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## Application of two novel spectrophotometric methods manipulating ratio spectra for resolving a pharmaceutical mixture of cinnarizine and dimenhydrinate

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Two simple, specific, accurate and precise spectrophotometric methods manipulating ratio spectra are developed for simultaneous determination of cinnarizine (CINN) and dimenhydrinate (DIM) in tablets. Method A is an extended ratio subtraction one (EXRSM) coupled with ratio subtraction method (RSM), which depends on subtraction of the plateau values from the ratio spectrum. Method B is a ratio difference spectrophotometric one (RDSM). The calibration curves are linear over the concentration range of 4-20 µg/ml and 10-45 µg/ml for CINN and DIM, respectively. The specificity of the developed methods is investigated by analyzing laboratory prepared mixtures of the two drugs and their combined dosage form. The two methods are validated as per ICH guidelines; accuracy, precision and repeatability are found to be within the acceptable limits.

### Biography

Nesrine T Lamie has completed her PhD at the age of 34 years from Faculty of Pharmacy, Cairo University. She is a Lecturer of Analytical Chemistry, Faculty of Pharmacy, Cairo University. She has published more than 20 papers in reputed journals.

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