

## EDITORIAL

This supplement issue contains results of pharmacological and molecular biological *in vitro* and *in vivo* investigations of a drug containing nine plant extracts (Iberogast®). The drug, which has been in the market for 45 years, is used for the treatment of the functional dyspepsia.

Two previous placebo-controlled clinical trials have been carried out for comparison against the synthetic monosubstance drugs metoclopramide and cisapride for the same indication. These comparative studies have shown conclusively that the multiextract preparation possesses full therapeutic equivalence to both synthetics, with an advantage in terms of the reported side-effects.

The different pharmacological investigations convincingly explain the clinical results. In contrast to the plant drug the synthetic monodrugs which belong to the classes of antazida, H<sub>2</sub>-blockers, proton-pump inhibitors, prokinetics, spasmolytics, antiemetics or selective serotonin-receptor antagonists, are targeted against only one symptom of the complex pathophysiology of functional dyspepsia. The multiextract drug, on the other hand, exhibits a multitarget effect by balancing the disturbed stomach/intestine motoric, by alleviating the sensitivity of the stomach/intestine tract, by inhibiting inflammatory processes and by reducing the excessive gastric acid production. As shown in separate investigations of the single extracts of the extract combination in the same bioassays and pharmacological tests, all extract components contribute in a synergistic manner to the overall efficacy of the drug, lending the total pharmacological profile of the drug. This multi-target approach,

used since ancient times in phytotherapy, has been recently also adopted from chemotherapeutic approach for the treatment of various diseases such as AIDS, cancer or hypertension.

This concept of multitargeting demonstrated with this multiextract drug is unique in that it provides the first evidence-based, rational explanation for the multitarget efficacy of a multiextract drug.

The final contribution in this supplementary issue shows that multi-drug and target effects may also be verified for many other multiextract preparations on the market (see this journal).

Progress in the field of drug synergy research lends phytotherapy a new legitimacy and, at the same time, suggests the chance that in the future, standardized phytopreparations may also be used for the treatment of diseases which have previously been treated only with chemotherapy.

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