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April 15, 2025

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

To whom it may concern

I am writing to respectfully support the inclusion of rapid-acting insulin analogues (insulin lispro, insulin aspart, and insulin glulisine) in the 24th WHO Model List of Essential Medicines. This decision could greatly improve the lives of millions of people living with diabetes, especially in low- and middle-income countries.

These insulin analogues demonstrate a more rapid onset of action compared to regular human insulin, thereby facilitating postprandial glycemic control in a manner that more closely replicates physiological insulin secretion. Clinical evidence supports their safety and efficacy in the management of both type 1 and type 2 diabetes (Gong et al., 2024). By enhancing glycemic management, these therapies significantly reduce the risk of long-term complications, including retinopathy, nephropathy, and neuropathy.

But more than that, these insulins improve people's quality of life. They give flexibility for food intake, working, studying, exercising, and daily living. For children and adolescents especially, who have changing routines and sometimes unpredictable eating habits, this flexibility is critical. A clinical study with young people found that insulin glulisine was just as effective and safe as insulin lispro for managing type 1 diabetes (Bode et al., 2011). This means children can go to school, play sports, and enjoy life more freely with fewer dangerous low and high glucose episodes.

It is also important to recognize the value of lived experience. Many individuals living with diabetes have attested to the impact that these analogues have had on their ability to manage the condition (not only from a medical perspective, but also in terms of emotional wellbeing). These lived experiences constitute more than anecdotal accounts; they reflect, real-world outcomes that underscore the daily realities faced by the very populations the World Health Organization is meant to serve.

At present, access to rapid-acting insulin analogues remains limited in many regions of the world. In most cases, only individuals living in high-income countries or those covered by private health systems are able to benefit from them. Including these insulins in the WHO Model List of Essential Medicines would send a strong and clear message: that all people, no matter where they live, have the right to receive the highest standard of care. This action would support governments and health systems in giving higher priority to access, and contribute to building more fair and equitable health systems globally.

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Real-world research supports this as well. One study from a large registry showed that insulin glulisine gave similar or better results compared to other rapid insulins when used with insulin pumps, and without increasing serious side effects like hypoglycemia or diabetic ketoacidosis (Rosenbauer et al., 2022).

Adding these medicines to the list would be a powerful step toward closing the gap in diabetes care worldwide. It is not just about technology or science, it is about dignity, fairness, and listening to the people most affected. Thank you for your attention and your continued work for global health.

Sincerely,

Mariana Gomez Hoyos

Mariana Gómez Hoyos

## References

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- Gong, L., Zhang, X., Wang, H., Li, Q., & Yu, L. (2024). Comparative efficacy and safety of rapid-acting insulin analogs and regular human insulin: A systematic review and meta-analysis. Diabetes Therapy, 15(1), 34–46. https://pubmed.ncbi.nlm.nih.gov/38934226/
- Rosenbauer, J., Dost, A., Hermann, J. M., et al. (2022). Clinical use and safety of insulin glulisine versus insulin lispro and aspart in pediatric insulin pump users with type 1 diabetes: Real-world evidence from a large registry. Pediatric Diabetes, 23(8), 1135–1144. https://pubmed.ncbi.nlm.nih.gov/35933650/