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Invitation To Samson H. Chowdhury Memorial Conference 2015

Square Pharmaceuticals Limited arranged the Samson H Chowdhury Memorial Conference 2015 on the topic "Bangladesh Pharmaceutical Industry and Current Issues" for the second time on 7th February 2015, Saturday at Kurmitola Golf Club, Dhaka. About 400 people attended the conference that included prominent industrialists of the Bangladesh pharmaceutical sector, faculty and students of various universities and researchers from icddrb and other research organizations. This day-long conference was a unique blend of industrial and educational sector.

Five faculty and six senior students Nabila Morshed, Chandan Sarkar, Samin Huq, Raksa Andalib Hia, Bratakatha Nath and Noshin Mubtasim (who will be graduating this year) was arranged by Dr. Eva Rahman Kabir, Associate Professor of the Department of Pharmacy, BRAC University to attend the conference. The four other faculty who attended the conference are Tareq Ibn Morshed, Zara Sheikh, Imon Rahman and Monica Sharfin Rahman, along with Dr. Eva Rahman Kabir.

Mr. Tapan Chowdhury, Managing Director of Square Pharmaceuticals opened the conference. The **first session** on 'Bangladesh Pharmaceutical Industry – where it is heading towards' started at 9:15am and continued till 11:00am. Mr. Salman F Rahman, Vice Chairman, Beximco Group & President, Bangladesh Association of Pharmaceutical Industries was the moderator of the session. Mr. Aminur Rahman, Country Director, Bangladesh and Srilanka at IMS Health Bangladesh Ltd. and IMS Health Srilanka Ltd. was the keynote speaker. The panel speakers of the session were Mr. Syed Monjural Islam, Secretary, Ministry of Health and family welfare, Govt of People's Republic of Bangladesh, Major General Md Jahangir Hossain Mollik, Director General Directorate General of Drug Administration, Mr. Abdul Muktadir, Managing Director, Incepta Pharmaceuticals Ltd & General Secretary, Bangladesh Association of Pharmaceutical Industries, Mr. Syed S. Kaiser Kabir , CEO & Managing Director, Renata Ltd along with Mr. Tapan Chowdhury. The **second session** on 'Advances in Molecular Biology & implications for pharmaceutical industries in Bangladesh' moderated by Dr. Md. Ziaur Rahman, Associate Scientist, Centre for Communicable Diseases, icddrb started at 11:20 am and ended at 1:00pm. Professor Dr. Zeba Islam Seraj, Department of Biochemistry and Molecular Biology, University of Dhaka gave the keynote presentation. The panel speakers included Professor Dr. Md. Ismail Khan, Dean, Faculty of Medicine, University of Dhaka & Member, Drug Control Committee, Dr. Firdausi Quadri, Director for Vaccine Sciences, icddrb & Member, Drug Control Committee, Professor Dr. Syeda Sultana Razia, Department of Chemical Engineering, BUET, Mr. Mosaddek Hossain, Managing Director, Unimed and Unihealth Manufacturers Ltd and Professor Dr. Naiyyum Choudhury, Chairman, Bangladesh Atomic Energy Regulatory Authority. Professor Dr. Syed Ferhat Anwar, IBA, University of Dhaka moderated the **third (last) session** on 'Advancement of Pharmaceutical Technology and future work force' that started from 2:00 pm till 4:00 pm. Mr. Abdul Muktadir gave an enlightening and informative presentation in the beginning of the session. The panel discussion included Professor A.B.M. Faruque, Department of Pharmaceutical Technology, University of Dhaka & Member, Drug Control Committee, Professor Dr. Md. Ali Mohammad Shoukat Choudhury, Chairman, Department of Chemical Engineering, BUET, Professor Dr. Al-Nakib Choudhury, Vice Chancellor, Pabna University of Science and Technology, Mr. Rabbur Reza, Chief Operating Officer, Beximco Pharmaceuticals Ltd, Mr. Md. Nawabur Rahman, General Manager, Dhaka Unit, Square Pharmaceuticals Ltd.

Each session was followed by a Question and Answer session. Mr. Abdul Muktadir gave the closing remarks highlighting the positive attributes of the conference and shared Late Samson H Chowdhury's vision towards life that took Bangladesh's Pharmaceutical industry to a completely different level thus providing a major contribution to the economic growth of the country and welfare of the citizens. Mr. Tapan Chowdhury concluded the conference with a vote of thanks to everyone present at the conference for their gracious presence and making the conference 'a success by beautiful minds put together'.

Breast Cancer and Its Progress in Treatment

Breast cancer is a disease in which malignant (cancer) cells form in the tissues of the breast. Upon early diagnosis, at a localized stage, the survival rate is 98%. Breast cancer can be diagnosed through multiple tests, including a mammogram, ultrasound, MRI and biopsy. The most common form of treatment for breast cancer is surgery that may be lumpectomy, partial mastectomy, radical mastectomy, and reconstruction. Chemotherapy is another way of treating breast cancer that uses a combination of drugs to either destroy cancer cells or slow down the growth of cancer cells.

An investigational drug discovered and being developed by Pfizer Inc., palbociclib targets a key family of proteins (CDK4/6) responsible for cell growth and prevents them from dividing. Results of the multi–year Phase 2 study showed a significant increase in progression–free survival —the length of time a patient is on treatment without tumor growth — for women with advanced breast cancer that is

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estrogen receptor–positive, HER2–negative, who are medicated synergistically with standard anti–estrogen treatment, letrozole, and palbociclib as it is more effective than letrozole alone. Even radiotherapy would have been a preferable alternative unless it has damaged the normal cell along with the cancerous ones. Blocking or inhibiting the hormonal receptors of these abnormal cells by drug therapy is a viable way of ceasing their growth. The routine treatment for women after early breast cancer surgery consists of the drug tamoxifen, which blocks the production of estrogen (the hormone is believed to stimulate the development of cancer) and chemotherapy. Continuous monitoring of the patient is required since the time of diagnosis and progression of cancer surgical treatment and chemotherapy because of the probability of increase in life span of the case by a decade. **- By Mehmuna Morshed [Source: http://www.medicalnewstoday.com]**

Battling Psoriasis: A New Panacea

On January 21st 2015, a new drug, secukinumab was approved by the U.S. Food and Drug Administration to treat adults with moderate-to-severe plaque psoriasis/psoriasis vulgaris, the most common form of the autoimmune skin disease that can be diagnosed by thick, red skin with flaky, silver-white patches called scales. A novel remedy, Secukinumab is marketed by Novartis Pharmaceuticals Corp., N.J under the trade name "Cosentyx" that is injected under the skin.

It is the first approved human monoclonal antibody (mAb) that targets member A from the cytokine family of interleukin 17, involved in the inflammatory response resulting plaque psoriasis. IL-17A activates keratinocytes leading to hyper-proliferation and further production of antimicrobial peptides, cytokines and chemokines, which in turn, recruit and activate other immune cells leading to amplification of psoriasis inflammation. It is highly specific to the human immunoglobulin G1k (IgG1k) subclass. **- By Sumaiya Yeasmin [Source: http://www.drugs.com]**

Vyvanse (lisdexamfetamine dimesylate) to treat binge-eating disorder

The U.S. Food and Drug Administration expanded the approved uses of Vyvanse (lisdexamfetamine dimesylate) to treat binge eating disorder in adults in January 2015. This drug is the first FDA approved medicine to treat this condition. In binge eating disorder, patients have recurrent episodes of compulsive overeating during which they consume uncontrollably larger amounts of food than normal without any hunger. Binge eating disorder may lead to weight gain and to health problems related to obesity, leading to embarrassments and social isolation.

Lisdexamfetamine dimesylate (LDX) is the first long-acting prodrug stimulant. It is a prodrug that is therapeutically inactive. After oral ingestion, it is converted to L-lysine and active D-amphetamine. The efficacy of Vyvanse in treating binge-eating disorder was shown in two clinical studies that included 724 adults with moderate to severe binge eating disorder. In the studies, participants taking Vyvanse experienced a decrease in the number of binge eating days per week and had fewer obsessive-compulsive binge eating behaviors compared to those on the inactive pill (placebo). **- By Nabila Morshed [Source: http://www.fda.gov]**

New self-administering 'smart' insulin could revolutionise diabetes treatment

This new form of 'smart' insulin remains in the blood stream for 24 hours, and maintains blood sugar levels on its own. Does that mean no more finger pricks or insulin pens?

Researchers in the US have developed a new type of insulin that is injected once a day into the blood-stream, and then is automatically activated only when a person's blood sugar levels are high enough. This means a type 1 diabetes patient doesn't need to worry about keeping tabs on their condition throughout the day, because the 'smart' insulin has got it covered.

The new compound, called Ins-PBA-F, was developed by researchers at the University of Utah and the Massachusetts Institute of Technology (MIT), and has so far shown very positive outcomes in diabetic mice. The team was able to ensure that it remained in the blood stream for 24 hours by adding a molecule known as an aliphatic domain, which is made up of a long chain of fatty acids that dangle from the insulin molecule. This chain, the researchers think, links to a blood protein called albumin, which allows the insulin to be stored safely, without the risk of it accidentally linking to other sugar molecules in the blood.

And there it sits, until blood sugar levels hit a critical threshold, which causes it to be released so it can lower the amount of glucose back to safe levels. The team also added a chemical called PBA (Phenylboronic Acid) to their new insulin, which can not only attach to glucose molecules, but also detach again once the job is done. "The real challenge is getting the right amount of insulin available when you need it, because if you have too little insulin your blood sugar goes up, and if you have too much, it can go dangerously low," according to one of the team members.

The next step is to get the insulin ready for human trials, which the team expect will take between two and five years. If this treatment makes it to the market, it will relieve the constant stress of maintaining blood sugar levels, and the risks of something going wrong if a diabetic gets their insulin dose wrong.

- By Zainab S. Ahmed [Source: http://www.sciencealert.com]

Editorial Committee: Dr. Eva Rahman Kabir, Nishat Zareen Khair and Zara Sheikh.

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