Managing Diabetic Ketoacidosis Among Patients with Type 1 Diabetes

Diabetic ketoacidosis (DKA) is a serious medical condition characterized by elevated ketone body and acidity levels in the blood



DKA is most common in individuals with type 1 diabetes (T1D) but can also occur in patients with type 2 diabetes mellitus



Poor adherence to ketone monitoring among patients with T1D, leads to increased morbidity and mortality due to DKA

Literature review examining the prevalence and economic burden of DKA

Prevalence of DKA



Incidence of DKA among patients with T1D



Factors affecting mortality rates

Children and adolescents



29.9%

(overall prevalence across Europe, Australia, New Zealand, and the USA)



Age



Time of manifestation or diagnosis



Geographic location

Adults

5-8%

(estimated global prevalence)



Age



Ethnicity



Economic burden associated with DKA



High annual average total costs of hospital treatment



Increased duration of hospital stay

Continuous ketone monitoring may be a solution for improving DKA outcomes among patients with T1D



Sodium-glucose cotransporter 2 inhibitor treatment poses an increased risk of DKA



Continuous glucose monitoring (CGM) devices help manage glycemia



CGM sensors capable of measuring ketone bodies in the blood can improve ketone monitoring

The comorbidity of DKA and T1D is more frequent among children and adolescents and monitoring both glucose and ketone body levels can potentially reduce the occurrence, associated costs, and overall burden of DKA





