

## B.Pharm Project Presentations



In the month of August, students of the Department of Pharmacy, who finished their undergraduate projects gave their project presentations. The examining committee consisting of the Chairperson, the Academic Coordinator along with the respective project supervisors were responsible for grading individual students on their presentations. The projects encompassed both laboratory work and non-lab related work such as reviews and surveys.

Research was undertaken across a variety of themes and hence a wide range of innovative topics were presented on. Themes included pharmaceutical technology, phytopharmacology, pharmacology, microbiology, computational biology and medicinal chemistry.

Source: [Department of Pharmacy](#)

## Seminar on Pharma Market Dynamics



The Department of Pharmacy organized a seminar on ‘Pharma Market Dynamics’ at the university auditorium. The seminar was arranged for students of the Department of Pharmacy on the 31st of July 2019. This was arranged by Prof. Dr. Eva Rahman Kabir, for the students of Pharmaceutical Marketing. The speaker of the seminar was Mr. Khaled Alhossainy, Director of Marketing and Sales, IQVIA. He focused on branding strategies of the leading pharmaceutical companies of Bangladesh by citing specific brands. The seminar was followed by a short question and answer session, where students from the department engaged the speaker with various queries. The objective of the event was to familiarize students with the work carried out by the IQVIA and its applications in pharmaceutical marketing, which should greatly benefit their future careers. IQVIA, formerly Quintiles and IMS Health, Inc., is a provider of global market information to the pharmaceuticals and healthcare industries. IQVIA provides a wide variety of market knowledge to support strategic decision-making in all aspects of pharmaceutical company operations.

Source: [Department of Pharmacy](#)

## FDA Approves New Drug for Treatment-Resistant Forms of Tuberculosis

Pretomanid Tablets in combination with bedaquiline and linezolid for the treatment of a specific type of highly treatment-resistant tuberculosis (TB) of the lungs has been approved by The U.S. Food and Drug Administration. Due to limited treatment options, multidrug-resistant TB and extensively drug-resistant TB are public health threats. This approval also marks the second time a drug is being approved under the Limited Population Pathway for Antibacterial and Antifungal Drugs. This pathway was advanced by Congress to spur development of drugs targeting infections that lack



effective therapies. Pretomanid in combination with bedaquiline and linezolid is approved for treating a limited and specific population of adult patients with extensively drug resistant, treatment-intolerant or nonresponsive multidrug resistant pulmonary TB. The most common adverse reactions observed in patients treated with this combination included damage to the nerves (peripheral neuropathy), acne, anemia, nausea, vomiting, headache, increased liver enzymes (transaminases and gamma-glutamyltransferase), indigestion (dyspepsia), rash, increased pancreatic enzymes (hyperamylasemia), visual impairment, low blood sugar (hypoglycemia), and diarrhea. Pretomanid used in combination with bedaquiline and linezolid should not be used in patients with hypersensitivity to bedaquiline or linezolid. Pretomanid also received the FDA's Qualified Infectious Disease Product (QIDP) designation. The FDA granted the approval of Pretomanid Tablets to The Global Alliance for TB Drug Development (TB Alliance).

Source: [FDA](#)

## New Drug Target for Chemically-Induced Parkinson Disease



MPTP is a synthetic opioid which has been observed to induce the onset of Parkinson's disease in rodents and primates. The most recent study in mice indicates that a naturally-occurring enzyme, known as mitochondrial CYP2D6, can metabolize certain compounds into MPTP-like chemicals and trigger Parkinson's. A new treatment for chemically-induced Parkinson's via targeting the mitochondrial CYP2D6 enzyme has now been proposed by the researchers.

The oxidation of some compounds by the CYP2D6 enzyme to form MPP<sup>+</sup> which is a toxic metabolite and thought to be transferrable to dopamine neurons via dopamine transporter proteins. Parkinson disease is characterized by unusually low dopamine levels in the brain.

Researchers showed that mice lacking CYP2D6 did not show any severe symptoms that were observed in mice with the protein. Furthermore, a CYP2D6 inhibitor was seen to prevent neuronal damage in mice. CYP2D6 protein is known to play a role in influencing the activity of a number of drugs.

The CYP2D6 inhibitor ajmalicine is a member of the reserpine family of alkaloids and can be found in the plant *Rauwolfia serpentina*. This plant has been used in India for treating mental illness such as paranoia and schizophrenia for a long time.

Source: [Science Daily](#)