To the Editor:

Of the many new therapeutic agents for slowing the progression of congestive heart failure (CHF), other than antagonizing the renin-angiotensin-aldosterone system, blocking the endothelin receptors seems to be most promising. The two latest reports published in *Circulation* render further support to this exciting concept.

Endothelin may contribute to the symptoms associated with CHF. Patients with the lowest exercise capacity, as measured objectively by maximum oxygen consumption ($\dot{V}O_2\text{max}$) were those who had the highest plasma levels of endothelin-1 at the time of maximal exercise. This finding suggests that endothelin may play a role in limiting the ability of the peripheral vasculature to dilate during exercise and, thus, contribute to exercise intolerance in these patients. Therefore, the reduced exercise capacity of patients with CHF may be more than a derangement in central hemodynamic variables, such as decreased cardiac output and increased pulmonary artery wedge pressure.

Several endothelin receptor antagonists have been developed. Tezosentan is being developed specifically for the short-term intravenous treatment of acute CHF. Studies with LU135252 and bosentan indicate that short-term treatment with bolus intravenous or oral dosages is associated with improved systemic and pulmonary hemodynamic parameters. The short-term effects are encouraging, but these drugs are being developed to treat chronic CHF. Only long-term studies will determine whether the short-term effects translate into long-term benefit. Further, comparative trials with “standard” therapies for CHF, such as ACE inhibitors and $\beta$-blockers, are needed before these agents can be introduced into clinical use.

Tsung O. Cheng, MD
Professor of Medicine
The George Washington University
Washington, DC 20037

Endothelin Receptor Blockade in Congestive Heart Failure
Tsung O. Cheng

Circulation. 2001;104:e96
Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2001 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/104/18/e96

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/