

Eisai enters industry-academia-government joint research agreement

15 July 2020 | News

Aiming for drug discovery for Systemic Lupus Erythematosus by practical application of toll-like receptor



Japanese firm Eisai Co., Ltd. announced that it has entered into an industry-academia-government joint research agreement with four universities in Japan concerning the "Industrialization of Japan-originated Toll-like receptor research by Academia-Industry collaborating All-Japan system: Creation of new drug for SLE treatment", which is a research project with Eisai as the representative research organization.

This joint research project was selected by the Japan Agency for Medical Research and Development (AMED) for its Cyclic Innovation for Clinical Empowerment (CiCLE) grant program.

In this project, Eisai aims at creating a Japan-originated therapeutic drug for systemic lupus erythematosus (SLE) through industry-academia-government collaboration, using its in-house discovered new oral Toll-Like Receptor (TLR) 7/8 inhibitor E6742.

SLE is a designated intractable autoimmune disease that causes various organ disorders involving the disorders of the skin and the musculoskeletal system. The estimated number of patients with SLE in Japan is 60,000 to 100,000. In particular, the onset of SLE appears more commonly in females in their 20s to 40s. As such, SLE is a disease with extremely high unmet medical needs. The current treatment mainstays are corticosteroids, hydroxychloroquine, and an immunosuppressant, but the development of new effective therapeutic agents with fewer side effects is desired.

According to the latest research findings, it has been reported that TLR7/8, a member of the TLRs-family of receptors, is associated with the pathogenesis of SLE, suggesting the possibility of controlling SLE by a TLR7/8-specific inhibitor. E6742 has selective and potent inhibitory activity against TLR7/8, and is expected to potentially become a new therapeutic agent for SLE.

In this project, Eisai will conduct the clinical development of E6742. In addition, the top-class research institutes for TLR and SLE research in Japan (University of Occupational and Environmental Health, Japan; Osaka University; Hokkaido University; Tohoku University) and Eisai's research subsidiary KAN Research Institute will carry out an academic-driven clinical

observational research in order to clarify the pathogenesis of SLE.

By creating new innovation based on industry-academia-government collaboration and fulfilling unmet medical needs, Eisai will contribute to increasing the benefits of patients and their families.