INTRODUCTION
Preclinical and clinical risk–benefit analyses are essential for proper prioritization of the drug candidates with the best chance of success. PharmaPendium's DMPK Solution helps users to make informed decisions in drug candidate assessment by providing a unique source of searchable pharmacokinetic, metabolizing enzyme and transporter data together with a powerful risk calculator to identify potential drug–drug interactions.
PharmaPendium’s DMPK Solution supports successful analysis and prioritization of drug candidates by helping to create a more detailed picture of potential drug–drug interactions (DDIs). Informed risk assessments are facilitated by comprehensive pharmacokinetic (PK) and metabolizing enzyme and transporter (MET) data extracted from FDA and EMA approval packages, FDA Advisory Committee Documents (metabolizing enzymes and transporter data only) and literature.

In addition, the solution provides a new DDI Risk Calculator for establishing drug–drug interaction risks in a manner compliant with the 2012 FDA draft Guidance for Industry Drug Interaction Studies. It helps to identify potential interactions for multiple drugs simultaneously, providing a full risk profile against marketed drugs.

The DMPK Solution delivers the information and tools that DMPK scientists need to answer critical questions during development, including:

• What is the risk that a drug candidate will interact with other, marketed drugs?
• Is the new drug a substrate of an enzyme that can be modulated by other drugs?
• Can transporters affect the disposition of the new drug?
• Might the new drug affect the metabolism of other drugs?
• What concerns have regulatory agencies previously expressed about potential DDIs?
• What studies were conducted to assess DDI risks?
• How do potential interactions affect pharmacokinetic properties?
• How does the drug candidate compare with drugs that share class, chemistry and target similarities?

**UNIQUE CONTENT ENABLES A MORE THOROUGH RISK ASSESSMENT**

The DMPK Solution is the only tool to provide manually extracted data not only from literature, but also from FDA and EMA approval packages, making this the most comprehensive solution for assessing drug–drug interaction risk across marketed drugs.

**AS OF JUNE 2017, THE DMPK SOLUTION GIVES ACCESS TO:**

- **2.32M+** pages of FDA approval documents
- **200K+** pages of EMA approval documents
- **684K+** pages from FDA Advisory Committee Meetings
- **4,466** indexed and fully searchable drugs
- **1.66M** extracted pharmacokinetics data lines
- **310K+** metabolizing enzyme and transporter data lines
- **238** unique drugs assessed as a victim
- **521** drugs assessed as a perpetrator
Analyze several drugs simultaneously with PharmaPendium’s DDI Risk Calculator, which quickly provides a full risk profile of the potential for a drug candidate to interact with marketed drugs (Figures 1 and 2).

Information on potential interactions is key for making critical drug development decisions, including:

- Identifying promising candidates with favorable safety profiles
- Prioritizing DDI clinical studies
- Determining what drugs can be used concurrently with a drug candidate
- Establishing initial inclusion/exclusion criteria relating to concomitant drugs

PharmaPendium’s DMPK Solution helps users make informed decisions in drug candidate assessment with access to unique and essential data, extracted and normalized for easy searching, and the powerful FDA guideline-compliant DDI Risk Calculator. It is part of Elsevier’s commitment to providing pharmaceutical developers with superior support for more rapid development of safe and effective drugs.

**Example:** My drug candidate is currently undergoing clinical trials for diabetes

**Figure 1** The DDI Risk Calculator enables risk assessment of multiple drugs simultaneously. The graph shows therapeutic classes where available drugs can be safely used as co-medications.

**Figure 2** Visualization of DDI risk for drugs at varying doses quickly facilitates decision-making on co-treatment options.
PharmaPendium helps customers make more informed drug development decisions on safety and efficacy, risk assessments and mitigation, and study designs by providing researchers with searchable FDA/EMA drug approval documents and comparative drug safety data.

LEARN MORE
To request information or a product demonstration, please contact us at elsevier.com/pharmapendium/contact-sales

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