Response to Arachidonate 5-Lipoxygenase Variants in Atherosclerosis, Obesity, and Bone Traits

Since learning of the Letter to the Editor by Lyons1 we sequenced the 5-lipoxygenase (5-LO) gene in strains 129/SvJ, CAST/EiJ, and a congenic strain carrying a CAST/Ei allele. The sequences are in agreement with those indicated by Dr. Lyons. CAST is a “wild-derived” strain, and we can only speculate that the stock we sequenced may not have been fully inbred; we obtained our stocks in or around 1990 from the Jackson Laboratory. When we reported the 5-LO amino acid differences between CAST and B6, we were unaware of their effect on enzymatic activity that was subsequently reported by Kuhn et al.2

Because we based our conclusions in our article solely on the low transcript and protein levels observed in congenic mice carrying the CAST 5-LO allele, the validity of our results are not altered. Overall, our studies in mice and humans as well as more recent ones from other groups are consistent with the proatherogenic role that 5-LO and the leukotriene pathway play in cardiovascular disease.

Margarete Mehrabian
David Geffen School of Medicine
Department of Medicine/Cardiology
University of California, Los Angeles

Response to Arachidonate 5-Lipoxygenase Variants in Atherosclerosis, Obesity, and Bone Traits
Margarete Mehrabian

Circ Res. 2006;98:e68
doi: 10.1161/01.RES.0000221754.32888.18
Circulation Research is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2006 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7330. Online ISSN: 1524-4571

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circres.ahajournals.org/content/98/9/e68

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in Circulation Research 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 Research is online at:
http://circres.ahajournals.org//subscriptions/