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(57) Abstract :
A nanomicelle drug delivery system is described, which includes a drug-phospholipid complex stabilized by a surfactant, specifically D-a-Tocopherol polyethylene glycol 1000 succinate (TPGS). This system is designed to improve the solubility and bioavailability of poorly soluble drugs, such as felodipine, while enabling controlled release for less frequent dosing and reducing side effects. The surfactant is present in an aqueous medium at a concentration of 0.5-2% w/v, and the drug-phospholipid complex is concentrated in a small amount of an organic solvent, such as dichloromethane. The system involves adding a drug-organic solvent mixture dropwise to an aqueous surfactant solution with continuous stirring to form stabilized nanomicelles, which are stirred for 2-4 hours. The drug-phospholipid complex and the surfactant are present in a ratio of 1:1 to 1:10 by weight.

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