

## **Molecular/Genetic Analysis of Liver Cancer**

**1**

Chen CF. Yeh SH. Chen DS. Chen PJ. Jou YS., "Molecular genetic evidence supporting a novel human hepatocellular carcinoma tumor suppressor locus at 13q12.11," *Genes, Chromosomes & Cancer*. 44(3):320-8, 2005 Nov.

**2**

Zhang SH. Cong WM. Xian ZH. Wu MC., "Clinicopathological significance of loss of heterozygosity and microsatellite instability in hepatocellular carcinoma in China," *World Journal of Gastroenterology*. 11(20):3034-9, 2005 May 28.

**3**

Tischhoff I. Markwarth A. Witzigmann H. Uhlmann D. Hauss J. Mirmohammadsadegh A. Wittekind C. Hengge UR. Tannapfel A.  
"Allele loss and epigenetic inactivation of 3p21.3 in malignant liver tumors," *International Journal of Cancer*. 115(5):684-9, 2005 Jul 10.

**4**

Lin YW. Lee HS. Chen CH. Huang GT. Lee PH. Sheu JC., "Clonality analysis of multiple hepatocellular carcinomas by loss of heterozygosity pattern determined by chromosomes 16q and 13q," *Journal of Gastroenterology & Hepatology*. 20(4):536-46, 2005 Apr.

**5**

Kremer-Tal S. Reeves HL. Narla G. Thung SN. Schwartz M. Difeo A. Katz A. Bruix J. Bioulac-Sage P. Martignetti JA. Friedman SL., "Frequent inactivation of the tumor suppressor Kruppel-like factor 6 (KLF6) in hepatocellular carcinoma," *Hepatology*. 40(5):1047-52, 2004 Nov.

**6**

Yeh SH. Lin MW. Lu SF. Wu DC. Tsai SF. Tsai CY. Lai MY. Hsu HC. Chen DS. Chen PJ., "Allelic loss of chromosome 4q21 approximately 23 associates with hepatitis B virus-related hepatocarcinogenesis and elevated alpha-fetoprotein," *Hepatology* 40(4):847-54, 2004 Oct.

**7**

Nagai H. Terada Y. Tajiri T. Yabe A. Onda M. Nagahata T. Ezura Y. Minegishi M. Horiguchi M. Baba M. Konishi N. Emi M., "Characterization of liver-cirrhosis nodules by analysis of gene-expression profiles and patterns of allelic loss," *Journal of Human Genetics*. 49(5):246-55, 2004.

**8**

Kondo M. Marusawa H. Ueda Y. Katsurada A. Kawasome C. Takami S. Kinoshita M. Ikai I. Yamaoka Y. Chiba T., "Diverse p53 gene aberration in hepatocellular carcinoma detected by dual-color fluorescence in situ hybridization," *Journal of Gastroenterology & Hepatology*. 19(9):1066-73, 2004 Sep.

**9**

Park SW. Ludes-Meyers J. Zimonjic DB. Durkin ME. Popescu NC. Aldaz CM, "Frequent downregulation and loss of WWOX gene expression in human hepatocellular carcinoma," *British Journal of Cancer*. 91(4):753-9, 2004 Aug 16.

**10**

Cazals-Hatem D. Rebouissou S. Bioulac-Sage P. Bluteau O. Blanche H. Franco D. Monges G. Belghiti J. Sa Cunha A. Laurent-Puig P. Degott C. Zucman-Rossi J., "Clinical and molecular analysis of combined hepatocellular-cholangiocarcinomas," *Journal of Hepatology*. 41(2):292-8, 2004 Aug.

**11**

Zhu GN. Zuo L. Zhou Q. Zhang SM. Zhu HQ. Gui SY. Wang Y., "Loss of heterozygosity on chromosome 10q22-10q23 and 22q11.2-22q12.1 and p53 gene in primary hepatocellular carcinoma," *World Journal of Gastroenterology*. 10(13):1975-8, 2004 Jul 1.

**12**

Feitelson MA. Pan J. Lian Z., "Early molecular and genetic determinants of primary liver malignancy," *Surgical Clinics of North America*. 84(2):339-54, 2004 Apr.

**13**

Anzola M. Cuevas N. Lopez-Martinez M. Saiz A. Burgos JJ. Martinez de Pancorboa M., "P14ARF gene alterations in human hepatocellular carcinoma," *European Journal of Gastroenterology & Hepatology*. 16(1):19-26, 2004 Jan.

**14**

Xiao WH. Liu WW, "Hemizygous deletion and hypermethylation of RUNX3 gene in hepatocellular carcinoma," *World Journal of Gastroenterology*. 10(3):376-80, 2004 Feb 1.

**15**

Aoki T. Miyamoto A. Marubashi S. Nagano H. Umeshita K. Fujiwara Y. Dono K. Nakamori S. Sakon M. Monden M., "Clinical value of alterations in p73 gene, related to p53 at 1p36, in human hepatocellular carcinoma," *International Journal of Oncology*. 24(2):441-6, 2004 Feb.

**16**

Kim CJ. Cho YG. Park JY. Kim TY. Lee JH. Kim HS. Lee JW. Song YH. Nam SW. Lee SH. Yoo NJ. Lee JY. Park WS., "Genetic analysis of the LKB1/STK11 gene in hepatocellular carcinomas," *European Journal of Cancer*. 40(1):136-41, 2004 Jan.

**17**

Hellerbrand C. Poppl A. Hartmann A. Scholmerich J. Lock G., "HFE C282Y heterozygosity in hepatocellular carcinoma: evidence for an increased prevalence," *Clinical Gastroenterology & Hepatology*. 1(4):279-84, 2003 Jul.

**18**

Wong CM. Lee JM. Ching YP. Jin DY. Ng IO, "Genetic and epigenetic alterations of DLC-1 gene in hepatocellular carcinoma," *Cancer Research*. 63(22):7646-51, 2003 Nov 15.

**19**

Niu Q. Tang ZY. Qin LX. Ma ZC. Zhang LH., "Loss of heterozygosity at D14S62 and D14S51 detected by a simple and non-radioactive method in plasma DNA is a potential marker of metastasis and recurrence after curative hepatic resection in hepatocellular carcinoma," *Hepato-Gastroenterology*. 50(53):1579-82, 2003 Sep-Oct.

**20**

Koo SH. Ihm CH. Kwon KC. Lee JS. Park JW. Kim JW., "Microsatellite alterations in hepatocellular carcinoma and intrahepatic cholangiocarcinoma," *Cancer Genetics & Cytogenetics*. 146(2):139-44, 2003 Oct 15.

**21**

Morimoto O. Nagano H. Sakon M. Fujiwara Y. Yamada T. Nakagawa H. Miyamoto A. Kondo M. Arai I. Yamamoto T. Ota H. Dono K. Umeshita K. Nakamori S. Sasaki Y. Ishikawa O. Imaoka S. Monden M., "Diagnosis of intrahepatic metastasis and multicentric carcinogenesis by microsatellite loss of heterozygosity in patients with multiple and recurrent hepatocellular carcinomas," *Journal of Hepatology*. 39(2):215-21, 2003 Aug.

**22**

Ho MK. Lee JM. Chan CK. Ng IO., "Allelic alterations in nontumorous liver tissues and corresponding hepatocellular carcinomas from chinese patients," *Human Pathology*. 34(7):699-705, 2003 Jul.

**23**

Marsh JW. **Finkelstein SD**. Demetris AJ. Swalsky PA. Sasatomi E. Bandos A. Subotin M. Dvorchik I., "Genotyping of hepatocellular carcinoma in liver transplant recipients adds predictive power for determining recurrence-free survival," *Liver Transplantation*. 9(7):664-71, 2003 Jul.

**24**

Anzola M. Cuevas N. Lopez-Martinez M. Saiz A. Burgos JJ. de Pancorbo MM., "Frequent loss of p53 codon 72 Pro variant in hepatitis C virus-positive carriers with hepatocellular carcinoma," *Cancer Letters*. 193(2):199-205, 2003 Apr 25.

**25**

Kahng YS. Lee YS. Kim BK. Park WS. Lee JY. Kang CS., "Loss of heterozygosity of chromosome 8p and 11p in the dysplastic nodule and hepatocellular carcinoma," *Journal of Gastroenterology & Hepatology*. 18(4):430-6, 2003 Apr.

**26**

Ching YP. Wong CM. Chan SF. Leung TH. Ng DC. Jin DY. Ng IO., "Deleted in liver cancer (DLC) 2 encodes a RhoGAP protein with growth suppressor function and is underexpressed in hepatocellular carcinoma," *Journal of Biological Chemistry*. 278(12):10824-30, 2003 Mar 21.

**27**

Gross-Goupil M. Riou P. Emile JF. Saffroy R. Azoulay D. Lacherade I. Receveur A. Piatier-Tonneau D. Castaing D. Debuire B. Lemoine A., "Analysis of chromosomal instability in pulmonary or liver metastases and matched primary hepatocellular carcinoma after orthotopic liver transplantation," *International Journal of Cancer*. 104(6):745-51, 2003 May 10.

**28**

Ng IO. Guan XY. Poon RT. Fan ST. Lee JM., "Determination of the molecular relationship between multiple tumour nodules in hepatocellular carcinoma differentiates multicentric origin from intrahepatic metastasis," *Journal of Pathology*. 199(3):345-53, 2003 Mar.

**29**

Tseng TL. Shih YP. Huang YC. Wang CK. Chen PH. Chang JG. Yeh KT. Chen YM. Buetow KH., "Genotypic and phenotypic characterization of a putative tumor susceptibility gene, GNMT, in liver cancer," *Cancer Research*. 63(3):647-54, 2003 Feb 1.

**30**

Zhao X. He M. Wan D. Ye Y. He Y. Han L. Guo M. Huang Y. Qin W. Wang MW. Chong W. Chen J. Zhang L. Yang N. Xu B. Wu M. Zuo L. Gu J., "The minimum LOH region defined on chromosome 17p13.3 in human hepatocellular carcinoma with gene content analysis," *Cancer Letters*. 190(2):221-32, 2003 Feb 20.

**31**

Matsuo K. Satoh S. Okabe H. Nomura A. Maeda T. Yamaoka Y. Ikai I., "SIAH1 inactivation correlates with tumor progression in hepatocellular carcinomas," *Genes, Chromosomes & Cancer*. 36(3):283-91, 2003 Mar.

**32**

Guan XY. Sham JS. Tai LS. Fang Y. Li H. Liang Q., "Evidence for another tumor suppressor gene at 17p13.3 distal to TP53 in hepatocellular carcinoma," *Cancer Genetics & Cytogenetics*. 140(1):45-8, 2003 Jan 1.

**33**

Pan H. Liao SJ. Lai WY. Lu HC. Hsiao KM., "Overexpression but lack of mutation and methylation of p73 in hepatocellular carcinoma," *Acta Oncologica*. 41(6):550-5, 2002.

**34**

Leung TH. Wong N. Lai PB. Chan A. To KF. Liew CT. Lau WY. Johnson PJ., "Identification of four distinct regions of allelic imbalances on chromosome 1 by the combined comparative genomic hybridization and microsatellite analysis on hepatocellular carcinoma," *Modern Pathology*. 15(11):1213-20, 2002 Nov.

**35**

Bluteau O. Jeannot E. Bioulac-Sage P. Marques JM. Blanc JF. Bui H. Beaudoin JC. Franco D. Balabaud C. Laurent-Puig P. Zucman-Rossi J., "Bi-allelic inactivation of TCF1 in hepatic adenomas," *Nature Genetics*. 32(2):312-5, 2002 Oct.

**36**

Buendia MA., "Genetic alterations in hepatoblastoma and hepatocellular carcinoma: common and distinctive aspects," *Medical & Pediatric Oncology*. 39(5):530-5, 2002 Nov.

**37**

Wei Y. Van Nhieu JT. Prigent S. Srivatanakul P. Tiollais P. Buendia MA., "Altered expression of E-cadherin in hepatocellular carcinoma: correlations with genetic alterations, beta-catenin expression, and clinical features," *Hepatology*. 36(3):692-701, 2002 Sep.

**38**

Nagai H. Kim YS. Konishi N. Baba M. Kubota T. Yoshimura A. Emi M., "Combined hypermethylation and chromosome loss associated with inactivation of SSI-1/SOCS-1/JAB gene in human hepatocellular carcinomas," *Cancer Letters*. 186(1):59-65, 2002 Dec 1.

**39**

Wong CM. Lee JM. Lau TC. Fan ST. Ng IO., "Clinicopathological significance of loss of heterozygosity on chromosome 13q in hepatocellular carcinoma," *Clinical Cancer Research*. 8(7):2266-72, 2002 Jul.

**40**

Chan KL. Lee JM. Guan XY. Fan ST. Ng IO., "High-density allelotyping of chromosome 8p in hepatocellular carcinoma and clinicopathologic correlation," *Cancer*. 94(12):3179-85, 2002 Jun 15.

**41**

Taniguchi K. Roberts LR. Aderca IN. Dong X. Qian C. Murphy LM. Nagorney DM. Burgart LJ. Roche PC. Smith DI. Ross JA. Liu W., "Mutational spectrum of beta-catenin, AXIN1, and AXIN2 in hepatocellular carcinomas and hepatoblastomas," *Oncogene*. 21(31):4863-71, 2002 Jul 18.

**42**

Levy L. Renard CA. Wei Y. Buendia MA., "Genetic alterations and oncogenic pathways in hepatocellular carcinoma," *Annals of the New York Academy of Sciences*. 963:21-36, 2002 Jun.

**43**

Chang J. Kim NG. Piao Z. Park C. Park KS. Paik YK. Lee WJ. Kim BR. Kim H., "Assessment of chromosomal losses and gains in hepatocellular carcinoma," *Cancer Letters*. 182(2):193-202, 2002 Aug 28.

**44**

Saffroy R. Riou P. Soler G. Azoulay D. Emile JF. Debuire B. Lemoine A., "Analysis of alterations of WFDC1, a new putative tumour suppressor gene, in hepatocellular carcinoma," *European Journal of Human Genetics*. 10(4):239-44, 2002 Apr.

**45**

Herath NI. Kew MC. Walsh MD. Young J. Powell LW. Leggett BA. MacDonald GA., "Reciprocal relationship between methylation status and loss of heterozygosity at the p14(ARF) locus in Australian and South African hepatocellular carcinomas," *Journal of Gastroenterology & Hepatology*. 17(3):301-7, 2002 Mar.

**46**

Oka Y. Waterland RA. Killian JK. Nolan CM. Jang HS. Tohara K. Sakaguchi S. Yao T. Iwashita A. Yata Y. Takahara T. Sato S. Suzuki K. Masuda T. Jirtle RL., "M6P/IGF2R tumor suppressor gene mutated in hepatocellular carcinomas in Japan," *Hepatology*. 35(5):1153-63, 2002 May.

**47**

Feitelson MA. Sun B. Satiroglu Tufan NL. Liu J. Pan J. Lian Z., "Genetic mechanisms of hepatocarcinogenesis," *Oncogene*. 21(16):2593-604, 2002 Apr 11.

**48**

Nishida N. Fukuda Y. Komeda T. Ito T. Nishimura T. Minata M. Kuno M. Katsuma H. Ikai I. Yamaoka Y. Nakao K., "Prognostic impact of multiple allelic losses on metastatic recurrence in hepatocellular carcinoma after curative resection," *Oncology*. 62(2):141-8, 2002.

**49**

Nita ME. Alves VA. Carrilho FJ. Ono-Nita SK. Mello ES. Gama-Rodrigues JJ., "Molecular aspects of hepatic carcinogenesis," *Revista do Instituto de Medicina Tropical de Sao Paulo*. 44(1):39-48, 2002 Jan-Feb.

**50**

Park WS. Lee JH. Park JY. Jeong SW. Shin MS. Kim HS. Lee SK. Lee SN. Lee SH. Park CG. Yoo NJ. Lee JY., "Genetic analysis of the liver putative tumor suppressor (LPTS) gene in hepatocellular carcinomas," *Cancer Letters*. 178(2):199-207, 2002 Apr 25.

**51**

von Schweinitz D. Kraus JA. Albrecht S. Koch A. Fuchs J. Pietsch T., "Prognostic impact of molecular genetic alterations in hepatoblastoma," *Medical & Pediatric Oncology*. 38(2):104-8, 2002 Feb.

**52**

Hanafusa T. Yumoto Y. Nouse K. Nakatsukasa H. Onishi T. Fujikawa T. Taniyama M. Nakamura S. Uemura M. Takuma Y. Yumoto E. Higashi T. Tsuji T., "Reduced expression of insulin-like growth factor binding protein-3 and its promoter hypermethylation in human hepatocellular carcinoma," *Cancer Letters*. 176(2):149-58, 2002 Feb 25.

**53**

Li SP. Wang HY. Li JQ. Zhang CQ. Feng QS. Huang P. Yu XJ. Huang LX. Liang QW. Zeng YX, "Genome-wide analyses on loss of heterozygosity in hepatocellular carcinoma in Southern China," *Journal of Hepatology*. 34(6):840-9, 2001 Jun.

**54**

Sun M. Eshleman JR. Ferrell LD. Jacobs G. Sudilovsky EC. Tuthill R. Hussein MR. Sudilovsky O., "An early lesion in hepatic carcinogenesis: loss of heterozygosity in human cirrhotic livers and dysplastic nodules at the 1p36-p34 region," *Hepatology*. 33(6):1415-24, 2001 Jun.

**55**

Laurent-Puig P. Legoix P. Bluteau O. Belghiti J. Franco D. Binot F. Monges G. Thomas G. Bioulac-Sage P. Zucman-Rossi J., "Genetic alterations associated with hepatocellular carcinomas define distinct pathways of hepatocarcinogenesis," *Gastroenterology*. 120(7):1763-73, 2001 Jun.

**56**

Matsumura T. Makino R. Mitamura K., "Frequent down-regulation of E-cadherin by genetic and epigenetic changes in the malignant progression of hepatocellular carcinomas," *Clinical Cancer Research*. 7(3):594-9, 2001 Mar.

**57**

Cong WM. Bakker A. Swalsky PA. Raja S. Woods J. Thomas S. Demetris AJ. Finkelstein SD, "Multiple genetic alterations involved in the tumorigenesis of human cholangiocarcinoma: a molecular genetic and clinicopathological study," *Journal of Cancer Research & Clinical Oncology*. 127(3):187-92, 2001.

**58**

Balsara BR. Pei J. De Rienzo A. Simon D. Tosolini A. Lu YY. Shen FM. Fan X. Lin WY. Buetow KH. London WT. Testa JR., "Human hepatocellular carcinoma is characterized by a highly consistent pattern of genomic imbalances, including frequent loss of 16q23.1-24.1," *Genes, Chromosomes & Cancer*. 30(3):245-53, 2001 Mar.

**59**

Shao J. Li Y. Li H. Wu Q. Hou J. Liew C., "Deletion of chromosomes 9p and 17 associated with abnormal expression of p53, p16/MTS1 and p15/MTS2 gene protein in hepatocellular carcinomas," *Chinese Medical Journal*. 113(9):817-22, 2000 Sep.

**60**

Wang G. Huang CH. Zhao Y. Cai L. Wang Y. Xiu SJ. Jiang ZW. Yang S. Zhao T. Huang W. Gu JR., "Genetic aberration in primary hepatocellular carcinoma: correlation between p53 gene mutation and loss-of-heterozygosity on chromosome 16q21-q23 and 9p21-p23," *Cell Research*. 10(4):311-23, 2000 Dec.

**b**

Lee TJ. Bae JJ. Lee JS. Lee SY. Kim HJ. Kim SK. Lee JY. Lee TY., "Abrogation of the p16-Rb pathway in Korean hepatocellular carcinomas," *Hepato-Gastroenterology*. 47(36):1663-8, 2000 Nov-Dec.

**62**

Yeh KT. Wang NM. Lee HH. Chang JG., "Mutation analysis of the Bcl 10 gene in hepatocellular carcinoma," *Kaohsiung Journal of Medical Sciences*. 16(7):332-8, 2000 Jul.

**63**

Kondo Y. Kanai Y. Sakamoto M. Mizokami M. Ueda R. Hirohashi S., "Genetic instability and aberrant DNA methylation in chronic hepatitis and cirrhosis--A comprehensive study of loss of heterozygosity and microsatellite instability at 39 loci and DNA hypermethylation on 8 CpG islands in microdissected specimens from patients with hepatocellular carcinoma," *Hepatology*. 32(5):970-9, 2000 Nov.

**64**

Maggioni M. Coggi G. Cassani B. Bianchi P. Romagnoli S. Mandelli A. Borzio M. Colombo P. Roncalli M., "Molecular changes in hepatocellular dysplastic nodules on microdissected liver biopsies," *Hepatology*. 32(5):942-6, 2000 Nov.

**65**

Fujii H. Zhu XG. Matsumoto T. Inagaki M. Tokusashi Y. Miyokawa N. Fukusato T. Uekusa T. Takagaki T. Kadowaki N. Shirai T., " Genetic classification of combined hepatocellular-cholangiocarcinoma," *Human Pathology*. 31(9):1011-7, 2000 Sep.

**66**

Liao C. Zhao M. Song H. Uchida K. Yokoyama KK. Li T., "Identification of the gene for a novel liver-related putative tumor suppressor at a high-frequency loss of heterozygosity region of chromosome 8p23 in human hepatocellular carcinoma," *Hepatology*. 32(4 Pt 1):721-7, 2000 Oct.

**67**

Piao Z. Kim H. Malkhosyan S. Park C., "Frequent chromosomal instability but no microsatellite instability in hepatocellular carcinomas," *International Journal of Oncology*. 17(3):507-12, 2000 Sep.

**68**

Fang W. Piao Z. Simon D. Sheu JC. Huang S., "Mapping of a minimal deleted region in human hepatocellular carcinoma to 1p36.13-p36.23 and mutational analysis of the RIZ (PRDM2) gene localized to the region," *Genes, Chromosomes & Cancer*. 28(3):269-75, 2000 Jul.

**69**

Kim H. Lee MJ. Kim MR. Chung IP. Kim YM. Lee JY. Jang JJ., "Expression of cyclin D1, cyclin E, cdk4 and loss of heterozygosity of 8p, 13q, 17p in hepatocellular carcinoma: comparison study of childhood and adult hepatocellular carcinoma," *Liver*. 20(2):173-8, 2000 Apr.

**70**

Kawai H. Suda T. Aoyagi Y. Isokawa O. Mita Y. Waguri N. Kuroiwa T. Igarashi M. Tsukada K. Mori S. Shimizu T. Suzuki Y. Abe Y. Takahashi T. Nomoto M. Asakura H., "Quantitative evaluation of genomic instability as a possible predictor for development of hepatocellular carcinoma: comparison of loss of heterozygosity and replication error," *Hepatology*. 31(6):1246-50, 2000 Jun.

**71**

Teeguarden JG. Newton MA. Dragan YP. Pitot HC., "Genome-wide loss of heterozygosity analysis of chemically induced rat hepatocellular carcinomas reveals elevated frequency of allelic imbalances on chromosomes 1, 6, 8, 11, 15, 17, and 20," *Molecular Carcinogenesis*. 28(1):51-61, 2000 May.

**72**

Okabe H. Ikai I. Matsuo K. Satoh S. Momoi H. Kamikawa T. Katsura N. Nishitai R. Takeyama O. Fukumoto M. Yamaoka Y., "Comprehensive allelotype study of hepatocellular carcinoma: potential differences in pathways to hepatocellular carcinoma between hepatitis B virus-positive and -negative tumors," *Hepatology*. 31(5):1073-9, 2000 May.

**73**

Feo F. Pascale RM. Simile MM. De Miglio MR. Muroli MR. Calvisi D., "Genetic alterations in liver carcinogenesis: implications for new preventive and therapeutic strategies," *Critical Reviews in Oncogenesis*. 11(1):19-62, 2000.

**74**

DaCosta SA. Schumaker LM. Ellis MJ., "Mannose 6-phosphate/insulin-like growth factor 2 receptor, a bona fide tumor suppressor gene or just a promising candidate?," *Journal of Mammary Gland Biology & Neoplasia*. 5(1):85-94, 2000 Jan.

**75**

Chung MY. Wu JC. Chau GY. Lui WY. Tsay SH. Chiang H., "Preferentially deleted chromosome region 9p21 in large hepatocellular carcinomas," *International Journal of Molecular Medicine*. 5(5):521-4, 2000 May.

**76**

Fujiwara Y. Hoon DS. Yamada T. Umeshita K. Gotoh M. Sakon M. Nishisho I. Monden M., "PTEN / MMAC1 mutation and frequent loss of heterozygosity identified in chromosome 10q in a subset of hepatocellular carcinomas," *Japanese Journal of Cancer Research*. 91(3):287-92, 2000 Mar.

**77**

Bando K. Nagai H. Matsumoto S. Koyama M. Kawamura N. Tajiri T. Onda M. Emi M., "Identification of a 1-Mb common region at 16q24.1-24.2 deleted in hepatocellular carcinoma," *Genes, Chromosomes & Cancer*. 28(1):38-44, 2000 May.

**78**

Roncagli M. Bianchi P. Grimaldi GC. Ricci D. Laghi L. Maggioni M. Opocher E. Borzio M. Coggi G., "Fractional allelic loss in non-end-stage cirrhosis: correlations with hepatocellular carcinoma development during follow-up," *Hepatology*. 31(4):846-50, 2000 Apr.

**79**

Gramantieri L. Tere D. Pession A. Piscaglia F. Masi L. Gaiani S. Mazziotti A. Bolondi L., "Allelic imbalance on 16q in small, unifocal hepatocellular carcinoma: correlation with HBV and HCV infections and cellular proliferation rate," *Digestive Diseases & Sciences*. 45(2):306-11, 2000 Feb.

**80**

Yeh KT. Chang JG. Chen YJ. Chen ST. Yu SY. Shih MC. Perng LI. Wang JC. Tsai M. Chang CP., "Mutation analysis of the putative tumor suppressor gene PTEN/MMAC1 in hepatocellular carcinoma," *Cancer Investigation*. 18(2):123-9, 2000.

**81**

Kanai Y. Ushijima S. Tsuda H. Sakamoto M. Hirohashi S., "Aberrant DNA methylation precedes loss of heterozygosity on chromosome 16 in chronic hepatitis and liver cirrhosis," *Cancer Letters*. 148(1):73-80, 2000 Jan 1.

**82**

Tsopanomichalou M. Kouroumalis E. Ergazaki M. Spandidos DA., "Loss of heterozygosity and microsatellite instability in human non-neoplastic hepatic lesions," *Liver*. 19(4):305-11, 1999 Aug.

**83**

Legoix P. Bluteau O. Bayer J. Perret C. Balabaud C. Belghiti J. Franco D. Thomas G. Laurent-Puig P. Zucman-Rossi J., "Beta-catenin mutations in hepatocellular carcinoma correlate with a low rate of loss of heterozygosity," *Oncogene*. 18(27):4044-6, 1999 Jul 8.

**84**

Mihara M. Nimura Y. Ichimiya S. Sakiyama S. Kajikawa S. Adachi W. Amano J. Nakagawara A., "Absence of mutation of the p73 gene localized at chromosome 1p36.3 in hepatocellular carcinoma," *British Journal of Cancer*. 79(1):164-7, 1999 Jan.

**85**

Rashid A. Wang JS. Qian GS. Lu BX. Hamilton SR. Groopman JD., "Genetic alterations in hepatocellular carcinomas: association between loss of chromosome 4q and p53 gene mutations," *British Journal of Cancer*. 80(1-2):59-66, 1999 Apr.

**86**

Piao Z. Kim NG. Kim H. Park C., "Deletion mapping on the short arm of chromosome 8 in hepatocellular carcinoma," *Cancer Letters*. 138(1-2):227-32, 1999 Apr 26.

**87**

Kawamura N. Nagai H. Bando K. Koyama M. Matsumoto S. Tajiri T. Onda M. Fujimoto J. Ueki T. Konishi N. Shiba T. Emi M., "PTEN/MMAC1 mutations in hepatocellular carcinomas: somatic inactivation of both alleles in tumors," *Japanese Journal of Cancer Research*. 90(4):413-8, 1999 Apr.

**88**

Piao Z. Park C. Kim JJ. Kim H., "Deletion mapping of chromosome 16q in hepatocellular carcinoma," *British Journal of Cancer*. 80(5-6):850-4, 1999 May.

**89**

Kusano N. Shiraishi K. Kubo K. Oga A. Okita K. Sasaki K., "Genetic aberrations detected by comparative genomic hybridization in hepatocellular carcinomas: their relationship to clinicopathological features," *Hepatology*. 29(6):1858-62, 1999 Jun.

**90**

Pineau P. Nagai H. Prigent S. Wei Y. Gyapay G. Weissenbach J. Tiollais P. Buendia MA. Dejean A., "Identification of three distinct regions of allelic deletions on the short arm of chromosome 8 in hepatocellular carcinoma," *Oncogene*. 18(20):3127-34, 1999 May 20.

**91**

Hammond C. Jeffers L. Carr Bl. Simon D., "Multiple genetic alterations, 4q28, a new suppressor region, and potential gender differences in human hepatocellular carcinoma," *Hepatology*. 29(5):1479-85, 1999 May.

**92**

Liew CT. Li HM. Lo KW. Leow CK. Lau WY. Hin LY. Lim BK. Lai PB. Chan JY. Wang XQ. Wu S. Lee JC., "Frequent allelic loss on chromosome 9 in hepatocellular carcinoma," *International Journal of Cancer*. 81(3):319-24, 1999 May 5.

**93**

Kanai Y. Hui AM. Sun L. Ushijima S. Sakamoto M. Tsuda H. Hirohashi S., "DNA hypermethylation at the D17S5 locus and reduced HIC-1 mRNA expression are associated with hepatocarcinogenesis," *Hepatology*. 29(3):703-9, 1999 Mar.

**94**

Liew CT. Li HM. Lo KW. Leow CK. Chan JY. Hin LY. Lau WY. Lai PB. Lim BK. Huang J. Leung WT. Wu S. Lee JC., "High frequency of p16INK4A gene alterations in hepatocellular carcinoma," *Oncogene*. 18(3):789-95, 1999 Jan 21.

**95**

Lin YW. Sheu JC. Liu LY. Chen CH. Lee HS. Huang GT. Wang JT. Lee PH. Lu FJ., "Loss of heterozygosity at chromosome 13q in hepatocellular carcinoma: identification of three independent regions," *European Journal of Cancer*. 35(12):1730-4, 1999 Nov.

**96**

Koyama M. Nagai H. Bando K. Ito M. Moriyama Y. Emi M., "Localization of a target region of allelic loss to a 1-cM interval on chromosome 16p.13.13 in hepatocellular carcinoma," *Japanese Journal of Cancer Research*. 90(9):951-6, 1999 Sep.

**97**

Aihara T. Noguchi S. Miyoshi Y. Nakano H. Sasaki Y. Nakamura Y. Monden M. Imaoka S., "Allelic imbalance of insulin-like growth factor II gene expression in cancerous and precancerous lesions of the liver," *Hepatology*. 28(1):86-9, 1998 Jul.

**98**

Yuan BZ. Miller MJ. Keck CL. Zimonjic DB. Thorgeirsson SS. Popescu NC., "Cloning, characterization, and chromosomal localization of a gene frequently deleted in human liver cancer (DLC-1) homologous to rat RhoGAP," *Cancer Research*. 58(10):2196-9, 1998 May 15.

**99**

Piao Z. Park C. Lee JS. Yang CH. Choi KY. Kim H., "Homozygous deletions of the CDKN2 gene and loss of heterozygosity of 9p in primary hepatocellular carcinoma," *Cancer Letters*. 122(1-2):201-7, 1998 Jan 9.

**100**

Chou YH. Chung KC. Jeng LB. Chen TC. Liaw YF., "Frequent allelic loss on chromosomes 4q and 16q associated with human hepatocellular carcinoma in Taiwan," *Cancer Letters*. 123(1):1-6, 1998 Jan 16.

**101**

Piao Z. Park C. Park JH. Kim H., "Allelotype analysis of hepatocellular carcinoma," *International Journal of Cancer*. 75(1):29-33, 1998 Jan 5.

**102**

Piao Z. Choi Y. Park C. Lee WJ. Park JH. Kim H., "Deletion of the M6P/IGF2r gene in primary hepatocellular carcinoma," *Cancer Letters*. 120(1):39-43, 1997 Nov 25.

**103**

Sheu JC., "Molecular mechanism of hepatocarcinogenesis," *Journal of Gastroenterology & Hepatology*. 12(9-10):S309-13, 1997 Oct.

**104**

Tamura S. Nakamori S. Kuroki T. Sasaki Y. Furukawa H. Ishikawa O. Imaoka S. Nakamura Y., "Association of cumulative allelic losses with tumor aggressiveness in hepatocellular carcinoma," *Journal of Hepatology*. 27(4):669-76, 1997 Oct.

**105**

Shiota G. Kishimoto Y. Suyama A. Okubo M. Katayama S. Harada K. Ishida M. Hori K. Suou T. Kawasaki H., "Prognostic significance of serum anti-p53 antibody in patients with hepatocellular carcinoma," *Journal of Hepatology*. 27(4):661-8, 1997 Oct.

**106**

Ashida K. Kishimoto Y. Nakamoto K. Wada K. Shiota G. Hirooka Y. Kamisaki Y. Itoh T. Kawasaki H., "Loss of heterozygosity of the retinoblastoma gene in liver cirrhosis accompanying hepatocellular carcinoma," *Journal of Cancer Research & Clinical Oncology*. 123(9):489-95, 1997.