



Research article

Development and validation of rapid HPLC method for determination of Aripiprazole in bulk drug and pharmaceutical formulation

Naved Ahmed, Obaid Shaikh^{*}, Aateka Barrawaz, Sarfaraz Khan, Zahid Zaheer

Department of Quality assurance, Y.B. Chavan College of pharmacy, Aurangabad, Maharashtra, India-431001.

Key words: Aripiprazole, RP-HPLC, Chromatograph, Accuracy, Method validation.

***Corresponding Author: Obaid Shaikh**, Department of Quality assurance, Y.B. Chavan College of pharmacy, Aurangabad, Maharashtra, India-431001.

Abstract

A simple, sensitive, rapid and economical reversed phase high performance liquid chromatography (RP-HPLC) method was developed for the quantitative detection of aripiprazole in bulk and pharmaceutical formulation. The separation and quantification were achieved on waters spherisorb 5 μ ODS 24.6mm x 250mm C18 column using a mobile phase of acetonitrile : methanol: buffer (20:40:40 v/v/v) pH 3.5 at flow rate of 1.0 ml/min with detection wavelength at 254nm. The separation was achieved within 7.7 \pm 0.1 min for aripiprazole sample. The method shows good linearity between the ranges of 5-25 μ g/ml. The intra and inter day variation was found to be less the 2%. The mean recovery of drug from solution was 103.67%. This method can be applied directly for the estimation of drug content in pharmaceutical formulation.