

## Formulation development and evaluation of immediate release tablet of first choice anti-arthritic drug (methotrexate) and its pharmacokinetic study in rabbit: A research

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The rationale of this project work was to enhance the bioavailability of the methotrexate. To achieve this objective, oral dispersible tablets (ODT) of methotrexate were formulated with various superdisintegrants (SSG, cross povidone NF, low substituted HPC and cross carmellose sodium) and these oral dispersible tablets were evaluated according to various standard parameters (as per USP 2004) to achieve the optimum results. The plasma serum concentration of methotrexate was analyzed by the HPLC method and compared with pharmacokinetic profile of conventional tablet of methotrexate. The pharmacokinetic studies were conducted in rabbit model either sex. The *In-vitro* release study showed that all formulation followed zero order release kinetics. Even though there were no significant differences with 'P' value between the pharmacokinetic data obtained for ODT and conventional Methotrexate tablets, the bioavailability was increased in case of ODT.

### Biography

Mohit batra has completed his B.Pharm at the age of 22 years from Rajasthan University of Health Science, Jaipur and he is a student of M.Pharm. (Pharmaceutics) IV th sem in Rajasthan University of Health Science. He has published 2 review papers in reputed journal of india and he got second prize from sagar college of Pharmacy, Sagar, M.P. in National level conference.

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