



INTERNATIONAL ATHEROSCLEROSIS SOCIETY

PRESS RELEASE

INTERNATIONAL ATHEROSCLEROSIS SOCIETY HARMONIZED GUIDELINES ON PREVENTION OF ATHEROSCLEROTIC CARDIOVASCULAR DISEASE

Atherosclerotic cardiovascular disease (CVD) is the foremost killer in developed countries and is assuming increasing importance in developing countries. The World Health Organization projects that CVD will become the primary cause of death worldwide by the year 2020. This prediction depends in part on anticipated progress in reducing deaths from infectious diseases throughout the world.

The International Atherosclerosis Society (IAS), incorporated in 1979, promotes, at an international level, the advancement of science, research and teaching in the field of atherosclerotic CVD. The IAS endeavors to achieve these objectives by promoting the exchange of existing knowledge; encouraging new research ventures and interdisciplinary approaches; establishing visiting fellowships for young investigators; fostering the dissemination of knowledge by organizing international symposia, workshops, courses, and meetings; and through the association with a scientific journal. Membership is open to active researchers who join one of the 50 IAS national or regional constituent societies or who join as individual members from countries without a national affiliated society. There are 10,265 individual members of the IAS. These members are represented in the IAS by the Executive Board. This board is elected by representatives of the 50 constituent societies. It consists of 10 members including the officers of the IAS, members at large, the president of the upcoming International Symposium on Atherosclerosis, and the senior advisor.

The Executive Board was responsible for developing the *IAS HARMONIZED GUIDELINES ON PREVENTION OF ATHEROSCLEROTIC CARDIOVASCULAR DISEASE*. The guidelines were ratified by the majority of the IAS member organizations. The guidelines are directed primarily to health professionals with the purpose to provide guidelines on clinical management of risk factors to reduce risk for CVD. In the past decade, a large number of guidelines for CVD prevention have been developed by professional organizations and national societies. These guidelines increasingly offer “evidence-based” recommendations and have gone beyond earlier “consensus” recommendations. The evidence mounted in guidelines has been enriched by many powerful randomized controlled trials. Even so, other lines of evidence—epidemiological studies, clinical experimentation, and expert judgment—contribute when clinical trials fail to answer pressing clinical questions.

The IAS guidelines aim to harmonize and integrate existing guidelines for the clinical management of risk factors for prevention of atherosclerotic CVD. The existing guidelines provide an extensive review of the scientific evidence underlying their recommendations. The IAS guidelines do not attempt to re-examine all of the available evidence. Instead they abstract the evidence reviewed by several expert panels. The IAS guidelines have incorporated concepts and information from many existing guidelines for the individual risk factors and for overall CVD prevention.

Close attention was paid to the European cardiovascular guidelines, the International Task Force guidelines, WHO guidelines, Asian Pacific and Japanese guidelines on obesity, and country-specific guidelines from the USA, Canada, UK, and Australia. To achieve a harmonization of existing guidelines, an element of judgment was required by the IAS Executive Board to link the different guidelines into a coherent whole. In this harmonization process, useful information was obtained from guidelines that focus on particular CVD risk factors, e.g. *major risk factors*, such as cigarette smoking, high blood pressure, high blood cholesterol, and diabetes, and/or *underlying risk factors*, such as overweight/obesity, physical inactivity, and atherogenic diets. In addition, recent guidelines were also surveyed that offer recommendations on global risk factor management in higher risk patients or for primary prevention.

The organization, integration, and harmonization of clinical guidelines from several fields of cardiovascular prevention represent the major strength of IAS guidelines. These guidelines should be useful at several levels in many countries. By providing up-to-date recommendations based on the latest scientific evidence, the guidelines should set a standard for clinical practice in all countries. It is recognized that many countries will not have sufficient health-care resources to implement all of the recommendations contained in these guidelines. On the other hand, the guidelines should assist those responsible for health-care policy in different countries in setting priorities for preventive interventions. They also should assist individual health-care professionals in making clinical judgments for prevention when managing particular patients. Certainly, local and national conditions may require modifications of the recommendations to meet existing circumstances. It should be noted however that thanks to a large number of clinical trials there is increasing consensus on what constitutes “state-of-the-art” clinical practice for prevention of atherosclerotic CVD.

In the field of CVD prevention, several major issues are under consideration for guideline development. Until recently, primary attention was given to modification of established risk factors. Each risk factor was identified separately and treated separately. In the past few years, however, more attention has been given to assessing a particular patient’s total risk for future CVD events. This is done by combining the contributions of each risk factor to the total risk of the patient. The addition of this *global risk assessment* to risk management has been a great step forward. A simple formula has been developed: *the higher the total risk, the more intensive should be the intervention on risk*. Patients at highest risk receive the most intensive treatment. These patients include those with established CVD and those with other high risk conditions like diabetes mellitus. Risk algorithms that include all of the risk factors have been developed, and they provide an estimate of a patient’s total risk. By adjusting intensity of intervention to total risk, it is possible to achieve the most cost-effective therapy and to provide the greatest benefit to patients who need it most.

At the same time, attention should not be diverted entirely from individual risk factors. Some guidelines may have provided so much attention to total risk that they may have neglected the contributions of individual risk factors. Total risk estimates are most useful for prevention over the next few years. On the other hand, individual risk factors acting alone can be detrimental in the long term. Failure to take long-term risk into account may do the patient a disservice. Therefore, IAS guidelines have attempted to seek the proper balance between intensifying therapies for patients at highest absolute risk and not neglecting the more severe, isolated risk factors that may produce heart attack or stroke in the long run.

The IAS guidelines are presented in two forms: an *Executive Summary* summarizes the key features of global risk assessment and simple approaches to intervention on particular risk factors. This summary can be used as a handbook for intervention. A *Full Report* provides the rationale for each stage of diagnosis, risk assessment, and intervention. The *Full Report* is being made available on the IAS website (www.athero.org); in the future it is expected to be published in a journal format.