

CONTENTS *Annals of Internal Medicine*[®]

2 June 2009 150 11 741-820

ARTICLES

Two Risk-Scoring Systems for Predicting Incident Diabetes Mellitus in U.S. Adults Age 45 to 64 Years 741

H.S. Kahn, Y.J. Cheng, T.J. Thompson, G. Imperatore, and E.W. Gregg

Several clinical trials have shown that the onset of diabetes in people with poor glucose tolerance can be delayed or prevented. Using data from a large prospective cohort study, the authors developed and tested scoring systems that identify adults with a high 10-year incidence of diabetes. The basic system included such items as waist circumference, height, hypertension, black race, and family history of diabetes. The enhanced system also included blood tests. People with many of these predictors had a high risk and might benefit from preventive interventions, but these scoring systems need to be validated in different populations.

Short-Term Hormone Therapy Suspension and Mammography Recall. A Randomized Trial 752

D.S.M. Buist, M.L. Anderson, S.D. Reed, E.J. Aiello Bowles, E.D. Fitzgibbons, J.C. Gandara, D. Seger, and K.M. Newton

Women screened for breast cancer are often recalled for additional testing when mammography findings are unclear. This randomized trial in middle-age and older women found that briefly stopping hormone therapy reduced breast density slightly but did not decrease mammography recall rates. Recall rates after screening mammograms were 12.3% (stopping for 1 month), 9.8% (stopping for 2 months), and 11.3% (continuing to take hormone therapy). Menopausal symptoms increased in the groups that stopped therapy.

Summary for Patients 1-28

Predictors of Extensively Drug-Resistant Pulmonary Tuberculosis 766

K. Kliiman and A. Altraja

Drug-resistant tuberculosis is a worldwide problem. If persons at high risk for drug-resistant tuberculosis could be identified, targeting the factors that predict high risk might aid tuberculosis control efforts. The authors identified factors associated with extensively drug-resistant tuberculosis in Estonia, a country with very high rates of drug-resistant tuberculosis. These factors included previous antituberculosis treatment, HIV infection, homelessness, and alcohol abuse.

REVIEWS

Narrative Review: The Emerging Clinical Implications of the Role of Aldosterone in the Metabolic Syndrome and Resistant Hypertension 776

J.R. Sowers, A. Whaley-Connell, and M. Epstein

Obesity, insulin resistance, and hypertension and other risk factors for cardiovascular and chronic kidney disease form the metabolic syndrome. This review discusses emerging evidence that aldosterone promotes insulin resistance and participates in the pathogenesis of the metabolic syndrome and resistant hypertension.

Meta-analysis: β -Blocker Dose, Heart Rate Reduction, and Death in Patients With Heart Failure 784

F.A. McAlister, N. Wiebe, J.A. Ezekowitz, A.A. Leung, and P.W. Armstrong

The reasons why β -blockade reduces mortality from heart failure remain elusive. In a review of 23 trials of β -blockade in heart failure, the authors sought to determine whether heart rate reduction, β -blocker dose, or both predicted the outcome. For every reduction in heart rate of 5 beats/min with β -blocker treatment, the risk for death was 18% lower. In contrast, β -blocker dosing did not predict all-cause mortality.

ACADEMIA AND CLINIC

Advances in Measuring the Effect of Individual Predictors of Cardiovascular Risk: The Role of Reclassification Measures 795

N.R. Cook and P.M. Ridker

Researchers have measured the contribution of new predictors, such as biomarkers, to estimating the risk for heart disease by calculating the area under the receiver-operating characteristic curve before and after adding the new predictor. However, this measure can be insensitive to important changes in absolute risk. A newly proposed approach takes into account the number of patients whose risk changes after adding a new predictor. This article discusses reclassification measures and assesses their performance in models for predicting cardiovascular disease in women.

Continued on page I-6

PERSPECTIVES

Glycemic Control in Type 2 Diabetes: Time for an Evidence-Based About-Face? 803

V.M. Montori and M. Fernández-Balsells

Some diabetes guidelines set low hemoglobin A_{1c} goals for patients with type 2 diabetes mellitus. After reviewing recent large randomized trials in type 2 diabetes, the authors suggest that complex treatment programs to achieve tight glycemic control create a large logistical burden for patients, increase expense and risk for hypoglycemia, and offer uncertain benefits. They believe that clinicians' first priority should be to support healthy lifestyles, preventive care, and cardiovascular risk reduction. Physicians and patients should jointly set individualized and realistic glycemic control targets that reflect patients' contexts and preferences.

Glucose Control in the Intensive Care Unit: Roller Coaster Ride or Swinging Pendulum? 809

R.J. Comi

Early randomized studies of tight glucose control in patients admitted to coronary care units or surgical intensive care units showed lower mortality, but more recent studies have not confirmed this result, and the most recent study suggests that tight control increases mortality. Tight control also increases episodes of hypoglycemia. The recent literature suggests that intermediate targets for glucose control can achieve a status that lies between the adverse outcomes related to poor glucose control and those related to overly aggressive control.

EDITORIAL

Predicting Risk for Diabetes: Choosing (or Building) the Right Model 812

W.H. Herman

Whether to screen for type 2 diabetes mellitus in asymptomatic adults is controversial. If we don't do so, we miss an opportunity to identify people at increased risk for diabetes because of dysglycemia. In this issue, Kahn and colleagues present 2 models to predict risk for diabetes in patients free of diabetes at baseline. Despite their limitations, the models clearly advance the cause of identifying individuals at high risk for diabetes.

IN MEMORIAM

Paul Epstein, MD, MACP: A Good and Honorable Man 815

The Editors commemorate Dr. Paul Epstein, an editor of *Annals of Internal Medicine* for 3 decades.

LETTERS

Comments and Responses

The Effectiveness of Colonoscopy in Reducing Mortality From Colorectal Cancer 816

IN THE CLINIC

Tuberculosis ITC6-1

Cover photograph by Gautam Pandey, MD

Subscription and Business Information I-13

Continuing Medical Education I-19

Classified Services Begin on I-22

Services for Readers I-34