Preface

At the beginning of the 21st century, the First International Workshop on Ischemic Stroke was held in Segovia (Spain) with the objectives to review the advances made in the diagnosis and treatment of stroke in the 90s as well as the challenges facing us for the next century. A supplement issue of *Cerebrovascular Diseases* with a condensed overview of the interesting innovations and concerns treated in that International Workshop was then published (Cerebrovasc Dis 11/S1/01). Due to the high success of both the Workshop and the *Cerebrovascular Diseases* supplement, a new edition of the former was held in 2002 in Madrid.

In this Second International Workshop on Ischemic Stroke entitled 'A Treatable Emergency and a Preventable Catastrophe', our main interest was to project the last therapeutic advances in the emergency approach to this disease and in the primary and secondary prevention. We have also had at our disposal a prestigious group of experts with proven experience in their particular areas. They have worked hard to compile an overview of the main topics discussed, giving condensed information in this supplement issue that has been divided into the following four parts:

(1) 'New Frontiers in the Diagnosis of Ischemic Stroke' analyzed: the ischemic penumbra concept from neuroimaging to pathophysiology focusing on the identification of this ischemic region, the most important mechanism for progression of penumbra towards irreversible injury and the most likely therapeutic modalities to prevent the development of infarction (M. Fisher); new research on the biochemical changes and inflammatory reaction as markers of cerebral ischemia and their utility in the early identification of risk of complications, such as neurologi-

cal deterioration and hemorrhagic transformation, and also in the selection of patients for some treatments such as intravenous thrombolysis (J. Castillo); new technological developments in arterial wall imaging with ultrasound techniques such as three-dimensional and four-dimensional imaging, application of echo contrast agents and high-resolution wall imaging as well as concomitant three-dimensional flow studies (M. Hennerici), and finally the utility of continuous blood pressure monitoring in cerebrovascular disease in order to stratify the risks of a further stroke (J. Tejada).

(2) 'Risk Factors in Cerebral Ischemia: The Best Knowledge for the Best Prevention' discussed: the role of new risk factors such as inflammation markers, infectious agents and homocysteine (A. Sempere); the still debated enigma about the management of blood pressure both as a risk factor and as a prognostic predictor in acute ischemic stroke (P. Bath); the new concepts in lacunar stroke etiology and the constellation of small vessel arterial disease (A. Arboix), and the advances in the complex genetic investigation in cerebrovascular diseases and its role in further therapeutic developments (N. Vila).

(3) 'Preventive Treatment for Ischemic Stroke: Reducing the Risk' focused on: the usefulness of anticoagulants in ischemic stroke prevention (F. Rubio); the evolution of antiplatelet treatment from monotherapy to combined treatment (J. Bogousslavsky); the reasons for using statins in these patients based on the last published trials (P. Amarenco), and the adjustment of the risk/benefit ratio for carotid endarterectomy (P. Rothwell) and for percutaneous angioplasty of cerebral arteries discussing which patients get the most benefit from this therapy (A. Gil Peralta).

(4) 'Acute Ischemic Stroke Treatment: An Emergency' involved both organization and management issues such as the importance of a good clinical network in acute stroke (A. Gil Nuñez) and the cost per process analysis (E. Martínez Vila) and, on the other hand, therapeutic approaches like the relevance of an early intervention in acute stroke for better brain protection focusing on the importance of acute general care that has become an emergent and first-line brain protectant treatment (E. Díez-Tejedor), the present and future of antithrombotic and hypofibrinogenemic drugs in acute ischemic stroke (D. Sherman), the development of thrombolysis therapy from the experimental findings to the clinical practice (G. del Zoppo) and, finally, the facts and fancies of neuropro-

tection in cerebral ischemia, discussing the need for new approaches in experimental studies and in clinical trials (N. Wahlgren).

With all these topics, a broad review of the current state of the art in ischemic stroke management and the basis for new diagnostic and therapeutic approaches has been done. I should like to give my thanks and congratulations to all of the participating authors for their magnificent work now published, and I would also thank BMS for their support which has made possible the consolidation of this workshop and allowed this supplement issue to be produced for the transmission of all this knowledge to our colleagues.

E. Díez-Tejedor