Questions in the comparative effectiveness of dabigatran and warfarin in atrial fibrillation

Alvaro Alonso, Emory University
Pamela L. Lutsey, University of Minnesota
Lin Y. Chen, University of Minnesota
Richard F. MacLehose, University of Minnesota
Lindsay G.S. Bengtson, Optum

Journal Title: Journal of Cardiology
Volume: Volume 70, Number 1-2
Publisher: Elsevier | 2017-07-01, Pages 99-100
Type of Work: Article | Post-print: After Peer Review
Publisher DOI: 10.1016/j.jjcc.2017.02.003
Permanent URL: https://pid.emory.edu/ark:/25593/t0nqp

Final published version: http://dx.doi.org/10.1016/j.jjcc.2017.02.003

Copyright information:
© 2017 Japanese College of Cardiology. Published by Elsevier Ltd. All rights reserved.
This is an Open Access work distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Accessed August 3, 2019 3:19 AM EDT
Questions in the comparative effectiveness of dabigatran and warfarin in atrial fibrillation

Alvaro Alonso, MD, PhD a,*, Pamela L. Lutsey, PhD b, Lin Y. Chen, MD, MS c, Richard F. MacLehose, PhD b, and Lindsay G. S. Bengtson, PhD d

a Department of Epidemiology, Rollins School of Public Health, Emory University, Atlanta, GA, USA
b Division of Epidemiology and Community Health, School of Public Health, University of Minnesota, Minneapolis, MN, USA
c Cardiovascular Division, Department of Medicine, University of Minnesota Medical School, Minneapolis, MN, USA
d Health Economics and Outcomes Research, Life Sciences, Optum, Eden Prairie, MN, USA

We appreciate Dr Kawada’s letter to the editor regarding our manuscript assessing the comparative effectiveness of dabigatran and rivaroxaban versus warfarin in patients with non-valvular atrial fibrillation (AF) [1, 2]. In the letter, Dr Kawada highlights the consistency of our results with those from a recent report by Chan and colleagues comparing outcomes in patients with AF receiving dabigatran to those receiving warfarin using data from the Taiwan National Health Insurance Research Database [3]. The similarity in findings across diverse geographic regions should reassure both clinicians and patients about the effectiveness of dabigatran (and possibly other newer oral anticoagulants) in the prevention of stroke and systemic embolism in non-valvular AF.

Dr Kawada also mentions the previously reported association between use of selective serotonin reuptake inhibitors (SSRIs) and risk of intracranial bleeding, particularly among individuals taking oral anticoagulants [4]. Although we did not specifically adjust for SSRI or antidepressant use, our decision to use high-dimensional propensity score adjustment ensures that our analysis controlled for the most important measured confounders. If SSRIs, other antidepressants, or a diagnosis of depression confounded the associations being studied, these clinical covariates would have been incorporated into the calculation of high-dimensional propensity scores since our approach included both diagnostic codes from inpatient and outpatient claims and outpatient pharmacy claims, as has been recommended [5]. Future studies should explore whether SSRIs and other antidepressants interact with warfarin and non-vitamin K antagonists oral anticoagulants to modify the risk of bleeding in patients with non-valvular AF.

*Corresponding author: Alvaro Alonso, MD, PhD. Department of Epidemiology, Rollins School of Public Health, Emory University, 1518 Clifton Rd NE, CNR 3051. Atlanta, GA 30322, USA, alvaro.alonso@emory.edu. Tel.: +1 404 727 8714. Fax:+1 404 7278737.
Acknowledgments

Disclosures: Dr Alonso is supported by grant R01 HL122200 from NIH and 16EIA26410001 from the American Heart Association and Dr Lutsey by grant R01 HL131579 from NIH. Dr Bengtson is an employee of Optum.

References