

# IDMPF: An Intelligent Diabetes Mellitus Prediction Framework using Machine Learning

*Table S2: Selected Features in our Results and the Literature.*

Work	Feature selection algorithm	Features	Selected features
[1]	Minimum Redundancy Maximum Relevance	Age, breathe, fasting glucose, height, HDL, left diastolic pressure, left systolic pressure, LDL, physique index, pulse rate, right diastolic pressure, right systolic pressure, waistline, and weight	Breathe, fasting glucose, height, HDL, and LDL (cholesterol)
		Age, BMI, diabetes pedigree function, diastolic blood pressure, number of times pregnant, plasma glucose concentration, triceps skinfold thickness, and 2-Hour serum insulin	Age, plasma glucose concentration, and 2-Hour serum insulin
[2]	Proposed correlation-based selector	Age, blood glucose level, blood pressure, BMI, diabetes pedigree function, gender, HBAIC, insulin, plasma glucose fasting, plasma glucose postprandial, pregnancy, serum creatinine, serum potassium, serum sodium, and skin thickness	Age, blood glucose level, blood pressure, BMI, diabetes pedigree function, gender, insulin, plasma glucose fasting, serum potassium, serum sodium, and skin thickness
This paper	Correlation Attribute Evaluator	Age, alcohol consumption, blood pressure, blurred vision, cholesterol, gender, heart disease, obesity, pregnancy, race, and uric acid	Age, blood pressure, cholesterol, gender, heart disease, obesity, and pregnancy

## References:

- [1] Zou Q, Qu K, Luo Y, Yin D, Ju Y, Tang H. Predicting Diabetes Mellitus With Machine Learning Techniques. *Front Genet* 2018;9. <https://doi.org/10.3389/fgene.2018.00515>.
- [2] Sneha N, Gangil T. Analysis of diabetes mellitus for early prediction using optimal features selection. *J Big Data* 2019;6.