

Is rs8099917 Polymorphism of IL-28B gene a good predictor of response to therapy of HCV than rs12979860? An Egyptian study

Olfat Shaker¹, Amal Rashad¹, Ghada Abd El Aziz² and Maysa El-Razki¹

¹Cairo University, Egypt

²Beni Suef University, Egypt

Hepatitis C virus (HCV) infection is the major etiology of chronic liver disease. Polymorphisms in the IL28B gene region are important in predicting outcome following therapy for chronic hepatitis C virus infection.

The aim of this study was to detect the relationship between IL28B polymorphism and responses to therapy in patients infected with genotype 4. This study included one hundred chronic hepatitis C patients infected with genotype 4, received PEG-IFN α 2b plus ribavirin for 24 weeks, as well as, 20 healthy subjects serving as control. Clinical and laboratory parameters, including genetic variation near the IL28B gene (rs8099917 and rs12979860), were assessed. The results of this study showed significant difference between responders and non responders as regard SNPs in the interleukin 28B gene at (rs8099917 and rs12979860). In rs8099917, TT genotypes had more frequency in responders than GG genotypes. On the other hand, CC genotype in rs12979860 had more frequency in responders than TT genotype. By multiple regression analysis, rs8099917 (TT), total bilirubin, and prothrombin time were independent factors affecting the response to treatment. This results demonstrate that in HCV genotype 4-infected patients, rs12979860 (CC) and rs8099917 (TT) genotypes may identify patients who are likely to respond to treatment. IL28B SNPs are good predictors of response to combination therapy of HCV.

olfatshaker@yahoo.com