

# Development and Validation of Stability Indicating UV Spectrophotometric Method for Simultaneous Estimation of Indacaterol and Mometasone Furoate in Pharmaceutical Dosage Form

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**Abstract:** A simple, accurate and precise stability indicating UV spectrophotometric method has been developed for simultaneous estimation of Indacaterol and Mometasone Furoate in pharmaceutical dosage form. The absorbance of Indacaterol and Mometasone Furoate was measured at two different wavelength 260 nm and 224 nm. It shows linear response between the concentration ranges 12-18 µg/ml and 25.6-38.4 µg/ml of regression coefficient  $r^2$  being 0.9994 and 0.9994 of Indacaterol and Mometasone Furoate, respectively. A recovery study was carried out to confirm the methods accuracy. In the recovery study, the % RSD was less than 2. The % degradation by acidic, basic, oxidation, thermal and photolytic degradation of Indacaterol was found to be 5.39, 2.37, 3.46, 2.43 and 1.64%, while of Mometasone Furoate it was 2.37, 11.44, 1.18, 9.88 and 2.35%. The method for estimation of Indacaterol and Mometasone Furoate was found to be precise, specific, reproducible & economical, as per ICH guideline the results of analysis were validated and found to be satisfactory.

**Keywords:** Indacaterol, Mometasone Furoate, UV spectrophotometer, simultaneous estimation, Validation, Force degradation

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