Effect of Antiangiogenic Agents on Experimental Animal Models of Hepatocellular Carcinoma

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Abstract

A new therapeutic strategy for treating metastasis in hepatocellular carcinoma (HCC) has entailed the use of antiangiogenic agents such as suramin, BB-94 (Batimastat), TNP-470, and carboxyamido-triazole (CAI, a synthetic inhibitor of non-excitability channels that reversibly inhibits angiogenesis). These agents have been used to treat metastatic model of HCC in nude mouse (LCI-D20 mouse model). The results of these studies are summarized in this paper with emphasis on the inhibitory effects of the drugs on tumour growth, angiogenesis, invasion and metastasis in LCI-D20 mouse models. The results suggest that all of the agents used can significantly inhibit tumour growth, angiogenesis, invasion and metastasis of human HCC in nude mouse models, and may be candidates for the control of recurrence and metastasis after HCC resection.


Key words: Angiogenesis, Antiangiogenesis, Hepatocellular carcinoma (HCC), Invasion, Metastasis