Canadian Healthy Infant Longitudinal Development (CHILD) study, a birth cohort of term and near-term infants who entered the study while their mothers were pregnant. Data on prenatal and postnatal fruit intake were available for a subcohort in the study. Analysis of the data showed a significant association between increased daily fruit intake during pregnancy and increased 1-year cognitive and adaptive development in infants, as assessed by the Bayley Scale of Infant Development in univariate and multivariate analyses.

Source: http://www.medscape.com/viewarticle/864348#vp_1

CURRENT AFFAIRS IN PHARMACEUTICAL INDUSTRY

Zydus Healthcare buys 2 ANDAs from Teva

Zydus Healthcare, a subsidiary of Cadila Healthcare, said it has acquired two abbreviated new drug applications (ANDAs) from Teva Pharmaceutical in the US for an undisclosed sum. The company said these ANDAs have been acquired by its 100 per cent subsidiary, Zydus Worldwide DMCC and will be financed through the group's internal accruals.

Source: http://economictimes.indiatimes.com/articleshow/52829477.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

Granules acquires rights for 4 products from US pharma Windlas

Pharma firm Granules India today said its subsidiary has entered into a product in-licensing pact with US pharma Windlas, LLC to market and distribute four products in the US. US pharma Windlas LLC is a joint venture between US pharma Ltd and Windlas Healthcare Pvt Ltd. US pharma Windlas will receive milestone payments and the share of profits from commercial sales.

Source: http://economictimes.indiatimes.com/articleshow/52668276.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

NEW MOLECULE ENTITY & NEW THERAPEUTIC BIOLOGICAL PRODUCT

Epclusa (Sofosbuvir; Velapatasvir)

June 28, 2016 - The U.S. Food and Drug Administration approved Epclusa® (Sofosbuvir and Velpatasvir) tablet for the treatment of adult patients with chronic hepatitis C virus (HCV) genotypes 1, 2, 3, 4, 5, or 6 infection: without cirrhosis or with compensated cirrhosis; and with decompensated cirrhosis for use in combination with Ribavirin. One tablet of EPCLUSA contains 400 mg of Sofosbuvir and 100 mg of Velpatasvir.

Source: http://www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm?fuseaction=Search.Label ApprovalHistory#apphist

Zinbryta (Daclizumab)

May 27, 2016 - The U.S. Food and Drug Administration approved Zinbryta (Daclizumab) for the treatment of adult patients with relapsing forms of multiple sclerosis (MS). Because of its safety profile, the use of Zinbryta should generally be reserved for patients who have had an inadequate response to two or more drugs indicated for the treatment of MS. The recommended dosage of Zinbryta is 150 milligrams injected subcutaneously once monthly. WARNING: Hepatic injury including Autoimmune Hepatitis and other Immune-medicated disorders.

Source: http://www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm?fuseaction=Search.Label_ApprovalHistory#labelinfo



HEALTHCARE NEWS-INDIA

CSIR launches ayurvedic anti-diabetic drug BGR-34

BENGALURU: The Council for Scientific and Industrial Research (CSIR) launched its ayurvedic anti-diabetic drug BGR-34. Aimed at managing type 2 diabetes, BGR-34 has been jointly developed by National Botanical Research Institute (NBRI) and Central Institute for Medicinal and Aromatic Plants (CIMAP), both located in Lucknow. "The modern diabetes drugs are known for side-effects and toxicity while BGR-34 works by controlling blood sugar and limiting the harmful effects of other drugs," said NBRIs' Senior Principal Scientist A.K.S. Rawat.

NBRI and CIMAP scientists studied nearly 500 ancient herbs listed in ayurvedic texts to zero in on daruharidra (Berberis aristata), giloy (Tinospora cordifolia), vijaysar (Pterocarpus marsupium), gudmar (Gymnema sylvestre), majeeth (Rubia cordifolia) and methika (Trigonella foenum-graecum) to make the anti-diabetic formulation.

Source: http://economictimes.indiatimes.com/articleshow/52942895.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

IQAC Activity

National Conference and Workshop, Sumandeep Vidyapeeth, Vadodara.

A National Conference and Workshop on "Quality Enhancement Practices in Health Education" was organized by Internal Quality Assurance Cell (IQAC), Sumandeep Vidyapeeth on 1st April, 2016. Prof. Dr. Shekar S. Rajderkar and Prof. Dr. Mahendra Patait were invited as a resource person for the workshop. 20 Faculty members of DoP, SV attended the conference. Dr. Girish Sailor, Asso. Prof., DoP, SV also served as a convener of the Conference and Workshop.

LAUGH & LIVE LONGER

Wife returns from the clinics and tells her husband:- The doctor recommended me to spend one month at the sea, two weeks in the countryside and go for one week abroad. Where will you take me first?

- To another doctor...

A doctor of a small village drives a car at 150 km/h.

His wife: - Honey, why are you driving so fast - there might be a policeman around the corner and he would stop you.

- Don't worry, darling, yesterday I told him to stay in bed.

When I was growing up they used to say, "Robin, drugs can kill you." Now that I'm 58, my doctor's going, "Robin, you need drugs to live." And I realise my doctor is my dealer now... and a lot harder to get hold of.

A doctor is to give a speech at the local AMA dinner. He jots down notes for his speech. Unfortunately, when he stands in front of his colleagues later that night, he finds that he can't read his notes. So he asks, "Is there a pharmacist in the house?"

sick jokes@ballu.com



PHARMACY WORD SEARCH

G	- 1	N	S	U	L	1	N	E	D	L	L	W	G	P	R	N	Q	F
ĮΤ	Ν	Е	1	Ţ	Α	Р	Н	S	R	G	L	Υ	Α	0	Н	0	0	D
L	V	1	Н	٧	С	C	S	R	L	U	C	E	Т	R	1	N	S	E
W	F	Х	D	٧	J	X	Е	0	G	Α	Т	Α	С	S	М	C	Q	R
D	Q	L	Т	Ν	Y	P	٧	Т	М	D	R	Α	N	1	Α	E	U	Υ
0	S	Α	Т	Е	U	E	Н	R	Α	Е	R	0	R	L	N	В	R	C
S	E	C	Q	Α	S	0	Α	A	G	M	1	E	Е	Е	P	М	T	K
E	M	-1	1	U	Н	Н	P	1	R	Т	1	L	В	R	P	Z	0	Q
Т	1	T	D	Т	P	P	R	М	Α	М	U	N	E	0	C	M	Н	W
Н	Y	U	E	C	0	F	R	C	0	D	Α	S	0	Е	Т	F	E	Ν
E	G	E	L	Υ	Е	1	1	0	Е	C	C	С	R	P	R	C	Α	Т
R	R	C	1	R	C	D	В	Н	Т	R	Н	U	1	Ε	Н	1	0	X
A	E	Α	٧	U	E	1	C	1	1	Α	D	E	E	S	С	E	Х	G
P	L	M	E	M	K	S	L	P	Т	E	L	Z	A	1	T	٧	N	E
E	L	R	R	L	D	Ν	Т	0	C	Ν	Ε	0	N	L	Н	Н	Q	Ν
U	Α	A	Y	Т	W	1	W	0	P	R	Α	Н	S	Ε	T	C	Н	E
Т	X	Н	G	0	0	Е	R	1	R	Z	С	В	J	1	J	Н	Q	R
1	P	P	G	N	D	P	K	0	N	E	F	0	R	P	U	В	1	1
C	L	Α	Т	1	Р	S	0	Н	Т	L	Е	S	U	0	R	Α	С	С

Words to be searched: SCHEDULE, ACETAMINOPHEN, COMPOUNDING, GENERIC, ALLERGY, HEALTH, IBUPROFEN, ANTIBIOTICS, INSULIN, TEMPERATURE.

Ö,	
	Postal stamp

Department of Pharmacy