Mathematical Models and Computer Simulation of Chemical Carcinogenesis Process and its Inhibition by Anticarcinogenic Substances

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Cancer research has yielded tremendous gains over the last two decades with remarkable results addressing this worldwide major public health problem. Continuous technological developments and persistent research has led to significant progress in targeted therapies. This paper focuses on the study of mathematical models that describe in the most optimal way the development of malignant tumours induced in experimental animals of a particular species following chemical carcinogenesis with a complete carcinogen factor known as 3,4-benzopyrene. The purpose of this work is to study the phenomenon of chemical carcinogenesis, inhibition and growth of malignant tumours.

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P. Vlamos (ed.), *GeNeDis 2018*, Advances in Experimental Medicine and Biology 1194, https://doi.org/10.1007/978-3-030-32622-7_44