

Supplementary Data

SUPPLEMENTARY TABLE S1A. CROSS-SECTIONAL AND LONGITUDINAL EFFECT OF PERIODONTAL DISEASE MEASURES ON IMT

Exposure variable	Mean estimate (95% CI)	p-value	Mean estimate (95% CI)	p-value
<i>Clinical measures of PD</i>	<i>Increase in baseline IMT per 10% increase in baseline PD</i>		<i>Increase in delta IMT per 10% increase in delta PD</i>	
PPD	0.0064 (−0.0091, 0.0220)	0.36	−0.0028 (−0.0227, 0.0171)	0.75
REC	0.0034 (−0.0067, 0.0135)	0.45	0.0013 (−0.0140, 0.0167)	0.84
CAL	0.0055 (−0.0032, 0.0142)	0.18	−0.0062 (−0.0248, 0.0125)	0.46
BOP	−0.0063 (−0.0211, 0.0084)	0.34	−0.0059 (−0.0184, 0.0067)	0.31
<i>Microbiological measures of PD</i>	<i>Increase in baseline IMT per 1-log₁₀ increase in baseline PD</i>		<i>Increase in delta IMT per 1-log₁₀ increase in delta PD</i>	
<i>P. gingivalis</i>	−0.0082 (−0.0271, 0.0107)	0.33	0.0102 (−0.0049, 0.0253)	0.15
<i>T. denticola</i>	−0.0242 (−0.0462, −0.0022)	0.04	0.0059 (−0.0070, 0.0188)	0.32
<i>T. forsythia</i>	−0.0165 (−0.0463, 0.0133)	0.23	0.0100 (−0.0087, 0.0286)	0.25
23S rRNA	0.0397 (−0.0380, 0.1174)	0.27	0.0133 (−0.0485, 0.0751)	0.63

PD, periodontal disease; IMT, carotid artery intima media thickness; PPD, periodontal probing depth; REC, gingival recession; CAL, clinical attachment level; BOP, bleeding on probing; *P. gingivalis*, *Porphyromonas gingivalis*; *T. denticola*, *Treponema denticola*; *T. forsythia*, *Tannerella forsythia*; 23S rRNA, 23S ribosomal RNA. Model adjusted for time on study only.

SUPPLEMENTARY TABLE S1B. CROSS-SECTIONAL AND LONGITUDINAL EFFECT OF PERIODONTAL DISEASE MEASURES ON IMT

Exposure variable	Mean estimate (95% CI)	p-value	Mean estimate (95% CI)	p-value
<i>Clinical measures of PD</i>	<i>Increase in baseline IMT per 10% increase in baseline PD</i>		<i>Greater increase in IMT from baseline per 10% greater increase in the clinical measure of PD from baseline</i>	
PPD	0.0010 (−0.0126, 0.0146)	0.86	0.0041 (−0.0095, 0.0176)	0.49
REC	0.0030 (−0.0047, 0.0107)	0.38	−0.0011 (−0.0130, 0.0107)	0.83
CAL	0.0028 (−0.0034, 0.0089)	0.32	−0.0067 (−0.0225, 0.0090)	0.34
BOP	0.0021 (−0.0140, 0.0182)	0.76	0.0001 (−0.0108, 0.0110)	0.98
<i>Microbiological measures of PD</i>	<i>Increase in baseline IMT per 1-log₁₀ change increase in baseline PD</i>		<i>Greater increase in IMT from baseline per 1-log₁₀ greater increase in the clinical measure of PD from baseline</i>	
<i>P. gingivalis</i>	−0.0079 (−0.0224, 0.0066)	0.24	0.0125 (−0.0020, 0.0269)	0.08
<i>T. denticola</i>	−0.0122 (−0.0280, 0.0037)	0.11	0.0091 (−0.0039, 0.0220)	0.14
<i>T. forsythia</i>	−0.0085 (−0.0256, 0.0085)	0.27	0.0167 (−0.0009, 0.0344)	0.06
23S rRNA	0.0503 (−0.0225, 0.1231)	0.15	0.0273 (−0.0187, 0.0733)	0.20

PD, periodontal disease; IMT, carotid artery intima media thickness; PPD, periodontal probing depth; REC, gingival recession; CAL, clinical attachment level; BOP, bleeding on probing; *P. gingivalis*, *Porphyromonas gingivalis*; *T. denticola*, *Treponema denticola*; *T. forsythia*, *Tannerella forsythia*; 23S rRNA, 23S ribosomal RNA. Model adjusted for time on study and CVD-specific variables including age, male gender, total smoking exposure, body mass index, systolic BP, high sensitivity C-reactive protein.

SUPPLEMENTARY TABLE S2A. CROSS-SECTIONAL AND LONGITUDINAL EFFECT OF PERIODONTAL DISEASE MEASURES ON FMD

Exposure variable	Mean estimate (95% CI)	p-value	Mean estimate (95% CI)	p-value
<i>Clinical measure of PD</i>	<i>Increase in baseline FMD per 10% increase in baseline PD</i>		<i>Increase in delta FMD per 10% increase in the delta PD</i>	
PPD	0.1138 (-0.9651, 1.1927)	0.81	-0.0393 (-2.1823, 2.1036)	0.97
REC	-0.6512 (-1.5608, 0.2585)	0.13	1.8094 (0.0306, 3.5883)	0.05
CAL	-0.3491 (-1.1969, 0.4987)	0.36	1.0862 (-1.5114, 3.6838)	0.36
BOP	-0.1998 (-1.3472, 0.9477)	0.69	-0.5621 (-2.1660, 1.0418)	0.43
<i>Microbiological measure of PD</i>	<i>Increase in baseline FMD per 1-log₁₀ increase in baseline PD</i>		<i>Increase in delta FMD per 1-log₁₀ increase in delta PD</i>	
<i>P. gingivalis</i>	-0.0487 (-1.3022, 1.2049)	0.93	0.3542 (-1.2288, 1.9372)	0.60
<i>T. denticola</i>	-0.4461 (-1.8707, 0.9786)	0.48	-0.8179 (-3.2475, 1.6116)	0.45
<i>T. forsythia</i>	-0.3423 (-1.9660, 1.2814)	0.63	-0.8437 (-2.7736, 1.0862)	0.34
23S rDNA	-3.0953 (-8.1935, 2.0029)	0.19	1.7863 (-2.6443, 6.2169)	0.37

PD, periodontal disease; FMD, brachial artery flow-mediated dilation; PPD, periodontal probing depth; REC, gingival recession; CAL, clinical attachment level; BOP, bleeding on probing; *P. gingivalis*, *Porphyromonas gingivalis*; *T. forsythia*, *Tannerella forsythia*; *T. denticola*, *Treponema denticola*; 23S rDNA, 23S ribosomal RNA. Model Adjusted for time on study only.

SUPPLEMENTARY TABLE S2B. CROSS-SECTIONAL AND LONGITUDINAL EFFECT OF PERIODONTAL DISEASE MEASURES ON FMD

Exposure variable	Mean estimate (95% CI)	p-value	Mean estimate (95% CI)	p-value
<i>Clinical measures of PD</i>	<i>Increase in baseline FMD per 10% increase in baseline PD</i>		<i>Increase in delta FMD per 10% increase in delta PD</i>	
PPD	0.0007 (-1.0963, 1.0977)	1.00	0.0588 (-2.1379, 2.2554)	0.95
REC	-0.2949 (-1.2161, 0.6264)	0.47	2.0450 (0.2492, 3.8409)	0.03
CAL	-0.1412 (-0.9768, 0.6944)	0.70	1.2042 (-1.4335, 3.8419)	0.32
BOP	-0.2832 (-1.2641, 0.6977)	0.52	-0.6771 (-2.2621, 0.9079)	0.35
<i>Microbiological measures of PD</i>	<i>Increase in baseline FMD per 1-log₁₀ increase in baseline PD</i>		<i>Increase in delta FMD per 1-log₁₀ increase in delta PD</i>	
<i>P. gingivalis</i>	-0.1868 (-1.5240, 1.1505)	0.75	0.4952 (-1.1120, 2.1024)	0.49
<i>T. denticola</i>	-0.5890 (-2.1969, 1.0190)	0.42	-0.6251 (-3.1014, 1.8512)	0.57
<i>T. forsythia</i>	-0.3663 (-1.9794, 1.2469)	0.60	-0.8996 (-3.0303, 1.2312)	0.34
23S rDNA	-1.6999 (-7.7692, 4.3694)	0.53	1.5604 (-2.8014, 5.9221)	0.43

PD, periodontal disease; FMD, brachial artery flow-mediated dilation; PPD, periodontal probing depth; REC, gingival recession; CAL, clinical attachment level; BOP, bleeding on probing; *P. gingivalis*, *Porphyromonas gingivalis*; *T. forsythia*, *Tannerella forsythia*; *T. denticola*, *Treponema denticola*; 23S rDNA, 23S ribosomal RNA. Model adjusted for time on study and CVD-specific variables including age, male gender, total smoking exposure, body mass index, systolic BP, high sensitivity C-reactive protein.