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Development and Validation of HPLC Method for Simultaneous Estimation of Minoxidil and Finasteride in Topical Solution

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Abstract: *A simple, precise, rapid, accurate HPLC method has been developed and validated for the simultaneous determination of Minoxidil and Finasteride in pharmaceutical dosage form. The chromatographic separation was achieved on ODS C_{18} column (250mm*4.6mm,5 micrometer particle size) using a mobile phase comprising Buffer(7.0PH); ACN 80:20% v/v. The flow rate was 1ml/min and eluents were detected by UV detector at 210 nm. Retention times were found to be 2.967 min and 5.750 min Finasteride and Minoxidil respectively. The calibration curve was linear over the range of 20-80 microgram/ml of Minoxidil and 0.5 -1.6 microgram/ml of Finasteride. The developed method was successfully applied for determination of the two drugs from its pharmaceutical formulation. The excipients in the formulation do not pose any hindrance in determination of two drugs. The proposed method is suitable for routine quality control analysis.*

Keywords: Minoxidil

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