



0203

**Periodontal Treatment is Efficient for Type 2 Diabetes: Meta-Analysis**G. Sáenz-Ravello<sup>1,2</sup>, M. Castillo-Riquelme<sup>1,3</sup>, C. Cuadrado<sup>3,4</sup>, J. Gamonal<sup>1,2</sup>, M. Baeza<sup>1,2</sup>

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**Objectives** To assess the efficiency of periodontal treatment (PT) in improving diabetes-related outcomes in adults with type 2 diabetes mellitus (T2D) and periodontitis, providing an updated and comprehensive synthesis from economic evaluations (EE).

**Methods** Seven databases and one register were independently searched by two reviewers for articles published up to July 6, 2023. Studies that comparatively assessed the efficiency of PT versus no treatment or other dental treatments were included. Risk of bias was assessed using the Cochrane RoB 2, ROBINS-I, and ECOBIAS tools for the first stage of EE and the CHEERS checklist and NICE quality appraisal tool for overall EE. Qualitative and quantitative syntheses of the articles were conducted and assessed using the GRADE approach. PROSPERO CRD42023443146.

**Results** Ten studies were included. PT results in a reduction in total healthcare costs, including inpatient and outpatient costs and diabetes-related healthcare costs, including related healthcare and drug costs (low to moderate certainty). A total incremental benefit of 12348 USD (2022 currency, 95% CI 12195-12500) was estimated from three high-quality model-based cost-utility analyses (high certainty).

**Conclusions** Including PT in the integrative treatment of patients with T2D and periodontitis is cost-effective. Future research is required to ensure the transferability of these findings.