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综述

尿苷二磷酸葡醛酸转移酶的研究进展

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摘要 尿苷二磷酸葡醛酸转移酶(UGT)是体内最重要的II相代谢酶, 它可以参与许多内源性物质如胆红素、甾体激素、甲状腺激素、胆汁酸和脂溶性维生素等的代谢, 在许多药物如阿片类药物、镇痛药、非甾体抗炎药和抗惊厥药等的代谢中也发挥着重要的作用。UGT在药物的吸收、分布、代谢和排泄中发挥重要作用。研究UGT特别是其基因多态性及其介导的药物-药物相互作用不仅可以指导临床用药, 也可以揭示内源性物质代谢紊乱的机制。本文就UGT的分类、组织分布、对药物吸收的影响、基因多态性及其所介导的药物-药物相互作用进行综述。

关键词 尿苷二磷酸葡醛酸 转移酶类 药物相互作用 多态性, 单核苷酸

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Progress of UDP-glucuronosyltransferases

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Abstract

UDP-glucuronosyltransferases (UGT) are the most important phase II drug metabolizing enzyme, which can metabolize not only various endogenous substances, such as bilirubin, steroid hormones, thyroid hormones, bile acids and fat-soluble vitamins, but also many drugs, such as opioids, analgesics, NSAID and anticonvulsants. UGT plays an important role in drug absorbtion, metabolism, distribution and excretion. Furthermore, the inhibition or induction of UGT could not only result in serious drug-drug interactions, but also induce metabolic disorders of endogenous substances, for which evaluation of the inhibitory or induction effects of compounds on UGT is very important in clinic. This paper reviewed UGT in terms of its classification, tissue distribution, effect on drug absorption, gene polymorphism and related drug-drug interactions.

Key words uridine diphosphate glucuronic acid transferases drug interactions polymorphism single nucleotide