# Herb-Drug Interactions

Today it is very common for patients to take many medications simultaneously. This is particularly true for elderly patients who frequently take ten and more medications. With multiple prescribed medications, there are numerous potential drug interactions that are often unpredictable. However, the scenario gets even more complicated in cases of cotreatment with herbal drug products that are often poorly defined with variable ingredients. Detection of these interactions is further hindered by the fact that many patients do not disclose the use of herbal products to their physicians and pharmacists.

The current issue of Planta Medica is a dedicated summary of articles dealing with various aspects of herb-drug interactions. The first two articles address the regulatory implication for drug approval and labeling, both in the US and in Europe. Both the FDA and EMA recently released updated guidance documents for the Pharmaceutical Industry on studying and reporting drug-drug interactions. Unfortunately, herb-drug interactions are addressed with little detail in these documents and the articles presented in this issue help fill this gap.

The third article deals with the limitations of *in vitro* studies to assess herb-drug interactions. This approach is standard for single component drug-drug interactions where a battery of *in vitro* tests is performed to identify likely interactions that can be evaluated at therapeutically relevant concentrations *in vivo*. The role of phenotyping in such studies is discussed in the next article in this issue. Finally, the ultimate relevance of herb-drug interactions becomes apparent during clinical use, where herbal medications often can be perpetrators and alter the pharmacokinetics of coadministered drugs. These clinical interactions are discussed in considerable detail in the fifth article.

This special issue closes with two papers that present numerous examples of clinically relevant herb-drug interactions to give the reader a flavor of the huge diversity of possible mechanisms and interaction scenarios. The examples presented are intended to be representative rather than a complete listing of all possible scenario examples. It is obvious that much more work is needed in this emerging field. The editors of this special issue hope that the current selection of manuscripts will stimulate more research to better utilize and combine herbal preparations with other drugs so that patients can use them with minimum risk and optimum benefit.

*Veronika Butterweck*
*Hartmut Derendorf*

**Bibliography**
**DOI** http://dx.doi.org/10.1055/s-0032-1315285
Planta Med 2012; 78: 1399
© Georg Thieme Verlag KG Stuttgart · New York ·
ISSN 0032-0943

**Correspondence**
***Veronika Butterweck, Hartmut Derendorf***
Institute for Pharma Technology
School of Life Sciences
University of Applied Sciences
Northwestern Switzerland
Gründenstrasse 40
4132 Muttenz
Switzerland
veronika.butterweck@fhnw.ch

This document was downloaded for personal use only. Unauthorized distribution is strictly prohibited.