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(57) Abstract:

The present invention relates to preparation of simvastatin niosomes to enhance its solubility and bioavailability. Simvastatin is derived synthetically from fermentation products of Aspergillus terreus. It is used to treat hyperlipidaemia. Simvastatin when synthetically from fermentation products of HMG – CoA (Hydroxylmethyl glutaryl CoA) in structure. So hydrolysed produces beta, delta, dihydroxy acid which is similar to HMG – CoA (Hydroxylmethyl glutaryl CoA) in structure. So hydrolysed simvastatin competes with HMG – CoA for HMG – CoA reductase. simvastatin niosomes were prepared by using hand hydrolysed simvastatin competes with HMG – CoA for HMG – CoA reductase. simvastatin F2 containing 2:1 (Span 60: Cholesterol) shaking method. From the result of the experiment, it may be concluded that formulation F2 containing 2:1 (Span 60: Cholesterol) was found to be high % of entrapment efficiency and desired sustained release of simvastatin. The in-vivo study value it was found that the bioavailability of simvastatin niosome was greater than the plain simvastatin drug due to the decrease in particle size.

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