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Review Paper on Formulation Development

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Abstract: *Naproxen is a non-steroidal anti-inflammatory drug (NSAID) widely used for the management of pain, inflammation, and fever. However, its poor aqueous solubility and gastrointestinal side effects pose challenges in achieving optimal bioavailability and patient compliance. The present work focuses on the formulation development of naproxen with the objective of improving its dissolution characteristics, stability, and therapeutic performance. Preformulation studies were carried out to evaluate the physicochemical properties of naproxen, including solubility, compatibility with excipients, and stability. Based on these studies, a suitable dosage form was designed using appropriate excipients and optimized processing parameters. The developed formulation was evaluated for critical quality attributes such as drug content uniformity, in vitro dissolution, stability, and other relevant pharmacotechnical parameters. The results demonstrated that the optimized formulation showed improved dissolution behavior and satisfactory stability compared to conventional formulations.*

Keywords: *Naproxen*

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