

SUMMARY

Human health and the length of life are dependent on the environment, lifestyle and level of medical care. Inappropriate sexual behavior and direct exposure to blood-borne pathogens, including very dangerous infections such as HIV and HBV, contribute to the suffering and death of millions of people around the world.

The doctoral dissertation consists of two main sections. The first one provides information on the tested compounds, i.e. creatinine, tenofovir, and entecavir as well as a short description of the biological matrices used for research. A literature review was carried out on the determination of tenofovir in urine, plasma and saliva samples. Methods dedicated to the determination of entecavir in pharmaceutical preparations and plasma using the technique of high-performance liquid chromatography were reviewed.

The second part presents a description of own research, a discussion of the results, a summary and conclusions. This section summarizes information on the reagents and the equipment used for the study, and the biological material obtained for testing. The results obtained during analyzes using the technique of high-performance liquid chromatography coupled with spectrophotometric and spectrofluorimetric detection were also presented. The information contained in this part of the work concerns the optimization and validation of new methods for the determination of tenofovir, entecavir and creatinine in urine, plasma and saliva samples. The experimental part ends with a discussion of the obtained results, their summary and conclusions. The final element of the work is a list of cited literature and the author's achievements.