

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

Paras Virani¹

¹Affiliation not available

April 17, 2023



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

PARAS VIRANI

READ REVIEWS

WRITE A REVIEW

CORRESPONDENCE:
parasvirani@gmail.com

DATE RECEIVED:
June 14, 2015

DOI:
10.15200/winn.143431.13037

ARCHIVED:
June 14, 2015

KEYWORDS:
Irbesartan, atorvastatin,
simultaneous estimation,
Simultaneous equation
method, analysis method

CITATION:
Paras Virani, Development and
validation of analytical method
for irbesartan and atorvastatin
by absorption correction
spectroscopic method, *The
Winnower* 2:e143431.13037 ,
2015, DOI:
[10.15200/winn.143431.13037](https://doi.org/10.15200/winn.143431.13037)

© Virani This article is
distributed under the terms of
the [Creative Commons
Attribution 4.0 International
License](https://creativecommons.org/licenses/by/4.0/), which permits
unrestricted use, distribution,
and redistribution in any
medium, provided that the
original author and source are
credited.



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 λ_{max} . 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:

Paras V, Sojitra R, Hashumati R, Jain V. Development and validation of analytical method for irbesartan and atorvastatin by absorption correction spectroscopic method. *GCC Journal of Science and Technology* 2015; 1(2): 23 - 30