Validated Spectroscopic Methods for the Determination of Fluoxetine HCl and Lamivudine in Bulk and Marketed Formulations

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ABSTRACT
A simple, convenient analytical methods were developed for the estimation of Fluoxetine HCl (FLU) and Lamivudine (LAM) in bulk and pharmaceutical dosage forms. The method for Fluoxetine HCl is based on the reaction between FLU and crystal violet in presence of Chloramine T and Sulphuric Acid. The blue coloured complex obeyed the Beer-Lamberts law in the concentration range of 0-2.5µg/ml at λ-max 603nm. The correlation coefficient was found to be 0.9991. This method was validated for linearity, sensitivity, accuracy, precision, LOD, LOQ and robustness.In the case of Lamivudine (LAM) the colour reaction is based on reaction involving the formation of greenish blue complex between Lamivudine and malachite green in the presence of Chloromine T (CT) and sulphuric acid. It obeys the Beer-Lamberts law in the concentration range of 0.3-2.7 µg/ml at λ-max of 623nm. The correlation coefficient was found to be 0.9997. The method was validated for linearity, sensitivity, accuracy, precision, LOD, LOQ and robustness.

Keywords: Fluoxetine HCl, Lamivudine, Crystal violet, Malachite green, Chloramine T, LOD, LOQ.

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