CONFERENCE ABSTRACT

ISSN (O): 2349-5332
CODEN: IRJPHY

NEW CONDUCTOMETRIC TITRATION METHODS FOR DETERMINATION OF RANOLAZINE BY USING 0.1 N CCL_4 IN AMMONIA SOLUTION WITH MICROMETRIC ANALYSIS.

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Abstract: -

Purpose: Ranolazine is an antianginal agent belonging to the class of miscellaneous agents used in the management of involving selective inhibition of the late sodium current. This study is aimed at developing and validating two simple, rapid, accurate, reliable and cost-effective methods based on titrimetry in non-aqueous medium are described for the determination of ranolazine inpharmaceutical dosage form.

Methods: In these methods, the drug dissolved in the glacial acetic acid was titrated with the 0.1 N CCl_4 in ammonia solution with visual and conductometricend point detection, phenolphthalein being used as the indicator for visual titration. The methods are applicable over 50-250 µg/ml range of ranolazine. The procedures were applied to determine ranolazine in pharmaceutical products and the results were found to be in a good agreement with those obtained by the reference method. Associated pharmaceutical materials did not interfere.

Results: The precision results, expressed by inter-day and intra-day relative standard deviation values, were satisfactory, higher than 2%. The accuracy was satisfactoryas well. The accuracy and reliability of the methods were further ascertained by recovery studies via a standard addition technique with percent recoveries in the range 99.08-100.2% with a standard deviation of less than 2%.

Conclusion: These results show that the proposed methods are accurate, precise & sensitive. The methods proved to be suitable for the analysis of ranolazinein bulk drug and in tablet.

Key words: - Ranolazine, non-aqueous titration, phenolphthalein, conductometry, CCl_4.

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Indian Research Journal of Pharmacy and Science; 19(2018)1726;
Journal Home Page: https://www.irjps.in