
Thrombosis and Haemostasis Issues in Cancer

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Lectures and Abstracts

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Preface

Dear Colleagues,

This volume contains the proceedings of the Second 'International Conference on Thrombosis and Hemostasis Issues in Cancer', held at the Congress Center Giovanni XXIII, in Bergamo, Italy from 19 to 21 September, 2003. The first Conference, which was held on November 2–4, 2001, in Bergamo, Italy, received much interest and was well attended by delegates from all over the world. For this reason and because the field of thrombosis and hemorrhage in malignancy is rapidly growing, we consider it important to convene again and discuss the novel results and ongoing progress.

This conference focuses on hemostatic system imbalance associated with malignant disease. This imbalance underpins the characteristic thrombotic and hemorrhagic diatheses of these patients. Indeed, thrombosis is a common complication of cancer that contributes significantly to the morbidity and mortality of this disease. Bleeding syndromes are rare, but when they occur, they are severe and life-threatening.

The association between cancer and thrombosis has been known for more than a century and, since its original description, has been known to have a dual meaning: 1. The occurrence of venous thromboembolism as a complication of cancer (as first described by Armand Trousseau in 1865); and 2. The possibility of a relation between the clotting mechanisms and the enhancement of tumor growth and the development of metastases (as postulated by Billroth in 1878).

Numerous investigations have shown that malignant cells can interact with and influence all of the components of the hemostatic system, including blood and blood vessel cells (i.e. platelets, leukocytes and endothelial cells). New mechanisms are described for the molecular interaction of tumor cells and the hemostatic system, which are influencing the rational design of anticancer therapy – e.g. so-called 'vascular targeting agents'. On the basis of this new understanding of pathological thrombus formation in cancer,

novel approaches to antithrombotic therapy have been developed with some intriguing early successes. Exciting data from several of the more recent clinical trials are presented, which will change the clinical practice of antithrombotic therapy in cancer patients. Pre-clinical and clinical investigations on the anti-tumor effects of antithrombotic drugs are also in rapid progress and some of the early successes of this approach are discussed.

The aim of the conference is to review recent advances in basic and clinical research; both prevention and treatment strategies of thrombohemorrhagic complications in cancer patients are extensively reviewed. Our wish is to continue to bring together leading researchers and clinicians and the format of the Conference is designed to favour an active exchange of important information and topics of research and to provide stimulation for cross-disciplinary collaborations.

The sessions of this conference cover a number of different issues, including: 1. The link between tumor-induced angiogenesis and thrombosis and the clinical implications of targeting the endothelium in cancer; 2. The role of coagulation proteins, platelets and proteolytic enzymes in cancer biology; 3. The risk assessment, prophylaxis and treatment of thrombosis and bleeding in the cancer patient; and 4. New experimental and clinical studies on the influence of anticoagulants on tumor progression.

We sincerely hope that this volume will enhance the overall knowledge of the interactions between the hemostatic system and malignant disease and will add new information on the prevention and management of thrombotic complications in cancer patients.

We wish to thank all participants for their contributions.

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