Recombinant Mutated Human TNF in Combination with Chemotherapy for Stage IIIB/IV Non-Small Cell Lung Cancer: A Randomized, Phase III Study

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The proportional hazard assumption test

Method

The proportional hazard assumptions of the data were tested using the log-log survivor plot¹. The log-log survivor plot is a plot defining log (-log S (t)) as the vertical axis, and log t as the horizontal axis, where t denotes study time, S (t) denotes survival rate in the Kaplan-Meier analysis. In this test, the proportional hazard assumption has not been violated if the plotted lines for a given independent variable are reasonably parallel.

Results

According to the data in Kaplan-Meier analysis, the log-log survivor plots of overall

survival (Fig. S A) and progression free survival (Fig. S B) for all of 529 patients were plotted. The plotted lines in the study period are approximately parallel. Therefore, the proportional hazard assumption for our data set was valid and the proportional hazards model (Cox regression) could be used for analysis.

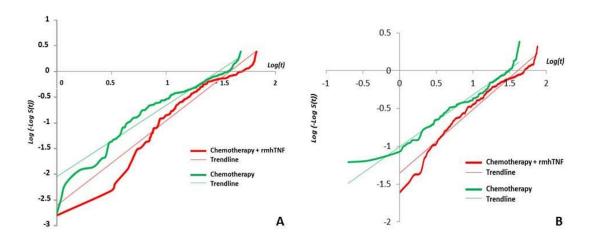


Figure S. The log-log survivor plots of the proportional hazard assumption test. t denotes study time, S (t) denotes survival rate in the Kaplan-Meier analysis. (A) The log-log survivor plot for the overall survival analysis. (B) The log-log survivor plot for the progression free survival analysis.

Reference

 Shenyang Guo. Survival Analysis (ed. Tony Tripodi) Ch. 4, 82-82 (Oxford University Press, 2010).