METHOD DEVELOPMENT AND VALIDATION OF A REVERSED PHASE HPLC METHOD FOR DETERMINATION OF ANASTRAZOLE AND TEMOZOLOMIDE IN PHARMACEUTICAL DOSAGE FORM

N. MD. Akram,1* N. Madana Gopal,2 A. Balakrishna,3 N. Bakthavatchala Reddy4

1Santhiram Engineering College, Nandyal, Kurnool (Dt), Andhra Pradesh, India.
2Santhiram College of pharmacy, Nandyal, Kurnool(Dt), Andhra Pradesh, India.
3Rajeev Gandhi Memorial College of Engineering and Technology (Autonomous), Nandyal 518501, Andhra Pradesh, India.
4Ural Federal University, Chemical Engineering Institute, Yekaterinburg, 620002, Russian Federation.
*Corresponding author, E-mail: mdakram.chem@gmail.com

Abstract. A new simple assay method has been developed and validated for the determination of Anastrazole and Temozolomide using reverse-phase high performance liquid chromatography in their pharmaceutical dosage form. The chromatographic separation was performed on an Inertsil ODS (4.6 x 150mm, 5µm) using mobile phase phosphate buffer pH 3.0 and methanol of 30:70% v/v at a flow rate of 0.8 mL/min. Analytes were detected at 260 nm. The method was found to be linear in the concentration range of 1-5 µg/mL for both medicaments with the coefficient value (R2) of >0.999. The accuracy was measured via recovery studies and found to be acceptable and the percentage recoveries were found in the range of 98.81-100.72 and 99.29-100.70%. The proposed method was successfully validated and applied for the quantitative estimation of these drugs in both bulk and tablet dosage forms.