

Abstract

This bachelor thesis aimed to compare selected analytical methods for determining the content of ambroxol in medicinal products in terms of trueness and precision of the measurement and measurement time and cost. Three methods were selected for the determination: (1) UV spectrometry using the calibration method, (2) UV spectrometry based on the standard addition method, and (3) high performance liquid chromatography. Two types of syrups, tablets, and prolonged-release capsules were chosen as tested medicinal products. Although high performance liquid chromatography was the most time and money-consuming, it gave the truest results. In contrast, both UV spectrometric determinations were the least costly and time-consuming, but the calibration line method was the least true and the standard addition method was the least precise.

Key words: ambroxol, UV spectrometry, high-performance liquid chromatography