

on Vaccine Research

ABSTRACTS OF INVITED PRESENTATIONS

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Preservatives: Friends or Foes

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This talk will present an overview of the use of preservatives in vaccines, with an emphasis on the routine childhood vaccines. The talk will cover: (1) the need for, and history of, preservatives in vaccines; (2) the current US regulations regarding preservatives; (3) definition of a preservative; (4) an overview of vaccines without preservatives; and (5) the current context and some trends regarding preservatives for the future. Because of current concerns, the use of thimerosal as a preservative in vaccines will be emphasized.

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New Cell Substrates - Challenges & Promises

J.C. Petriccioni. International Association for Biologicals, Geneva, Switzerland

When viral vaccines derived from cell cultures were first being developed in the 1950s, discussions began about which type of cell would provide the least risk. From that point on, each milestone in the evolution of cell substrates represents an attempt to balance several factors, not the least of which were known vs theoretical risks. To date, we have accumulated a significant amount of experience with primary cells and diploid cells in the production of viral vaccines for humans. In contrast, overtly tumorigenic cell lines such as BHK-21 have been employed for many years to produce vaccines for veterinary use. The only continuous cell line that has been used for human vaccines is VERO for the production of both live and inactivated polio vaccines. Other continuous cell lines, especially those derived from human and animal tumors, for the production of live viral vaccines for humans present unique issues such as the possibility that the virus may recombine with cellular genetic elements to generate a new or altered virus which could be pathogenic. Activation of a latent virus with tumorigenic potential is another concern. These issues will be discussed in the context of past experience with vaccines and other biologicals produced in various cell culture systems.

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Abstract not submitted