

# Letter to the Editor

## Comment on: Expressions of MiR-132 in patients with chronic hepatitis B, posthepatitic cirrhosis and hepatitis B virus-related hepatocellular carcinoma

Dear Editor,

Among the most aggressive tumors, liver cancer represents the second cause of death in humans. In support of this statistic, there is an epidemiological study conducted in 2012 with over 700,000 cases of hepatocarcinoma. Moreover, this study highlights a higher incidence in male sex and in the 45-60 age group. The main risk factors in liver cancer are chronic HBV and HCV infections. Furthermore, in the same study, it was elucidated that chronic HBV and HCV infections are primarily responsible for the liver lesion. These biological factors are associated with behavioral risks such as smoking, alcohol and some minor nutritional factors<sup>1,2</sup>. The two HBV and HCV viruses are reported in a total of 87% of cases of liver cancer, with a higher prevalence of HBV<sup>3</sup>. Hepatocarcinoma with HBV etiology firstly passes through a cirrhosis phase, due to an alteration of the hepatocyte replication caused by the virus<sup>4</sup>. In this scenario, the optimization and research of new diagnostic markers for hepatocellular carcinoma, together with therapeutic alternatives with a low toxic content<sup>5-7</sup>, is mandatory. Nowadays, markers such as CEA and CA-19.9 are supported by innovative and potential alterations in miRNAs expression. As already shown in other studies, there is a correlation between miRNAs and different types of cancers. Regarding the innovative markers in liver cancer, Liu et al<sup>8</sup> analyzed miRNA expression levels in patients with liver cirrhosis and hepatocellular carcinoma with chronic HBV infection. The patients were divided into three groups: 44 patients with chronic hepatitis, 42 with liver cirrhosis and 39 with liver cancer. In these three groups, the levels of miR-132 were evaluated. The results showed an inversion of correlation among the miR-132 levels and the progression of the pathology. The miR-132 joins to the other miRNAs already related to hepatocarcinoma such as miR-120<sup>9</sup> and miR-124<sup>10</sup>. The evaluation of these miRNAs as a molecular marker in hepatocarcinoma may represent a new gold standard in diagnostic practices.

### Conflict of interest

The authors declare no conflicts of interest.

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