

The relevance of preclinical assessment of carcinogenesis

Evidence for the carcinogenic activity of various pharmaceutical agents and preparations is reviewed and the relevance of laboratory tests for carcinogenicity on animals discussed. A rating system for carcinogenicity is proposed and the need for balancing risk, including carcinogenic risk, with the severity of the condition under treatment and the benefit to be expected from treatment, stressed. It is suggested that the following have a high carcinogenicity rating: biological alkylating agents, urethan, isonicotinic acid hydrazide (INAH), arsenic, coal tar and creosote preparations, phenylbutazone, estrogens (especially when administered continuously over long periods), large implants of materials such as plastic sponge in the course of plastic or reconstruction surgery, and combinations of ¹³¹I with goitrogens. Recommendations on the future use of these agents in therapy are made. The immediate need for a large scale epidemiologic survey of patients treated with INAH is strongly emphasized.

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