

*Prostaglandins and Related Lipids, Volume 2***Prostaglandins and Cancer: First International Conference**

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If you want the last word on interrelationships between prostaglandins and cancer, try ploughing through this mammoth tome. It has been assembled – with commendable speed – from material provided by participants at a 4-day symposium held at Washington in late 1981. The book contains both reviews and short reports (84 papers in all) in camera-ready format. There is also a decent index, although the cross-referencing is not very good: anti-inflammatory steroids appear under 4 categories (anti-inflammatory drugs, corticosteroids, glucocorticoids and steroids) and each contains different citations.

Taken overall, this is a monumental achievement and the editors deserve credit for this, despite the fact that in the preface submitted by one of them (page xxxi) they have blotted their copybook by penning a feeble preamble containing unnecessary spelling errors.

As there has been a tremendous proliferation (no pun intended!) of international symposia on prostaglandins (and a corresponding deluge of bulky proceedings) I think it is inappropriate here to go into the contents in much detail. The papers are grouped in 8 sections, the first of which provides a general overview of prostaglandin synthetic pathways and pharmacology (ably presented by familiar contributors). Section II covers carcinogenesis initiation and includes papers on the ability of the hydroperoxidase-containing component of prostaglandin synthetase to co-oxygenate other substrates, especially potential tumour initiators. Section III deals with the significance of enhanced PG synthesis following membrane lipid activation by tumour promoters such as the phor-

bol esters. The various conflicting effects of prostaglandins on cell replication and proliferation are considered in section IV. Two of the papers highlight the possible obligatory involvement of prostaglandin synthesis in the induction of interferon production and in determining its antiviral actions on target membranes.

Sections V and VI concern the roles of prostaglandins in the induction of differentiation and in bone resorption; in section VII are papers on prostaglandin effects on host–tumour interactions and the immune response with emphasis on macrophages. The final part concerns the effects of manipulation of the prostaglandin system on tumour growth and metastasis, and includes detailed discussion by K.V. Honn of his important results showing that prostacyclin and nafazatrom (which may work by enhancing vascular prostacyclin production) are both potent anti-metastatic agents in animal models, possibly by interfering with tumour cell deposition dependent on platelet–vascular adherence.

Clearly prostaglandins have diverse, often mutually opposing and possibly vital actions on cellular processes in tumour development. However, it seems unlikely that much progress will be made in the clinic by using either prostaglandins or their synthesis inhibitors (most of the results presented in this volume regrettably were negative) or in experimental situations purely by assaying for prostaglandin production – this gives no clues as to cause and effect. Nevertheless, prostaglandin involvement in cancer is a bandwagon which many will jump onto with relish.

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