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## Formulation and Evaluation of Fast Dissolving Tablets

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Abstract: This study investigates the formulation and evaluation of Aceclofenac fast dissolving tablets, covering preformulation studies, formulation optimization, and stability assessment. The calibration curve demonstrates sensitivity in quantifying Aceclofenac, while FTIR spectra analysis elucidates molecular structure and excipient compatibility. Precompression parameters provide insights into powder flow properties crucial for formulation development. Evaluation of fast dissolving tablets reveals uniformity, mechanical strength, and desirable disintegration properties, essential for dosage accuracy. In-vitro drug release studies offer insights into dissolution characteristics, guiding therapeutic efficacy assessment. Stability studies affirm the formulation's robustness over three months, highlighting its potential for pharmaceutical application. Overall, this study underscores the successful formulation and evaluation of Aceclofenac fast dissolving tablets with promising attributes for enhanced patient care.

**Keywords:** Aceclofenac, fast dissolving tablets, preformulation studies, formulation optimization, stability assessment, in-vitro drug release, pharmaceutical formulation.

