



### Letter to the Editor:

## Growing role of CD40 ligand gene transfer therapy in the management of systemic malignancies besides hepatocellular carcinomas<sup>#</sup>

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The article "Cationic liposome-mediated transfection of CD40 ligand gene inhibits hepatic tumor growth of hepatocellular carcinoma in mice" [doi:10.1631/jzus.B0820178] by Jiang *et al.* (2009) in a recent issue of the *Journal of Zhejiang University SCIENCE B* was highly thought provoking. The authors have clearly demonstrated the efficacy of CD40 ligand gene therapy in inhibiting the growth of hepatocellular carcinomas. The findings of Jiang *et al.* (2009) are highly important as they further support and corroborate the rapidly expanding role of CD40 ligand gene therapy in the management of systemic malignancies besides hepatocellular carcinomas.

For instance, CD40 ligand gene transfer into cutaneous dendritic cells attenuates tumor growth in dermatological malignancies such as squamous cell carcinoma cell lines (Tomihara *et al.*, 2008). Similar attenuation of tumor growth in gastrointestinal tumors, such as pancreatic carcinomas, has been achieved following CD40 ligand gene therapy (Serba *et al.*, 2008; Kuhlmann *et al.*, 2008). CD40 ligand gene transfection by using adenoviruses has also been successfully used for regressing tumor growth in pulmonary carcinomas (Wu *et al.*, 2007). CD40 ligand gene transfection has also been used in controlling tumor growth in other systemic malignancies. For instance, urological cancer cell lines, such as the TRAMP-C2 (prostate carcinoma) cell line, show attenuated tumor growth and size following CD40

ligand gene therapy (Dzójic *et al.*, 2006).

The above examples have clearly highlighted the importance of the findings of Jiang *et al.* (2009). Clearly, CD40 ligand gene therapy has a major role to play in the control and management of systemic malignancies and may prove to be a major tool in medicine.

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<sup>#</sup> The authors of the paper (Jiang *et al.*, 2009) were invited to reply to this Letter to the Editor, but they did not respond