**STATINS IN THE TREATMENT AND PREVENTION OF CARDIOVASCULAR DISEASES: CURRENT AND EMERGING CLINICAL AND PUBLIC HEALTH CHALLENGES**

**C.H. Hennekens1**, E.H. Lieberman1; M.H. Rubenstein1; P.R. Hebert1; D.L. DeMets2; M.A. Pfeffer3

1. Charles E. Schmidt College of Medicine, Florida Atlantic University, Boca Raton, FL, USA

2. University of Wisconsin School of Medicine and Public Health, Madison, WI, USA

3. Harvard Medical School and Brigham and Women’s Hospital, Boston, MA, USA

Cardiovascular disease (CVD) is and will remain the leading avoidable cause of premature deaths in the US and is rapidly becoming so worldwide. The totality of available evidence on statins in the treatment and prevention of CVD is robust and includes over 200,000 randomized subjects from dozens of large scale trials designed a priori to test the hypothesis and their meta-analyses. In secondary and high-risk primary prevention, clinicians should more widely prescribe evidence based doses of statins as first line drugs. In low-risk primary prevention subjects previously considered ineligible, statins also have a favorable benefit to risk ratio. Statins should be adjuncts, not alternatives to therapeutic lifestyle changes of proven benefit including weight loss, physical activity, avoidance or cessation of cigarettes and diet. In addition, any decision to prescribe statins should be based on individual clinical judgments that include all the risk factors of an individual and not simply those in any risk algorithm. Further, for individuals optimally treated with a statin and the responsible clinician wishes to prescribe additional therapy, the data are far less persuasive. Ezetimibe but not nicotinic acid, omega-3 fatty acids, or fibrates have been demonstrated to add to the benefits of statins. Finally, new and novel therapies, even if eventually proven to have a favorable benefit to risk ratio, will generally be adjuncts not alternatives to statins. The utilization of guidelines as guidance for clinicians should lead to more widespread and judicious prescription of evidence based doses of statins which, in turn, will lead to even greater net clinical and public health benefits in the treatment and prevention of CVD.