

Seminar on “Molecular Chaperones, Ionizing Radiation and Cancer”

The Department of Pharmacy, BRAC University had organized a seminar on 12th August 2015 in the BRAC University Auditorium at 11 am. The seminar titled, “Molecular Chaperones, Ionizing Radiation and Cancer” conducted by Dr. Ayesha Murshid, Instructor, Department of Radiation Oncology, Harvard Medical School was focused on the developments in the area of cancer research. Dr. Ayesha Murshid is a renowned personality in the society of research. She completed her Masters in Biochemistry from Dhaka University and Masters in Microbiology (Long Island University, NY, USA) where she worked as an adjunct lecturer. After that Dr. Ayesha completed her PhD in Cell Biology from McGill University, Canada in 2008 from John Presley’s lab. Later she joined Beth Israel Deaconess Medical Center (Harvard Medical School) as a post-doctoral research fellow in Dr. Stuart Calderwood’s Lab where she characterized Extracellular Heat Shock Proteins’ Receptors. The Department of Pharmacy was honored to welcome such a knowledgeable person to share her research work. Furthermore, the presence of distinguished guests from renowned pharmaceutical industries of Bangladesh along with the presence of Professor A. A. Ziauddin Ahmad, Chairperson of MNS Department, BRAC University and Mr. Mohammad Rezaur Razzak, Associate Professor, BRAC Business School made the seminar more noteworthy. The seminar ended successfully with a question and answer session where guests, faculties and students interacted with the speaker and vote of thanks was given by Dr. Eva Rahman Kabir, Chairperson, Department of Pharmacy, BRAC University. The Seminar Committee of the Department of Pharmacy is looking forward to organize more seminars in future which will open new arenas for collaborative research and will create positive learning atmosphere for the students.



FDA Approves Spritam (levetiracetam) as the First 3D Printed Drug Product

The U.S. Food and Drug Administration (FDA) has recently approved Spritam (levetiracetam) of Aprelia Pharmaceuticals Company for oral use as a prescription adjunctive therapy in the treatment of partial onset seizures, myoclonic seizures and primary generalized tonic-clonic seizures in adults and children with epilepsy. Spritam utilizes Aprelia's proprietary ZipDose® Technology platform, a groundbreaking advance that uses three-dimensional printing (3DP) to produce a porous formulation that rapidly disintegrates with a sip of liquid. While 3DP has been used previously to manufacture medical devices, this approval marks the first time a drug product manufactured with this technology has been approved by the FDA. ZipDose Technology enables the delivery of a high drug load, up to 1,000 mg in a single dose. As a result, Spritam enhances the patient experience - administration of even the largest strengths of levetiracetam with just a sip of liquid. In addition, with Spritam there is no measuring required as each dose is individually packaged, making it easy to carry this treatment on the go. Spritam is expected to be available in the first quarter of 2016. Spritam (levetiracetam) is a prescription

medicine taken by mouth that is used with other medicines to treat primary generalized tonic-clonic seizures in people 6 years of age and older with certain types of generalized epilepsy, myoclonic seizures in people 12 years of age and older with juvenile myoclonic epilepsy and partial onset seizures in people 4 years of age and older with epilepsy. Whole Spritam can be administered along with a sip of liquid. Spritam is recommended for use in patients weighing 20 kg (44 lbs) or more. In clinical trials, the most common side effects (incidence $\geq 5\%$ more than placebo) seen in people who take Spritam include extreme sleepiness, weakness, dizziness, problems with muscle coordination and infection. In addition to those previously listed, the most common side effects seen in children who take Spritam include tiredness, acting aggressive, nasal congestion, decreased appetite, and irritability.



-Fabiha Tasnim

<http://www.drugs.com/newdrugs/fda-approves-spritam-levetiracetam-first-3d-printed-product-4240.html>

10 Excel Functions Every Marketer Should Know

Whenever the word “Marketing” comes across our mind, we define it as a concept developed through assimilation of creative and innovative ideas but it should also be considered that a lot of effort and time is spent on evaluating market situation prior to generating such ideas. This market analysis involves a plethora of activities that often requires the aid of Microsoft Excel to facilitate handling of

data. The following are some basic but salient tools designed in Excel for such operations that every marketer should know-

- Table formatting provides superior tools for working with data in the list form.

- Pivot tables are interactive tables that allow the user to group and summarize large amount of data in a concise, tabular format.

-Charting allows spreadsheet data to be expressed graphically facilitating comparison of data.

-MS Excel COUNTIFS function counts the number of cells in a range that met a single or multiple criteria.

-SUMIFS function adds all of its arguments that meet multiple criteria.

-IF statement allows to evaluate a situation which has two possible outcomes and works by evaluating a logical test--a calculation which can only be TRUE or FALSE.



-CONCATENATE function allows joining two or more words or text strings together.

-VLOOKUP helps to find features in a table or range by row.

-Conditional formatting option in Excel quickly highlights important information in a spread sheet.

-Keyboard shortcuts simplify the operation of Excel data. The list of tools does not end here. However, the proper operating procedure of these tools needs to be thoroughly practiced to increase the efficiency in analyzing data not only in marketing but in any other professional field as well.

<http://bit.ly/1fAJphI>

-Tanisha Khan

Weight Relation of Sugar-Sweetened Beverages and type 2 Diabetes

Who doesn't like to drink ice cold beverages or fresh juice especially during summer? Actually many of us love to have sweetened beverages even with meal. It has always been a burning question whether daily consumption of sweetened beverages, fruit juice or artificially sweetened beverages increase the possibility of type 2 diabetes or not. Recently a review and meta-analysis was conducted in order to answer this question. The study was conducted on more than 460,000 adults between the age ranges of 19-84 and found that higher risk of type 2 diabetes is considerably linked with elevated consumption of sugar-sweetened beverages even daily 18% higher risk per 1 serving. Moreover this threat is 13% more even after adjustment for baseline adiposity. Beside

this the study also revealed that artificially sweetened beverages have higher risk of 25% and 8% per 1 serving both before and after adjustment of adiposity whereas fruit juice have risk of 5% and 7% risk per 1 serving daily before as well as after adjustment. So after getting all these information we should be more careful about consuming sweetened beverages, fruit juice and also artificially sweetened beverages at least should avoid having it every day.



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-Tanisha Momtaz

http://www.jwatch.org/na38593/2015/08/13/regular-consumption-sugar-sweetened-beverages-associated?query=topic_diabetes

Combination or Sequential Therapy for Osteoporosis: Unlocking the Best Approach

Switching from teriparatide to denosumab — or continuing denosumab after simultaneous teriparatide plus denosumab — was beneficial, while switching from denosumab to teriparatide was detrimental. The NIH-funded DATA trial (with manufacturer-provided study drugs) demonstrated that teriparatide plus denosumab resulted in greater, faster increases in bone mineral density (BMD) than either drug alone. In an extension of this trial, 77 participants who received teriparatide or denosumab for 2 years were switched to the other drug for 2 more years, while those who received both drugs continued on denosumab alone. At 4 years, BMD in both groups did not differ significantly. Among women who switched from denosumab to teriparatide, bone loss occurred. Losses in spine and hip were transitory, although hip BMD values achieved at the end of the study were significantly less in the this group than in the other two groups. Moreover, in the denosumab-to-teriparatide group

BMD loss in the radius was progressive, yielding a final value 1.8% below baseline. BMD gained with denosumab is quickly lost when treatment is stopped and teriparatide's effects require more time because osteoblast proliferation is activated and new bone matrix is synthesized. These results clarify that treatment with denosumab followed by teriparatide is not recommended. Thus, for most patients with osteoporosis, combination therapy has no strong justification. However, for the relatively few patients at very high fracture risk, achieving rapid BMD gain is important and combination treatment with teriparatide plus denosumab for 1 to 2 years followed by denosumab monotherapy is currently the best option for promoting prompt, sustained increases in BMD with attendant protection against fractures.

-Sauda Binte Sunjida

http://www.jwatch.org/na38473/2015/07/24/combination-or-sequential-therapy-osteoporosis-unlocking?query=topic_bone

Report on the 61st International Pharmaceutical Students Federation World Congress, Hyderabad, India

Mr. Samin Huq, Teaching Assistant of the Department of Pharmacy, BRAC University and Contact Person BUPs-Bangladesh at IPSF has participated in the 61st IPSF World Congress, Hyderabad, India from 30th July to 9th August, 2015. The congress was organized by the International Pharmaceutical Students Federation hosted by Indian Pharmaceutical Association-Students Forum. Beximco Pharmaceutical Limited has generously sponsored him for participation in the prestigious global event. International Pharmaceutical Students Federation (IPSF) is the leading global organization of students of Pharmacy and Pharmaceutical science in terms of advocacy in the field of public health, professional development and pharmacy education representing 3,50,000 students across 85 countries worldwide. Mr. Samin Huq has also taken a workshop entitled 'TRIPS and Post 2015: Opportunities to improve access to medicine' as chair and speaker on August 7, 2015 where more than 20 participants from different countries of the world including France, Germany, United States, Japan and South Korea has participated. The workshop emphasized on the opportunities of TRIPS implementation over access to medicine and how the opportunities can be utilized to improve access to health across the globe. This is a complete honor for any person from Bangladesh as he is the first person from Bangladesh as well as South Asia to achieve such recognition. For more information: <http://bit.ly/1EefurQ>



-Samin Huq