

SUPPLEMENTAL MATERIAL

Appendix S1. ChiOTEAF Registry Investigators

Academic Executive Steering Committee

Gregory Y H Lip, MD, Liverpool Centre for Cardiovascular Science, University of Liverpool and Liverpool Heart & Chest Hospital, Liverpool, United Kingdom (Co-Chair)

Xiaoying Li, MD, PhD, Department of Geriatric Cardiology, Chinese PLA General Hospital, Beijing, China (Co-Chair)

Yutang Wang, MD, PhD, Department of Geriatric Cardiology, Chinese PLA General Hospital, Beijing, China (Co-Chair)

Changsheng Ma, MD, PhD, Department of Cardiology, Center for Atrial Fibrillation, Beijing Anzhen Hospital, Capital Medical University, Beijing, China

Shu Zhang, MD, PHD, Fuwai Hospital, Chinese Academy of Medical Sciences, Beijing, China

Congxin Huang, MD, PHD, RenMin Hospital, Wuhan University, Wuhan, China

Jiefu Yang, MD, PhD, Department of Cardiology, Beijing Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China.

Meilin Liu, Department of Geriatrics, Peking University First Hospital, Beijing, China

Data Management Committee

Gregory Y H Lip, MD, Liverpool Centre for Cardiovascular Science, University of Liverpool and Liverpool Heart & Chest Hospital, Liverpool, United Kingdom

Yutao Guo, MD, PhD, Department of Pulmonary Vessel and Thrombotic Disease, Sixth Medical Centre, Chinese PLA General Hospital, Beijing, China

Guangliang Shan, PhD, Department of Epidemiology and Statistics, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences and School of Basic Medicine, Peking Union Medical College, Beijing, China

Taixiang Wu, MD, PhD, Administrator of Chinese Clinical Trial Registry, Associate Professor of Clinical Epidemiology and Evidence-Based Medicine, West China Hospital, Sichuan University

Chen Yao, PhD, Associate Director, Peking University Clinical Research Institute, Beijing, China

Steering Committee Members

Changsheng Ma, MD, PhD Anzhen Hospital, Capital Medical University, Beijing

Congchun Huang, MD, PhD Air Force General Hospital, Beijing

Cuntai Zhang, MD, PhD Tongji Hospital, Tongji Medical college, Huazhong
University of Science & Technology, Guangzhou

Dang Aiming, MD, PhD Fuwai Hospital, Chinese Academy of Medical Sciences,
Beijing

Dawei Qian, MD, PhD Ji Lin Hospital, Ji Lin

Fakuan Tang, MD, PhD PLA 309th Hospital, Beijing

| | |
|-----------------------|---|
| Fang Wu, MD, PhD | Rui Jin Hospital, Tong University School of Medicine, Shanghai |
| Feng Liu, MD, PhD | First People's Hospital, Guangdong |
| Gexin Zhu, MD, PhD | The General Hospital, Tianjing Medical Hospital, Tianjing |
| Guo Yutao, MD, PhD | PLA General Hospital, Beijing |
| Guorong Xi, MD | Health Division of Guard Bureau, Chinese PLA General Staff Department, Beijing |
| Heng Dou, MD, PhD | Beijing Hospital, Beijing |
| Hou Cuihong, MD, PhD | Fuwai Hospital, Chinese Academy of Medical Sciences, Beijing |
| Hua Li, MD, PhD | The First Affiliated Hospital, Zhengzhou University, Zhejiang |
| Hui Han, MD, PhD | The First Affiliated Hospital, Harbin Medical University, Heilongjiang |
| Huiliang Liu, MD, PhD | Wujing General Hospital, Beijing |
| Jian Kong, MD, PhD | The First Affiliated Hospital, Ji Lin University, Ji Lin |
| Junxia Li, MD, PhD | Beijing PLA General Hospital, Beijing |
| Liang Zaoguang | The First Affiliated Hospital, Harbin Medical University, Heilongjiang |
| Liangyi Si, MD, PhD | Southwest Hospital, Chongqing |
| Liu Meilin, MD, PhD | The First Affiliated Hospital, Peking University First Hospital, Beijing |

| | |
|-------------------------|--|
| Liu Yanxia, MD | Shenyang General PLA Hospital |
| Liu Yu, MD | Yanggu People's Hospital, Shandong |
| Liu Zhiming, MD, PhD | Fuwai Hospital, Chinese Academy of Medical Sciences, Beijing |
| Luo Ma, MD, PhD | NAVY General Hospital, Beijing |
| Ming Li, MD, PhD | Beijing Friendship Hospital, Capital Medical University, Beijing |
| Qian Xiao, MD, PhD | First Affiliated Hospital, Chongqing Medical University, Chongqing |
| Qingwei Chen, MD, PhD | The Second Affiliated Hospital, Chongqing Medical University, Chongqing |
| Qiong Chen, MD, PhD | Xiangya Hospital, Central South University, Hunan |
| Ren Xuejun, MD, PhD | Anzhen Hospital, Capital Medical University, Beijing |
| Shan Zhaoliang, MD, PhD | PLA General Hospital, Beijing |
| Shi Xiangming, MD, PhD | PLA General Hospital, Beijing |
| Shilian Hu, MD, PhD | Anhui Provincial Hospital, Anhui |
| Song Bai, MD, PhD | First Affiliated Hospital of Kunming Medical University, Kunming |
| Tianchang Li, MD, PhD | NAVY General Hospital, Beijing |
| Wang Lijuan, MD | Suqian People's hospital, Jiangsu |

| | |
|------------------------|---|
| Wu Qiang, MD, PhD | Guizhou Provincial People's Hospital |
| Xianghu Wang, MD, PhD | Union Hospital, Tongji Medical College, Huazhong University of Science & Technology, Guangzhou |
| Xiaojuan Bai, MD, PhD | Sheng Jing Hospital, China Medical University, Shengyang, Liaoning |
| Xiaoming Wang, MD, PhD | Xijing Hospital, Xian |
| Xinchun Yang, MD, PhD | Chao-Yang Hospital, Capital Medical University, Beijing |
| Xuan He, MD, PhD | Air Force General Hospital, Beijing |
| Xuejun Liu, MD, PhD | The First Affiliated Hospital, Shanxi Medical University, Shanxi |
| Yan Li, MD, PhD | First People's Hospital, Kunming, Yunnan |
| Yang Jiefu, MD, PhD | Beijing Hospital, Beijing |
| Yong Wang, MD, PhD | China-Japan Friendship Hospital, Beijing |
| Yunmei Yang, MD, PhD | The First Affiliated Hospital, Zhenjiang University, Zhejiang |
| Zeng Yuan, MD, PhD | PLA 306 Hospital |
| Zhang Shu, MD, PhD | Fuwai Hospital, Chinese Academy of Medical Sciences, Beijing |
| Zhang Wei, MD, PhD | Beijing PLA General Hospital, Beijing |
| Zhanyi Lin, MD, PhD | Guangdong General Hospital, Guangdong |

Table S1. Predictors of the ABC compliance among patients with atrial fibrillation and multimorbidity.

| | Univariate | | | Multivariate | | |
|--------------------------------|------------|-----------|--------|--------------|-----------|--------|
| | Odds ratio | 95% CI | P | Odds ratio | 95% CI | P |
| Age | 0.97 | 0.96-0.98 | <0.001 | 0.98 | 0.97-0.99 | <0.001 |
| Female sex | 1.01 | 0.93-1.27 | 0.317 | | | |
| Diabetes mellitus | 1.03 | 0.88-1.21 | 0.711 | | | |
| Hypertension | 1.58 | 1.32-1.89 | <0.001 | 1.50 | 1.23-1.82 | <0.001 |
| Heart failure | 0.82 | 0.70-0.96 | 0.014 | - | - | - |
| Coronary artery disease | 0.58 | 0.49-0.69 | <0.001 | 0.55 | 0.46-0.65 | <0.001 |
| Prior ischemic stroke | 1.11 | 0.93-1.31 | 0.242 | | | |
| Prior major bleeding | 0.11 | 0.05-0.23 | <0.001 | 0.14 | 0.06-0.29 | <0.001 |
| Chronic kidney disease | 0.58 | 0.46-0.75 | <0.001 | 0.66 | 0.51-0.86 | 0.002 |
| Liver disease | 0.76 | 0.52-1.12 | 0.16 | | | |
| COPD | 0.58 | 0.44-0.76 | <0.001 | 0.71 | 0.53-0.96 | 0.025 |
| Sleep apnea | 1.23 | 0.84-1.79 | 0.288 | | | |
| Polypharmacy | 1.87 | 1.59-2.18 | <0.001 | 2.15 | 1.81-2.55 | <0.001 |

CI – confidence interval; COPD – chronic obstructive pulmonary disease; OAC – oral anticoagulation.

Table S2. Effects of ABC compliance on clinical outcomes (composite outcome; all-cause death; any thromboembolism; major bleeding) among patients with multimorbidity and polypharmacy.

| Outcomes | ABC N=621 n (%) | Non-ABC N=582 n (%) | P[^] | Odds ratio* (95% CI) |
|--------------------|--------------------------------|------------------------------------|----------------------|---------------------------------|
| Composite outcome# | 10 (1.6) | 31 (5.3) | <0.001 | 0.38 (0.18-0.79) |
| All-cause death | 7 (1.1) | 18 (3.1) | 0.017 | 0.49 (0.20-1.20) |
| TE events | 4 (0.6) | 15 (2.6) | 0.007 | 0.31 (0.10-0.94) |
| Major bleeding | 10 (1.6) | 5 (0.9) | 0.242 | 2.43 (0.81-7.26) |

*Adjusted for age.

Composite outcome of all-cause death/any thromboembolism

[^] Between-group comparison made by χ^2 test

TE – thromboembolism; CI – confidence interval.

Table S3. The effects of ABC compliance on clinical outcomes (composite outcome; all-cause death; any thromboembolism; major bleeding) among overall multimorbidity cohort.

| Outcomes | ABC N=1133 n (%) | Non-ABC N=3511 n (%) | P[^] | Odds ratio* (95% CI) |
|--------------------|---------------------------------|-------------------------------------|----------------------|---------------------------------|
| Composite outcome# | 20 (1.8) | 441 (12.6) | <0.001 | 0.19 (0.12-0.30) |
| All-cause death | 13 (1.1) | 377 (10.7) | <0.001 | 0.15 (0.09-0.27) |
| TE events | 8 (0.7) | 84 (2.4) | <0.001 | 0.39 (0.19-0.83) |
| Major bleeding | 13 (1.1) | 77 (2.2) | 0.025 | 0.71 (0.39-1.29) |

*Adjusted for age.

Composite outcome of all-cause death/any thromboembolism

[^] Between-group comparison made by χ^2 test

TE – thromboembolism; CI – confidence interval.

Table S4. The effects of ABC compliance on clinical outcomes (composite outcome; all-cause death; any thromboembolism; major bleeding) among overall polypharmacy cohort.

| Outcomes | ABC N=687 n (%) | Non-ABC N=1575 n (%) | P[^] | Odds ratio* (95% CI) |
|--------------------|--------------------------------|-------------------------------------|----------------------|---------------------------------|
| Composite outcome# | 11 (1.6) | 173 (11.0) | <0.001 | 0.19 (0.10-0.36) |
| All-cause death | 8 (1.2) | 143 (9.1) | <0.001 | 0.18 (0.09-0.37) |
| TE events | 4 (0.6) | 36 (2.3) | 0.003 | 0.35 (0.12-0.99) |
| Major bleeding | 10 (1.5) | 32 (2.0) | 0.345 | 0.98 (0.47-2.05) |

*Adjusted for age.

Composite outcome of all-cause death/any thromboembolism

[^] Between-group comparison made by χ^2 test

TE – thromboembolism; CI – confidence interval.