

Data Description

I applied the methods to a publicly available dataset with a size of 1700 patients. The dataset was collected in a clinical hospital in Krasnoyarsk, Russia from 1992-1995. The database contains information about 111 medical features and a binary output representing if a patient with myocardial infarction shows complications or not. The original database and the detailed description of the variable names can be found on the researchers' website. There were several overarching variable categories in the dataset:

- General input values (e.g., ID, age, gender),
- Inputs from anamnesis (e.g., arrhythmia, obesity, bronchial asthma, exertional angina pectoris in the anamnesis),
- Inputs from electrocardiography (e.g., ventricular fibrillation, sinoatrial block on ECG),
- Inputs from the serum (e.g., serum potassium content, serum sodium content)
- Inputs from intensive care units (e.g., use of liquid nitrates in ICU, use of opioid drugs in the ICU), and
- Results from the emergency cardiology team (e.g., systolic blood pressure, diastolic blood pressure according to the emergency cardiology team).

Under these themes, the dataset has four types of time-related information: myocardial information at the time of admission, at the end of the first day, second day, and third day. Some of the variable examples are provided in Table 1.

Table 1: Variable Examples

Variable Name	Meaning
AGE	Age
zab_leg_03	Bronchial asthma in the anamnesis
Ant_im	Presence of an anterior myocardial infarction (left ventricular)
ritm_ecg_p_02	Atrial fibrillation in ECG rhythm
NA_R_2_n	Use of opioid drugs in the ICU in the second day of the hospital period
NOT_NA_3_n	Use of NSAIDs in the ICU in the third day of the hospital period
S_AD_KBRIG	Systolic blood pressure according to Emergency Cardiology Team
K_BLOOD	Serum potassium content