**Abstract**

**Background.** Cardiovascular disease is the leading cause of death worldwide. Although modern technologies provide efficient and accurate diagnosis of heart disease, identifying people at-risk would enable early prevention and treatment, which is often preferable than the previous. Many machine learning techniques is being used to serve this purpose with an average accuracy of 80%, which, although is a great advancement, still needs improvement.

**Aim.** Our goal is to predict the risk of developing heart disease, with an accuracy rate over 80%, based on some easily obtainable medical records such as age, gender, BMI, blood glucose, cholesterol, levels of physical activity, alcohol consumption, smoking habit, etc.

**Methodology.** Among numerous models of risk prediction, we chose to use Naïve Bayes and Support Vector Machine along with standard statistical tests like ANOVA, Chi-Square, T-Test, etc, for selecting best attributes.

**Results.**

**Conclusion.**