Validated Chromatographic Methods For The Simultaneous Determination of Co-formulated Drugs in Pharmaceutical Formulation

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Two simple and sensitive chromatographic methods were developed for the simultaneous determination of chlorpheniramine maleate, pseudoephedrine hydrochloride and propyphenazone in their combined dosage form. The first method was a reversed-phase high performance liquid chromatography using methanol: 0.02 M phosphate buffer pH 3.0: triethylamine (60: 40: 0.1, by volume) as a mobile phase. Separation was carried out using RP C18 analytical column (250 × 4.6 mm, 5µm) and a flow rate of 1.0 mL/min. The separated peaks were detected at 215 nm. The second method was a thin layer chromatography-densitometric method, where the three drugs were separated on silica gel F254 plates using ethyl acetate: methanol: toluene: 30% ammonia solution (7.5: 1: 1.5: 0.5, by volume) as a developing system. The separated bands were scanned at 215 nm. The suggested methods were validated according to the International Conference on Harmonization guidelines with good results and they were successfully applied to pharmaceutical formulation without interference from excipients. The proposed methods could be used for routine analysis of the mentioned drugs in quality control laboratories.

**Biography**

Dina A.El Mously is an assistant lecturer in the analytical chemistry department at faculty of pharmacy, Cairo University.She had her bachelor of pharmaceutical sciences from the same university. Her research interests are focused on developing the new analytical methods for the determination and quantification of different analytes. She has recently published two scientific papers in different reputed journals.

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