Cytochromes P450: Drug Metabolism and Bioactivation

Message from the Guest Editors

Nearly seventy year ago, R.T. Williams and B.B. Brodie developed the concept of drug metabolism and the types of reactions and the mechanisms for the body to facilitate the excretion of a drug. Ten years later, Klingenberg and Garfinkel independently discovered the P450 protein, which was, five years later, demonstrated to be a cytochrome P450 by Omura and Sato. Later on, the prominent function of this enzyme and its role in drug metabolism was established. This resulted in a new chapter, and now more than 84,000 papers contain the concept of cytochrome P450. We now know this enzyme’s importance in clearance and potential toxicity, and, therefore, compounds do get tested for these reasons. This Special Issue focus on “Cytochrome P450: Drug Metabolism and Bioactivation” and includes papers on: (1) its structures, (2) types and mechanisms of reaction, (3) pharmacogenomics, (4) bioactivation reactions and biological markers, (5) mechanism-based inactivation, (6) species differences, and (7) regulation.

We warmly welcome submissions, including original papers and reviews, on these widely-discussed topics.

Deadline for manuscript submissions: closed (30 April 2018)