

ABSTRACT

The thesis is presented in 46 pages. It contains bibliography of 30 references. 9 figures and 3 tables are given in the thesis.

The goal of this thesis is to develop mathematical and software tools for choosing the optimal strategy for treatment of infectious human diseases by existing database of patients and the input data according to the treatment approach.

In the thesis existing solutions are analyzed – software that allow to build, calculate and perform decision tree analysis for clinical and other goals. They are compared in terms of the simulation solutions and the outputting graphics of functions. In the thesis, method of cost disease is used to solve the task.

Developed modules of automated system that implement the chosen method of treatment depending on the approach. Completed tests of developed system.

Keywords: pharmacoeconomic analysis, decision tree, the cost of the disease.

