

## **ABSTRACT**

Heart disease is the leading cause of mortality in people (HD). This disease claims many lives. For the benefit of both healthcare and patients, several researchers have been developing new technologies to prognosticate diseases early and before it's too late. There is an ongoing study being done on these procedures. A faster-emerging branch of artificial intelligence (AI), machine learning (ML), adds a number of HD methods. Early methods for evaluating cardiovascular disease aided in making decisions and progressions that should have occurred in large no. of individuals. Methods: For the proposed study, information was gathered using Kaggle, which does not require data pre-handling data like the elimination of noisy data, removing missing information, trying to fill in default parameters when appropriate, or classification of features for predictive model and taking decisions at various levels. The effectiveness of the diagnostic model is assessed using methods such as classifying, precision, sensitive, and analysis. In this research provides a prediction model to ascertain if a person has cardiovascular disease or not in order to determine or diagnose it.

On comparing the methods of applying the rules for Support Vector Machine, Naive Bayes , and regression models on this dataset, this is done in order to achieve an accurate modelling of predicting cardiovascular sickness.

**Keywords:** Machine Learning (ML), Logistic Regression(LR), Support Vector Machine(SVM), Naïve Bayes (NB), Cardiovascular Disease, Classification.