DESCRIPTION

Sets the foundation for safer, more effective drug therapies

With this book as their guide, readers will discover how to apply our current understanding of the pharmacogenomics of drug transporters to advance their own drug discovery and development efforts. In particular, the book explains how new findings in the field now enable researchers to more accurately predict drug interactions and adverse drug reactions. Moreover, it sets the foundation for the development of drug therapies that are tailored to an individual patient's genetics.

Pharmacogenomics of Human Drug Transporters serves as a comprehensive guide to how transporters regulate the absorption, distribution, and elimination of drugs in the body as well as how an individual's genome affects those processes. The book's eighteen chapters have been authored by a team of leading pioneers in the field. Based on their own laboratory and clinical experience as well as a thorough review of the literature, these authors explore all facets of drug transporter pharmacogenomics, including:

• Individual drug transporters and transporter families and their clinical significance

• Principles of altered drug transport in drug#drug interactions, pharmacotherapy, and personalized medicine

• Emerging new technologies for rapid detection of genetic polymorphisms

• Clinical aspects of genetic polymorphisms in major drug transporter genes

• Future research directions of drug transporter pharmacogenomics and the prospect of individualized medicine
Pharmacogenomics of Human Drug Transporters opens the door to new drug discovery and development breakthroughs leading to safer and more effective customized drug therapies. The book is recommended for pharmaceutical scientists, biochemists, pharmacologists, clinicians, and genetics and genomics researchers.

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