

The major aspects of pertussis prevention and control in a single volume

Pertussis Vaccine Trials

Editors: Fred Brown, Donato Greco, Paola Mastrantonio, Stefania Salmaso, Steve Wassilak

This book contains the proceedings of the International Symposium on Pertussis Vaccine Trials, held in Rome in October 1995. The meeting was organised following the almost simultaneous release of the results of five clinical trials and two other clinical studies of acellular pertussis vaccines. These large, multi-center studies, conducted independently and over several years, explored the efficacy, safety, and immunogenicity of several acellular pertussis vaccines, comparing them with whole-cell vaccine and/or placebo. In addition, the book covers other major topics concerning the use of acellular and whole-cell pertussis vaccines, including basic biological and epidemiological questions, various considerations in interpreting the studies' results, regulatory issues, and worldwide perspectives on the expanded use of acellular vaccines.

Bringing together the world's leading experts in this field of research and summarizing all major aspects of pertussis prevention and control, this book is a vital reference for pediatricians, public health officials, microbiologists, immunologists, epidemiologists and all biomedical scientists who produce or regulate the use of vaccines.

Selected Contents

Session I: Pertussis: Confronting the Problem

Ivanoff, B.; Robertson, S.E.: Pertussis: A Worldwide Problem

Miller, E.; Gay, N.J.: Epidemiological Determinants of Pertussis

La Montagne, J.R.: The United States Research Strategy on Pertussis

Hansen, B.: European Union Research Strategies on Vaccines

Session II: Trial Synopses

Session III: Vaccine Safety Overview

Ciofi degli Atti, M.L.; Olin, P.: Severe Adverse Events in the Italian and Stockholm I Pertussis Vaccine Clinical Trials

Ueberall, M.A. et al.: Severe Adverse Events in a Comparative Efficacy Trial in Germany in Infants receiving either the Lederle/Takeda Acellular Pertussis Component DPT (DtaP) Vaccine, the Lederle Whole-Cell Component DTP (DTP) or DT Vaccine

Heijbel, H. et al.: Hypotonic Hyporesponsive episodes in eight pertussis vaccine studies

Taranger, J. et al.: Adverse reactions of a pertussis toxoid vaccine in a double-blind placebocontrolled trial.

Session IV: Vaccine Efficacy

Fine, P.E.M.: Implications of Different study designs for the evaluation of acellular pertussis vaccines

Hewlett, E.L.: Preparation and composition of acellular pertussis vaccines: consideration of potential effects on vaccine efficacy

Plotkin, S.A.: The effectiveness of whole-cell pertussis vaccines

Wirsing von König, C.H. et al.: Factors Influencing the analysis of secondary prevention of pertussis

Session V: Serologic Assays and Confirmation

Lynn, F. et al.: A comparison of Enzyme Immuno-Assays used to measure serum antibodies to components of Bordetella pertussis serology in the recent clinical efficacy studies of Acellular vaccines

Session VI, Part 1: Microbiology and Immune response

Guiso, N.: Isolation, Identification and characterisation of Bordetella Pertussis

Tiru, M. et al.: Bordetella Pertussis serotype of clinical isolates in Sweden during 1970-1995 and Influence of Vaccine Efficacy Studies

Reizenstein, E.: Diagnostic Polymerase chain reaction

Session VI, Part 2: Microbiology and Immune Response

Edwards, K.M.; Decker, M.D.: Comparison of serological results in the NIAID multicenter Acellular pertussis trial with recent efficacy trials

Trollfors, B.: Factors influencing antibody responses to acellular pertussis vaccines

Ryan, M. et al.: Bordetella pertussis specific Th1/Th2 cells generated following respiratory infection or immunisation with an acellular vaccine: Comparison of the T Cell cytokine profiles in infants and mice

Kuno-Sakai, H.; Kinura, M.: Epidemiology of pertussis and use of acellular pertussis vaccines in Japan

Session VII: Future Strategies

Tiru, M.: Regulatory issues concerning pertussis vaccines

Corbel, M.J.; Xing, D.K.L.: A consideration of control requirements for acellular pertussis vaccines

Hadler, S.C.; Orenstein, W.A.: Public Health Applications of acellular pertussis vaccines

Halperin, S.A.: Acellular pertussis vaccines: The next step

Chen, R.T.: Safety of acellular pertussis vaccine: follow-up studies

Pletschette, M.: Some thoughts for future pertussis research in Europe

Summary and Conclusions