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2.8 SummaryReferences; 3 Conjugative Metabolism of Drugs; 3.1 UDP-Glucuronosyltransferases; 3.1.1 Location Within the Cell; 3.1.2 Endogenous Substrates; 3.1.3 Enzyme Multiplicity; 3.1.4 Inducibility; 3.1.5 Pharmacogenetics; 3.1.6 Experimental Considerations; 3.1.7 Enzyme Selective Substrates and Inhibitors; 3.1.8 Drug-Drug Interactions and Glucuronidation; 3.1.9 Summary; 3.2 Cytosolic Sulfotransferases; 3.2.1 Cellular Location and Tissue Expression; 3.2.2 The SULT Superfamily of Cytosolic Enzymes; 3.2.3 Inducibility; 3.2.4 SULT Pharmacogenetics
3.2.5 Analytical Detection of Sulfonated Metabolites3.2.6 SULT Inhibitors (Pacifici and Coughtrie, 2005); 3.2.7 Drug-Drug Interactions and Sulfonation; 3.2.8 Summary; 3.3 Glutathione-S-Transferases; 3.3.1 General Overview; 3.3.2 Classification of the GST Enzymes; 3.3.3 Localization and Expression; 3.3.4 Reactions Catalyzed by GSTs; 3.3.5 Regulation of GSTs; 3.3.6 GST Alpha Class; 3.3.7 GST Mu Class; 3.3.8 GST Pi Class; 3.3.9 GST Theta Class; 3.3.10 GST Zeta Class; 3.3.11 Incubation Conditions and Analytical Methods; 3.3.12 Glutathione Conjugate Metabolism (Mercapturic Acid Pathway)
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4.7.6 Summary of Effects of Various Inhibition Types of Kinetic Parameters

Sommario/riassunto

The essentials of drug metabolism vital to developing new therapeutic entitiesInformation on the metabolism and disposition of candidate drugs is a critical part of all aspects of the drug discovery and development process. Drug metabolism, as practiced in the pharmaceutical industry today, is a complex, multidisciplinary field that requires knowledge of sophisticated analytical technologies and expertise in mechanistic and kinetic enzymology, organic reaction mechanism, pharmacokinetic analysis, animal physiology, basic chemical toxicology, preclinical pharmacology, and molecular biol