conferenceseries.com

Gerald Kleymann, Clin Microbiol 2017, 6:5(Suppl)
DOI: 10.4172/2327-5073-C1-029

8th CLINICAL MICROBIOLOGY CONFERENCE

October 26-28, 2017 | Paris, France

Gerald Kleymann

University of Tubingen, Germany

Novel agents and strategies to treat herpes simplex virus infections

After first evidence that nucleosides such as idoxuridine may also be useful to treat herpes disease in the 1950, research in the field was intensified. The milestone publication of acyclovir in 1978 subsequently leads to a new era of DNA polymerase inhibitors to treat herpes infections. For the underlying strategy of anti-metabolite research, the noble price was awarded to Gertrude Elion in 1988. Since the eighties the prodrug acyclovir became the gold standard to treat herpes infections, predominantly HSV and VZV. In the nineties the pre-prodrugs of acyclovir and penciclovir, a close congener of ACV, named valacyclovir and famciclovir with a more convenient dosing schedule were launched. These anti-herpes nucleosidic drugs are virostatic but they do not cure the key clinical issue of herpes infections which is recurrent disease. In 2002, helicase primase inhibitors of HSV and VZV that are two orders of magnitude more potent than acyclovir *in vitro* and at least 10 times more efficacious *in vivo* were published and subsequently developed. Published animal models and current clinical trials indicate that the frequency of recurrent herpes disease can be reduced.

Biography

Gerald Kleymann has received his PhD from the Max Planck Institute of Biophysics and the University of Frankfurt in 1994. He worked with Bayer Pharmaceuticals as a Lab Head and Coordinator of strategic projects where he discovered the helicase primase inhibitors to treat herpes disease. He was appointed as Apl. Professor at the University of Tübingen in 2009. He has founded diverse companies e.g. the private clinic Primedica, Innovative Molecules and Your Lab. He has published numerous papers, patents, review articles and book chapters.

Gerald.Kleymann@uni-tuebingen.de