

Impact of Timely Treatment Intensification on Glycemic Goal Achievement in Patients With Type 2 Diabetes Failing Metformin Monotherapy

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Purpose: The purpose of the study was to examine the association between timely treatment intensification (TTI) and glycemic goal achievement in patients with type 2 diabetes (T2D) failing metformin monotherapy (MM).

Methods: This study was set at a large integrated health care system in the United States. The study cohort included T2D patients aged 18 to 85 years who were on MM between January 2009 and September 2013 and had an uncontrolled glycated hemoglobin (A1C) reading ($\geq 8\%$) after at least 3 months of MM (corresponding date was index date). Secondary analyses were performed using A1C $< 7\%$ as T2D control. TTI was defined as receipt of an add-on therapy within 180 days after the index date. Impact of TTI on glycemic goal achievement was determined using multivariate Cox proportional hazards regression. Patients were censored at their last A1C reading or health care visit during 2 years after the index date.

Results: The study cohort consisted of 996 patients, ~58% male and ~59% Caucasian, with a mean age of ~54 (± 12) years. TTI was observed in 50.2% of the patients. The rate of glycemic goal achievement was higher in patients with TTI compared with patients without TTI (hazards ratio = 1.632, 95% confidence interval = 1.328-2.006). The results for the secondary analyses were largely consistent with the primary findings.

Conclusions: TTI positively affected glycemic goal achievement among T2D patients failing MM and could be a useful strategy to increase the currently low proportion of patients with their T2D controlled in the United States.