Abstracts

Oral Session I

Design and In Vitro Evaluation of Antiviral Agents

1

Synthesis and Antiviral Activity of N7-Substituted Acyclic Purine Nucleoside Analogues. First Example of an Antivirally Active N7-Isomer. G. Jähne, M. Rösner, I. Winkler, and M. Helsberg. PGU Antiinfectives, HOECHST AG, P.O. Box 80 03 20, D-6230 Frankfurt/Main, Fed. Rep. of Germany

The regioselective synthesis and antiherpetic activity of new N7-substituted acyclic purine nucleoside analogues is presented. Compounds of the general formula A are regioselectively prepared by reaction of a suitably substituted silylated purine derivative with an acetoxymethoxy-substituted side-chain precursor. Structure-activity relationships will be discussed. Unexpectedly, one class of compounds bearing the acyclic substituent in the N7-position of the purine system, shows high antiviral activity. These are the first examples of antivirally active N7-substituted acyclic purines.