

## **Certificate of Biostatistics**

13 December 2019

To whom it may concern

Title of Study: Bacterial Infection triggers and complicates Acute-on-chronic Liver Failure in Patients with HBV-Decompensated Cirrhosis: a retrospective-cohort study

Chief investigator: Qing Xie M.D., Ph.D., Department of Infectious Diseases, Ruijin Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, 200025, China; Tel: +86 21 64370045 x 680403, Fax: +86 21 6445 4930, E-mail: xieqingrjh@163.com

This letter is to confirm that I have prepared the ethics application and the statistical analysis plan for this study. I am responsible for all the statistical analysis in the current study and in my opinion the statistical methods and techniques mentioned are appropriate for the research.

Please contact me if you have queries

Sincerely,

Name: Zhujun Cao

Signature: *Zhujun Cao*

Zhujun M.D., Ph.D.,

Department of Infectious Diseases,

Ruijin Hospital, School of Medicine, Shanghai Jiaotong University

Email: estherlucifer@163.com

Telephone: +86 15216652990