

TIRZEPATIDE IN THE TREATMENT OF DIABETES: A SYSTEMATIC OVERVIEW OF ECONOMIC EVALUATIONS

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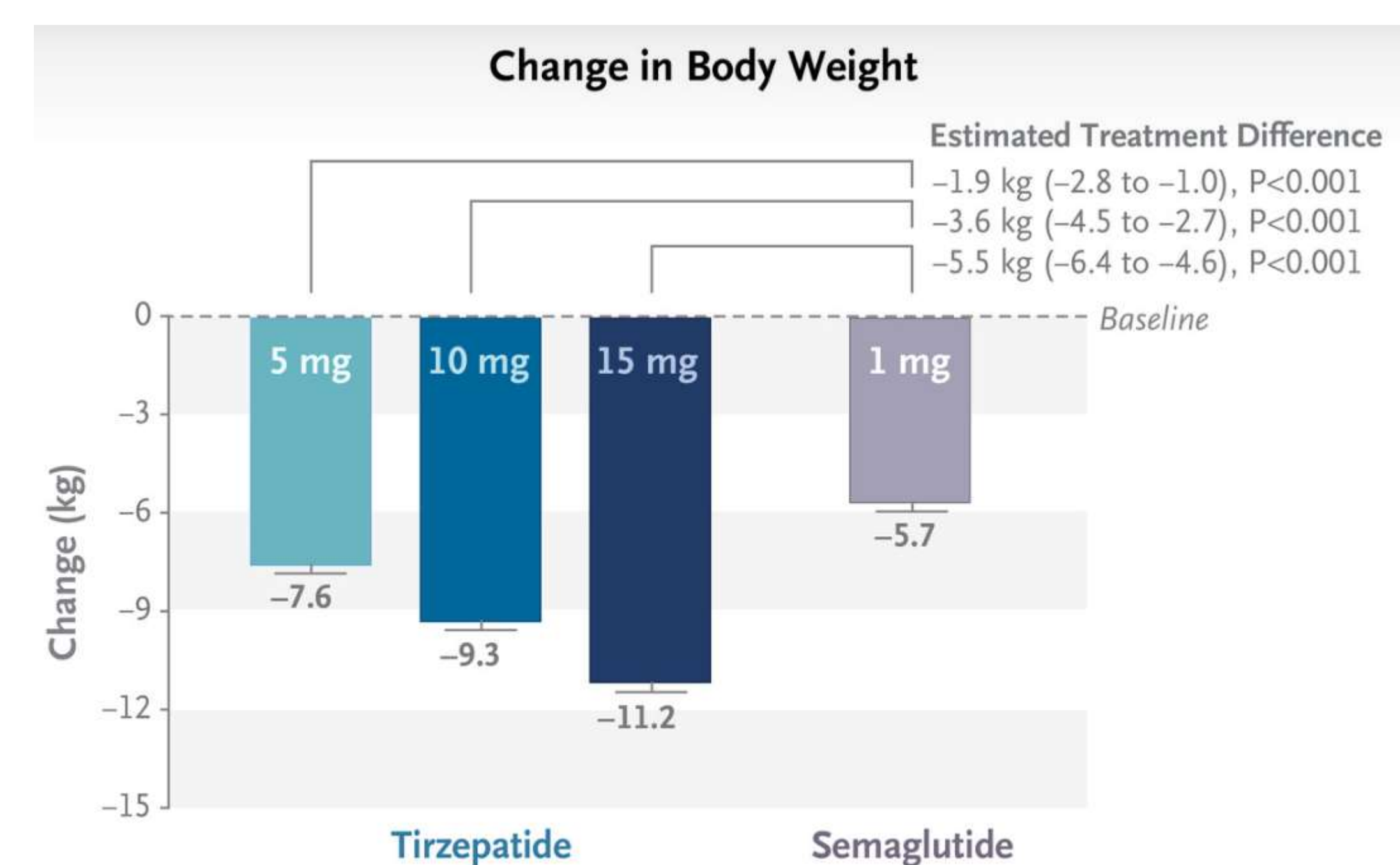
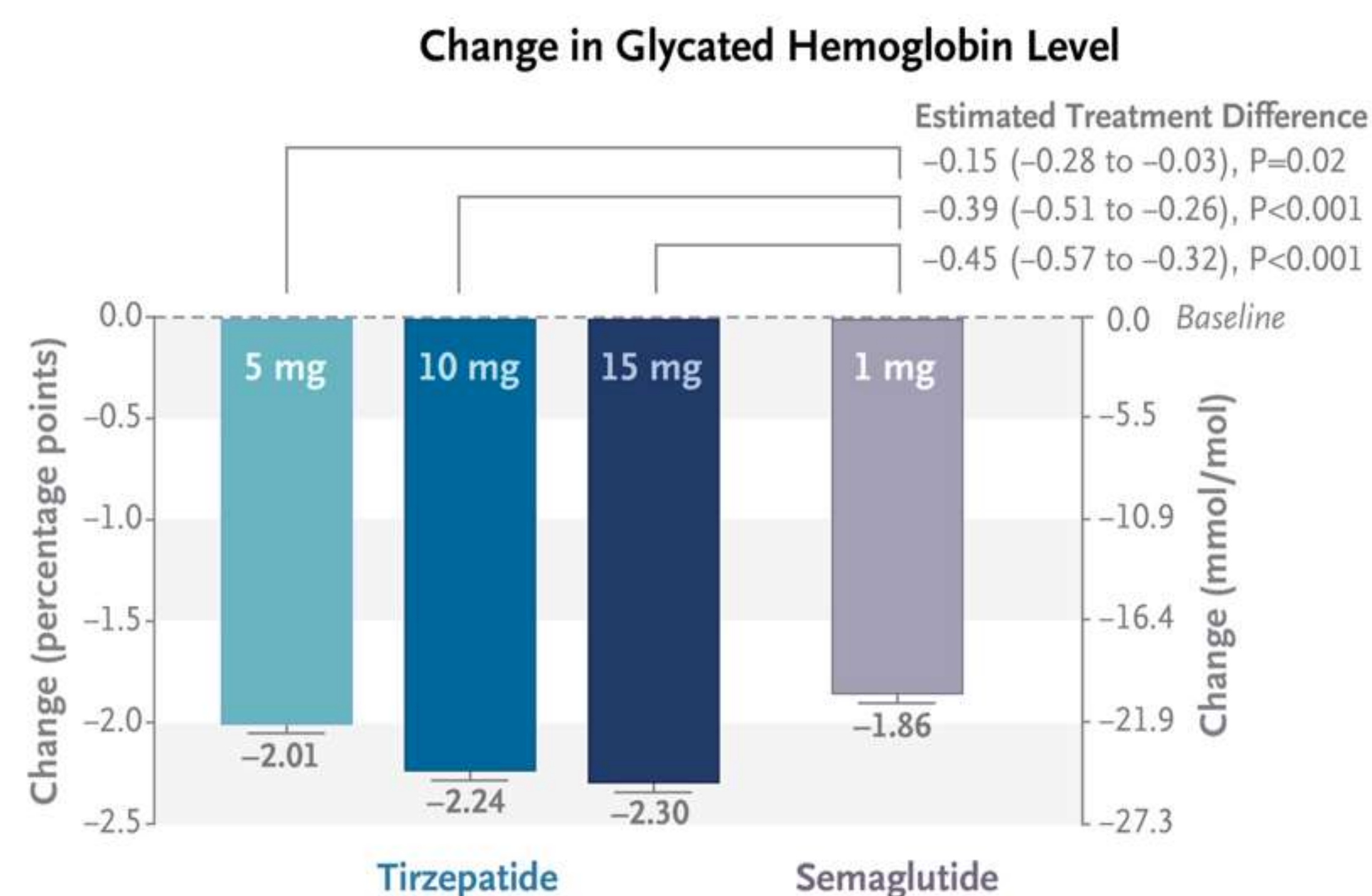
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OBJECTIVE & METHODS

- This systematic review aimed to overview the body of evidence on cost-effectiveness of tirzepatide for managing diabetes type 2 in adults.
- Methods: We have conducted a systematic literature review (as per PRISMA guidelines). Studies written in English, cost-effectiveness analyses (CEAs) and cost-utility analyses (CUAs) on tirzepatide for the treatment of diabetes type 2 and comparisons of this regimen against other antihyperglycemic agents, as well as no treatment/diet and exercise alone, were considered for inclusion. A comprehensive search [(diabetes) AND (tirzepatide) AND (econom* OR cost*)] was conducted across PubMed/Medline on 25th June 2024. Data was manually extracted.

OBSERVATIONS AND CONCLUSIONS

- The literature search yielded 36 records in total. Following screening, 4 CEAs (United States) [1-4], and 1 CUA (China) [5] were included for further analysis. Studies were conducted predominantly from the healthcare payer's perspective [1-4]. All studies used semaglutide as the comparator, and predominantly concluded towards tirzepatide being more cost-effective than semaglutide [1-5]. Nikitin et al. also provided CEAs for: i) tirzepatide+background therapy (BT=metformin ± sulfonylureas or thiazolidinediones) vs empagliflozin+BT, and ii) tirzepatide+BT vs BT. The ICERs yielded were: i) US\$101,000/QALY / US\$160,000/LYG, and ii) US\$58,000/QALY / US\$44,000/LYG, respectively [2].
- Although the body of literature on the present topic is still quite scarce, tirzepatide seems to be more cost-effective both in comparison to semaglutide and BT for the treatment of type 2 diabetes. However, future research should focus on resolving uncertainties in economic evaluations and broaden the scope to include MACE benefits, renal benefits, and prevention/management of diabetes-related complications into calculations when yielding ICER.



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