Title	The association of chromosome 8p deletion and tumor metastasis in human hepatocellular carcinoma
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Citation	The 49th Annual Meeting of the American Society of Human Genetics, San Francisco, California, USA, 19-23 October 1999
Issued Date	1999
URL	http://hdl.handle.net/10722/57186
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Program Nr: 686 from the 1999 ASHG Annual Meeting

The Association of Chromosome 8p Deletion and Tumor Metastasis in Human Hepatocellular Carcinoma. *X.-Y. Guan[1], L.-X. Qin[2], Z.-Y. Tang[2], J.S.T. Sham[1], Z.-C. Ma[2], S.-L. Ye[2], X.-D. Zhou[2], Z.-Q. Wu[2], J.M. Trent[3]*. 1) Clinical Nocology, University of Hong Kong, Hong Kong, P.R.China; 2) Liver Cancer Institute, Shanghai Medical University, Shanghai, P.R. China; 3) Cancer Genetics Branch, NHGRI, NIH, Bethesda, MD.

To understand the genetic mechanisms underlying the progression of hepatocellular carcinoma (HCC) metastasis, differences of genomic alterations between 10 pairs of primary HCC tumors and their matched metastatic lesions were analyzed by comparative genomic hybridization (CGH). Several genomic alterations including loss of 8p, 4q, 17p, and 19p, gain of 5p and high-level amplification of 1q12-q22 were detected in two or more cases. The most significant finding is the loss of 8p which was detected in 8 metastatic tumors but only in 3 corresponding primary tumors (p=0.03). This result suggests that the deletion of chromosome 8p might contribute to the development of HCC metastasis. Another interesting finding is the detection of a minimum amplification region at 1q12-q22 in HCC. This result provides a candidate amplification region in HCC for further study to identify amplified oncogenes related to the development or progression of HCC. Finally, this study provides a practicable model to detect specific genetic alterations related to the tumor metastasis through comparing the primary tumor and its corresponding metastatic lesion using CGH technique. Finally, this study provides a practicable model to detect specific genetic alterations related to the tumor metastasis through comparing the primary tumor and its corresponding metastatic lesion using CGH technique.