In vitro and in vivo studies of poly-L-lysine as inducer of Friend leukemic cells differentiation.

Supino R, Gibelli N, Nano R, Pezzoni G, Zunino F.

Source

Istituto Nazionale per lo Studio e la Cura dei Tumori, Milano, Italia.

Abstract

Poly-L-lysine, a synthetic cationic polypeptide known for its ability to bind to cell membranes, was found to induce differentiation of Friend leukemia cells "in vitro". Studies were extended to the same "in vitro" model, in order to examine the therapeutic potential of this new differentiating agent. The i.p. administration of the polymer (Mw 2700) at the maximal tolerated dose resulted in major alterations of disease-related parameters. In particular, a multiple treatment schedule on the advanced disease resulted in a successful reduction of target organ weight and peripheral white blood cell count and appreciable differentiation of spleen and bone marrow cells. Apparently, the effects of poly-L-lysine were superior to those produced by N-methyl-acetamide, a potent inducer of differentiation "in vitro".

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