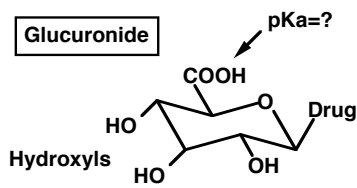


Phase-2 Drug Metabolism

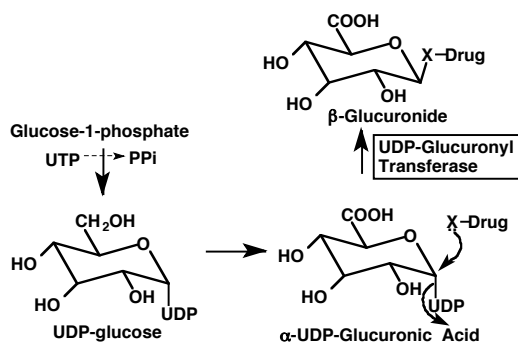
Prof. Patrick Davis
Basic Med Chem Principles
PHR 143M Fall-08

Phase-2 (Conjugation) Reactions

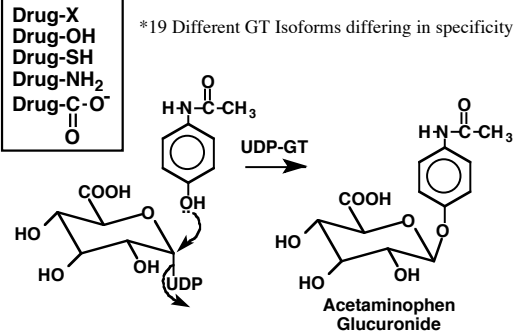
- Glucuronidation - Most Important
- Huge supply of glucuronic acid
- Reacts with many functional groups
- Very polar! Enhances excretion.



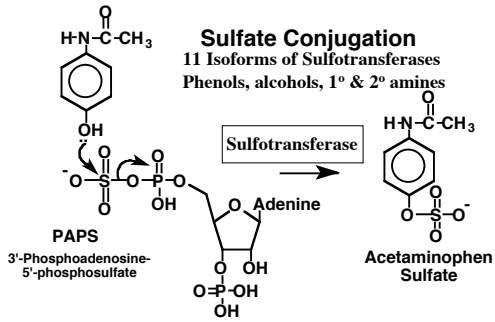
Phase-2 (Conjugation) Reactions



Phase-2 (Conjugation) Reactions

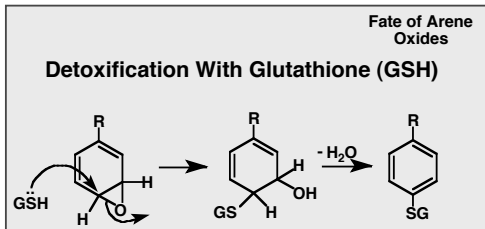


Phase-2 (Conjugation) Reactions



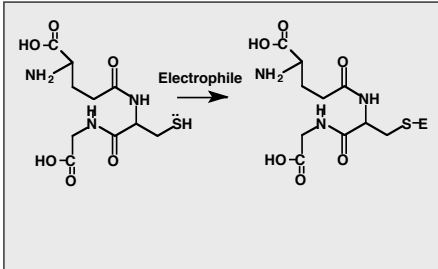
Phase-2 (Conjugation) Reactions

- Glutathione Conjugation
- Detoxification of electrophilic compounds.
- Glutathione-S-Transferase (GST) 20 isoforms.



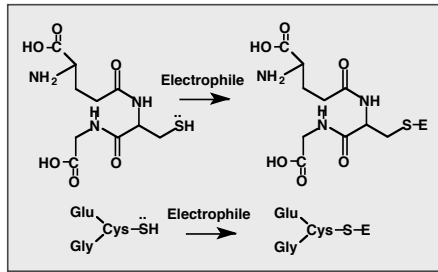
Phase-2 (Conjugation) Reactions

- Glutathione Conjugation
- Tripeptide Structure (γ -glutamyl-cysteinyl-glycine).



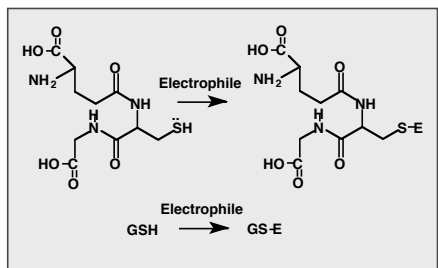
Phase-2 (Conjugation) Reactions

- Glutathione Conjugation
- Tripeptide Structure (γ -glutamyl-cysteinyl-glycine).



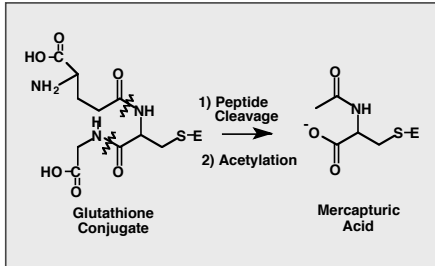
Phase-2 (Conjugation) Reactions

- Glutathione Conjugation
- Tripeptide Structure (γ -glutamyl-cysteinyl-glycine).



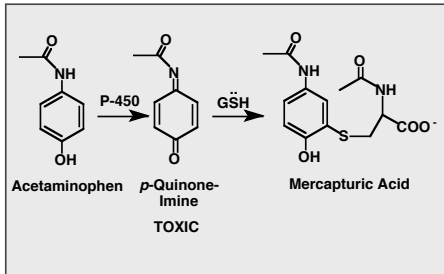
Phase-2 (Conjugation) Reactions

- Glutathione Conjugation
- Further metabolized to mercapturic acids.



Phase-2 (Conjugation) Reactions

- Glutathione Conjugation
- Detoxification of reactive metabolites.



Phase-2 Drug Metabolism

You're Ready for Quiz #2
