KET ROLE OF THE 3'-LOR REGION OF BOVINE LEUKAEMIA VIRUS IN THE MAINTENANCE OF CELL TRANSFORMATION.

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Viral RNA expression was studied by dot blot hybridization with polyadenylated RNAs using either the complete BLV information or only the LOR sequences as probes. No significant amount of viral RNA corresponding to the BLV-LOR region was detected in lymphoid cell lines derived from in vivo BLV-induced tumours. These results demonstrate that viral expression, even the LOR region, is not required for the maintenance of cell transformation.

KEY ACUTE MYELOCYTIC LEUKAEMIA (AML): CORRELATION OF HUMAN HISTOCOMPATIBILITY ANTIGENS (HLA) WITH COMPLETE RESPONSE (CR) AND SURVIVAL

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Much interest has centred on a possible role of histocompatibility and immune response genes in controlling cancer. In acute leukaemias, several studies have called attention to the superior survival rate of individuals possessing the HLA-A 2, B 12 and DR 5 phenotypes as well as the HLA-A 1/B 8, and HLA-A 2/B 12 haplotypes. To evaluate further this point, the authors have retrospectively analysed 87 AML-patients diagnosed since 1978 and treated at the Department of Haematology and Oncology of the Steglitz Medical Centre in West Berlin. Diagnosis was established according to FAB criteria. HLA-typing was performed at the time of diagnosis using the standard NIH lymphocytotoxicity technique. Length of survival and duration of CR were analysed by the life table and the log rank test. Differences in the ability to achieve a CR were evaluated using the chi-square test with Yates correction.

Patients with the HLA-A 2/B 12 haplotype appeared to have a better CR to therapy. The difference was not significant, however, and the 1-year and 2-year survival was not different from that of individuals without this haplotype. The available evidence does not strongly support a significant influence of HLA on CR, length of CR and survival in AML.

KIR GENETIC AND CYTOGENETIC CHANGES IN EARLY AND LATE STAGES OF RAT HEPATOCARCINOGENESIS.

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The GERLANS model for induction of liver carcinogenesis in rats has the advantage to establish synchronisation of the early transformation events. This makes a sequential analysis of genetic and cytogenetic parameters possible.

The parameters analysed were: a) activity of DNA genes by cytodensitometric and morphological analysis after silver staining; b) amount of DNA by cytodensitometric analysis after Feulgen staining; c) number of chromosomes by karyotyping of metaphase spreadings.

Our results indicate that during the first weeks of phenobarbital treatment, the hepatocytes show a clear cut modification of their ploidy level. Instead of being predominantly tetraploid as found in untreated rats, the hepatocytes are in the form of a quasi-diploid population of cells.

On serial sections, the amount of silver-staining, which is assumed to estimate the rRNA synthesis, increases with the duration of phenobarbital treatment. On metaphase spreads, hyperstainability is observed on the nucleolar genes but also in some cases, on non-nucleolar chromatin: these findings suggest that phenobarbital treatment may induce an overall decondensation of chromatin.
