Correspondence

Letter by Serebruany Regarding Article, “Cost-Effectiveness of Prasugrel Versus Clopidogrel in Patients With Acute Coronary Syndromes and Planned Percutaneous Coronary Intervention: Results From the Trial to Assess Improvement in Therapeutic Outcomes by Optimizing Platelet Inhibition With Prasugrel-Thrombolysis in Myocardial Infarction TRITON-TIMI 38”

To the Editor:

I read with interest the article by Mahoney et al1 suggesting the cost advantage of prasugrel over clopidogrel; however, I found 3 aspects of their article confusing. First, frequency of rehospitalizations (Table 1 in their article) does not include extra cancers observed in the prasugrel arm of the TRial to assess Improvement in Therapeutic Outcomes by optimizing platelet inhibi\(T\)onN with prasugrel (TRITON) trial. Considering the 27% increase in new cancers (\(P=0.031\)), the 36.8% incidence of new solid cancers (\(P=0.013\)), and the escalated delayed cancer risks after 4 months of therapy (especially dominant in women) that are clearly outlined in the available US Food and Drug Administration reports,2,3 cancer imbalance should be included for a fair cost comparison. The mortality rate was also higher for patients with solid cancers, with more deaths in patients with new solid cancers (37 versus 25) and with new and worse solid cancers (43 versus 28) in the prasugrel group.3

Second, the statement that “prasugrel was associated with life-expectancy gains because of the decreased rate of nonfatal MI” is challenged by the very high rates of myocardial infarction (MI) due to massive adjudication of enzymatic events unrecognized as MIs by the TRITON investigators.2 Therefore, application of the physician-driven Saskatchewan Health Database as a model for predicting life expectancy for the centrally adjudicated TRITON data set is questionable, because MI definitions, clinical manifestations, and, most importantly, associated prognoses of ischemic episodes were different and hard to match.

Finally, the Food and Drug Administration’s Prasugrel Action Package suggests that all-cause deaths go in opposite directions in ST-elevation MI and unstable angina/non–ST-elevation MI TRITON subgroups. Mortality shows a trend of being consistently higher for prasugrel in unstable angina/non–ST-elevation MI patients, who represent 74% of the entire TRITON cohort, whereas there is an early mortality benefit in ST-elevation MI patients, followed by late detriment.4 The potential impact of the front-loaded nature of vascular benefit versus a delayed but ever-increasing bleeding and cancer risks after prasugrel should be included in a predictive model for a more balanced and reasonable assessment of the cost-effectiveness of thienopyridine.

Disclosures

Dr Serebruany is listed as an inventor and received compensation for the US patent application P-17232, “Method for treating vascular diseases with prasugrel,” assigned to Lilly. He received funding for research studies with both prasugrel and clopidogrel.

Victor L. Serebruany, MD, PhD
Johns Hopkins University
Baltimore, Md

References

Letter by Serebruany Regarding Article, "Cost-Effectiveness of Prasugrel Versus Clopidogrel in Patients With Acute Coronary Syndromes and Planned Percutaneous Coronary Intervention: Results From the Trial to Assess Improvement in Therapeutic Outcomes by Optimizing Platelet Inhibition With Prasugrel-Thrombolysis in Myocardial Infarction TRITON-TIMI 38"
Victor L. Serebruany

Circulation. 2010;122:e436
doi: 10.1161/CIRCULATIONAHA.110.936757
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2010 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/122/8/e436

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to Circulation is online at:
http://circ.ahajournals.org//subscriptions/