

b. serrou, p. s. schein and j. -l. imbach editors

nitrosoureas in cancer treatment

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NITROSOUREAS IN CANCER TREATMENT

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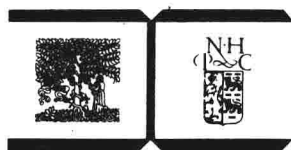
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Editors: B. SERROU
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PREFACE

This book is a collection of the papers presented at an international symposium devoted to "Nitrosoureas in Cancer Treatment" held in Montpellier, France on January 26 and 27, 1981. The symposium represented the fruits of a joint Franco-American effort under the auspices of INSERM, CNRS and the National Cancer Institute (NCI) who offered a meeting ground to the foremost authorities in this field. The participants included basic scientists and clinicians from France, America, Europe and Japan.

The medical management of cancer is a rapidly evolving approach which presently accounts for a 41% cure rate when complemented by surgical and radio-therapeutic loco-regional therapy. This percentage promises to show a steady rise in the years ahead. The medical approach to cancer therapy is primarily concerned with chemo-, immuno- and hormonotherapies. The field of chemotherapy has undergone rapid expansion in recent years, receiving particular attention as an adjuvant in solid tumor therapy. Within this context, nitrosoureas have earned an undeniable place, especially in the treatment of solid tumors.

This alone serves as ample reason for a symposium evaluating the efficacy of this family of drugs and their potential applications in the future. The unique aspect of this symposium is that it addresses itself to a range of difficulties from laboratory synthesis to clinical evaluation. In the span of two days, a highly concentrated exchange of information took place concerning the problems of laboratory synthesis, mechanisms of action, short and long term secondary toxic effects and clinical results which primarily dealt with brain tumors, digestive tract tumors and malignant melanoma. Other topics of discussion included high therapeutic doses of nitrosoureas followed by autologous bone marrow grafts and the difficulties involved in the development of new derivatives. The final evaluation was judged sufficiently impressive as to assign a very definite place to nitrosoureas in cancer treatment and to deem the development of new derivatives indispensable. The latter will hopefully produce even more effective drugs which could be especially useful in the treatment of chemo-resistant tumors such as brain, lung and digestive tract tumors. The new approaches which were proposed give rise to the hope that this type of drug may yet enjoy an even wider application in cancer therapy in the coming years.

We believe that the articles presented in this book will offer the reader a very precise idea of the role of nitrosoureas in cancer treatment as well as a glimpse toward the future. For these reasons the book should serve as a reference for those interested in the field whether they be organic chemists, biologists or clinicians. We wish to thank all of the speakers at the symposium whose cooperation and enthusiasm assured the overwhelming success of the meeting. The quality of the papers within this collection bear witness to the present interest and future hopes for the nitrosoureas in the treatment of cancer.

The Editors.

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**CHEMISTRY, MECHANISM OF ACTION
AND EXPERIMENTAL EVALUATION**

