

## Development of sustained release tablet of verapamil HCl using natural polymers

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Advancement in development of sustained-release drug delivery systems is use of polymer of natural origin to fulfill the aim of sustaining the drug release. Aim of present study was to develop sustained release tablet of Verapamil HCl using natural polymers such as Locust bean gum (LBG) and Xanthan gum (XG). Different batches of SR tablet were prepared using various concentrations of LBG, XG and combination of both. Prepared tablets were evaluated for various parameters like hardness, friability, uniformity of weight, uniformity of drug content, swelling behavior, drug-polymer interaction, in-vitro drug release and short term stability studies. *In-vitro* drug release studies were performed using USP XXIII apparatus-I at 100 rpm. The results of *in-vitro* drug release showed that as concentration of polymer increases drug release retardation also increase. It was also found that formulations containing Xanthan gum retard more drug than that of formulation containing Locust bean gum. Formulation containing combination of both LBG and XB showed required drug release which was compared with marketed formulation. It was may be due to synergistic effect of both polymer. Short term stability study of optimized formulation showed that formulation was stable at respective temperature and humidity condition. Study concluded that it is possible to make once a day sustained release tablet of Verapamil HCl using natural polymer such as Locust bean gum and Xanthan gum

### Biography

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## Novel approaches in cancer therapy

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Targeted delivery of drug molecules to tumor tissue is one of the most interesting and challenging endeavors faced in pharmaceutical field, due to the critical and specific environment that exists in tumor. Over these years, cancer targeting treatment has been greatly improved by new tools and approaches based on nanotechnology. Nanomaterials such as nanoparticles, micelles, niosomes, liposomes, dendrimers, carbon nanotubes, quantum dots, and nanofibers have application in the field of cancer therapy when they are used as nanocarrier systems. However, there are only a few clinically approved nanocarriers that incorporate molecules to selectively bind and target cancer cells. This presentation will discuss about various nanocarriers and targeted delivery systems employed in cancer therapy.

### Biography

T.Lakshmi has completed B.pharmacy from Sri Venkateshwara college of pharmacy with 79 percentage. At present persuing M.pharmacy (Pharmaceutics) from Bhaskar pharmacy college. My goal is to find a new medicine for complete cure of HIV/AIDS.

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