

IM4TB, A FOUNDATION FOR DRUG DEVELOPMENT TO TREAT MULTIDRUG-RESISTANT TUBERCULOSIS



Multidrug-resistant Tuberculosis

In 2013, an estimated nine million people developed active tuberculosis (TB), of whom 360,000 were HIV-positive, while the disease or its co. mplications proved fatal for another 1.5 million. TB now ranks as the 8th cause of death in emerging countries. Founded in 2013 as a not-for-profit foundation, the EPFL spin-off Innovative Medicines for Tuberculosis (iM4TB) is addressing the challenge with a promising new drug. Called "PBTZ169", the molecule has been very effective in combination with the standard therapy pyrazinamide, as well as with the more recent drug, Bedaquiline (approved by the European Union and the U.S. FDA for cases of multidrug-resistant TB). PBTZ169 works by destroying the bacterium's cell wall, which shields it against the immune system of the host and antibiotics. In vivo studies show that PBTZ169 is effective and quicker than current drugs recommended by the World Health Organization.



A promising drug candidate

The EPFL and iM4TB have entered into a partnership with the company Nearmedic (Moscow, Russia) for developing and commercialising the drug in countries of the former Soviet Union, which are experiencing a resurgence of the disease that is resistant to most treatments. iM4TB has also been granted an award from the Bill & Melinda Gates Foundation that will help move PBTZ169 into human trials, initially planned to occur in collaboration with the Centre Hospitalier Universitaire Vaudois (CHUV) in Lausanne. iM4TB is chaired by the world renowned TB expert Professor Stewart Cole. He also directs EPFL's Global Health Institute. iM4TB enjoys as well advice from the HIV-discoverer and Nobel laureate Françoise Barré-Sinoussi (Institut Pasteur), as Patron of iM4TB: "I am happy to support and encourage iM4TB's work on tuberculosis drug development," she states. "I applaud their aim to stop this disease that is a major threat to persons infected with HIV and kills three people every minute worldwide."

