ABSTRACT

A HPLC method for the detection and quantification of glibenclamide, from dissolution studies of glibenclamide tablets (5 mg), was developed. The dissolution test employed was the basket method, operating at 100 rpm, using 1000ml phosphate buffer pH 7.4 as the dissolution medium. Elution was performed on LC-18 reverse phase, SupelcosilTM ODS column (4.6mm x 25cm, 5mm) using a mobile phase consisting of 0.02M monobasic ammonium phosphate in 60%v/v acetonitrile in water at a flow rate of 2ml/min, using phenacetin as the internal standard. The eluent was monitored at 254nm with an UV detector. Retention times of the glibenclamide and phenacetin peaks were 3.61 minutes and 1.8 minutes respectively.

Key words: glibenclamide, dissolution studies, in vitro, HPLC analysis