Formation of Generalized Tumor-Describing Concept by Use of Analytical Heuvristics Method

Manana Khachidze^a David Khachidze^b

^ae-mail: manana.khachidze@tsu.ge ^be-mail: khacho_dg@yahoo.com

^aComputer Sciences, Technical Informatics, TSU, Tbilisi, 0186, University str. #13 ^b Andronikashvili Institute of Physics, Tbilisi, 0177, Tamarashvili St#6.

The effectiveness of cancer treatment to a large extent depends on early disease detection. Therefore it is very important to develop such a screening method that could relatively easily (without differentiation) detect the presence of tumors. A special method of tumors' general descriptions has been developed which can be used in diagnostics. Descriptive parameters are presented by data obtained from microcalorimetrical analysis of blood serum (data on denaturation of separate serum proteins). The data is processed using analytical heuvristics method and "tumor concept" is formed – an implicant created by the totality of each protein's denaturational thermodynamic parameters. Their unity will form a knowledge base for an information system that will support doctors in decision making.