

# INPLASY

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## Use of aPDT in the treatment of residual periodontal pockets

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## ADMINISTRATIVE INFORMATION

**Support** - CAPES.

**Review Stage at time of this submission** - Data analysis.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202650071

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 12 May 2026 and was last updated on 12 May 2026.

## INTRODUCTION

**Review question / Objective** To evaluate the effect of aPDT as adjunctive treatment on residual periodontal pockets of subject under supportive periodontal therapy.

**Rationale** The use of aPDT as adjunctive therapy could be improve the response of periodontal treatment when compared with scaling and root planing alone. The impact of singlet oxygen on citoplasmatic organel of microorganism act more benefit than antimicrobials as antibiotics that could increase the bacterial resistance).

**Condition being studied** This systematic review will include only RCT.

## METHODS

**Search strategy** The searches were conducted using controlled vocabulary (MeSH terms) and free terms related to photodynamic therapy, residual

periodontal pocket, and non-surgical treatment. Boolean operators (AND, OR) were used, and the strategies were adapted to the specificities of each database.

**Participant or population** Patients undergoing periodontal supportive therapy with pockets equal to or greater than 4 mm.

**Intervention** Scaling and root planing plus aPDT (test group) and sacling root planig alone.

**Comparator** Reduction off clinical attachment level (mm).

**Study designs to be included** RCTs.

**Eligibility criteria** The articles were selected from the following databases: PubMed, Scopus, and Web of Science. Only randomized clinical trials that investigated the use of Photodynamic Therapy (aPDT/PDT) in the treatment of residual pockets were included.

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**Information sources** PubMed, Scopus, and Web of Science.

**Main outcome(s)** A total of 1125 records were obtained; after removing 652 duplicates using an automated tool (Rayyan), 478 records were sorted by title and abstract. After applying the inclusion and exclusion criteria, 35 articles remained, which were analyzed in full text for eligibility, and of these, 12 were included in the final synthesis.

**Additional outcome(s)** We will included microbiological and immunological dental.

**Quality assessment / Risk of bias analysis** Robins I.

**Strategy of data synthesis** Pd, cal and bop.

**Subgroup analysis** Pd, cal and bop.

**Sensitivity analysis** two reviewers with a third reviewer.

**Language restriction** No.

**Country(ies) involved** Brazil - Guarulhos University.

**Keywords** periodontal suport therapy, photodynamic therapy, periodontal pockets, scaling and root planing.

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