Response to Letter Regarding Article, “Cardiovascular Events as a Function of Serum Bilirubin Levels in a Large, Statin-Treated Cohort”

Mascitelli and Goldstein propose that lower levels of redox-active iron could explain some of the observed relationship between low serum bilirubin and the increased incidence of cardiovascular disease. Biliverdin/bilirubin, ferritin, and carbon monoxide are produced in equal quantities by heme-oxygenase–1, and the vascular effects of raised carbon monoxide may also contribute to the relationship between bilirubin and cardiovascular disease reported in our article.1 Disentangling the individual role of HO-1 products in cardiovascular disease will be difficult, although an independent effect of bilirubin is somewhat supported by Mendelian randomization designs using genetic variation strongly associated with bilirubin clearance.2,3 However, we should point out that these findings are not consistently replicated.4 We are not convinced that the results of our study can provide particularly strong support for the iron hypothesis, which remains an interesting area for research and debate.5,6

Disclosures

None.

Laura J. Horsfall, PhD
Irwin Nazareth, PhD, FRCGP

References

Response to Letter Regarding Article, "Cardiovascular Events as a Function of Serum Bilirubin Levels in a Large, Statin-Treated Cohort"
Laura J. Horsfall, Irwin Nazareth and Irene Petersen

Circulation. 2013;127:e861
doi: 10.1161/CIRCULATIONAHA.113.001663
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2013 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/127/24/e861

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/