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"Antiviral activity of HOE 602 and Analogues against Herpes Simplex Virus infections".

M. Helsberg, I. Winkler, Ch. Meichsner, H. Rolly, E. Winkelmann, G. Jähne, Th. Hilpert, W. Hertzsch, M. Rösner and A. Sinharay; HOECHST AG, Postfach 80 03 20, D-6230 Frankfurt/M. 80, Fed. Rep. of Germany.

HOE 602 is a newly synthesized nucleoside analogue with antiviral activity in vivo against Herpes simplex 1 (HSV 1), Herpes simplex 2 (HSV 2) and Murine Cytomegalovirus (M-CMV). The compound is a pro-drug of Ganciclovir (DHPG) with altered pharmacokinetics, outstanding bio-availability after oral application and significantly higher antiviral activity than Acyclovir. Hoe 602 is converted to DHPG in a cascade of three already characterized intermediate products. Although HOE 602 is more lipophylic than DHPG, it is more soluable in aqueous solvents.

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Effect of Liposome Encapsulated Recombinant Herpes Simplex Glycoprotein in Controlling Recurrent Herpes Genitalis. R.J.Y.Ho*, R.L. Burke+, and T.C. Merigan*. Department of Medicine, *Division of Infectious Diseases, Stanford University School of Medicine, Stanford, California 94305, and +Department of Virology, Chiron Corporation, 4560 Horton Street, Emeryville, California 94608, U.S.A.

The goal of our study was to improve the efficacy of a recombinant herpes simplex glycoprotein D (rgD-1) in controlling recurrence of herpes genitalis. Using guinea pigs (Hartley, 250-350 g) as a model, we have investigated the efficacy of rgD-1 in a vaccine (BIOCINE HSV-gD-1) formulation and a liposome (rgD-1-liposome) formulation. This was done by intravaginally infecting guinea pigs with HSV-2 (MS strain), and allowing them to recover from the primary infection without any intervention. At 14-day post infection, symptomatic animals were enrolled in placebo, BIOCINE HSV-gD-1 and rgD-1-liposome groups. BIOCINE HSV-gD-1 was given by IM/SC route while rgD-1-liposome was given by intra-cardiac puncture (under anesthesia). In both cases, two doses of 12 ug of rgD-1 were given at 14 and 28 day post infection and animals were observed from 14-60 days. We found that the rgD-1-liposome formulation gave a much higher protective action than the equivalent rgD-1 in BIOCINE HSV-gD-1 formulation. There was a 75% reduction in cumulative new recurrent herpetic lesions in rgD-1-liposome group, compared to about a 40-50% reduction in the BIOCINE group. Enhanced potency of the rgD-1-liposome formulation may relate to an early HSV specific cellular immune response. (Supported by AI-05629-24 and The BIOCINE Company).