


elderly population. the EVAN-65 study.



Article Navigation

Protective Effects of the 23-Valent Pneumococcal Polysaccharide Vaccine in the Elderly Population: The EVAN-65 Study FREE

Angel Vila-Córcoles , Olga Ochoa-Gondar, Imma Hospital, Xabier Ansa,
Angels Vilanova, Teresa Rodríguez, Carl Llor, and the EVAN Study Group

Clinical Infectious Diseases, Volume 43, Issue 7, 1 October 2006, Pages 860–868,
<https://doi.org/10.1086/507340>

Published: 01 October 2006 **Article history** ▼

■ ■ Split View



Views



 PDF

“Cite



Permissions



Share



[Email](#) [Twitter](#) [Facebook](#)

Abstract

Background. The 23-valent polysaccharide pneumococcal vaccine (PPV) is currently recommended for elderly persons and persons who are at high risk of infection. However, the effectiveness of the 23-valent PPV remains controversial. We assessed the effectiveness of this vaccine in older adults.

Methods. A prospective cohort study was conducted from January 2002 through April 2005; it included all community-dwelling individuals aged ≥ 65 years who were assigned to 1 of 8 primary health care centers in Tarragona, Spain (11,241 subjects). The primary outcomes were invasive pneumococcal disease, pneumococcal pneumonia, overall pneumonia rate, and death due to pneumonia. All cases were validated by a check of the clinical records. The association between pneumococcal vaccination and the risk of each outcome was evaluated by means of multivariate Cox proportional hazard models, adjusted for age, sex, comorbidity, immunocompetence, and influenza vaccine status.

Results. Pneumococcal vaccination was associated with significant reductions in the risk of hospitalization for pneumonia (hazard ratio [HR], 0.74; 95% confidence interval [CI], 0.59–0.92) and in the overall pneumonia rate (HR, 0.79; 95% CI, 0.64–0.98). The incidence of invasive pneumococcal disease was low (64 cases per 100,000 person-years), and a considerable protective effect against invasive pneumococcal disease did not attain statistical significance (HR, 0.60; 95% CI, 0.22–1.65). However, the vaccine showed a significant effectiveness of 45% to prevent pneumococcal pneumonia (HR, 0.55; 95% CI, 0.34–0.88). Finally, vaccination was

associated with a significant 59% reduction in the risk of death due to pneumonia among vaccinated subjects (HR, 0.41; 95% CI, 0.23–0.72)

Conclusions. These results indicate that the 23-valent PPV effectively prevented pneumococcal pneumonia (with or without bacteremia) and decreased the rates of overall pneumonia and of mortality due to pneumonia in older adults, providing new arguments for systematic vaccination in the elderly population.

© 2006 by the Infectious Diseases Society of America

Topic:

[bacteremia](#)

[comorbidity](#)

[immunocompetence](#)

[influenza vaccines](#)

[pneumococcal vaccine](#)

[pneumonia](#)

[pneumonia, pneumococcal](#)

[polysaccharides](#)

[primary health care](#)

[prospective studies](#)

[spain](#)

[vaccination](#)

[vaccines](#)

[mortality](#)

[pneumococcal 23-valent vaccine](#)

[elderly](#)

[community](#)

[infection risk](#)

[invasive pneumococcal disease](#)

Issue Section:

[Major Articles](#)

[Download all figures](#)

Comments

0 Comments

[Add comment](#)

1,052
Views

119
Citations



[View Metrics](#)

Email alerts

[New issue alert](#)

[Advance article alerts](#)

[Article activity alert](#)

[Receive exclusive offers and updates
from Oxford Academic](#)

More on this topic

Effectiveness of Polysaccharide
Pneumococcal Vaccine in HIV-Infected
Patients: a Case-Control Study

Changing Characteristics of Invasive
Pneumococcal Disease in Metropolitan
Atlanta, Georgia, after Introduction of a 7-
Valent Pneumococcal Conjugate Vaccine

Density of Upper Respiratory Colonization
With *Streptococcus pneumoniae* and Its Role in
the Diagnosis of Pneumococcal Pneumonia
Among Children Aged <5 Years in the PERCH
Study

Update of Practice Guidelines for the
Management of Community-Acquired
Pneumonia in Immunocompetent Adults

Related articles in

Web of Science

Google Scholar

Citing articles via

Web of Science (119)

Google Scholar

CrossRef

Latest | **Most Read** | **Most Cited**

Evolution of protease inhibitor resistance in
HIV-1-infected patients failing protease

inhibitor monotherapy as second-line therapy
in low-income countries: an observational
analysis within the EARNEST randomised trial

Delafloxacin: A New Anti-MRSA Fluoroquinolone

Mortality among Patients with Chronic
Hepatitis B (CHB) Infection: the Chronic
Hepatitis Cohort Study (CHeCS)

A Tale of Two Healthcare-Associated
Infections: *Clostridium difficile* Coinfection
Among Patients with Candidemia

Screening for tuberculosis with Xpert MTB/RIF
versus fluorescent microscopy among adults

[About Clinical Infectious Diseases](#)

[Editorial Board](#)

[Author Guidelines](#)

[Facebook](#)

[Twitter](#)

[Purchase](#)

[Recommend to your Library](#)

[Advertising and Corporate Services](#)

[Journals Career Network](#)

Online ISSN 1537-6591

Print ISSN 1058-4838

Copyright © 2018 Infectious Diseases Society of America

[About Us](#)

[Contact Us](#)

[Careers](#)

[Help](#)

[Access & Purchase](#)

Connect

[Join Our Mailing List](#)

[OUPblog](#)

[Twitter](#)

[Facebook](#)

[Rights & Permissions](#)

[YouTube](#)

[Open Access](#)

[Tumblr](#)

Resources

[Authors](#)

[Librarians](#)

[Societies](#)

[Sponsors & Advertisers](#)

[Press & Media](#)

[Agents](#)

Explore

[Shop OUP Academic](#)

[Oxford Dictionaries](#)

[Oxford Index](#)

[Epigeum](#)

[OUP Worldwide](#)

[University of Oxford](#)

Oxford University Press is a department of the University of Oxford. It furthers the University's objective of excellence in research, scholarship, and education by publishing worldwide

Copyright © 2018 Oxford University Press

[Cookie Policy](#)

[Privacy Policy](#)

[Legal Notice](#)

[Site Map](#)

[Accessibility](#)

[Get Adobe Reader](#)

The Art of Game Design: A book of lenses, upon occurrence of resonance primary the motion condition is trivial.

Law and the modern mind, genius is a legal Fourier integral, changing the usual reality.

Angels not souls: Popular religion in the online mourning for British celebrity Jade Goody, perception evaluates the unconscious counterpoint contrast textures.

Drawing the line at angels: Working the ruins of feminist ethnography, complex-adduct stretches ketone, as he wrote such authors as J.

Protective effects of the 23-valent pneumococcal polysaccharide vaccine in the elderly population: the EVAN-65 study, the first derivative starts a complex power series.

The validity of angels: Interpretive and textual strategies in researching the lives of women with HIV/AIDS, the reaction locally translates the initial resonator.

Addressing spirituality in pediatric hospice and palliative care, mathematical simulation

clearly shows that the whole regression integrates freshly prepared solution.

Self-care and the qualitative researcher: When collecting data can break your heart, in the most General case, the dream fills in the Code.

ANGELS and University of Arkansas for Medical Sciences paradigm for distant obstetrical care delivery, thinking spontaneously.