

Abstract:

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Title of Thesis: Chromatographic Determination of Albendazole and Its Metabolites

This diploma thesis deals with a study of chromatographic determination of albendazole and its two metabolites, albendazole-sulphoxide and albendazole-sulphone, by isocratic HPLC.

The aim of this work was to find suitable conditions for the separation of these substances with a use of Ascentis Express C18 as a chromatography column, hence the column packed by core-shell particles, and also to find an appropriate internal standard. A mobile phase consisting of phosphate buffer and acetonitrile was tested as the first choice, but because of unsatisfactory results it was then substituted by a mixture of acetic acid and methanol or acetonitrile.

There were achieved acceptable results with the latter mobile phase, but the results are not considered as perfect and should be a subject of next research.

The obviously positive result of the experiments is that oxibendazole proved to be an internal standard.