

## Effect of Non-Ionic Surfactants on in vitro Release of Ketorolactromethamine

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**Abstract :** Niosomes or non-ionic surfactant vesicles are microscopic lamellar structures formed on admixture of non-ionic surfactant of the alkyl or dialkyl polyglycerol ether class and cholesterol with subsequent hydration in aqueous media. They are vesicular systems similar to liposomes that can be used as carriers of amphiphilic and lipophilic drugs. Entrapment efficiency was found to be higher in case of niosome prepared with span60 than niosome prepared with tween. The amount of release was found to be in order of Span20>Tween60>Tween20>Span60. As the concentration of surfactant is increased in vitro release was increased due to high entrapment. The stability study of optimized batch revealed that particle size was increased after 3months on increasing the temperature. On the other hand entrapment efficiency was decreased on increasing the temperature.

**Keywords :** niosomes, vesicles, span, tween, in vitro release

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