



## Dissolution Rate Enhancement of Fenofibrate using Lquisolid Tablet Technique

Amrit B. KARMARKAR \*<sup>1</sup>, Indrajeet D. GONJARI <sup>1</sup>, Avinash H. HOSMANI <sup>2</sup>,  
Pandurang N. DHABALE <sup>1</sup> & Satish B. BHISE <sup>1</sup>

<sup>1</sup> Govt. College of Pharmacy, Karad – 415124, Dist. Satara, MS, India.

<sup>2</sup> Govt. College of Pharmacy, Amaravati, MS, India.

---

**SUMMARY.** Fenofibrate is more effective drug as compared to other fibrates. But low bioavailability of it is due to its poor aqueous solubility. The purpose of present study was to improve fenofibrate dissolution through its formulation into lquisolid tablets and then to investigate in vitro performance of prepared lquisolid systems. By use of this technique, liquid medications such as solutions or suspensions of water insoluble drugs in suitable non-volatile liquid vehicles can be easily converted into powders with acceptable flow properties and compression behavior by using suitable powder excipients. X-ray powder diffraction and Differential Scanning Calorimetry were used for evaluation of physicochemical properties of Fenofibrate in lquisolid tablets. Stereomicroscopy was used to assess morphological characteristics of lquisolid formulation. Enhanced drug release profiles due to increased wetting properties and surface of drug available for dissolution was obtained in case of lquisolid tablets.

---

**KEY WORDS:** Dissolution rate, Drug release, Lquisolid tablets, Poorly water soluble drug.

\* Author to whom correspondence should be addressed. *Email:* abkarmarkar@gmail.com