

**Additional file 1: List of participating centers of the randomized controlled trial  
NCT05307913**

**Lead trial center: Chinese Academy of Medical Sciences, Peking Union Medical College, Peking  
Union Medical College Hospital**

**Person in charge: Professor Yun Long, Department of Critical Care Medicine, Peking Union  
Medical College Hospital**

**Trial Coordinator: Huaiwu He, Department of Critical Care Medicine, Peking Union Medical  
College Hospital**

Participating trial Centers: Beijing Friendship Hospital Affiliated to Capital Medical University, Beijing, China; Beijing Hospital, Beijing, China; West China Hospital of Sichuan University, Chengdu, China; China-Japan Friendship Hospital, Beijing, China; Department of Critical Care Medicine, The Second Hospital of Jilin University, Changchun, China; Chongqing People's Hospital, Chongqing, China; Tongchuan People's Hospital, Tongchuan, China; SIR Run Run Shaw Hospital Zhejiang University School of Medicine, Hangzhou, China; Beijing Chaoyang Hospital Affiliated to Capital Medical University, Beijing, China; Union Hospital Affiliated to Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China; Tianjin Third Central Hospital, Tianjin, China; Second Affiliated Hospital of Kunming Medical University, Kunming, China; Sichuan Provincial People's Hospital, Chengdu, China; Hunan Provincial People's Hospital, Changsha, China; Ruijin Hospital, Shanghai Jiaotong University School of Medicine, Shanghai, China; Shandong Provincial Public Health Clinical Center, Jinan, China; Dong'e County People's Hospital, Dong'e, China; Shenzhen Third People's Hospital, Shenzhen, China; The First Affiliated Hospital of University of South China, Hengyang, China; Third Medical Center, Chinese PLA General Hospital, Beijing, China; First Medical Center, PLA General Hospital, Beijing, China; Qinghai Provincial People's Hospital, Xining, China; Beijing Luhe Hospital, Capital Medical University, Beijing, China; Shengjing Hospital of China Medical University, Shenyang, China; Far Eastern Memorial Hospital, Taiwan, China; The Fourth Affiliated Hospital of Anhui Medical University, Hefei, China; Xi'an Daxing Hospital, Xi'an, China; Tianjin Hospital, Tianjin, China.