



## Antibiotic effectiveness in Periodontics: Unlocking research opportunities with the PAAS trial

The **Periodontal Adjunctive Antibiotics Study (PAAS)** will assign patients with periodontitis to receive either Amoxicillin + Metronidazole or placebo as an adjunct treatment to scaling and root planing. Over 12 months, we will track periodontal clinical parameters, complications, and patient satisfaction.

- **Misuse of antibiotics** poses a growing threat, jeopardizing both patient health and microbial resistance.
- **Current guidelines lack strong evidence**,<sup>1,2</sup> leading to confusion and inconsistencies in prescribing practices.
- **PAAS will bridge the gap**, providing definitive data to establish clear, optimal antibiotic utilization strategies.

### Study Details:

- **Double-blind, randomized clinical trial design:** Testing Amoxicillin + Metronidazole as adjunct to non-surgical periodontal therapy (scaling and root planing).
- **Data collection:**
  - Practitioners will record full mouth probing depth, bleeding on probing, gingival recession, etc. at baseline, 6-week, and 1-year follow-up visits and upload periodontal charts via a user-friendly web form.
  - Practitioners will dispense Amoxicillin + Metronidazole or placebo to their patients in conjunction to scaling and root planing (SRP) treatment.
  - Patients will complete short web-based surveys at baseline, 10 days after baseline, and at the 6-week and 1-year follow-up visits.
  - Both practitioners and patients will report on adverse events throughout the study.
- **Sample size:** 544 patients from 36 practices in the South Central, Southwest, and Western Network Regions.
- **Outcomes:**
  - Primary: Improved clinical parameters of probing depth, and bleeding on probing at 1 year as primary outcome
  - Effect of adjunctive antibiotics on other clinical parameters (gingival recession, attachment level).
  - Identify factors associated with high response to adjunctive antibiotics.
  - Evaluate the safety and tolerability of adjunctive antibiotics.



**Potential benefits for practitioners and their patients:**

- **Shape the future of periodontal therapy.** Your data will directly influence future clinical guidelines, with clear protocols for antibiotic use, optimizing both patient care and antibiotic stewardship.
- **Benefit your patients.** Advance scientific knowledge to deliver the best possible periodontal care.

**Current study status:**

1. Currently enrolling practitioners from the participating regions.
2. Expected patient enrollment is April through July 2024.

[1] Smiley CJ, Tracy SL, Abt E, Michalowicz BS, John MT, Gunsolley J, Cobb CM, Rossmann J, Harrel SK, Forrest JL, Hujoel PP, Noraian KW, Greenwell H, Frantsve-Hawley J, Estrich C, Hanson N. Systematic review and meta-analysis on the nonsurgical treatment of chronic periodontitis by means of scaling and root planing with or without adjuncts. J Am Dent Assoc. 2015 Jul;146(7):508-24.e5. doi: 10.1016/j.adaj.2015.01.028. PMID: [26113099](#).

[2] Smiley CJ, Tracy SL, Abt E, Michalowicz BS, John MT, Gunsolley J, Cobb CM, Rossmann J, Harrel SK, Forrest JL, Hujoel PP, Noraian KW, Greenwell H, Frantsve-Hawley J, Estrich C, Hanson N. Evidence-based clinical practice guideline on the nonsurgical treatment of chronic periodontitis by means of scaling and root planing with or without adjuncts. J Am Dent Assoc. 2015 Jul;146(7):525-35. doi: 10.1016/j.adaj.2015.01.026. PMID: [26113100](#).