数学模型在中药研究方面的应用进展

朱永,李洪 广西科技大学理学院,广西

摘要

本文通过收集查阅相关的数据资料,并结合了我国近几年来在中药提取、药动学已经药效学方面的重大研究成果,较为仔细将各种类型数学模型的运作原理和使用方法进行了分析,并对各种数字模型的优点和缺点逐一进行了比较。并论述了数字模型应该如何在中药相关研究方面来实施定量分析,从而达到了将数据精确化、预测化与可控化的最终目的。希望能够通过这些研究来总结出中药科学中量里面存在的规律性,以此来进一步促进中药学科现代化、科技化的发展。

关键词:数学模型;中药;神经网络模型;动力学模型;总量统计矩模型

ABSTRACT

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This paper collects relevant data and collects the important research results in the pharmacodynamics of traditional Chinese medicine extraction and pharmacokinetics in recent years. The operating principles and methods of various types of mathematical models are carefully studied. The analysis and comparison of the advantages and disadvantages of various digital models were made one by one. It also discusses how the digital model should implement quantitative analysis in the research of traditional Chinese medicine, thus achieving the ultimate goal of data precision, predictive and controllable. I hope that through these studies, we can sum up the regularity of the traditional Chinese medicine science, so as to further promote the development of modernization and science and technology in the Chinese medicine department.

Key words: mathematical model; traditional Chinese medicine; neural network model; dynamic model; total statistical moment mode



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朱永, 李洪

广西科技大学理学院,广西 Yong Zhu, Hong Li

College of Science, Guangxi University of Science and Technology, Guangxi