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**A study on antimalarial potency of artesunate liposomes****Ramakrishna Shabaraya, Ankit SP, Sripathy D and Kamath KK**  
Srinivas College of Pharmacy, India

Among several talented new drug delivery systems, liposomes characterize an advanced technology to deliver active molecules to the site of action, and at present, several formulations are in clinical use. Artesunate having a short half-life of 2-3 hours upon oral administration and is a lipophilic in nature is used for the treatment of malaria, was encapsulated in liposomes. The liposomes containing artesunate were prepared using thin film hydration method. In this study, PEGylated and conventional liposomes containing artesunate were prepared using varying drug-lipid ratio and were characterized for their particle size, zeta potential, encapsulation efficiency and *in vitro* drug release studies. The drug encapsulation efficiency of PEGylated liposomes was found to be higher in comparison to conventional liposomes. The average particle size of both conventional and PEGylated liposomes was obtained in nanometers with PDI ranging from 0.095-0.356. The PEGylated liposomes were found to be more stable than the traditional liposomes through the zeta potential studies. *In vitro* drug diffusion studies was carried for period of 16 hours where PEGylated liposomal formulation showed around 80.99% sustained drug release which was more than the conventional liposomes. The PEGylated liposomal formulations followed Higuchi model where as conventional liposomal formulations followed zero order kinetics.

**Biography**

Ramakrishna Shabaraya has completed his BPharm in 1995, MPharm in 1997, PhD in 2007 and MBA in 2015. He has published more than 60 research publications in national and international journals and presented in International conferences i.e. France, Australia, New Orleans, Malaysia and Dubai. He has successfully guided 25 MPharm and five PhD students. He has received many travel grants, research and seminar grants. He has authored one book. He was awarded National Education Leadership Award by Economic Growth society of India New Delhi.

shabaray1@rediffmail.com

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