



[Table of Contents](#) [Author Guidelines](#)

Evidence-Based Complementary and Alternative Medicine

Volume 2013, Article ID 925625, 14 pages

<http://dx.doi.org/10.1155/2013/925625>



Review Article

## Effects and Mechanisms of Chinese Herbal Medicine in Ameliorating Myocardial Ischemia-Reperfusion Injury

Qing Liu,<sup>1,2</sup> Jiqiang Li,<sup>2</sup> Jing Wang,<sup>2</sup> Jianping Li,<sup>1</sup> Joseph S. Janicki,<sup>1</sup> and Daping Fan<sup>1</sup>

<sup>1</sup>Department of Cell Biology and Anatomy, University of South Carolina School of Medicine, Columbia, SC 29208, USA

<sup>2</sup>The Second Clinical School of Medicine, Guangzhou University of Chinese Medicine, Guangzhou 510405, China

Received 24 July 2013; Revised 26 August 2013; Accepted 4 September 2013

Academic Editor: Joen-Rong Sheu

Copyright © 2013 Qing Liu et al. This is an open access article distributed under the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

### Abstract

Myocardial ischemia-reperfusion (MIR) injury is a major contributor to the morbidity and mortality associated with coronary artery disease, which accounts for approximately 450,000 deaths a year in the United States alone. Chinese herbal medicine, especially combined herbal formulations, has been widely used in traditional Chinese medicine for the treatment of myocardial infarction for hundreds of years. While the efficacy of Chinese herbal medicine is well documented, the underlying molecular mechanisms remain elusive. In this review, we highlight recent studies which are focused on elucidating the cellular and molecular mechanisms using extracted compounds, single herbs, or herbal formulations in experimental settings. These studies represent recent efforts to bridge the gap between the enigma of ancient Chinese herbal medicine and the concepts of modern cell and molecular biology in the treatment of myocardial infarction.

[About this Journal](#) · [Abstracting and Indexing](#) · [Aims and Scope](#) · [Article Processing Charges](#) · [Bibliographic Information](#) · [Editorial Board](#)  
· [Editorial Workflow](#) · [Publication Ethics](#) · [Reviewer Resources](#) · [Submit a Manuscript](#) · [Subscription Information](#) · [Table of Contents](#)

[Annual Issues](#) · [Open Special Issues](#) · [Published Special Issues](#) · [Special Issue Resources](#)

Subscribe to  
Table of Contents Alerts



About Hindawi

Meet the Team

Contact Us

Blog

Jobs

Publish with Us

Submit Manuscript

Browse Journals

[For Authors](#)

**Work with Us**

[Institutions](#)

[Publishers](#)

[Editors](#)

**Legal**

[Terms of Service](#)

[Privacy Policy](#)

[Copyright](#)

---

Shandong, P. R. China: Jilayu Shang.