Liquid Chromatographic Determination of Alogliptin in Bulk and in its Pharmaceutical Preparation”.

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Abstract

In this work, a reversed-phase liquid chromatographic (RP-LC) method has been developed for the determination of alogliptin (ALG) based on isocratic elution using a mobile phase consisting of potassium dihydrogen phosphate buffer pH (4.6)-acetonitrile (20:80, v/v) at a flow rate of 1 mL min⁻¹ with UV detection at 215 nm. Chromatographic separation was achieved on a Symmetry® cyanide column (150 mm × 4.6 mm, 5 µm). Linearity, accuracy and precision were found to be acceptable over the concentration range of 5-160 µg mL⁻¹ for ALG in bulk. The optimized method was validated and proved to be specific, robust and accurate for the quality control of ALG in pharmaceutical preparations.