Metabolism & Transport

Drug Interaction Database

Unique Features

Search by quantitative parameters
Users can search for quantitative parameters such as $K_i$, $K_m$, or Percent Change in AUC.

A search for $K_i$ values obtained with inhibitors of tolbutamide retrieves 64 values.

Search by categories
Users can search the Metabolism and Transport Drug Interaction Database using 40 categories such as:
- genotype
- metabolite name
- study design
- therapeutic class
- transporter

Uses for the Metabolism and Transport Drug Interaction Database

- To evaluate the interaction potential of drugs in development
- To optimize study designs and comply with regulatory recommendations
- As reference database for hospital pharmacists
- As didactic tool in teaching programs

A search for Percent Change in AUC of drugs induced by rifampin retrieves 105 values, sorted by administration method, dose size and interval, and substrate (i.e., object).

Contact Information
For more information, visit our web site at
http://depts.washington.edu/didbase/

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Metabolism & Transport

Drug Interaction Database

Project of the Program in Drug Interactions
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- A Web-based research tool
- Includes over 4,000 published articles on drug interactions in humans from 1966 to the present
- Designed for scientists in drug discovery and drug development
- Allows in vitro - in vivo correlations

http://depts.washington.edu/didbase/
Queries and Searches

Users can search the Metabolism and Transport Drug Interaction Database using a number of formulated queries.

**Drug queries**

Example: Retrieve all available in vivo studies with **tacrolimus** as a substrate (i.e., object) and **ketoconazole** as inhibitor (i.e., precipitant).

**Enzyme queries**

Example: Retrieve all substrates (i.e., objects) of a particular enzyme such as UGT1A3.

**In vivo studies**

Research articles describing PK/PD measures of drug interactions in humans; clinical case reports

**In vitro studies**

Research articles providing the in vitro basis of drug interactions in humans

Link to the article abstract on Medline

Link to a table providing therapeutic range and other PK parameters for each drug included in the article

Click to display source article

Blue text is hyperlinked to additional searches

Magnitude of change in AUC observed in each clinical study

Role of transporter

Kinetic parameters