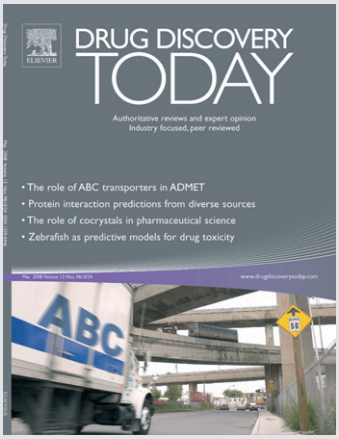
ELSEVIER

DRUG DISCOVERY TODAY

May 2008
Volume 13 · Numbers 9/10
pp. 371–468



Cover Story
The keynote review in this issue of *Drug Discovery Today*, by Gergely Szakács, András Váradi, Csilla Özvegy-Laczka and Balázs Sarkadi, discusses how human ATP-Binding Cassette (ABC) transporters modulate the pharmacological effects of various drugs. They provide an overview of those models and assay systems that are used to analyse drug/transporter interactions. The combination of in vitro, in vivo and in silico modeling is evaluated to highlight their potential applications in screening compounds in early drug development.

REVIEWS

KEYNOTE

379 **The role of ABC transporters in drug absorption, distribution, metabolism, excretion and toxicity (ADME–Tox)**
Gergely Szakács, András Váradi, Csilla Özvegy-Laczka and Balázs Sarkadi

GENE TO SCREEN

394 **Zebrafish: a predictive model for assessing drug-induced toxicity**
Patricia McGrath and Chun-Qi Li

INFORMATICS

402 **Human metabolic network reconstruction and its impact on drug discovery and development**
Hongwu Ma and Igor Goryanin

409 **Protein interaction predictions from diverse sources**
Yin Liu, Inyoung Kim and Hongyu Zhao

POST SCREEN

417 **Application of LC/MS and related techniques to high-throughput drug discovery**
Alfonso Espada, Manuel Molina-Martin, Jeffrey Dage and Ming-Shang Kuo

424 **Recent progress in antiretrovirals – lessons from resistance**
Catherine S. Adamson and Eric O. Freed

433 **Designing transient binding drugs: A new concept for drug discovery**
Sten Ohlson

440 **The role of cocrystals in pharmaceutical science**
Ning Shan and Michael J. Zaworotko

447 **Logic models of pathway biology**
Steven Watterson, Stephen Marshall and Peter Ghazal

457 **Product-related research: how research can contribute to successful life-cycle management**
Peter Sandner and Karl Ziegelbauer

ScienceDirect