

Despite the advent of novel therapies which manage and control diabetes well, the increased risk of morbidity and mortality in diabetic subjects is associated with the devastating secondary complications it produces. The microvascular complications include diabetic neuropathy, diabetic nephropathy, diabetic retinopathy, while the macrovascular complications include diabetic heart disease and stroke. Success in the drug discovery of diabetic complications may be achieved by a better understanding of the underlying pathophysiology and by recognising the crucial factors contributing to the development and progression of the disease. Long-standing diabetes majorly drives cellular and molecular alterations, which eventually damage both small and large blood vessels. In this review, we discuss the well-studied cellular mechanisms leading to the development and progression of diabetic complications. The complications are prevalent both in type I and type II diabetic subjects. Also, the recent clinical trial outcomes in this field are disappointing.