

Daily Low-Dose Aspirin Cut Cancer Death Rate 30%-40%

BY SARA FREEMAN

FROM THE LANCET

LONDON – The daily, long-term use of low-dose aspirin cuts the risk of death from several types cancer, in addition to colorectal cancer, according to a large meta-analysis.

In a meta-analysis of eight randomized clinical trials involving 25,570 patients, low-dose aspirin taken for 5 years or longer reduced mortality from esophageal, pancreatic, brain, stomach, colorectal, prostate, and even lung cancer, with doses as low as 75 mg/day having an effect.

This is the first time that low-dose as-

pirin has been linked to a reduction in cancer mortality other than colorectal cancer, said Dr. Peter M. Rothwell, who conceived and coordinated the research.

Major Finding: A total of 674 cancer deaths occurred in 25,570 patients, with aspirin treatment significantly reducing the risk of death compared to no aspirin treatment (odds ratio 0.79, 95% confidence interval 0.68-0.92, $P = .003$).

Data Source: Meta-analysis and review of individual patient data on cancer deaths from randomized controlled clinical trials ($n = 25,570$) that had compared at least 4 years' treatment with aspirin versus no aspirin, originally performed for the prevention of vascular events.

Disclosures: The study was conducted independently of the Pharmaceutical industry and other commercial interests. Dr. Rothwell has received honoraria from pharmaceutical companies with an interest in anti-platelet therapy, including AstraZeneca, Bayer, Boehringer Ingelheim, Sanofi-Aventis/BMS, and Servier. Dr. Elwood reported no relevant financial disclosures.

pirin has been linked to a reduction in cancer mortality other than colorectal cancer, said Dr. Peter M. Rothwell, who conceived and coordinated the research.

Dr. Rothwell of the John Radcliffe Hospital and the University of Oxford, England, and his associates in October 2010 showed that low-dose aspirin reduced the 20-year risk of new colon cancer cases by approximately one-quarter and deaths by a third (Lancet 2010; 376:1741-50).

The current study looked at all deaths from cancer that occurred during or after completion of eight randomized clinical trials that had been performed to look at the effects of daily aspirin vs. control for the primary or secondary prevention of vascular events (Lancet 2010 [doi:10.1016/S0140-6736(10)62110-1]).

Across all eight trials, 674 cancer deaths occurred in 25,570 patients, with aspirin treatment significantly reducing the risk of death, compared with no aspirin treatment (pooled odds ratio [OR] 0.79, 95% confidence interval [CI] 0.68-0.92, $P = .003$).

From individual patient data available for seven of the trials and in which 657 cancer deaths occurred in 23,535 patients, the benefit of aspirin therapy was apparent only after 5 years or more of follow-

up. The hazard ratio (HR) for death from all types of cancer was 0.66 (95% CI 0.50-0.87, $P = .003$), with a greater effect seen in patients with gastrointestinal tumors (HR 0.46, 95% CI 0.27-0.77, $P = .003$).

"We found that within the trials, while people were still on aspirin vs. no aspirin, the aspirin group had about a 30%-40% reduction in cancer deaths between year 5 and the end of the trial," Dr. Rothwell said at a press briefing.

To determine the longer-term effects of aspirin on cancer mortality, the team looked more closely at data from three of the trials. These had all been conducted in the United Kingdom and continued to collect information on cancer deaths via national death certification and cancer registration systems long after the trials had concluded.

In all, individual patient data were obtained on 1,634 cancer deaths that had occurred in 12,659 patients. Aspirin was found to reduce the 20-year risk of death from all solid cancers by 20% (HR 0.80, 95% CI 0.72-0.88, P less than .0001).

Again, the effect on gastrointestinal cancer was greater (HR 0.65, 95% CI 0.54-0.78, P less than .0001), but there was no effect on hematologic malignancies.

At least 5 years of therapy were needed to reduce the risk of death from esophageal, pancreatic, brain, or lung cancer, with 10 years or more treatment required to see any effect on stomach and colorectal cancer death

rates, and 15 years or more for prostate cancer.

With regard to both lung and esophageal cancer, the effect of aspirin was limited to adenocarcinomas.

While the findings do not mean that everyone over the age of 40 years should now suddenly start taking a daily dose of aspirin to prevent cancer, given the increased risk of bleeding in some individuals, "We should probably stop taking people off aspirin unless they've got side effects," Dr. Rothwell said in an interview.

"We probably shouldn't discourage those who want to take aspirin as actively as we have been doing," he added, and perhaps physicians should "think about prescribing aspirin more in people at increased vascular risk, because they certainly benefit already."

"There is a fundamental difference between the treatment and the prevention of a disease," said Dr. Peter Elwood, professor of epidemiology at Cardiff University, Wales.

Dr. Elwood suggested that deciding to take a daily dose of aspirin to prevent cancer could be another choice patients make once they have all the relevant facts, such as lifestyle changes are advised but not prescribed for cardiovascular disease prevention. ■

Family Practice News

President, IMNG Alan J. Imhoff

Editor in Chief Mary Jo M. Dales

Executive Editors Denise Fulton, Kathy Scarbeck

Managing Editor Terry Rudd

Senior Editors Christina Chase, Kathryn DeMott, Jeff Evans, Lori Buckner Farmer, Catherine Hackett, Keith Haglund, Gina L. Henderson, Sally Koch Kubetin, Teresa Lassman, Mark S. Lesney, Jane Salodof MacNeil, Renée Matthews, Catherine Cooper Nellist, Amy Pfeiffer, Leanne Sullivan, Elizabeth Wood

Editorial Production Manager Carol Nicotera-Ward

Associate Editors Felicia Rosenblatt Black, Therese Borden, Lorinda Bullock, Jay C. Cherniak, Richard Franki, Virginia Ingram-Wells, Jane Locastro, January Payne

Reporters *Chicago:* Patrice Wendling; *Denver:* Bruce Jancin; *Germany:* Jennie Smith; *Miami:* Damian McNamara; *Mid-Atlantic:* Michele G. Sullivan; *New England:* Diana Mahoney; *New York:* Mary Ellen Schneider; *Philadelphia:* Mitchel L. Zoler; *San Diego:* Doug Brunk; *San Francisco:* Sherry Boschert, Robert Finn; *Washington:* Alicia Ault, Elizabeth Mechatie, Naseem S. Miller, Heidi Splete, Miriam E. Tucker, Kerri Wachter

Multimedia Producer Nick Piegari

Contributing Writers Christine Kilgore, Mary Ann Moon

Project Manager Susan D. Hite

Assignments Manager Megan Evans

Address Changes Fax change of address (with old mailing label) to 973-290-8245 or e-mail change to subs@elsevier.com

Editorial Offices 5635 Fishers Lane, Suite 6000, Rockville, MD 20852, 877-524-2341, fpnews@elsevier.com

Director of Information Technology Doug Sullivan

Senior Systems Administrators Lee J. Unger, Kreg M. Williams

Systems Administrator/Application Support Peter Ayinde

Executive Director, Operations Jim Chicca
Director, Production/Manufacturing Yvonne Evans Struss

Production Manager Judi Sheffer
Production Specialists Maria Aquino, Anthony Draper, Rebecca Slobodnik

Creative Director Louise A. Koenig
Design Supervisor Elizabeth Byrne Lobdell
Senior Designers Sarah L.G. Breenen, Yenling Liu

Designer Lisa M. Marfori
Photo Editor Catherine Harrell
Senior Electronic Production Engineer Jon Li

Sales Director, IMNG

Mark E. Altier, 973-290-8220, m.altier@elsevier.com

Sales Manager, Family Practice News
Phil Soufleris, 973-290-8224, p.soufleris@elsevier.com

National Account Managers
Kathleen Hiltz, 973-290-8219, k.hiltz@elsevier.com
Cathy McGill, 973-290-8221, c.mcgill@elsevier.com

Classified Sales Manager, IMNG
Robert Zwick 973-290-8226, fax 973-290-8250, r.zwick@elsevier.com

Advertising Offices
60 Columbia Rd., Bldg. B, 2nd fl.,
Morristown, NJ 07960,
973-290-8200, fax 973-290-8250

Reprints/Eprints
Contact Wright's Media 877-652-5295

Sr. Program Manager, Customized Programs
Malika Wicks

Circulation Analyst Barbara Cavallaro,
973-290-8253, b.cavallaro@elsevier.com

Program/Marketing Manager Jennifer Eckert
Business Controller Dennis Quirk

Adv. Services Manager Joan Friedman
Manager, Administration/Conventions
Lynne Kalish

Receptionist Linda Wilson
Accounts Payable Coordinator Daniela Silva

FAMILY PRACTICE NEWS is an independent newspaper that provides the family physician with timely and relevant news and commentary about clinical developments in the field and about the impact of health care policy on the specialty and the physician's practice.

The ideas and opinions expressed in FAMILY PRACTICE NEWS do not necessarily reflect those of the Publisher. Elsevier Inc. will not assume responsibility for damages, loss, or claims of any kind arising from or related to the information contained in this publication, including any claims related to the products, drugs, or services mentioned herein.

POSTMASTER Send changes of address (with old mailing label) to FAMILY PRACTICE NEWS Circulation, 60 Columbia Rd., Bldg. B, 2nd fl., Morristown, NJ 07960.

FAMILY PRACTICE NEWS (ISSN 0300-7073) is published semimonthly by Elsevier Inc., 60 Columbia Rd., Bldg. B, 2nd fl., Morristown, NJ 07960, 973-290-8200, fax 973-290-8250. Subscription price is \$146.00 per year. Periodicals postage paid at Morristown, NJ, and additional offices.

Founding Publisher: Jack O. Scher
Founding Editor: William Rubin

©Copyright 2011, by Elsevier Inc.



INTERNATIONAL
MEDICAL NEWS
GROUP



EDITORIAL ADVISORY BOARD

DAVID S. ABEND, D.O., Touro College of Osteopathic Medicine, New York

WARREN A. JONES, M.D., University of Mississippi, Jackson

HAROLD B. BETTON, M.D., University of Arkansas, Little Rock

DARLENE LAWRENCE, M.D., Georgetown University, Washington

TINA BRUESCHKE, M.D. Private Practice, Geneva, Ill.

CAROLYN LOPEZ, M.D., Rush Medical College, Chicago

NEIL S. CALMAN, M.D., Institute for Family Health, New York

ROBERT E. RAKEL, M.D., Baylor College of Medicine, Houston

GRETCHEN M. DICKSON, M.D., University of Kansas, Wichita

PETER P. TOTH, M.D., Sterling Rock Falls Clinic, Sterling, Ill.

TILLMAN FARLEY, M.D., Salud Family Health Center, Fort Lupton, Colo.

RUSSELL D. WHITE, M.D., University of Missouri, Kansas City

THEODORE GANIATS, M.D., University of California, San Diego

COLETTE R. WILLIAMS, M.D., Case Western Reserve University, Cleveland