综述

纳米颗粒物对心血管系统的影响及其作用机制研究进展

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摘要 随着纳米技术的快速发展和纳米材料的大量出现和广泛应用,人们接触纳米材料的机会大大增加。纳米材料将通过环境暴露、职业暴露以及医源性暴露作用于人类,对人类健康产生潜在危害。越来越多的流行病学研究证实,纳米颗粒暴露与心血管疾病的发生发展关系密切。因此,纳米颗粒心血管系统毒性的研究逐渐受到关注,目前国内外学者已经从细胞、动物和流行病等方面开展了大量研究工作,并取得了一定的进展。本文就国内外有关纳米颗粒物心血管系统毒性研究的进展作一简要的综述。

关键词 纳米颗粒 超细颗粒物 心血管系统 毒性

分类号 R994.3 R994.6

Progress in effect of nanoparticles on cardiovascular system and their mechanism

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Abstract

With the appearence in large numbers and wide use of nanomaterials, the chance of human exposure to nanomaterials is greatly increased, such as environmental, occupational or iatrogenic exposure, posing a potential hazard to human health. More and more epidemiological studies have confirmed that nanoparticle exposure is closely related to the occurrence and development of cardiovascular diseases. Therefore, research on the cardiovascular systemic toxicity of nanoparticles has received much attention. Much work has been done by scholars involving cells, animals and epidemiology, and some proress has been made. This paper briefly overviews the progress achieved in the cardiovascular systemic toxicity induced by nanoparticles.

Key words nanoparticle ultrafine particle cardiovascular system toxicity

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