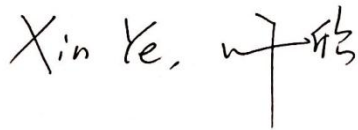


### Biostatistics statement

Statistical analysis was performed using SPSS 22.0 software (IBM Corp., Armonk NY). The  $\chi^2$  test was used to analyze categorical data, and Student's t test was used for continuous data. Propensity score matching was used to match covariates between the two groups. All patients in the research group were matched 1:1 to those in the control group by nearest neighbor matching. A caliper was used to define the maximum allowable difference (0.3) between two participants to ensure good matches. The Kaplan–Meier method was used to create a survival curve, and the log-rank test was used to detect differences between the two groups. All statistical tests were two-sided, and  $P < 0.05$  was considered statistically significant.

The statistical analysis was reviewed and approved by Dr. Li Zhou, who is the experienced scientific researcher in the laboratory of our department publishing several articles in SCI journals and is an expert to perform such statistical analysis.

Dr. Xin Ye 叶欣

Handwritten signature of Xin Ye in black ink, consisting of the name 'Xin Ye' followed by Chinese characters '叶欣'.

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