LETTER TO THE EDITOR

The revolutionary weekly insulin: The prime time for icodec in Pakistan?

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Dear Editor, The burden of diabetes in Pakistan is reaching alarming levels, with prevalence rising from 5.2 million in 2000 to around 33 million in 2021, a striking sixfold increase over two decades.[1] Insulin remains the mainstay of treatment for type 1 diabetes mellitus and a significant and growing component in the management of type 2 diabetes mellitus. Despite its clinical necessity, initiation and adherence to insulin therapy are frequently delayed due to multiple barriers, including fear of injections, multiple daily dosing, social stigma, and disruption to quality of life. In Pakistan, these challenges are further amplified by low health literacy, cultural misconceptions regarding insulin, dependence on cold-chain storage, and a resource-constrained healthcare system.[1,2]

Insulin icodec is a recently approved once-weekly ultra-long-acting basal insulin with a half-life of about 196 hours, reducing injection frequency from 365 to 52 per year.[3] It has shown superior glycaemic control to other long acting insulin, as the ONWARDS 3 trial demonstrated a statistically significant greater reduction in glycated haemoglobin (−0.19%) with insulin icodec compared to insulin glargine in insulin-naïve patients with type 2 diabetes mellitus, with a similar safety profile.[4] A meta-analysis of the ONWARDS 1–5 trials reported a higher proportion of patients achieving target glycated haemoglobin levels (<7.0%) without clinically significant or severe hypoglycaemia.[5]

As a resource-limited country, the introduction of insulin icodec has the potential to address several key barriers to insulin use in Pakistan. A once-weekly regimen may improve willingness to initiate insulin and enhance acceptability in the setting of prevailing social stigma, low literacy, and cultural misconceptions. Reduced dosing frequency can minimize dependence on caregivers for daily administration, while also improving adherence among individuals with demanding lifestyles. Weekly administration may also mitigate refrigeration-related challenges, as patients could access their weekly injection through a healthcare facility rather than relying on daily home storage. As younger and middle-aged Pakistani individuals are increasingly affected,[1] icodec has the potential to improve adherence and compliance, enhance glycaemic control, and reduce long-term complications and the overall disease burden in Pakistan. However, the potential higher cost of icodec compared to current insulins must be acknowledged; this could be offset by reduced long-term healthcare expenditure from fewer complications and improved overall adherence.

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