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TO DEVELOP AND VALIDATE AN EFFECTIVE UPLC METHOD FOR THE DETERMINATION OF DARUNAVIR AND COBICISTAT IN BULK AND MULTI BRANDED FORMULATIONS

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Abstract

A simple, rapid, precise, sensitive and reproducible reverse phase high performance liquid chromatography (UPLC) method has been developed for the quantitative analysis of Darunavir and Cobicistat in pharmaceutical dosage form. Chromatographic separation of Darunavir and Cobicistat was achieved on Waters Acquity UPLC system, by using Waters X-bridge C8 100 x 3.0mm, 3.5µ column and the mobile phase containing 0.1% TFA & ACN in the ratio of 40:60% v/v. The flow rate was 1.0 ml/min; detection was carried out by absorption at 257nm using a photodiode array detector at ambient temperature. The number of theoretical plates and tailing factor for Darunavir and Cobicistat were NLT 2000 and should not more than 2 respectively. % Relative standard deviation of peak areas of all measurements always less than 2.0. The proposed method was validated according to ICH guidelines. The method was found to be simple, economical, suitable, precise, accurate & robust method for quantitative analysis of Darunavir and Cobicistat and study of its stability.

Keywords : UPLC Darunavir and Cobicistat

Biography

N.Revathi has her own experience in valuation and passion for ML and data. The research team built this model after many years of experience in research, evaluation, work in both hospitals and scientific laboratories. This approach meets all the requirements for precise, specific, sensitive diagnostics.

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