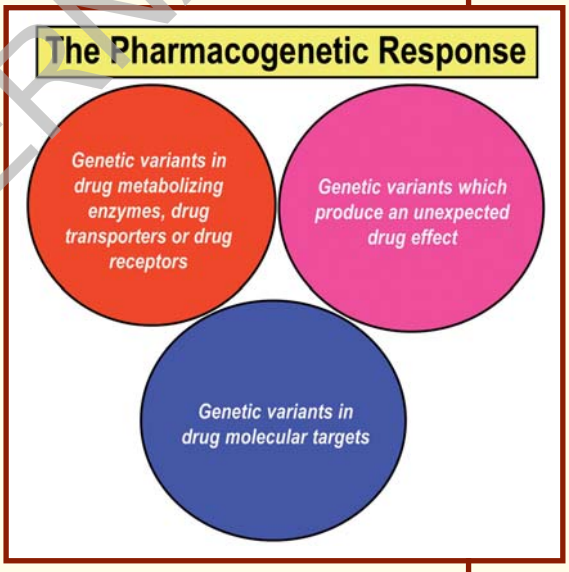
From the Editor-in-Chief

Several articles in this number of *Clinical Cases in Mineral and Bone and Bone Metabolism* (*CCMBM*) are devoted to pharmacogenetics and pharmacogenomics. Drug response is known to be highly variable among treated patients and affected by many factors, such as age, sex, ethnicity, concomitant diseases, and pharmacological therapy. However, sequence variants in the human genome are now considered an important cause of differences in drug response.

Pharmacogenetics, which is the utilization of individual genetic data to predict the outcome of drug treatment with respect to both beneficial and adverse effects, represents an emerging field of genetics with the potential to become useful for the identification of the most effective drug and the most beneficial dose for a given individual.



In osteoporosis pharmacogenetic studies are in their infancy. In this number we host reviews selected out of the presentations at the Second International Meeting on Pharmacogenetics of Ostearticular Disorders, held in Florence on April 2008.

W.H. Dere and T.S. Suto introduced new insights on the role of pharmacogenetics and pharmacogenomics in improving translational medicine.

E. Mini and S. Nobili covered the important concept of implementing personalized medicine. Examples of how to transform the practice of medicine using genomics were treated by G.S. Ginsburg and Y.J. McCarthy.

The role of Regulatory Agencies in translating pharmacogenetics to the clinics is elegantly presented by K. Prasad.

Novel insights into the pharmacogenetics of osteoporosis are described in three reports, marking the future approaches in the evaluation of the response of the single patient to antifracture treatments.

Finally, pharmacogenetics of cardiovascular drug therapy is critically analyzed in a review by B.J.M. Peters and coll. Due to the association between osteoporosis and cardiovascular diseases, this report results of potential great interest to bone specialists.

This issue also includes a Case Report on systemic mastocytosis with skeletal involvement, a rare disorder whose management is still a matter of debate.

As always, *CCMBM* takes only responsibility for the editorial content and peer-review of the articles.

There is no doubt that pharmacogenetics will continue to grow in the field of osteoporosis. It is, therefore, imperative that we educate the scientific community on an area of potential great impact into the clinical management of osteoporotic patients. The research agenda aimed at filling the considerable gaps in knowledge regarding pharmacogenetics of osteoporosis is dense.

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