OBJECTIVES: The objective of this study was to estimate a prevalence of diabetes mellitus (DM) among patients with micro- and macrovascular complications in Poland, like angina pectoris, myocardial infarction (MI), stroke, lower limb ischemia, end-stage renal disease (ESRD), and their consequences like heart failure, visual disorders or amputations.

METHODS: The estimation was based on observational studies, which were identified by searching medical databases and Polish registries. Publications were selected in a specific order, to ensure that included data are the most representative for Polish population. Firstly, studies conducted in Polish settings were included and, if no reliable publications were found, European, non-European Caucasian and other (not specified) population were analyzed. Population based registries were considered as the most appropriate type of data. When no registry was available systematic reviews of observational studies were included. If systematic review was not available - data from clinical studies were taken into account.

RESULTS: According to polish registries, DM was present in 28% of patients with non-ST-elevation MI, 20% of patients with ST-elevation MI, 22% of patients with unstable angina and 22% patients with ESRD. The results of two studies regarding Polish population indicate that 15.3% of patients with stable angina pectoris suffer from DM. The results of studies coming from European countries identified by literature search showed that DM was diagnosed in 26.2% of patients with heart failure, 21.5% of patients with stoke, 40% of patients hospitalized for peripheral artery disease, 52.8% of patients with lower-extremity amputation and 67.1% of patients with non-traumatic amputations. Diabetes was present in 34.9%, 9.4% and 7.1% of patients with retinopathy, vision disorders and blindness respectively.

CONCLUSION: DM often co-exists with vascular disorders in Poland. It affects 15% of patients with macrovascular complications and more than 20% of patients with microvascular complications.