## Age ≥ 60 years was an independent risk factor for diabetes-related complications despite good control of cardiovascular risk factors in patients with type 2 diabetes mellitus

## **ABSTRACT**

Providing effective medical care for older patients with type 2 diabetes mellitus (T2D) that may contribute to their active aging has always been challenging. We examined the independent effect of age × 60 years on disease control and its relationship with diabetesrelated complications in patients with T2D in Malaysia. This was a cross-sectional study using secondary data from the electronic diabetes registry database Adult Diabetes Control and Management (ADCM). A total of 303 centers participated and contributed a total of 70,889 patients from May 2008 to the end of 2009. Demographic data, details on diabetes, hypertension, dyslipidemia and their treatment modalities, various risk factors and complications were updated annually. Independent associated risk factors were identified using multivariate regression analyses. Fifty-nine percent were female. Malay comprised 61.9%, Chinese 19% and Indian 18%. There were more Chinese, men, longer duration of diabetes and subjects that were leaner or had lower BMI in the older age group. Patients aged × 60 years achieved glycemic and lipid targets but not the desired blood pressure. After adjusting for duration of diabetes, gender, ethnicity, body mass index, disease control and treatment, a significantly higher proportion of patients × 60 years suffered from reported diabetes-related complications. Age × 60 years was an independent risk factor for diabetesrelated complications despite good control of cardiovascular risk factors. Our findings caution against the currently recommended control of targets in older T2D patients with more longstanding diseases and complications.

**Keyword:** Aged; Type 2 diabetes mellitus; HbA1; Blood pressure; LDL cholesterol; Diabetes complications