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Use of Insulin Glargine and Metformin for Prevention of Diabetes and its Cardiovascular Complications

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Editorial

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Editorial

Cardiovascular disease is a common and serious complication of type 2 diabetes mellitus (T2DM) often linked to the increased morbidity and mortality associated with T2DM [1].

It's noteworthy to recall that 30% of contemporary cardiology patients have coexisting known diabetes, and another 40% have either undiagnosed diabetes or pre-diabetes [2].

Two thirds of patients with T2DM can die from heart attack or a cerebrovascular accident if it is not possible to influence these risks by procedures such as decreasing the blood pressure, cholesterol level, glycemia and to stop smoking [3].

Multiple studies have documented that early insulin; insulin glarginein particular, treatment could be used as a strategy in prevention of cardiovascular disease and T2DM progression in pre*diabetes and overt diabetes patients as well as reduction of development of new diabetes from pre-diabetes. Insulin is known to possess cardio protective and potentially anti-atherosclerotic effects [3,4].

Moreover, treatment with insulin glargine was associated with marked improvement in the lipid profile of people with T2DM [1]. On the other hand, Metformin is the most widely recommended first-line drug therapy in T2DM, also in terms of preventing cardiovascular complications [2].

Insulin glargine treatment combined with Metformin in the early stages of diabetes has been shown to be a safe protocol without an increased number of atherosclerosis or cancer occurrences, and with minimal weight gain [5,6]. The decision to introduce basal insulin to Metformin must, however be individualized based on a risk-benefit analysis [7].

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