The purpose of thesis is the development of HPLC methods for determination of amiloride hydrochloride in pharmaceutical preparation. A medicinal product containing amiloride hydrochloride is used in the treatment of cystic fibrosis as a solution for inhalation. During the development, various stationary and mobile phases were tested. For the measurement was selected HS F5 column (150x 2,1 mm, 3 µm) and as the mobile phase was mixture of acetonitrile and 0,085% phosphoric acid to pH adjusted to 3,0 with triethylamine, in the ratio 75:25. Standard solution contained amiloride hydrochloride, Impurity A as a degradation product and butylparaben as an internal standard. The developed method was completely validated.

According to results of the validation this method, was found that the developed method for the analysis of the product is suitable, and provides accurate and precise results. One of the findings of validation was the fact that the medicinal product containing amiloride hydrochloride is not stable enough. Therefore, it is necessary to prepare the test solution in the time of need.