

## ABSTRACT

With the development of science and technology, the number of colon cancer treatment and medication are increasing. Medication also increase in certain degree, however, among them, medication for early stage colon cancer patient is better than them who has suffer greater stage.

Data Mining, a process to explore and analyze a large number of data and to find pattern which is used to make a decision in the future. Emerge as a solution for early prevention.

In this final project the early prevention for colon cancer will be implemented using Predictive by Collective Likelihoods (PCL) which is very useful in more effective rule using. In order to express a profile of a gene in medical data, the used of sample rule is more effective because the rule can help us to understand more about the problems. The rule are get by making interval to the numerical data using discretization. Then that rules are transform into Emerging Pattern. This Emerging Pattern will be very usefull for Predictive by Collective Likelihoods (PCL).

Keywords : data mining, prediction by collective likelihoods, intervals, numeric, discretization, emerging pattern.

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