

Summary of the
article:


Study of microRNAs in Gingival Crevicular Fluid as Periodontal Diseases Biomarkers: Systematic Review

María Cosín-Villanueva¹, Pedro J Almiñana-Pastor¹, Jose Luis García-Giménez^{2 3 4},
Andrés López-Roldán¹



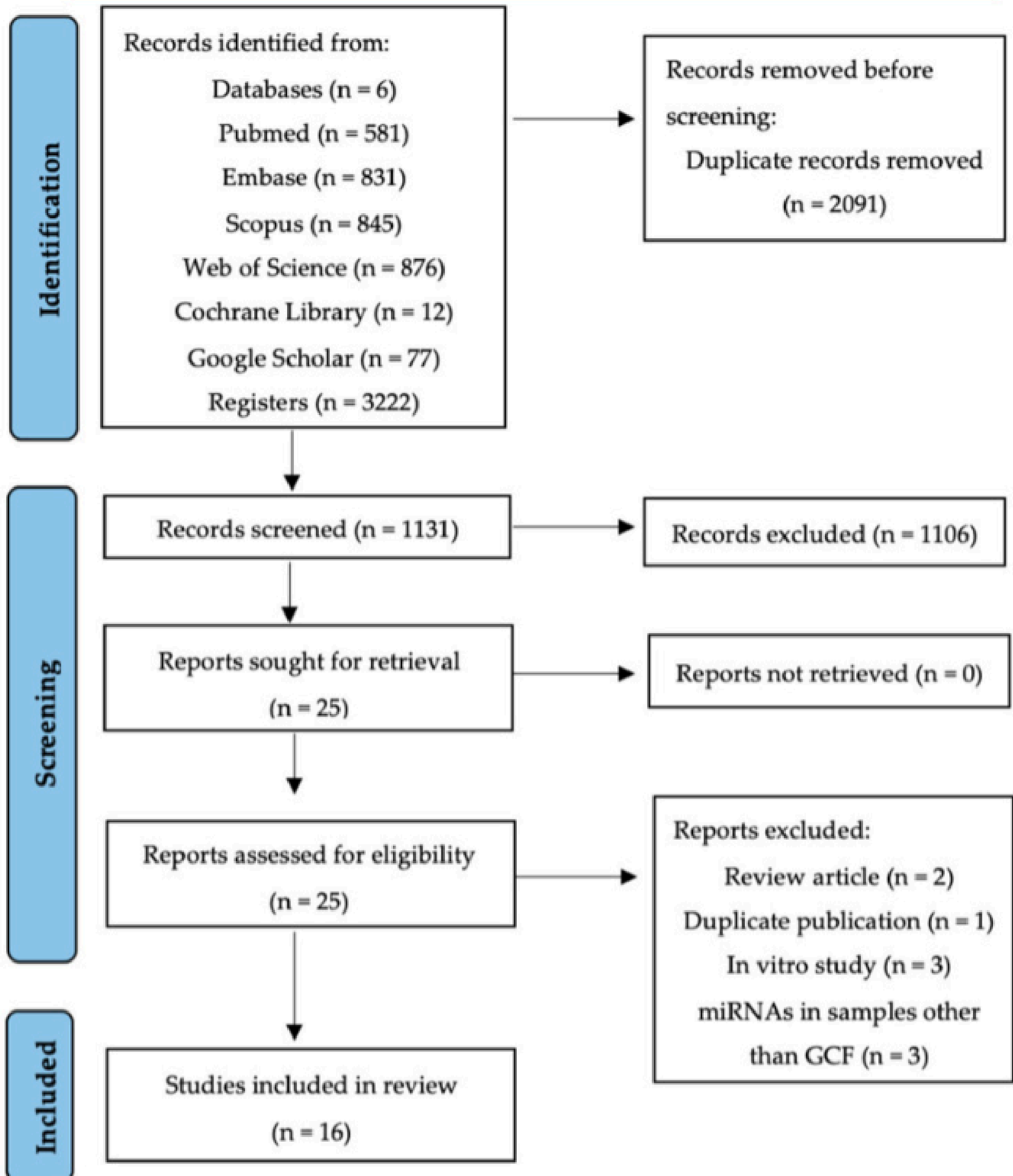
International Journal of
Molecular Sciences

InPMID: 37987369
PMCID: [PMC10660715](https://pubmed.ncbi.nlm.nih.gov/PMC10660715/)
DOI: [10.3390/ncrna9060073](https://doi.org/10.3390/ncrna9060073)



This review aimed to identify microRNAs (miRNAs) in gingival crevicular fluid (GCF) that could serve as biomarkers for diagnosing periodontal diseases, particularly periodontitis.

Identification of studies via databases and registers



PRISMA flow diagram of the search process across the different databases

• Taken from DOI: [10.3390/ijms25158274](https://doi.org/10.3390/ijms25158274)



Summary

Following systematic review guidelines, the authors searched multiple databases for clinical studies on this topic and assessed the methodological quality of the included articles using the Newcastle-Ottawa Scale.

Out of 3222 references, 16 studies were included, but their heterogeneous designs precluded a meta-analysis.

Most studies compared miRNA expression levels between periodontitis patients and healthy controls, with miR-200b-3p and miR-146a being the most researched.

This review concluded that miR-146a, miR-200b, miR-223, and miR-23a show acceptable diagnostic potential for periodontitis, while miR-203 does not.