

# A new isocratic HPLC method for simultaneous determination of Sildenafil and Dapoxetine in pharmaceutical dosage forms

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In this study, a new isocratic high performance liquid chromatographic method was developed and validated for simultaneous analysis of Sildenafil and Dapoxetine in tablet dosage form. Chromatographic separation was achieved with a mixture of Acetonitrile: Phosphate buffer pH 9.5 in the ratios 70:30 (v/v) as the mobile phase and a C18 column. The detection wavelength was adjusted to 228 nm. Retention times were found as 2.7 min for Sildenafil and 6.1 min for Dapoxetine. The linear concentration ranges were 0.25-0.75 mg/ml for Sildenafil and 0.15-0.45 mg/ml for Dapoxetine. The Limit of Detection (LOD) and the Limit of Quantitation (LOQ) values were 0.318µg/ml and 1.060 µg/ml for Sildenafil, 0.316 µg/ml and 1.053 µg/ml for Dapoxetine, respectively. Recovery percentages were found to be 99.07-100.37% for sildenafil and 99.43-100.11% for Dapoxetine. The method was applied to simultaneous analysis of Sildenafil and Dapoxetine in tablet dosage form. The proposed method is simple, rapid, selective and reproducible. It can be recommended to be used for simultaneous analysis of Sildenafil and Dapoxetine in pharmaceutical industry.

## Biography

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