## Curriculum Vitae

## Name: Meng-Hsin Chen

Affiliation: VP, R\&D, TaiMed Biologics
Short Biography (maximum of 400 words):
Dr. Meng-Hsin Chen has served as a research and development vice president at TaiMed Biologics, one of few biotech companies focus on HIV therapy, since 2012. Previously, he was a distinguished Scientist at the Development Center for Biotechnology in Taiwan for 2 years. Prior to working in the Taiwanese biotech industry, he was a medicinal chemist at Merck, NJ for nearly 20 years. He completed his post-doctoral training at Columbia University, received his Ph.D. in synthetic organic chemistry from the University of Pittsburgh, and his BS in chemistry at National Cheng-Kung University.

Dr. Chen is devoted to the research and development of pharmaceutical products, both small molecules and biologic antibodies, for over 27 years. His research experience include anti-viral (HIV), anti-cancer, anti-bacterial, anti-inflammatory, anti-glaucoma, metabolic diseases, and others. Recently, he and his group have accomplished one phase III trial for HIV and completed BLA submission to the US FDA in May 2017. He has published more than twenty peer-review research articles and holds forty patents. He has also been nominated as a member of the "MRL (Merck Research Laboratories) Key R\&D Awards Club" 2007.

## Speech Summary at ATC 2017

## Speech Title:

Insights from a Success Story of a Local Biotech Leader
Development of -- Ibalizumab --the $1^{\text {st }}$ Monoclonal Antibody for HIV
Treatment Treatment

Speech Summary (200-400 words)
Monoclonal antibodies belong to a new class of drug with encouraging results in the treatment of many diseases. The advantages of using antibodies in HIV are related to antiviral effect, lack of toxicity, good resistance profile, synergy with other ARV drugs, and their ability to restore the CD4 T-cell responses.

Ibalizumab is a novel, humanized IgG4 monoclonal antibody ( mAb ) that binds to domain 2 of the CD4 receptor. The binding epitope is distinct from the binding site for interaction with major histocompatibility complex class II (MHC II) proteins and gp120. Ibalizumab does not prevent gp120 binding to CD4 but is thought to decrease the flexibility of CD4, thereby hindering access of CD4-bound gp120 to engage one of two chemokine co-receptors, either CCR5 or CXCR4. Therefore, blocked HIV virus enters the host T-cells. The mAb has shown highly potent and broad-spectrum activities against HIV-1. No immunosuppressive effect has been reported with ibalizumab during pre-clinical and clinical studies. Clinical trials revealed that ibalizumab has displayed promising long-lasting antiviral activity and safety.

In this presentation, product development strategies and the clinical trials results will be covered. Commercial batch production plan and marketing partner selection will also be addressed.

