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Formulation and evaluation of invasomal drug delivery system for non-steroidal anti-inflammatory agents**Abbaraju Krishna sailaja***Osmania University, Hyderabad***Aim:** The aim of this study was to prepare Naproxen Sodium loaded Invasomes by thin film hydration method.**Materials and Methodology:** For the preparation of naproxen sodium loaded invasomes, thin film hydration method was adopted. Total twelve formulations (INV1-INV12) of invasomes were prepared, in which four Formulations (INV1-INV4) were prepared by varying drug to surfactant ratio and eight Formulations (INV5-INV12) were prepared by varying drug to lipid ratio. Soya lecithin was used as phospholipid, limonene as terpene and span 60 as surfactant. Chloroform, methanol and ethanol as organic solvents.**Evaluation parameters:** The prepared formulations are evaluated for their vesicle size, entrapment efficiency, drug content, zeta potential and invitro drug diffusion studies.**Results and discussion:** Among the twelve formulations of invasomes the INV2 formulation (1:1) ratio containing 40mg drug and 40mg surfactant (span60) was found to be the best formulation with drug content of 96.62%, entrapment efficiency of 90.9%, zeta potential of - 68.5mV, mean particle diameter of 572.4 nm and invitro drug diffusion of 91.6% in a time period of 12 hrs and followed the zero order kinetics with non fickian diffusion mechanism.**Conclusion:** Naproxen Invasomal formulations were successfully prepared**Biography**

Dr. A.Krishna sailaja is working as Associate Professor and Head, Department of Pharmaceutics RBVRR Women's college of pharmacy, Hyderabad. She pursued her Mpharm from BIT Mesra and PhD from Osmania University. She is having 18 years of experience in teaching as well as research. She published 150 scientific papers in various national and International journals with h index value of 12 and 780 citations. Authored 5 books. Delivered 25 invited talks in national and International conferences. Filed 5 patents. She received best scientist award from IMRF and best Faculty award from Novel research academy. She is an editorial board member and reviewer for several journals. She guided 35 M pharmacy projects guiding 2 research scholars. She filed 6 patents and received one patent grant.