Developing drugs for tropical diseases: 30 years of Katsura Hata at Eisai

Ongoing local clinical studies

Infectious diseases prevalent in Africa and South America, termed as “neglected tropical diseases,” are generally ignored by pharmaceutical companies. Despite several reluctant researchers, Mr. Katsura Hata (53), an employee of Eisai, a major pharmaceutical company, has been developing therapeutic drugs for infectious diseases ever since he joined the company. Clinical trials of his newly developed drugs are ongoing in affected regions.

With a primary interest in African wildlife, he studied veterinary medicine at Hokkaido University and attended its graduate school, where he learnt about infectious diseases affecting both humans and animals alike. He learned that common causative agents of these diseases are molds or parasites for which there are no effective treatments or drugs. With the hope of developing therapeutic drugs for tropical diseases, he joined Eisai.

Although he began his research on familiar infectious diseases, such as athlete’s foot, the company shifted its focus to cancer and dementia, for which no curative drugs are available, thereby significantly reducing efforts in the field of infectious diseases. He was approached to turn his research toward oncology, but he decided to continue studying infectious diseases, as he wanted “to make use of what he learned and to continue doing what he likes.”

After days of uneasy research, which offered little hope of a breakthrough, and at the brink of the dissolution of his research team, good news arrived from Venezuela in 2006. Mr. Hata was invited to collaborate on exploring the potential of “ravuconazole,” a drug that he and his colleagues had previously developed for athlete’s foot, as a therapeutic agent for “Chagas disease,” a tropical disease prevalent in South America.

The news not only motivated him but also persuaded the company to continue its investigation on infectious diseases, especially tropical diseases. Reportedly, ravuconazole was also found to be effective in the treatment of “mycetoma,” a tropical disease in Africa. Presently, clinical studies led by “DNDi,” an NPO aiming at new drug development, are being conducted in Bolivia and Sudan to establish the efficacy and side effects of these potential drugs in patients with tropical diseases.

The 2015 Nobel Prize in Physiology or Medicine to Dr. Satoshi Omura, Distinguished Emeritus Professor at Kitasato University, brought tropical diseases into the spotlight and provided a boost to his research. Currently, Mr. Hata is the head of the Global Health Laboratory and advises troubled young researchers to continue working everyday if they are interested in their chosen field.

Photo caption: Mr. Katsura Hata, working on research and development of therapeutic drugs for tropical diseases at Eisai = March, Tsukuba, Ibaraki