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Pharmacosomes: Revolutionizing Drug Formulation and Novel Drug Delivery

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Abstract: *Pharmacosomes are drug delivery systems that can enhance the bioavailability and protect the GI tract of drugs like poorly soluble ones. They resemble liposomes but with a significant increase in drug loading which makes them more effective for clinical application. The advantage over liposomes is that pharmacosomes do not require any special techniques to improve their loading capacity for drugs. Pharmacosomes, tiny drug-carrying particles, can boost the effectiveness of various medications, such as amoxicillin, bupranolol hydrochloride, and pindolol. By designing and testing pharmacosomes for drug delivery, scientists can enhance drug availability, prevent degradation, and improve overall treatment results. Pharmacosomes are amphiphilic phospholipid complexes of drugs bearing active hydrogen that bind to phospholipids. Pharmacosomes exhibit fusion, aggregation and hydrolysis when stored which affect their stability. Nevertheless, they have various merits such as enhanced biopharmaceutical properties, controlled release, reduced toxicity and cost of therapeutics*

Keywords: Pharmacosomes, vesicular drug delivery, Amphiphilic, Phospholipid, bioavailability