resistant P388 leukaemia, Yoshida sarcoma and BCNU resistant L1210 leukaemia cell lines. The parameters examined vary substantially among the different cell lines. BCNU resistance of L1210 was almost completely overcome by dianhydrogalactitol.

TISSUE DISTRIBUTION OF POLYALKYLCYANO-ACRYLATE NANOPARTICLES CHARGED WITH SPIN-LABLED NITROSOUREA

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The tissue distribution of biodegradable polyalkylcyanoacrylate nanoparticles associated with spin-labled nitrosourea, possessing high antitumour activity has been studied. The investigation has been carried out on C57 black mice with intramusculary implanted Lewis Lung carcinoma after intraperitoneal administration. The localisation of the polymer-carrier into the studied tumour has been estimated by ESR-spectroscopy.

The concentration of the drug carrier in the tumour tissue, 30 min after the administration, is almost constant. The highest concentration was found in the lung tissue of tumour-bearing animals. As intramusculary grafted experimental Lewis Lung carcinoma induces metastasis in the lung, this result can be used for application of the nanoparticles as a reliable drug-carrier of the cytostatic agents for pulmonary metastasis treatment.

INTERFERENCE OF ONCOGENE PRODUCTS WITH THE HORMONE DEPENDENT MMTV-LTR TRANSCRIPTION

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The H-ras and the v-mos oncogene proteins repress the glucocorticoid hormone-dependent transcription of the MMTV-LTR (EMBO J., 5: 2609-2616, 1986). To probe the mechanism of this effect, NIH cells transfected with an MMTV-LTR gene construct or with a chimeric gene construct consisting of the hormone responsive element of the MMTV-LTR (HRE) and the α-globin gene were infected with ras, mos, src or myc expressing retroviruses. Constitutive expression of oncogene protein did not abolish MMTV-LTR inducibility. The kinetics of transcriptional repression of the hormone dependent gene constructs was determined in all cases. Stimulation with dexamethasone and treatment with cycloheximide did not change the pattern of induction and repression of the HRE- α -globin gene transcription in ras- and mos-infected cells. We conclude that (1) the hormone/receptor binding domain is instrumental for the repression of the MMTV-LTR transcription and suggest that (2) the inhibition of the transcription is mediated by a modification of the affinity of activated glucocorticoid receptor to the MMTV-LTR DNA.

TIME DEPENDENCE OF BIOCHEMICAL CHANGES DURING DIFFERENTIATION OF A HUMAN NEUROBLASTOMA CELL LINE, SH-SY5Y

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TPA induces differentiation in the human neuroblastoma cell line SH-SY5Y. The sensitivity of muscarinic receptors to agonist with respect to Ca^{2+} mobilization decreases during the initial 6 hr. After induction of differentiation, the cells loose their processes and a decrease in c-myc expression occurs. The number of muscarinic receptors decreases after this time period followed by the appearance of features of a differentiated phenotype after 24 hr, including long neurite-like processes and an excitable membrane.

IMMUNOHISTOCHEMICAL LOCALIZATION OF S-100P AND NSE IN MALIGNANT MELANOMA

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This study included 30 cases of malignant melanoma. The classification of Clark has been used (LMM, SSMn, NM, ALM). The cells of the following types have been distinguished in morphological pattern: CE-epithelial, CS-spindle and mixed. The PAP method was used formalin-fixed paraffin embedded material. Immunohistochemical localization of S-100P and NSE in cytoplasm of melanocytes were observed. Positive staining was graded on a scale of -,+,++,+++. In the cells of both types S-100P and NSE were spread out within whole cytoplasm. The differences appeared in the intensity of staining: CE: S-100P (+); NSE (++,+++) and CS: S-100P (++,+++), NSE- (+). Immunohistochemistry research of the localization and intensity of S-100P and NSE in melanocytes may assist in the diagnosis