Singh S, Dahiya R. Stability-indicating RP-HPLC method for estimation of atorvastatin calcium in solid dosage form. *Bull. Pharm. Res.* 2014;4(1):9-13.

Abstract: In present investigation, a stability indicating RP-HPLC method for estimation of Atorvastatin calcium in solid dosages form is developed and validated. The chromatographic separation was achieved on Phenomenax Luna C_{18} (50 × 4.6 mm,5 μ m) column using a mobile phase consisting of methanol:acetonitrile:water in the ratio of 70:20:10 % ν/ν , at a flow rate of 1.0 ml/min and UV detection at 256 nm. The linearity of the proposed method for Atorvastatin Calcium was 2-10 μ g/ml (r²= 0.999) and retention time for Atorvastatin calcium was found to be 1.9223. The method was validated for accuracy, repeatability, reproducibility, robustness and system suitability. LOD and LOQ of Atorvastatin calcium were found to be 1.218 μ g/ml and 4.060 μ g/ml respectively. The stability studies of Atorvastatin calcium were conducted and the degradation characteristics were found to be much more prominent in alkaline hydrolysis (alkaline stress condition).

Key words: Atorvastatin calcium, RP-HPLC, Stability-indicating assay, Validation.

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