

Abstract

Different analytical techniques are adopted in this thesis including spectrophotometry, chemometric manipulation of the spectrophotometric data, spectrofluorimetry, high performance liquid chromatography, and TLC-densitometry for the analysis of some compounds containing carbonyl and/ or hydroxyl group of different pharmacological activities. The chosen drugs are Cyproheptadine HCl, Carbinoxamine Maleate, Pseudoephedrine HCl, Carbazochrome and Troxerutin. Aim of the work was the development of rapid, economic and selective methods for analysis of the cited drugs in raw materials and in their pharmaceutical formulations without interference from additives and the development of stability-indicating analytical methods which are capable of determining Cyproheptadine HCl in presence of its degradation product and its impurity.

This thesis consists of three parts in addition to references and an Arabic summary. Each part includes an introduction, literature review, descriptive experimental work for the studied drugs, results, discussion and ends with a conclusion. Part I was named Quantitative Determination of Cyproheptadine HCl in Presence of Its Degradation Product and Impurity, part II was named Quantitative Determination of Carbinoxamine maleate and Pseudoephedrine HCl in Their Binary Mixtures and in Presence of Oral Drops Excipient and Part III was named Quantitative Determination of Carbazochrome and Troxerutin in Their Binary Mixtures and in Pharmaceutical Formulation.

KEY WORDS (الكلمات المفتاحية): (Cyproheptadine HCl; Carbinoxamine Maleate; Pseudoephedrine HCl; Carbazochrome and Troxerutin).