

Biostatistics statement

Manuscript title:

The proportion of acetyl-histone-positive hepatocytes indicates the function status and prognosis of cirrhotic patients (ESPS Manuscript NO: 14687)

Authors:

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The statistical methods of this study were reviewed by Hong Feng from West China Hospital, Sichuan University. The statistical analyses in this study were performed with SPSS16.0 software for Windows. Kruskal-Wallis Test was used to compare the liver function and the proportions of acetyl-histone positive hepatocytes among the cases in different CTP grades. Correlations among parameters of liver function, hepatocytic positive proportions of acetyl-histones and patients' CTP grade were evaluated by Spearman correlation test. In a univariate survival analysis, the Kaplan-Meier method was used to calculate survival rates and to identify significant prognostic variables. The significance of the data was determined by the log-rank test. In a multivariate survival analysis, the COX proportional hazard regression model was used to identify independent prognostic variables for overall survival (OS). A series of variables including age, gender, CTP grade, ascites status, positive proportions of

acetyl-histone markers were considered for inclusion in the multivariate logistic regression analysis to identify independent factors to predict mortality. The prognostic effect of different variables was expressed with the hazard ratio (HR) and 95% confidence interval (95% CI). All tests were two-tailed, and a *P* value <0.05 was considered statistically significant.

A handwritten signature in black ink that reads "Jeng Hong". The letters are cursive and connected, with a large initial 'J' and 'H'.

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