中国药理学与毒理学杂志 2013 27 (1): 110-113 ISSN: 1000-3002 CN: 11-1115/R

综述

药物肝损伤的潜在生物标志物循环miR-122的研究进展

王雁，汤纳平，马璟

中国医药工业研究总院国家上海新药安全评价研究中心，上海 201203

收稿日期 2012-3-26 修回日期 2012-6-25 网络版发布日期 2013-2-21 接受日期

摘要 药物诱导的肝损伤是药物研发失败或退市的主要原因之一，而传统的肝损伤评价指标因为种种缺陷如缺乏特异性或灵敏性而不能为药物的肝毒性评价提供早期、及时和可靠的信号。循环微RNA-122(miR-122)因其在肝脏特异性表达、以及其高度的稳定性和灵敏性成为目前肝毒性评价指标的研究热点。本综述主要从特异性、稳定性和灵敏性3方面系统地阐述循环miR-122成为肝毒性生物标志物的应用潜力，并对下一步的研究工作进行探讨。

关键词 微RNAs miR-122 生物标志物 肝 毒性作用

分类号 R99

Progress in circulating miR-122 as potential biomarker for drug-induced liver injury

WANG Yan, TANG Na-ping, MA Jing

National Shanghai Center for New Drug Safety Evaluation and Research, China State Institutes of Pharmaceutical Industry, Shanghai 201203, China

Abstract

Drug-induced liver injury (DILI) is one the cause of drug attrition during drug development and post-marketing drug withdrawal. Currently, the traditional biomarkers cannot meet the requirements of early detection of DILI during drug development for lack of sensitivity and specificity. miR-122 is an abundant, liver-specific microRNA and has recently been reported to be remarkably stable in plasma. Given its high stability, sensitivity and specificity, miR-122 has recently been thought of as a new potential biomarker for DILI. In this paper, the potential application of miR-122, as a biomarker of DILI, was systematically reviewed in terms of the specificity, stability and sensitivity of miR-122. The prospect of research was also discussed.

Key words microRNAs miR-122 biomarker liver toxicactions

DOI: 10.3867/j.issn.1000-3002.2013.01.021

通讯作者 马璟,E-mail:jma@ncdser.com,Tel:(021)50801763 jma@ncdser.com