

## Molecular Classification of Cancer by Gene Expression Monitoring

In this report a generic approach to cancer classification based on gene expression monitoring is applied to human acute leukemias. The dataset will first be analysed using data exploration techniques and clustering. Dimensionality reduction will be carried out to reduce the number of input variables in the training data. The aim of this report is to demonstrate the feasibility of cancer classification based solely on gene expression monitoring and compare the performance of classifiers on the dataset. The results will demonstrate how this general strategy (proposed by Golub et al. in 1999) for discovering and predicting cancer classes works.