Development and validation of analytical method for irbesartan and atorvastatin by absorption correction spectroscopic method

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A simple, accurate and precise spectroscopic method was developed for simultaneous estimation of irbesartan and atorvastatin in synthetic mixture using simultaneous equation Method. In this spectroscopic method, 226.00 nm and 246.00 nm wavelengths were selected for measurement of absorptivity. Both the drugs show linearity in a concentration range of 05-30 μg/ml at their respective λmax. Accuracy, precision and recovery studies were done by QC samples covering lower, medium and high concentrations of the linearity range. The relative standard deviation for accuracy, precision studies were found to be within the acceptance range (<2%). The limit of determination was 0.033μg/ml and 0.125 µg/ml for Irbesartan and atorvastatin, respectively. The limit of quantification was 0.1008 μg/ml and 0.3792 μg/ml for Irbesartan and atorvastatin, respectively. Recovery of Irbesartan and atorvastatin were found to be 99.75 % and 99.52% respectively confirming the accuracy of the proposed method. The proposed method is recommended for routine analysis since they are rapid, simple, accurate and also sensitive and specific by no heating and no organic solvent extraction.

Reference:


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