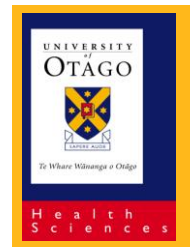


Dangerous Caring: Why having a Good Doctor may be bad for your health

Dee Mangin

University of Otago Christchurch, New Zealand

McMaster University Ontario, Canada



King Charles II



drew blood from his body
forced him to vomit violently
gave him a strong laxative
shaved his head
applied blistering agents to his scalp
put plasters made from pigeon droppings on the
soles of his feet
fed him gallstones from the bladder of a goat
made him drink 40 drops of extract from a dead
man's skull



Scottish Intercollegiate Guidelines Network



Quality Improvement Scotland

97

Risk estimation and the prevention of cardiovascular disease

A national clinical guideline

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Evidence-based Best Practice Guidelines

JUNE 2005

New Zealand Cardiovascular Guidelines Handbook

Developed for Primary Care Practitioners

CD Rom included

Risk Assessment
Atrial Fibrillation
Heart Disease
Stroke
Diabetes
Smoking Cessation

February 2007

AVAILABLE ONLINE AT WWW.SIGN.AC.UK



Supported by Diabetes New Zealand



September 2008 | Volume 32 | Supplement 1

Canadian Journal of Diabetes

Canadian Diabetes Association
2008 Clinical Practice Guidelines
for the Prevention and Management
of Diabetes in Canada

CANADIAN RESPIRATORY JOURNAL

Executive Summary

Canadian Thoracic Society Recommendations
for Management of Chronic Obstructive
Pulmonary Disease – 2003

Résumé

Recommandations de la Société Canadienne
de Thoracologie relativement au
traitement de la Maladie Pulmonaire
Obstructive Chronique – 2003

(Revised translation/traduction révisé)
Nov. 2003

JOURNAL OF THE CANADIAN THORACIC SOCIETY
JOURNAL DE LA SOCIÉTÉ CANADIENNE DE THORACOLOGIE
Medical section of THE LUNG ASSOCIATION
Section médicale de L'ASSOCIATION PULMONAIRE

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- COPD
- Type 2 diabetes
- Hypertension
- Osteoarthritis
- Osteoporosis



Applying Guidelines

- 19 doses of 12 different medications
- Taken at five times during the day
- 14 non pharmacological activities
- 10 different possibilities for significant medicine interactions either with other medicines or other diseases

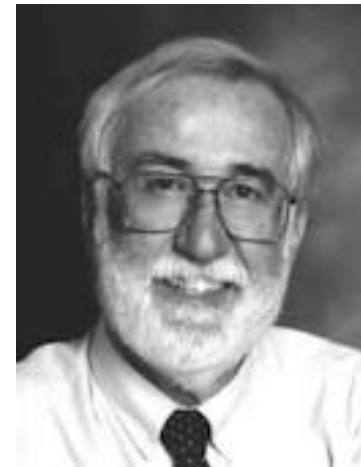
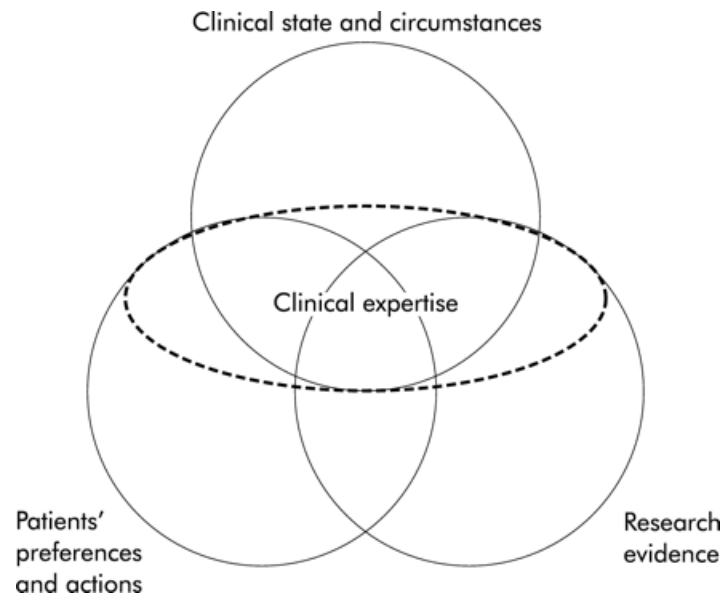
Patient centred care?

“The sick-man may be said to have disappeared from medical cosmology(as) the universe of discourse of medical theory changed from that of an integrated conception of the whole person to that of a network of bonds between microscopic particles.....”

“the plethora of theories and therapies, which had previously afforded the sick-man the opportunity to negotiate his own treatment, were replaced by a monolithic consensus of opinion imposed from within the community of medical investigators.”

Evidence-based medicine is the integration of **best research evidence** with **clinical expertise** and **patient values**

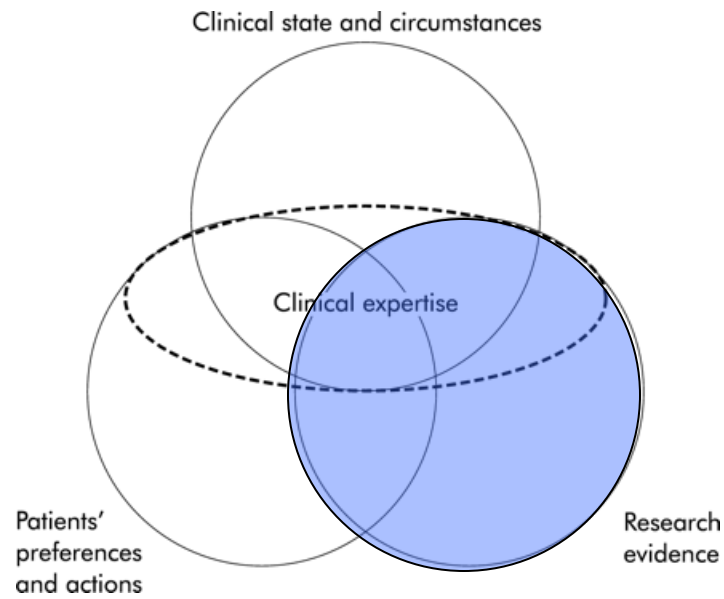
- *Sackett & Straus* BMJ 1996;312:71-2.



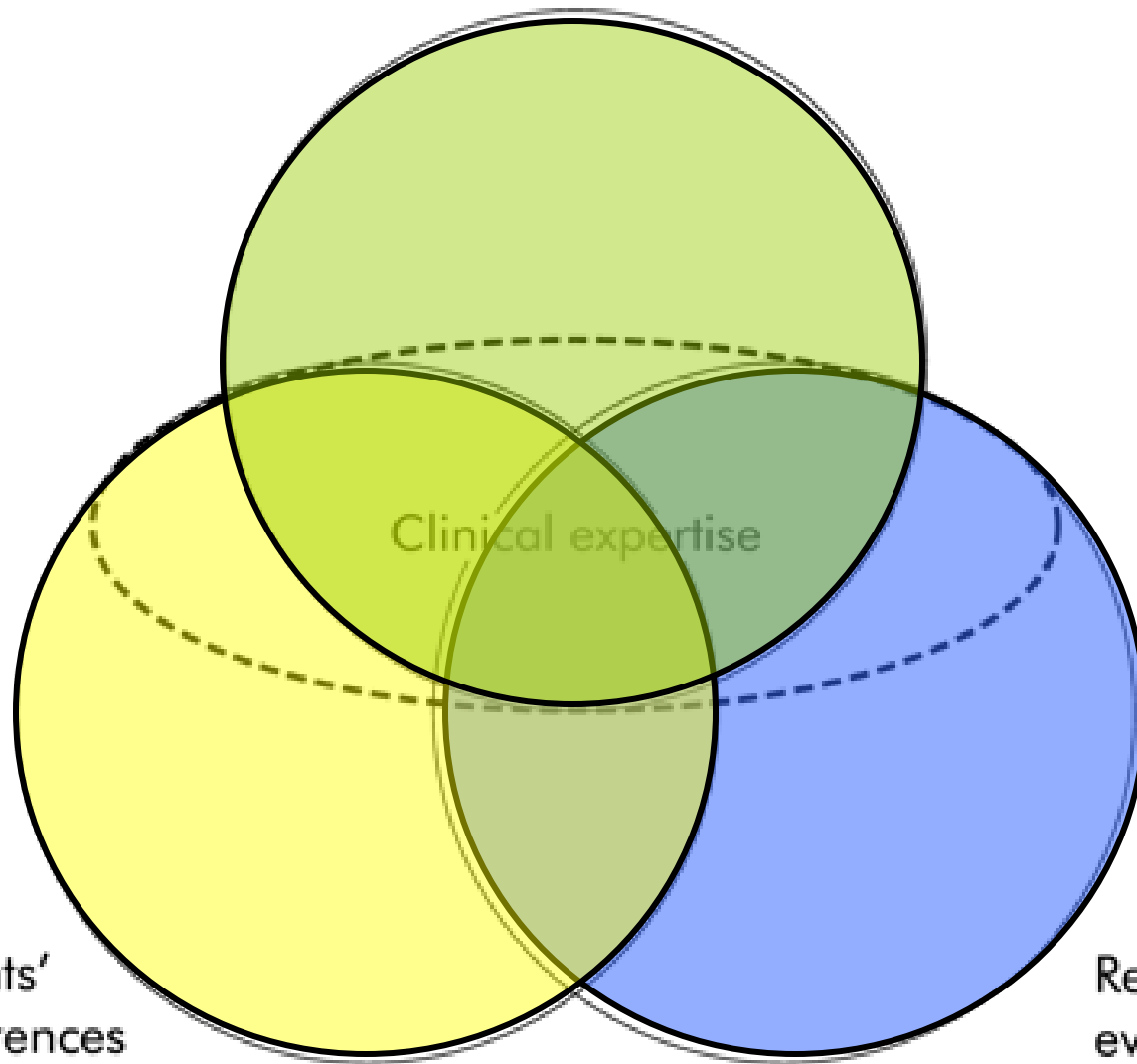
Dave Sackett

Guidelines and EBM

~~Evidence-based medicine is the integration of best research evidence with clinical expertise and patient values~~



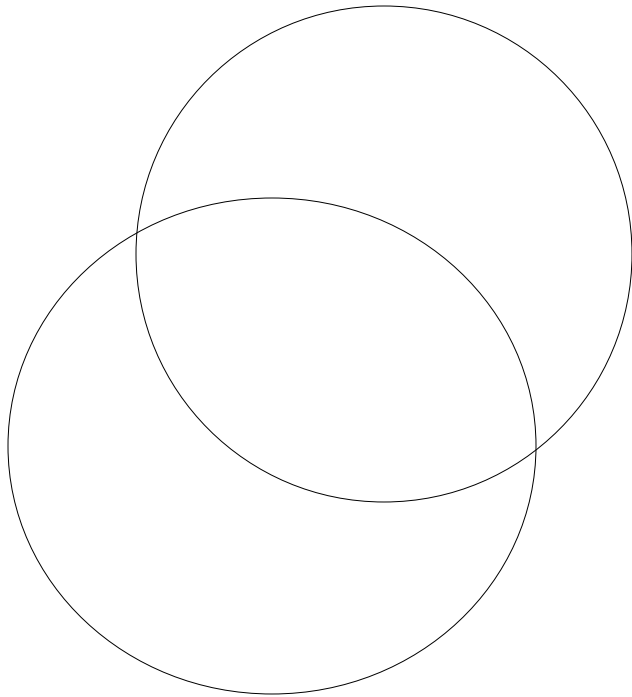
Clinical state and circumstances



Patients'
preferences
and actions

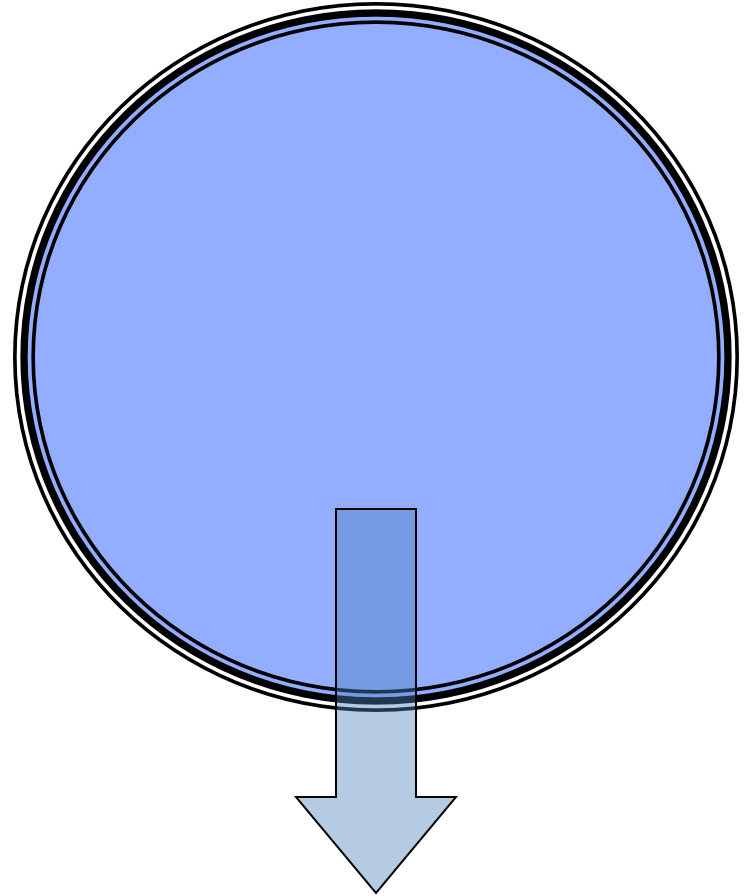
Research
evidence

Clinical state and circumstances



Patients'
preferences
and actions

**Research
evidence**



Improved health outcomes



The invisible pandemic

- Hospitalisation due to medicine adverse events in older adults 17%
- Adverse drug reactions 4-6th most common cause of death (US)
- Adverse drug reactions cost USD \$27 million for every million older adults in the community

Nananda Cet al Archives of Internal Medicine, Vol. 150, No.4 (Apr. 1990)
Lazarou J et al *JAMA*. 1998;279:1200–5.

Lombardi & Kennicutt. *Med Pharm* 2 (1), 2001

PHARMAC NZ data





Pravastatin in elderly individuals at risk of vascular disease (PROSPER): a randomised controlled trial

James Shepherd, Gerard J Blauw, Michael B Murphy, Edward L E M Boilen, Brendan M Buckley, Stuart M Cobbe, Ian Ford, Allan Gaw, Michael Hyland, J Wouter Jukema, Adriaan M Kamper, Peter W Macfarlane, A Edo Melnders, John Norrie, Chris J Packard, Ivan J Perry, David J Stott, Brian J Sweeney, Clillian Twomey, Rudi G J Westendorp, on behalf of the PROSPER study group*

Summary

Background Although statins reduce coronary and cerebrovascular morbidity and mortality in middle-aged individuals, their efficacy and safety in elderly people is not fully established. Our aim was to test the benefits of pravastatin treatment in an elderly cohort of men and women with, or at high risk of developing, cardiovascular disease and stroke.

Methods We did a randomised controlled trial in which we assigned 5804 men (n=2804) and women (n=3000) aged 70–82 years with a history of, or risk factors for, vascular disease to pravastatin (n=2913). Baseline cholesterol was 4.0 mmol/L to 9.0 mmol/L (mean 6.5), average and our primary endpoint was coronary death, non-fatal stroke. Analysis was by intention to treat.

Findings Pravastatin reduced the risk of coronary death by 34% and reduced the risk of non-fatal stroke by 40% (p=0.001). The risk of total mortality was reduced by 10% (p=0.05). The risk of heart disease death was also reduced by 24% (p=0.001). The risk of stroke was unaffected (1.03, 0.81–1.31, p=0.8), but the hazard ratio for transient ischaemic attack was 0.75 (0.55–1.00, p=0.051). New cancer diagnoses were more frequent on pravastatin than on placebo (1.25, 1.04–1.51, p=0.020).

However, incorporation of this finding in a meta-analysis of all pravastatin and all statin trials showed no overall increase in risk. Mortality from coronary disease fell by 24% (p=0.043) in the pravastatin group. Pravastatin had no significant effect on cognitive function or disability.

Interpretation Pravastatin given for 3 years reduced the risk of coronary disease in elderly individuals. PROSPER therefore extends to elderly individuals the treatment strategy currently used in middle aged people.

Lancet 2002; 360: 1623–30. Published online Nov 19, 2002
<http://image.thelancet.com/extras/02art8325web.pdf>

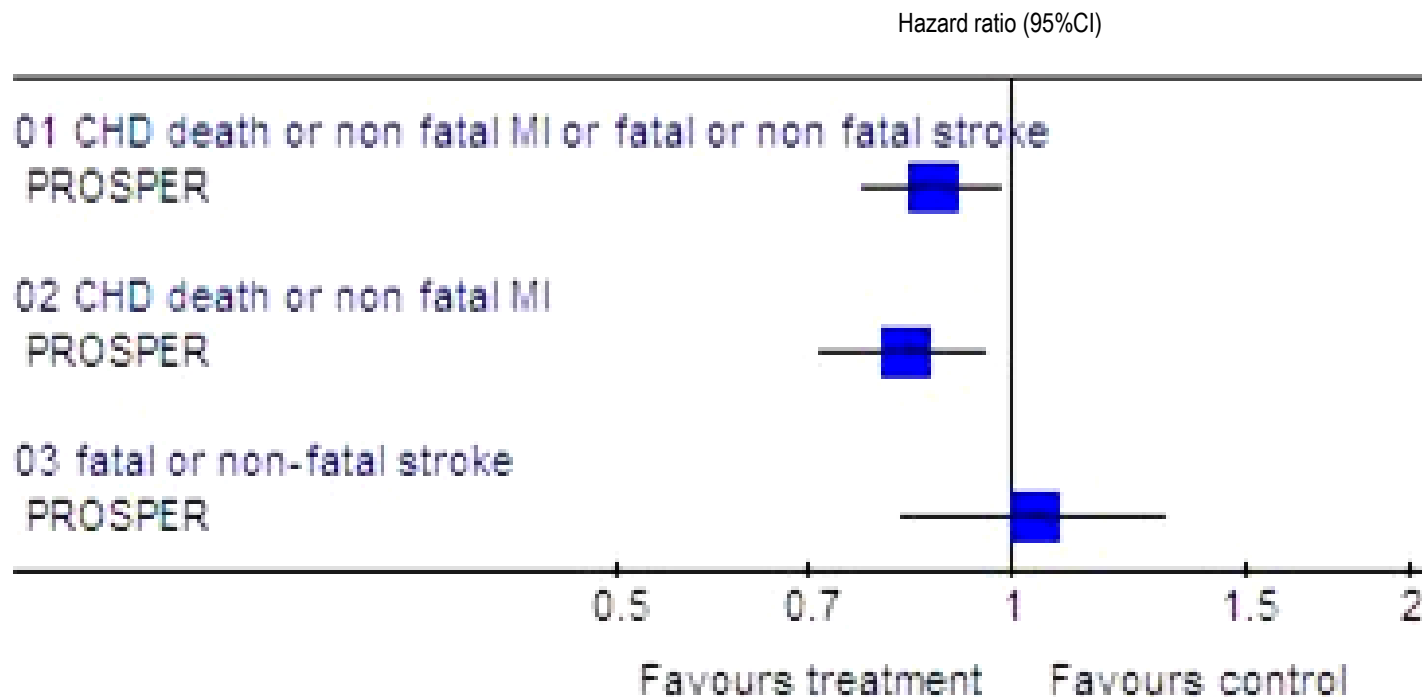
Interpretation Pravastatin given for 3 years reduced the risk of coronary disease in elderly individuals. PROSPER therefore extends to elderly individuals the treatment strategy currently used in middle aged people.

increasing age.^{7–9} The frequency of stroke, an important manifestation of vascular disease in elderly individuals, is associated with hypertension and seems independent of plasma cholesterol.¹⁰ However, investigators of previous statin trials¹¹ have reported benefits on stroke, and results of observational studies have raised the possibility that statins could reduce the rate of cognitive decline in elderly people.¹² However, in the oldest old people, low plasma cholesterol is associated with increased mortality.¹³ In view of these conflicting observations, we concluded that the balance of the efficacy and safety of cholesterol

*Members listed at end of paper

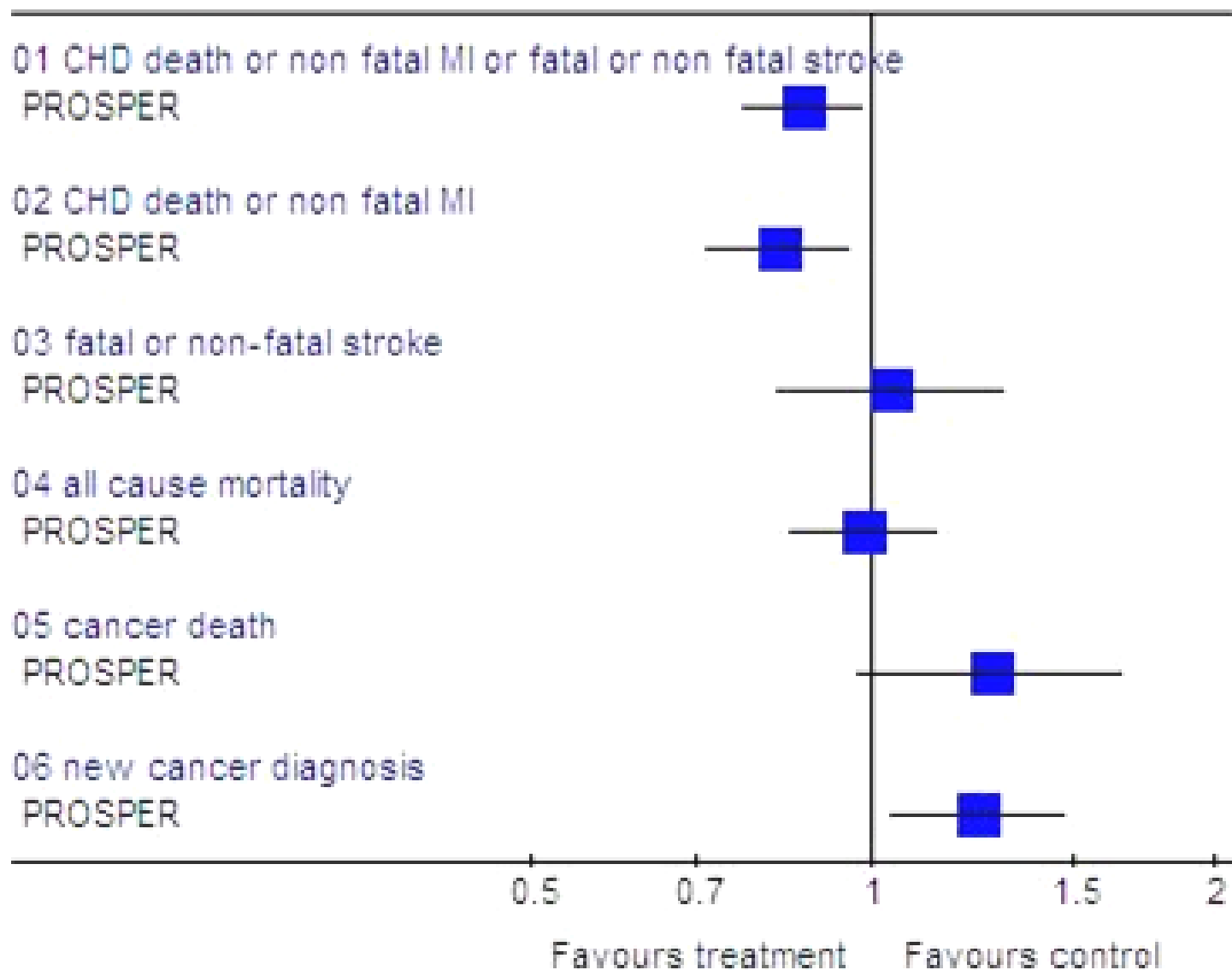
University Department of Pathological Biochemistry (Prof J Shepherd MD, A Gaw MD, Prof C J Packard DSc), North Glasgow University NHS Trust; Robertson Centre for Biostatistics (Prof I Ford PhD, J Norrie MSc), and Division of Cardiovascular and Medical Sciences (Prof S M Cobbe MD, Prof P W Macfarlane DSc,

Cholesterol drugs over age 70



Shepherd J, Blauw GJ, Murphy MB, Bollen EL, Buckley BM, Cobbe SM, et al. Pravastatin in elderly individuals at risk of vascular disease (PROSPER): a randomised controlled trial.

Lancet 2002;360:1623-



Conflict of interest statement

The authors declare the following arrangements with the sponsoring company or other companies, or both, making competing products. Consultancy agreements: J Shepherd, M B Murphy, I Ford, B M Buckley, S M Cobbe, J W Jukema, C J Packard. Research support, honoraria, travel grants: J Shepherd, G J Blauw, M B Murphy, E L E M Bollen, B M Buckley, S M Cobbe, I Ford, A Gaw, M Hyland, J W Jukema, P W Macfarlane, A E Meinders, J Norrie, C J Packard, D J Stott, R G J Westendorp.

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We thank Sheena Brownlie for her administrative and secretarial help, and the following individuals and their staff, all of whom have worked with great enthusiasm and professionalism, contributing to the successful completion of this trial: *recruitment of patients*—Melvyn Percy, Karen McIntyre, Bernadette Stierhout, Helen Walsh, on behalf of all staff within the trial centres in Glasgow, Leiden, and Cork, and the Irish College of General Practitioners; *psychometric testing*—Peter Houx; *MRI scanning*—Mark A van Buchem; *central laboratory*—M Anne Bell, Christine Gourlay; *ECG laboratory*—Julian Allan, Louise Inglis, J Kennedy, Shahid Latif, Kathryn McLaren, Pamela Reay, Marianne Sneddon, Jean Watts; *Robertson Centre for Biostatistics*—Liz Anderson, Sharon Kean, Jan Love, Anne Nears, Michele Robertson; *Biobank*—Marijke Frölich; *PROSPER administration centres*—Liz Ronald, Jane Kent, Moira Mungall, Eleanor Dinnett, Jane Rush, Claire Gordon, Eileen McCafferty, Margaret McMurrough, Elizabeth Brown, Kirsty Simpson, Marjan Hornstra Moedt, Ilse van Gils, Natascha Zimmermann, Maria-Teresa Carroll, Maura Fallon, Leona Heaphy, Lisa Drinan, Ciara Roe, Denise Murphy, Nicholas Hern, Suzanne Doyle, Niamh O'Dwyer, Michelle Kavanagh, Gobnait Lynch, Noirin Deady, Margaret O'Donoghue, Sinead Murphy, Eimear Singleton, Imelda O'Meara, Shirley O'Donoghue, Emma Clarke, Annette O'Gorman, Clare Mills, Carmel Buckley, and the staff of the three administrative centres.

This work was supported by an investigator initiated grant from Bristol-Myers Squibb, USA.

Quaternary Prevention



P4
hst

The Art of Not Doing, Well

“It is an art of no little importance to administer medicines properly: but, it is an art of much greater and more difficult acquisition to know when to suspend or altogether to omit them.”

Philippe Pinel Treatise on Insanity

ORIGINAL INVESTIGATION

LESS IS MORE

Feasibility Study of a Systematic Approach for Discontinuation of Multiple Medications in Older Adults

Addressing Polypharmacy

Doron Garfinkel, MD; Derelie Mangin, MBChB

Arch Intern Med. 2010;170(18):1648-1654

- 311 medications in 64 patients (58%) of drugs discontinued
- 4/5 didn't have to be restarted
- 80% reported a global improvement in health
- No adverse events from the discontinuations

Patient care vs disease management

To improve the individual's experience of healthcare we must not define people by their sicknesses but rather treat them as a sick person

Challenge

- Disease based medicine
- Homogeneous medicine
- Commercial control of research and data
- Epidemiologically driven priorities for care
- The RCT as the only form of valid evidence

Embrace

- Multimorbid illness as unique patterns of symptoms, problems and functioning
- Patients priorities for care
- Observation of individual response to the effects and side effects of treatment – the forgotten highest level of the EBM pyramid
- Variation in clinical interpretation of science

PROMOTE

Research, guidance, policy and measures of care that seek to value these attributes and to understand and describe multimorbidity and support the complex art of not giving or stopping treatment