

Type 1 diabetes mellitus (type 1 DM) is a polygenic multifactorial disease based on immune-mediated or idiopathic destruction of pancreatic  $\beta$ -cells leading to absolute insulin deficiency. In 2021, there were approximately 8.4 million people with type 1 DM worldwide. By 2040, the total number of cases is estimated to increase to 13.5-17.4 million. In Russia, according to the study in 2021, there are about 336 thousand patients with type 1 DM, by 2040 the number of patients is expected to increase 2.5-fold. People with type 1 DM have a 4-8 times higher risk of cardiovascular diseases (CVD) than the rest of the population. The underlying mechanisms of CVD development in type 1 DM are poorly understood. Optimal glycemic control without significant hypoglycemia is mandatory to reduce CVD in patients with type 1 DM. Although hyperglycemia plays an important role, CVD risk remains high even in well-compensated patients with type 1 DM, suggesting that other cardiovascular risk factors may be involved. Further studies are needed to research the factors involved in the premature development of CVD in patients with type 1 DM.