

## Mutagenicity Risk Analysis by Using Class Association Rules

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Mutagenicity analysis of chemical compounds is crucial for the cause investigation of our modern diseases including cancers. For the analysis, accurate and comprehensive classification of the mutagenicity is strongly needed. Especially, use of appropriate features of the chemical compounds plays a key role for the interpretability of the classification results. In this paper, a classification approach named “*Levelwise Subspace Clustering based Classification by Aggregating Emerging Patterns* (LSC-CAEP)” which is known to be accurate and provides interpretable rules is applied to a mutagenicity data set. Promising results of the analysis are shown through a demonstration.