

Table S4. Mean and standard deviation of the anaerobic microbiota of the subgingival plaque, of the species selected by the included studies.

Study	Groups	<i>Porphyromonas gingivalis</i> (Pg)	<i>Tannerella forsythia</i> (Tf)	<i>Prevotella intermedia</i> (Pi)	<i>Prevotella nigrescens</i> (Pn)
		Mean± SD of copy number	Mean± SD of copy number	Mean± SD of copy number	Mean± SD of copy number
Al- Kheraif et al. 2022 [26]	Group NS	Group NS	Group NS		
	PDT+ SRP	aPDT+ SRP	aPDT+ SRP		
	Baseline	1.980.08±111.52‡	1.932.29±130‡		
	Follow up	334.66±27.89*	281.25±46.87*		
	3 months	1.366.53±111.56	687.5± 67.7*		
	6 months				
	Difference	1.645.42	1.651.04		
	3 months	613.55	1.245.29		
	6 months				
	SRP	SRP	SRP		
	Baseline	1.590.7± 111.63‡	2.234.47 ± 139.53‡		
	Follow up	530.23±55.80*	747.93±54.07*		
	3 months	2.065.12±139.53	918.39±85.3*		
	6 months				
	Difference	1.060.5	1.487.0		
	3 months	-474.3	1.316.1		
	6 months				
Al- Kheraif et al., 2022 [25]	Group CS	Group CS	Group CS		
	PDT+ SRP	aPDT+ SRP	aPDT+ SRP		
	Baseline	6.203.36±332.17‡	9.510.42 ±984‡		
	Follow up	575.67±57.92*	328.13±78*†		
	3 months	2.746.29±139.75*†	1.046.88±130.2*		
	6 months				
	Difference	5.627.35	9.182		
	3 months	3.457	8.464		
	6 months				
	SRP	SRP	SRP		
	Baseline	5.060.81±1.030.66‡	10.235.7±1.025‡		
	Follow up	776.82±178.13*	938.60±128*†		
	3 months	4.099.96±827.04†	1.946.35±212.38*		
	6 months				
	Difference	4.283.18	9.296.4		
	3 months	961	8.288.65		
	6 months				
Al- Kheraif et al., 2022 [25]	Group NS	Group NS	Group NS	NA	NA
	PDT+ DS	PDT+ DS	PDT+ DS		
	Baseline	1.821.47 ± 85‡	1.760.61 ± 114.92‡		
	Follow up	160.81 ± 19.22*	108.79± 67.89*		
	3 months	1.202.78 ± 78.03‡	540.69 ± 57.44		
	6 months				
	Difference	1.661.97	1.651.82		
	3 months	618.69	1.219.92		
	6 months				
	DS	DS	DS		
	Baseline	1.504.61 ± 97.74‡	1.963.9±164.65‡		
	Follow up	457.84 ± 29.62*	453.68±111.9*		
	3 months	2.010.39± 124.32‡	692.27± 92.67‡		
	6 months				
	Difference	1.046.77	1509.32		
	3 months	-505.78	1.270.73		

	6 months Group CS PDT+ DS Baseline Follow up 3 months 6 months Difference 3 months 6 months DS Baseline Follow up 3 months 6 months Difference 3 months 6 months	Group CS PDT+ DS 6.015.63 ± 300.37‡ 314.35 ± 33.29* † 2.497.26±142.23‡ 5.701.28 3.518.37 DS 4.999.35±1.021.35‡ 713.97±145.06* † 4.027.87±796.35‡ 4.285.38 971.48	Group CS PDT+ DS 9.459.68 ± 940‡ 141.48± 83.56* 897.14 ± 104.58† 9.408.2 8.562 DS 10.257.2±1.072.1‡ 748.31±142.41* 1.771.57±182.3‡† 9.509 8.486		
		Mean± SD (ng/mL)		Mean± SD (ng/mL)	Mean± SD (ng/mL)
Theodoro et al.2018 [20]	Group 1 SRP Baseline Follow up 90 days 180 days Difference 90 days 180 days Group 3 SRP + aPDT Baseline Follow up 90 days 180 days Difference 90 days 180 days Group 1 SRP Baseline Follow up 90 days 180 days Difference 90 days 180 days Group 3 SRP + aPDT Baseline Follow up 90 days 180 days Difference 90 days 180 days	Group 1 Moderate pockets SRP 1.21 ± 2.13 4.97 ± 17.92 0.45±1.68 -3.76 0.76 Group 3 SRP + aPDT 1.13 ± 2.40 0.97 ± 1.74 1.20 ± 2.13 0.16 -0.07 Deep pockets SRP 0.88 ± 1.35 0.45 ± 0.79 1.08 ± 2.36 0.43 -0.2 SRP + aPDT 1.33 ± 5.15 2.51 ± 5.85 2.79 ± 6.20 -1.18 -1.46	NA	Group 1 Moderate pockets SRP 0.31± 1.12 0 0 0.31 0.31 Group 3 SRP + aPDT 0.17 ± 0.39 0.02 ± 0.04 1.58 ± 5.77 0.15 -1.41 Deep pockets SRP 0 0.02 ± 0.07 0. -0.02 0.0 SRP + aPDT 0 0.01± 0.04 0.07 ± 0.12* 0.01 -0.07	Group 1 Moderate pockets SRP 0.33± 0.86 0.12 ± 0.37 0.02 ± 0.04 0.21 0.31 Group 3 SRP + aPDT 1.79± 6.89 0.01± 0 0*† 1.78 1.79 Deep pockets SRP 0.03± 0.07 0.07 ± 0.26 0 -0.04 0.03 SRP + aPDT 0.05 ± 0.12 0* 0* 0.05 ± 0.12 0.05 ± 0.12

NA, not evaluated; NR, not reported; *Intra-group, difference with baseline, $p < 0.05$; † Inter-group, indicates significant difference between test group (PDT+ SRP) and control group (SRP) across same timeline; ‡ Indicates significant difference between smokers and Never smokers.