

[1]陈凯,李中虎,江鹏,等.CD44、CD133和TF与肝癌中门静脉癌栓形成及恶性预后相关[J].第三军医大学学报,2014,36(10):1068-1073.

Chen Kai,Li Zhonghu,Jiang Peng,et al.CD44, CD133 and TF correlate with formation of portal vein tumor thrombus and poor prognosis in patients with hepatocellular carcinoma[J].J Third Mil Med Univ,2014,36(10):1068-1073.

点击

复制

## CD44、CD133和TF与肝癌中门静脉癌栓形成及恶性预后相关 [PDF](#) 分享到:

《第三军医大学学报》[ISSN:1000-5404/CN:51-1095/R] 卷: 36 期数: 2014年第10期 页码: 1068-1073 栏目: 论著 出版日期: 2014-05-30

Title: CD44, CD133 and TF correlate with formation of portal vein tumor thrombus and poor prognosis in patients with hepatocellular carcinoma

作者: [陈凯](#); [李中虎](#); [江鹏](#); [张曦](#); [张玉君](#); [江艳](#); [李晓武](#)  
第三军医大学西南医院全军肝胆外科研究所

Author(s): [Chen Kai](#); [Li Zhonghu](#); [Jiang Peng](#); [Zhang Xi](#); [Zhang Yujun](#); [Jiang Yan](#); [Li Xiaowu](#)

Institute of Hepatobiliary Surgery, Southwest Hospital, Third Military Medical University, Chongqing, 400038, China

关键词: [肝细胞癌](#); [CD44](#); [CD133](#); [组织因子](#); [免疫组织化学](#); [预后](#)

Keywords: [hepatocellular carcinoma](#); [CD44](#); [CD133](#); [tissue factor](#); [immunohistochemistry](#); [prognosis](#)

分类号: R341; R730.43; R735.7

文献标志码: A

摘要: 目的 探讨肝癌干细胞表面标志物CD44、CD133与组织因子(tissue factor, TF)在肝癌组织中的表达及分析其与肝癌临床病理资料及生存预后间的相互关系。方法 应用免疫组化法检测387例肝癌组织中CD44、CD133和TF的表达,比较其表达与肝癌临床病理资料及预后间的关系。结果 ①387例肝癌组织中CD44、CD133和TF的阳性率分别为60.47%、55.81%和65.12%; CD44与CD133双阳性表达(CD44<sup>+</sup>CD133<sup>+</sup>)阳性率41.60%; CD44、CD133和TF三阳性表达(CD44<sup>+</sup>CD133<sup>+</sup>TF<sup>+</sup>)阳性率35.14%; ②CD44、CD133与TF单独阳性表达以及CD44<sup>+</sup>CD133<sup>+</sup>和CD44<sup>+</sup>CD133<sup>+</sup>TF<sup>+</sup>均与肝癌患者门静脉癌栓、TNM分期和Edmendsen分级具显著相关性( $P<0.01$ ); ③CD90、CD44和CD133蛋白表达呈正相关( $P<0.01$ ); ④CD44、CD133和TF阳性组的总生存时间短于阴性组,差异有统计学意义( $P<0.05$ ); CD44<sup>+</sup>CD133<sup>+</sup>组总生存时间短于非CD44<sup>+</sup>CD133<sup>+</sup>组总生存时间及CD44<sup>+</sup>CD133<sup>+</sup>TF<sup>+</sup>组总生存时间短于非CD44<sup>+</sup>CD133<sup>+</sup>TF<sup>+</sup>组,差异均有统计学意义( $P<0.01$ ); ⑤多因素分析门静脉癌栓、TF<sup>+</sup>、CD44<sup>+</sup>CD133<sup>+</sup>和CD44<sup>+</sup>CD133<sup>+</sup>TF<sup>+</sup>是影响肝癌预后的独立危险因素( $P<0.01$ )。结论 CD44、CD133和TF均与门静脉癌栓形成及恶性预后密切相关,可作为判断患者预后的指标。

Abstract: Objective Investigate the expression of CD44, CD133 and tissue factor (TF) and their clinicopathologic significance in hepatocellular carcinoma (HCC).

Methods The expression of CD44, CD133 and TF was detected using

导航/NAVIGATE

[本期目录/Table of Contents](#)

[下一篇/Next Article](#)

[上一篇/Previous Article](#)

工具/TOOLS

[引用本文的文章/References](#)

[下载 PDF/Download PDF\(1080KB\)](#)

[立即打印本文/Print Now](#)

[查看/发表评论/Comments](#)

[导出](#)

统计/STATISTICS

摘要浏览/Viewed 51

全文下载/Downloads 39

[评论/Comments](#)

[RSS](#) [XML](#)

immunohistochemistry in 387 liver tissue samples from HCC patients. We further evaluated the relationship between the expression and clinical pathology and prognosis of HCC. Results The positive expression rates of CD44, CD133 and TF in HCC patients were 60.47%, 55.81%, and 65.12%, respectively. The positive rate of co-expression of CD44 and CD133 (CD44<sup>+</sup> CD133<sup>+</sup>) was 41.60%. The positive rate of co-expression of CD44, CD133 and TF (CD44<sup>+</sup> CD133<sup>+</sup> TF<sup>+</sup>) was 35.14%. Clinical analysis showed that single expression of CD44, CD133 or TF was associated with portal vein tumor thrombus, TNM staging and grading of Edmondson. CD44<sup>+</sup> CD133<sup>+</sup> and CD44<sup>+</sup> CD133<sup>+</sup> TF<sup>+</sup> had the same results ( $P < 0.01$  and  $P < 0.01$ , respectively). The difference of survival rate between CD44-positive and CD44-negative groups was observed, and the CD133-positive and CD133-negative groups as well as the TF-positive and TF-negative groups had the same result ( $P < 0.01$  all). The protein expression CD90, CD44 and CD133 was positively correlated ( $P < 0.01$ ). The total survival time of CD44, CD133 and TF positive groups was shorter than the negative groups and the differences were statistically significant (all  $P < 0.01$ ). The total survival time of CD44<sup>+</sup> CD133<sup>+</sup> group was shorter than that of non-CD44<sup>+</sup> group ( $P < 0.01$ ). The total survival time of CD44<sup>+</sup> CD133<sup>+</sup> TF<sup>+</sup> group was shorter than that of non-CD44<sup>+</sup> CD133<sup>+</sup> TF<sup>+</sup> group and the differences were statistically significant ( $P < 0.01$ ). Multivariate analysis suggested that portal vein tumor thrombus, TF<sup>+</sup>, CD44<sup>+</sup> CD133<sup>+</sup> and CD44<sup>+</sup> CD133<sup>+</sup> TF<sup>+</sup> were the independent risk factors of the prognosis of HCC ( $P < 0.01$  all). Conclusion The positive expression of CD44, CD133 and TF is associated with each other and closely correlated with the formation of portal vein tumor thrombus, indicating the poor prognosis of HCC.

#### 参考文献/REFERENCES:

陈凯, 李中虎, 江鹏, 等. CD44、CD133和TF与肝癌中门静脉癌栓形成及恶性预后相关[J]. 第三军医大学学报, 2014, 36(10): 1068-1073.

#### 相似文献/REFERENCES:

- [1] 宋春丽, 任吉华, 张祯祯, 等. SIRT1基因沉默诱导肝癌细胞老化及其机制[J]. 第三军医大学学报, 2012, 34(19): 1929.  
Song Chunli, Ren Jihua, Zhang Zhenzhen, et al. Silent information regulator 1 gene induces aging of hepatocellular carcinoma cells via p53/p21 pathway[J]. J Third Mil Med Univ, 2012, 34(10): 1929.
- [2] 李建国, 江小杰. 原发性肝癌RUNX3基因启动子区甲基化及其意义[J]. 第三军医大学学报, 2012, 34(19): 1933.  
Li Jianguo, Jiang Xiaojie. Methylation of RUNX3 gene promoter in HCC and its significance[J]. J Third Mil Med Univ, 2012, 34(10): 1933.
- [3] 左国华, 梁平, 李洪艳. 肝细胞癌免疫磁珠的制备及鉴定[J]. 第三军医大学学报, 2005, 27(16): 1700.
- [4] 程晓荣, 杨爱军, 刘燕菲, 等. 前胃泌素、胃泌素、膜联蛋白2对胃癌CD44+细胞增殖和侵袭的影响[J]. 第三军医大学学报, 2012, 34(21): 2171.  
Cheng Xiaorong, Yang Aijun, Liu Yanfei, et al. Effects of progastrin, gastrin and annexin 2 on proliferation and invasion in CD44+ gastric cancer cells[J]. J Third Mil Med Univ, 2012, 34(10): 2171.
- [5] 张小丽, 高建, 贾茜, 等. 肝癌干细胞样细胞的分离及其耐药性受PI3K/Akt通路调节[J]. 第三军医大学学报, 2013, 35(02): 99.  
Zhang Xiaoli, Gao Jian, Jia Qian, et al. Isolation of HCC cancer stem-like cells and chemo-resistance mediated by PI3K/Akt pathway[J]. J Third Mil Med Univ, 2013, 35(10): 99.
- [6] 潘光栋, 严律南, 王新平, 等. RNA干扰逆转肝细胞癌多药耐药[J]. 第三军医大学学报, 2008, 30(01): 35.  
PAN Guang-dong, YAN Lu-nan, WANG Xin-ping, et al. Reversal of multidrug resistance of hepatocellular carcinoma by siRNA/mdr1[J]. J Third Mil Med Univ, 2008, 30(10): 35.
- [7] 谢斌, 唐春, 吴刚, 等. c-Met、MMP-2、MMP-9在肝细胞癌中的表达及临床意义[J]. 第三军医大学学报, 2008, 30(12): 1140.  
XIE Bin, TANG Chun, WU Gang, et al. Expressions and clinical significances of c-Met, MMP-2, MMP-9 in metastasis of human hepatocellular carcinoma: report of 47 cases[J]. J Third Mil Med Univ, 2008, 30(10): 1140.
- [8] 廖翠薇, 邹利光, 卫静, 等. 实验性肝细胞癌SPIO增强MRI及其病理学对照研究[J]. 第三军医大学学报, 2006, 28(01): 38.
- [9] 李静, 沈宜, 杨麟, 等. 小鼠肝癌细胞(H22)源外泌体的体内抗肝癌作用研究[J]. 第三军医大学学报, 2008, 30(19): 1836.  
LI Jing, SHEN Yi, YANG Lin, et al. Antitumor effects of exosomes derived from a mouse hepatoma carcinoma cell line H22

[J].J Third Mil Med Univ,2008,30(10):1836.

[10]吕文平,于学军,董家鸿.根治性肝切除肝细胞癌术后患者肝功能与其预后关系的临床研究[J].第三军医大学学报,2006,28(14):1529.