Antitumor effect of macrolides – erythromycin and roxithromycin in B16 melanoma-transplanted mice

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Abstract:
The aim of this study was to examine the effects of 14-membered ring macrolides administered intraperitoneally at two doses (10 or 50 mg/kg) on tumor growth in B16F10 melanoma-transplanted mice. Erythromycin at the doses of 10 mg/kg or 50 mg/kg inhibited significantly the growth of B16/F10 melanoma in mice (1040.29 and 1026.53 vs. 2539.78 mm³ respectively). Significant inhibition of tumor growth was also observed in the group receiving roxithromycin at a dose of 10 mg/kg compared to the control group (1334.12 vs. 2539.78 mm³). No significant differences of the effect of roxithromycin administered at the dose of 50 mg/kg on the tumor volume compared to the control group was observed (2050.89 vs. 2539.78 mm³).

Key words:
mouse B16 melanoma, macrolides, roxithromycin, erythromycin