



## ATRA inhibits experimental liver metastasis of gastric cancer cells in nude mice

Yu-Qiang Chen, Qiao Wu, Zheng-Ming Chen, Fu Chen, Wen-Jin Su

Yu-Qiang Chen, Qiao Wu, Zheng-Ming Chen, Wen-Jin Su, State Lab for Tumor Cell Engineering of Xiamen University, Xiamen 361005, Fujian Province, China

Yu-Qiang Chen, Department of General Surgery, Chinese PLA 174<sup>th</sup> Hospital Xiamen 361003, Fujian Province, China

Fu Chen, Cancer Research Center of Xiamen University, Xiamen 361005, Fujian Province, China

Author contributions: All authors contributed equally to the work.

Supported by the Natural Science Foundation of Fujian Province, No. C96002

Correspondence to: Dr. Yu-Qiang Chen, Department of General Surgery, Chinese PLA 174<sup>th</sup> Hospital, Xiamen 361003, Fujian Province, China  
Telephone: +86-592-2040931  
Fax: +86-592-2040931

Received: November 16, 1999

Revised: April 2, 2000

Accepted: May 16, 2000

Published online: September 15, 2000

### Abstract

**AIM:** To study the effects of ATRA on experimental liver metastasis of gastric cancer cells.

**METHODS:** MGc80-3 and SGC-7901 cells were injected into

spleen subcapsule of nude mice, who were subsequently administrated with ATRA every other day. Food intake and body weight of mice were measured weekly. After six weeks, the nude mice were executed, tumors in spleen and liver were examined pathologically, microtumor vessel density (MVD) was accounted by immunohistochemical method and serum CEA was measured by radioimmunoassay.

**RESULTS:** Nude mice administrated with ATRA, the growth of spleen tumor and its metastatic ability to liver were inhibited, the metastatic rate was decreased by 33.3% (MGc80-3) and 50.0% (SGC-7901). Spleen MVD and liver MVD were reduced by 28.6% and 22.9% (MGc80-3), 23.7% and 37.6% (SGC-7901), respectively. The serum CEA was lowered by 43.4% (MGc80-3).

**CONCLUSION:** ATRA can effectively inhibit the experimental liver metastasis of gastric cancer cells, which is relevant with the decrease of MVD and CEA.

**Key words:** Stomach neoplasms; Tretinoin; Liver neoplasms; Liver metastasis; Immunohistochemistry; Mice, nude

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Chen YQ, Wu Q, Chen ZM, Chen F, Su WJ. ATRA inhibits experimental liver metastasis of gastric cancer cells in nude mice. *World J Gastroenterology* 2000; 6(Suppl 3): 113 Available from: URL: <http://www.wjgnet.com/1007-9327/full/v3/iSuppl3/113.htm> DOI: <http://dx.doi.org/10.3748/wjg.v3.iSuppl3.113>

E- Editor: Hu S



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