Response to Letters Regarding Article, “Predictors of Outcomes in Medically Treated Patients With Acute Coronary Syndromes After Angiographic Triage: An Acute Catheterization and Urgent Intervention Triage Strategy (ACUITY) Substudy”

We thank Drs Correia and Barreto-Filho for their interest in our work.1,2 In response, patients with acute coronary syndromes enrolled in the Acute Catheterization and Urgent Intervention Triage Strategy (ACUITY) trial underwent guideline-recommended early invasive angiography followed by revascularization when appropriate. Our study (in contrast to Invasive Versus Conservative Treatment in Unstable Coronary Syndromes [ICTUS]) was neither meant to confirm nor refute the correctness of this practice (currently class I level of recommendation in the North American and European Guidelines3,4), but rather the value of specific angiographic findings in further assigning patient risk once angiography is performed. However, because the issue has been raised, it is worth noting that ICTUS was only one such randomized trial examining the utility of an early invasive strategy in acute coronary syndrome, and modestly sized at that, resulting in end points with wide confidence intervals. All such studies (including ICTUS) have collectively demonstrated the robust benefits of early angiography with appropriate revascularization in reducing the 5-year rates of cardiovascular death or myocardial infarction.5

Our study shows that the number of diseased vessels—the simplest parameter obtained from angiography—further risk stratified patients beyond the well-accepted Thrombolysis in Myocardial Infarction risk score in identifying a higher-risk cohort for composite ischemia, defined as all-cause death, myocardial infarction, or ischemic revascularization (the same primary end point and definition used in the original development and validation of the Thrombolysis in Myocardial Infarction risk score).6 In addition, the number of diseased vessels provided prognostic value in predicting the end points of death and myocardial infarction and all-cause death, albeit of weaker statistical significance because of their lower frequency. It is also noteworthy that, with the exception of age, renal insufficiency, and hypertension, most predictors of early and late adverse events were angiographic parameters. Development, validation, and comparison of risk scores was not the intent of this work, making the discussion about comparative C statistics and reclassification improvement analysis needless. However, our study clearly defines a new high-risk cohort for which more effective therapeutic approaches are required.

In response to the letter by Boschetti et al.,7 we previously have described the prognostic importance of hemorrhagic complications in predicting mortality.8 We chose not to include major bleeding in the multivariate models to assess the utility of baseline clinical and angiographic variables in predicting outcomes before bleeding or other complications occurred. To clarify an apparent misunderstanding, however, all patients, including those with major bleeding, were followed up and included in the final 1-year analysis. Finally, we have previously shown that, whereas radial access reduces local hemorrhagic complications, as would be expected, major nonaccess site bleeding is not reduced by choice of vascular access, but is reduced by bivalirudin.9

Disclosures

Dr Ohman has received consulting fees from The Medicines Co, Liposcience, Inovise Medical, Response Biomedical, Datascpe, and Abiomed; he has equity interests in Medtronic and Savador; and he has received lecture fees from Schering-Plough, Bristol-Myers Squibb, and Datascpe and grant support from The Medicines Co, Schering-Plough, Bristol-Myers Squibb, Sanofi-Aventis, Millen- nium Pharmaceuticals, Eli Lilly, and Daiichi Sankyo. Dr Ohman is on the speakers’ bureau for CV Therapeutics and The Medicines Co. Dr White has received grant support from The Medicines Co, Sanofi-Aventis, Schering-Plough, Eli Lilly Co, Merck Sharpe and Dohme, National Institutes of Health, Pfizer, Roche, Johnson & Johnson, and AstraZeneca. Dr Alexander serves on the speakers’ bureau of Amgen, Pfizer, and Schering-Plough. Dr Bertrand reports receiving consulting fees from Servier Laboratories, Sanofi-Aventis, and Nycomed and lecture fees from Servier Laboratories and Sanofi-Aventis. Dr Mehran is on the speakers’ bureau for The Medicines Co, Cordis, and Boston Scientific, and has received honoraria from The Medicines Co. Dr Stone reports receiving research support from The Medicines Co, Boston Scientific, and Abbott Vascular and honoraria from Eli Lilly. The other authors report no conflicts.

Alexandra Lansky, MD
Yale University School of Medicine
New Haven CT

Kenji Goto, MD
Martin Fahey, MSc
Ecatara Cristina, MD
Roxana Mehran, MD
Gregg W. Stone MD
Columbia University Medical Center
Cardiovascular Research Foundation
New York, NY

Frederick Feit, MD
New York University School of Medicine
New York, NY

E. Magnus Ohman, MD
Karen P. Alexander, MD
Department of Medicine
Duke University School of Medicine
Durham, NC

Harvey D. White, MD
Green Lane Cardiovascular Service
Auckland City Hospital
Auckland, New Zealand

Michel E. Bertrand, MD
Hôpital Cardiologique
Lille, France

Walter Desmet, MD
University Hospital Gasthuisberg
Leuven, Belgium

Martial Hamon, MD
University Hospital
Normandy, France

References

The letters to which this response pertains were published in the November 16, 2010 issue of Circulation. (Circulation. 2011;123:e410-e411.)
© 2011 American Heart Association, Inc.
Circulation is available at http://circ.ahajournals.org DOI: 10.1161/CIRCULATIONAHA.111.010306 e410


Response to Letters Regarding Article, "Predictors of Outcomes in Medically Treated Patients With Acute Coronary Syndromes After Angiographic Triage: An Acute Catheterization and Urgent Intervention Triage Strategy (ACUITY) Substudy"
Alexandra Lansky, Kenji Goto, Martin Fahy, Ecaterina Cristea, Roxana Mehran, Gregg W. Stone, Frederick Feit, E. Magnus Ohman, Karen P. Alexander, Harvey D. White, Michel E. Bertrand, Walter Desmet and Martial Hamon

_Circulation_. 2011;123:e410-e411
doi: 10.1161/CIRCULATIONAHA.110.010306

_Circulation_ is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2011 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/123/15/e410

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/