

What is the meaning of first pass effect?

- **Hepatic first pass effect:-** All drug dose absorbed from the gastrointestinal tract is first delivered to the liver by the portal vein. A fraction of the drug can then be metabolized in the liver before it even reaches the systemic circulation. Therefore the oral bioavailability of the drug is reduced.

What drugs are metabolized in the liver?

- Drug metabolism also known as xenobiotic metabolism is the biochemical modification of pharmaceutical substances or xenobiotics respectively by living organisms, usually through specialized enzymatic systems. Drug metabolism often converts lipophilic chemical compounds into more readily excreted hydrophilic products.

What drugs have significant first pass effect?

- Notable drugs that experience a significant first-pass effect are imipramine, morphine, propranolol, buprenorphine, diazepam, midazolam, demerol, cimetidine, and lidocaine. After a drug is swallowed, it is absorbed by the digestive system and enters the hepatic portal system.