

## **Predication Model for Leukemia Diseases Based on Data Mining Classification Algorithms with Best Accuracy**

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**Abstract :** In recent years, there has been an explosion in the rate of using technology that help discovering the diseases. For example, DNA microarrays allow us for the first time to obtain a &quot;global&quot; view of the cell. It has great potential to provide accurate medical diagnosis, to help in finding the right treatment and cure for many diseases. Various classification algorithms can be applied on such micro-array datasets to devise methods that can predict the occurrence of Leukemia disease. In this study, we compared the classification accuracy and response time among eleven decision tree methods and six rule classifier methods using five performance criteria. The experiment results show that the performance of Random Tree is producing better result. Also it takes lowest time to build model in tree classifier. The classification rules algorithms such as nearest- neighbor-like algorithm (NNge) is the best algorithm due to the high accuracy and it takes lowest time to build model in classification.

**Keywords :** data mining, classification techniques, decision tree, classification rule, leukemia diseases, microarray data

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