

Some chemical carcinogens for leukaemia induction and their animal models

ABSTRACT

Animal models have been providing invaluable contributions to the better understanding of mechanisms of cancer (including leukaemias) development and effectiveness of most of the treatments. Chemical carcinogens are generally used to study the biology of cancers including leukaemias in many animal models, including rats and mice. The studies in most cases are aimed at the development and evaluation of cancer treatments and preventions. Some of the most common chemical carcinogens used in animal models for leukaemias include N-ethyl-N-nitrosourea (ENU), N-methyl-N-nitrosourea (MNU), dimethyl benz(a)anthracene (DMBA) and benzo(a)pyrene (BaP). This review provides highlights on different animal models of leukaemia induced by the chemical carcinogens mentioned earlier, at the same time discussing the contributions of these models to the leukaemia diagnosis in laboratory animal models for subsequent development of treatment.

Keyword: Animal model; Dimethyl Benzanthracene (DMBA); Benzo (a) pyrene (BaP); Leukaemia; N-ethyl-N-nitrosourea (ENU); N-methyl-N-nitrosourea (MNU)