

Breakthrough Vaccines and Transformative Therapies on the Horizon of Progress toward Diabetes Management

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Summary

Background: Diabetes mellitus, affects millions of people globally. Over the years, diabetes has emerged as a significant global health concern, with steadily increasing prevalence. **Objectives:** This review explores the various aspects of diabetes mellitus, and delves into the evolving field of new emerging treatments and diabetes vaccines, highlighting the potential they hold in revolutionizing diabetes management in the future. **Materials and Methods:** Literature search was done in PubMed database and relevant articles were selected for the narrative review. **Results:** The review reveals that currently most vaccines that have been developed are in animal studies and early phases of trials. Only few human trials have been conducted, but, with positive outcome. There are also some novel therapeutics emerging as potential management options for diabetes. Therefore, it is imperative to know about the potential vaccines and novel emerging treatment options for diabetes mellitus, to understand the challenges faced in constructing novel vaccines and the intricate relationship between diabetes and Alzheimer's disease, an emerging entity as Type 3 Diabetes. **Conclusion:** There is a growing interest in the development of vaccines as a revolutionary approach to diabetes management. As our understanding of diabetes deepens and vaccine technology advances, the prospect of a diabetes vaccine becoming a reality offers hope for millions living with this condition and in reducing the burden of diabetes-related complications.

Key words: Alzheimer's disease, diabetes mellitus, emerging treatments, type 3 diabetes, vaccine