

## **Research Paper**

# **METHOD DEVELOPMENT AND ANALYTICAL VALIDATION FOR THE SIMULTANEOUS DETERMINATION OF REMOGLIFLOZIN AND METFORMIN**

**Priyanka Choudhary\*, Dilip Agrawal, Rakesh Goyal**

sDept. of Pharmaceutical Quality Assurance, Mahatma Gandhi College of Pharmaceutical Sciences, Jaipur - 302022

A simple, rapid, affordable, precise, and accurate RP-HPLC technique for simultaneous quantification of Remogliflozin Etabonate and Metformin HCl in their synthetic mixture and tablet dosage form has been devised. A reverse-phase high-performance liquid chromatographic method has been devised to simultaneously quantify Remogliflozin Etabonate and Metformin HCl in their Synthetic Mixture. Chromatographic separation was obtained using a Hypersil TM Thermo Scientific "ODS-C18 (250 mm × 4.6 mm, i.d. 2.5 µm) column with a mobile phase consisting of Acetonitrile: 20 mM ammonium formate (pH adjusted to 3.5 with formic acid) in a ratio of 40:60 % (v/v). Detection was carried out at 243nm. The retention time of Remogliflozin Etabonate and Metformin HCl was 3.2 min and 4.9 min, respectively. The method devised for quickly, precisely, and accurately quantifying Metformin HCl and Remogliflozin Etabonate in their synthetic mixture was effective. The suggested technique, which worked well for simultaneously quantifying both drugs in a commercial synthetic mixture.

**Keywords:** Remogliflozin Etabonate, Metformin HCl, RP-HPLC, Development of method, validation.

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