

An Intelligent System for Early Cancer Diagnosis Using Machine Learning Methods

Karymsakova I.B.

Shakarim University, Semey, Kazakhstan

Kozhakhmetova D.O.

Shakarim University, Semey, Kazakhstan

Shyrynkhanova D.Zh.

Shakarim University, Semey, Kazakhstan

Bekenova D.B.

Shakarim University, Semey, Kazakhstan

Abstract

Oncological diseases are one of the socially significant problems. The detection rate of cancer in the early stages is currently low. In this regard, the development of early cancer diagnosis systems is an important task.

The use of artificial intelligence methods makes it possible to solve forecasting problems at a high level. In this study, an early cancer diagnosis system was built using the example of lung cancer. A questionnaire for the diagnosis of lung cancer was created according to the protocol for the diagnosis of the disease. The results of the questionnaire were processed using mesh learning methods. 8 methods were used. Based on the results of the interpretation of the models, it can be concluded that machine learning methods can predict the risk of cancer.

Keywords

Information system, prototype, artificial intelligence, intelligent analysis, intelligent systems, databases, neural networks.