BOOK REVIEW

ADVANCES IN PROSTAGLANDIN, THROMBOXANE AND LEUKOTRIENE RESEARCH

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Edited by Osamu Hayaishi and Shozo Yamamoto Published by Raven Press, New York, 1985

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The latest volume of Advances in Prostaglandin, Thromboxane and Leukotriene Research contains the major papers presented at the Kyoto Conference on Prostaglandins held in Kyoto, Japan in November 1984.

The book covers a varied range of topics which are subdivided into the following sections: Assays, utility and difficulty; arachidonic acid release and phospholipid metabolism; arachidonic acid metabolism and related enzymes; regulation and manipulation of cascade; medicinal chemistry; inflammation, allergy and immunity; cell growth and differentiation; renal system and hypertension; thrombosis and vasospasm; nervous system; reproductive biology; gastrointestinal tract; cellular and molecular mechanisms; and platelet activating factor.

Significant advances have been made in our understanding of the actions of arachidonic acid metabolites. Much of this knowledge can be attributed to the development of quantitative techniques for their measurement. However, there is some concern about the variability of results quoted by different groups. The first section of this book admirably addresses some of the uncertainties in measurements and interpretation of results. Radioimmunoassay techniques for prostaglandin and leukotrienes are reviewed and compared with enzymeimmunoassay and assay by HPLC and GCMS. Attention is given to the value of stable metabolite measurements and their applicability to experimental design. In addition, problems associated with sample type and stability are highlighted.

Many authors evaluate the actions of new enzyme inhibitors on the arachidonic cascade and the influence of stable analogues on the biological potency of a number of prostaglandins. There is considerable interest in these types of compounds as potential therapeutic aids.

The book contains 191 papers spanning recent developments over a broad range of topics in which studies of prostaglandins and related compounds have proceeded.

Since the editors have combined so many studies into this volume the technical information of each paper has suffered; nevertheless, the book content is sufficiently varied to provide an authoritative review of current investigations. The book will be of considerable value to anyone involved or likely to be involved in the products of the arachidonic acid cascade.

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