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Applications of a DAD-HPLC method for determination of loratadine on biological samples

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Abstract. The aim of research is to assess the active substance by a HPLC method for the separation and quantitative determination of loratadine. The method has been developed and validated on the standard solutions, in previous research. The current study was undertaken to present the results obtained from loratadine determination in biological samples (human serum, urine and breast milk). These results may be applicable on patients with different physiological conditions (aging, pregnancy or recently giving birth, etc.) and pathological conditions which may interfere with the metabolism of loratadine. The used HPLC method detected loratadine concentrations in human serum samples, respectively urine samples, at 2 hours after drug administration. The method detected traces of loratadine which passed into breast milk, as well. Data were statistically interpreted using MED CALC 10.2 software. These results show that the applied method can be used for quantitative analysis of loratadine in biological fluids (all permissible limits of quality specifications being in the range 95-105%).

Keywords: loratadine, HPLC, biological samples.

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