

WWOX rs11644322 Polymorphism, Gemcitabine, and Pancreatic Cancer

Sir,

The pancreatic cancer is a deadly gastrointestinal cancer. The treatment by chemotherapy is a present cancer therapy

option. Gemcitabine is widely used for the management of pancreatic cancer.^[1] The effect of genetic underlying factor in response to gemcitabine is interesting. Schirmer

et al. reported that “WVOX rs11644322 represents a major predictive factor in gemcitabine-treated pancreatic cancer. Decreased WVOX expression may interfere with gemcitabine sensitivity.”^[2] Schirmer *et al.* found that the survival period of the patients decreased in order if they present GG, GA, and AA genotypes, respectively.^[2] Here, the authors would like to discuss on the finding based on the quantum medicine calculation as previously reported in referenced publications.^[3-5]

Theoretically, the three genotypes can be successfully expressed, but there will be the difference in degree of expression based on the starting molecular component. In translation, the final amount of product will vary on the variation on molecular weight of genetic component. From calculation, the molecular weight will be $N + 302.26$, $N + 286.26$, and $N + 270.28$, where N is the molecular weight of other nucleotides apart from the variant point, for GG, GA, and AA genotypes, respectively. It can be seen that the variation AA has the lowest amount of starting molecular component; hence, it might result in the lowest amount of final product which further implies the lowest amount of successful bringing of derived translated product and drug, gemcitabine.

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Conflicts of interest

There are no conflicts of interest.

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