Reviewer’s report

Title: TRAIL receptor I (DR4) polymorphisms C626G und A638C are associated with an increased risk for hepatocellular carcinoma (HCC) in HCV-infected patients

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Reviewer: Muhammad Idrees

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RE: TRAIL receptor I (DR4) polymorphisms C626G und A638C are associated with an increased risk for hepatocellular carcinoma (HCC) in HCV-infected patients

In this study Christian Körner and colleagues found out that the distribution of C626G and A683C genotypes were not significantly different between healthy controls and HCV-positive patients without HCC. However, DR4 variants 626C and 683A occurred at increased frequencies in patients with HCC. The authors has linked risk of HCC to carriage of the 626C allele and the homozygous 683AA genotype, and the simultaneous presence of the two risk variants was confirmed as independent HCC risk factor by Cox regression analysis (Odds ratio 1.975, 95% CI 1.205-3.236; p=0.007). The authors further reported that HCV viral loads are significantly increased in patients who simultaneously carried both genetic risk factors (2.69 ± 0.36 x 106 IU/ml vs. 1.81 ± 0.23 x 106 IU/ml, p=0.049).

At the end the researchers concluded that the increased prevalence of patients with a 626C allele and the homozygous 683 AA genotype in HCV-infected patients with HCC suggests that these genetic variants are a risk factor for HCC in chronic hepatitis C.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests: I declare that I have no competing interests