April 17, 2025

Re: A.18 Insulin, analogue rapid-acting – diabetes mellitus

Dear WHO Essential Medicines List team,

I am writing to express my strong support for the inclusion of rapid-acting insulin analogues (insulin lispro, insulin aspart, and insulin glulisine) for the treatment of diabetes mellitus on the WHO Essential Medicines List (EML). I submit this statement in my personal capacity as both a person living with Type 1 Diabetes (T1D) and a psychologist specializing in diabetes distress and burnout, particularly in low- and middle-income countries (LMICs) like India. As someone who has lived with T1D for over two decades, I have directly experienced the challenges associated with managing the condition, particularly with the limitations of regular human insulin. My experience is not unique, but one shared by millions of individuals globally. In addition to the clinical risks, the psychological burden of diabetes management in LMICs, where resources are scarce, is profound. The inclusion of rapid-acting insulin analogues on the EML is critical not only for improving clinical outcomes but also for alleviating the mental and emotional toll of living with diabetes.

1. Impact on Hypoglycemia and Treatment Burden

One of the most compelling reasons to include rapid-acting insulins

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is their ability to significantly reduce hypoglycemic events. For people with T1D, hypoglycemia is not just a medical concern but a constant psychological burden. The fear of severe hypoglycemia, which is common with human insulin, creates chronic anxiety and distress. Studies show that insulin analogues lead to a reduction in both severe hypoglycemia and nocturnal hypoglycemia, which in turn greatly improves quality of life (Pedersen-Bjergaard et al., 2014; Melo et al., 2019).

In a low-resource setting like India, where continuous glucose monitoring (CGM) is not widely available and self-monitoring of blood glucose is often inconsistent due to cost, reducing the frequency of severe hypoglycemic events is critical for safeguarding both physical and mental health.

2. Quality of Life and Flexibility

The flexibility offered by rapid-acting insulins also plays a crucial role in improving quality of life. Unlike regular human insulin, which requires administration 30 to 45 minutes before meals, rapid-acting insulins can be administered immediately before eating, allowing greater flexibility in daily activities and reducing the stress associated with strict timing (Sjöström et al., 2016). This flexibility is particularly important for working adults and children in school, as it supports a better integration of diabetes management into daily life, reducing both physical and emotional burdens.

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In my clinical practice, I have seen firsthand how individuals experience significant distress when required to adhere to rigid schedules with human insulin. The freedom provided by rapid-acting insulins is not only a clinical benefit but also a psychological relief, helping to reduce burnout and the emotional toll of diabetes management.

3. Equity and Global Health Disparities

Equity is a central consideration. While rapid-acting insulin analogues are commonly used in high-income countries, people in LMICs, including India, are often forced to rely on outdated therapies due to financial constraints. The lack of access to insulin analogues exacerbates existing health inequities, perpetuating a cycle of poor outcomes and suffering. However, there are positive examples of how LMICs are already managing to procure affordable insulin analogues through collaborations with NGOs and biosimilar manufacturers (Elliott et al., 2025). The inclusion of rapid-acting insulins on the EML would further empower countries to negotiate better pricing and improve access, which would have a transformative effect on diabetes care globally.

4. Bridging the Gap in Diabetes Technologies

In addition to their clinical and psychological benefits, rapid-acting insulin analogues are crucial for the safe and effective use of

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diabetes technologies such as insulin pumps and automated insulin delivery systems, which are gaining traction in many parts of the world. These technologies are vital for improving diabetes control, particularly in those with severe insulin resistance or those prone to hypoglycemia (Weintrob et al., 2017). Denying access to these insulins based on outdated metrics prevents equitable access to these life-changing technologies and perpetuates systemic disparities in diabetes care.

5. Evidence-Based Support for EML Inclusion

The evidence supporting the efficacy of rapid-acting insulins is substantial. Studies have consistently shown that insulin analogues provide superior outcomes in terms of hypoglycemia reduction, glycemic control, and overall diabetes management when compared to regular human insulin (Melo et al., 2019; Pedersen-Bjergaard et al., 2014). The psychological benefits of reducing fear and distress associated with hypoglycemia are well-documented and should not be underestimated when considering inclusion on the EML.

As a person with lived experience and a psychologist who works closely with individuals living with diabetes, I can attest to the transformative impact that access to the right insulin therapy can have on both clinical and psychological outcomes. By reducing the

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burden of hypoglycemia and offering greater flexibility, insulin analogues enable individuals to lead fuller, healthier lives, free from the constant anxiety of diabetes-related complications.

Conclusion

In conclusion, the inclusion of rapid-acting insulin analogues on the WHO Essential Medicines List is not merely a clinical decision; it is a matter of health equity and human dignity. As someone who has personally lived the challenges of diabetes management in a LMIC and worked with others who face similar struggles, I urge the Committee to consider the broad-ranging benefits of these insulins —not just in terms of clinical outcomes, but in improving the quality of life, reducing psychological distress, and advancing global health equity.

Thank you for your time and consideration.

Sincerely,

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