Editorial

G.V.

SHerbet

Cancer Research Unit, Medical School, University of Newcastle upon Tyne, UK

Retinoids are vitamin-A-related compounds that elicit specific biological responses upon binding to and activating specific receptors or sets of receptors occurring in the cell [1]. Retinoids can exert diverse biological effects. The teratogenic effects of retinoic acid (RA) have been known for many years [2-4]. RA can inhibit cellular transformation by oncogenes [5,6] and chemical carcinogens [7-9]. We have now come to appreciate in some detail the role played by RA in embryonic development, growth and cellular proliferation, and also the modes of modulation by RA of the invasive and meta-static properties of tumours. Our knowledge of the mechanisms by which RA exerts its biological effects, i.e. mediated by specific receptors which act as transcriptional factors, has expanded considerably in recent years. We have also become aware of the various genomic targets afforded by oncogenes and suppressor genes for modulation by the retinoids.

In the light of these significant developments in the biology and function of retinoids as biological response modifiers, the editors of Pathobiology present in this issue four reviews which cover these topics. These reviews are not intended, by design, to be exhaustive in detail or comprehensive in coverage, but the authors were asked to highlight important areas of retinoid biology. We believe that these articles will be of some help in understanding the importance of retinoids not only in biological phenomena but also in the development and use of retinoids in cancer therapy.

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