

Research Paper

ANALYTICAL METHOD VALIDATION FOR SIMULTANEOUS ESTIMATION OF LAMIVUDINE, TENOFOVIR AND DORAVIRINE

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A simple and new isocratic RP-HPLC method was developed and validated for the estimation of LAM, TDF and DOR. The chromatographic separation was performed on Waters column (250×4.6mm, 5µm), mobile phase used for the analysis was prepared by the combination of 20.0 parts of Acetonitrile, 30.0 parts of Methanol and 50.0 parts of orthophosphoric acid mixture. The run time for the separation was fixed at 8min and the flow rate was maintained at 1 ml/min with the detection wave length of 260nm. The column temperature was maintained at 25⁰C ±5 and performed the HPLC analysis. The retention times found to be 2.53 min, 3.53 min and 5.69 min for LAM, TDF and DOR respectively. Under these optimized conditions the respective drugs were shown symmetrical peaks with low tailing factor and high peak area without interference of any excipients.

Keywords: Lamivudine, Tenofovir, Doravirine, RP-HPLC and Validation.

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