GLOBAL GATORS SYMPOSIUM

BILBAO SPAIN

Bernd Meibohm

Bio

Bernd Meibohm, PhD, FCP, FAAPS is a UTHSC Distinguished Professor of Pharmaceutical Sciences and Associate Dean for Research and Graduate Programs at the College of Pharmacy, The University of Tennessee Health Science Center, Memphis, Tennessee, USA. He also serves as Chair of the University of Tennessee Department of Pharmaceutical Sciences and holds the Harriet S. Van Fleet Endowed Professorship in Pharmaceutics.

Dr. Meibohm received his pharmacy degree and doctorate in pharmaceutics from Technical University Carolo-Wilhelmina, raunschweig, Germany. After completion of a clinical pharmacology research fellowship at the University of Florida in 1997, he joined the faculty of the University of South Carolina, and in 1999 the University of Tennessee.

Dr. Meibohm's scientific interests include bacterial and viral infectious diseases, pediatric pharmacotherapy and the application of quantitative modeling and simulation techniques in preclinical and clinical drug development, with specific focus on therapeutic proteins. His research has resulted in over 210 scientific papers and book chapters (>12,000 citations; h-index 53), three textbooks, 200 abstracts, and over 240 invited scientific presentations to national and international audiences.

Abstract

Bernd Meibohm, PhD, FCP, FAAPS, UTHSC Distinguished Professor, Associate Dean, Chair and Harriet S. Van Vleet Endowed Professor in Pharmaceutics, University of Tennessee Health Science Center

Prevention and treatment of severe neurological disease caused by the mosquito-borne alphaviruses, Venezuelan (VEEV) and Eastern equine encephalitis viruses (EEEV), remains a significant challenge due to the lack of effective anti-viral therapeutics. We recently disclosed the discovery of BDGR-49, a 2-pyrrolidinoquinazolinone, that demonstrated complete protection against VEEV and infection in lethal murine models (Sci Transl Med. 2023;15(691):eabl9344). The presentation will focus on the application of a pharmacokinetic/pharmacodynamic based, model-informed drug development framework for the efficient development of BDGR-49 and related direct-acting antivirals under the FDA Animal Rule in lethal viral diseases such as VEEV and EEEV infections.