

No CP	906/1187 (76.3%)	3901/5118 (76.2%)	1		1		1	
CP ≥ 1	281/1187 (23.7%)	1217/5118 (23.8%)	0.99 (0.86–1.15)	0.939	0.99 (0.85–1.15)	0.921	1.01 (0.87–1.18)	0.870
Total cholesterol < 200mg/dL (n = 9209)								
No CP	1479/1907 (77.6%)	5717/7302 (78.3%)	1		1		1	
CP ≥ 1	428/1907 (22.4%)	1585/7302 (21.7%)	1.04 (0.93–1.18)	0.485	1.05 (0.93–1.18)	0.454	1.06 (0.94–1.20)	0.369
Total cholesterol ≥ 200mg/dL (n = 8631)								
No CP	1291/1661 (77.7%)	5502/6970 (78.9%)	1		1		1	
CP ≥ 1	370/1661 (22.3%)	1468/6970 (21.1%)	1.07 (0.94–1.22)	0.278	1.08 (0.94–1.22)	0.273	1.10 (0.96–1.25)	0.156
CCI scores = 0 (n = 11,036)								
No CP	1525/1991 (76.6%)	7105/9045 (78.6%)	1		1		1	
CP ≥ 1	466/1991 (23.4%)	1940/9045 (21.5%)	1.12 (1.00–1.26)	0.056	1.13 (1.00–1.27)	0.043*	1.13 (1.01–1.27)	0.038*
CCI score = 1 (n = 3038)								
No CP	588/740 (79.5%)	1782/2298 (77.6%)	1		1		1	
CP ≥ 1	152/740 (20.5%)	516/2298 (22.5%)	0.89 (0.73–1.09)	0.275	0.90 (0.74–1.11)	0.328	0.91 (0.74–1.11)	0.345
CCI score ≥ 2 (n = 3766)								
No CP	657/837 (78.5%)	2332/2929 (79.6%)	1		1		1	
CP ≥ 1	180/837 (21.5%)	597/2929 (20.4%)	1.07 (0.89–1.29)	0.479	1.08 (0.90–1.31)	0.399	1.10 (0.91–1.33)	0.326

Abbreviations: CP, chronic periodontitis; RA, rheumatoid arthritis; SBP, systolic blood pressure; DBP, diastolic blood pressure; CCI, Charlson Comorbidity Index.

* Conditional or unconditional logistic regression analysis, Significance at $p < 0.05$

† Stratified model for age, sex, income, and region of residence.

‡ Model 1 was adjusted for smoking, alcohol consumption, obesity and CCI scores.

§ Model 2 was adjusted for model 1 plus total cholesterol, systolic blood pressure, diastolic blood pressure, and fasting blood glucose.

Supplementary Table S2. Subgroup analyses of crude and adjusted odds ratios of chronic periodontitis (CP) for rheumatoid arthritis (RA) when participants are diagnosed with CP ≥ 2 within 1 year before index date.

N of RA (exposure/total, %)		N of Control (exposure/total, %)	Odd ratios for RA (95% confidence interval)						
			Crude†	<i>p</i>	Model 1†‡	<i>p</i>	Model 2†§	<i>p</i>	
Age < 65 years old (n = 8780)									
CP < 2	1604/1756 (91.3%)	6423/7024 (91.4%)	1		1		1		
CP ≥ 2	152/1756 (8.7%)	601/7024 (8.6%)	1.01 (0.84–1.22)	0.894	1.01 (0.84–1.22)	0.896	1.01 (0.84–1.22)	0.904	
Age ≥ 65 years old (n = 9060)									
CP < 2	1574/1812 (86.9%)	6344/7248 (87.5%)	1		1		1		
CP ≥ 2	238/1812 (13.1%)	904/7248 (12.5%)	1.06 (0.91–1.24)	0.448	1.06 (0.90–1.23)	0.494	1.08 (0.92–1.26)	0.340	
Men (n = 5275)									
CP < 2	898/1055 (85.1%)	3649/4220 (86.5%)	1		1		1		
CP ≥ 2	157/1055 (14.9%)	571/4220 (13.5%)	1.12 (0.92–1.35)	0.255	1.12 (0.93–1.36)	0.244	1.14 (0.94–1.38)	0.188	
Women (n = 12,565)									
CP < 2	2280/2513 (90.7%)	9118/10,052 (90.7%)	1		1		1		
CP ≥ 2	233/2513 (9.3%)	934/10,052 (9.3%)	1.00 (0.86–1.16)	0.976	0.99 (0.86–1.16)	0.945	1.01 (0.86–1.17)	0.942	
Low income (n = 8630)									
CP < 2	1554/1726 (90.0%)	6256/6904 (90.6%)	1		1		1		
CP ≥ 2	172/1726 (10.0%)	648/6904 (9.4%)	1.07 (0.90–1.28)	0.463	1.07 (0.89–1.28)	0.469	1.07 (0.90–1.28)	0.431	
High income (n = 9210)									
CP < 2	1624/1842 (88.2%)	6511/7368 (88.4%)	1		1		1		
CP ≥ 2	218/1842 (11.8%)	857/7368 (11.6%)	1.02 (0.87–1.19)	0.807	1.02 (0.87–1.19)	0.829	1.04 (0.89–1.22)	0.642	
Urban residents (n = 7705)									
CP < 2	1365/1541 (88.6%)	5434/6164 (88.2%)	1		1		1		
CP ≥ 2	176/1541 (11.4%)	730/6164 (11.8%)	0.96 (0.81–1.14)	0.649	0.96 (0.80–1.14)	0.625	0.96 (0.80–1.15)	0.648	
Rural residents (n = 10,135)									
CP < 2	1813/2027 (89.4%)	7333/8108 (90.4%)	1		1		1		
CP ≥ 2	214/2027 (10.6%)	775/8108 (9.6%)	1.12 (0.95–1.31)	0.175	1.12 (0.95–1.31)	0.176	1.14 (0.97–1.34)	0.107	
Underweight (n = 388)									
CP < 2	62/69 (89.9%)	288/319 (90.3%)	1		1		1		
CP ≥ 2	7/69 (10.1%)	31/319 (9.7%)	1.05 (0.44–2.49)	0.914	0.88 (0.36–2.13)	0.769	0.86 (0.35–2.13)	0.741	
Normal weight (n = 6468)									
CP < 2	1179/1334 (88.4%)	4610/5134 (89.8%)	1		1		1		
CP ≥ 2	155/1334 (11.6%)	524/5134 (10.2%)	1.16 (0.96–1.40)	0.134	1.15 (0.95–1.40)	0.144	1.17 (0.97–1.42)	0.110	
Overweight (n = 4807)									
CP < 2	858/945 (90.8%)	3451/3862 (89.4%)	1		1		1		
CP ≥ 2	87/945 (9.2%)	411/3862 (10.6%)	0.85 (0.67–1.09)	0.195	0.84 (0.66–1.07)	0.166	0.85 (0.66–1.08)	0.185	
Obese (n = 6177)									
CP < 2	1079/1220 (88.4%)	4418/4957 (89.1%)	1		1		1		
CP ≥ 2	141/1220 (11.6%)	539/4957 (10.9%)	1.07 (0.88–1.30)	0.494	1.08 (0.88–1.31)	0.473	1.09 (0.89–1.33)	0.400	
Non-smoker (n = 14,404)									
CP < 2	2570/2853 (90.1%)	10,418/11,551 (90.2%)	1		1		1		
CP ≥ 2	283/2853 (9.9%)	1133/11,551 (9.8%)	1.01 (0.88–1.16)	0.858	1.01 (0.88–1.16)	0.858	1.03 (0.89–1.18)	0.702	
Past smoker and current smoker (n = 3436)									
CP < 2	608/715 (85.0%)	2349/2721 (86.3%)	1		1		1		
CP ≥ 2	107/715 (15.0%)	372/2721 (13.7%)	1.11 (0.88–1.40)	0.374	1.12 (0.89–1.42)	0.338	1.14 (0.90–1.45)	0.273	
Alcohol consumption < 1 time a week (n = 13,182)									
CP < 2	2435/2690 (90.5%)	9483/10,492 (90.4%)	1		1		1		
CP ≥ 2	255/2690 (9.5%)	1009/10,492 (9.6%)	0.98 (0.85–1.14)	0.830	0.98 (0.84–1.13)	0.752	0.99 (0.85–1.14)	0.865	
Alcohol consumption ≥ 1 time a week (n = 4658)									
CP < 2	743/878 (84.6%)	3284/3780 (86.9%)	1		1		1		
CP ≥ 2	135/878 (15.4%)	496/3780 (13.1%)	1.20 (0.98–1.48)	0.079	1.20 (0.98–1.48)	0.079	1.20 (0.98–1.48)	0.081	
SBP < 140 mmHg and DBP < 90 mmHg (n = 13,526)									
CP < 2	2472/2783 (88.8%)	9583/10,743 (89.2%)	1		1		1		
CP ≥ 2	311/2783 (11.2%)	1160/10,743 (10.8%)	1.04 (0.91–1.19)	0.565	1.03 (0.91–1.18)	0.615	1.05 (0.92–1.20)	0.467	
SBP ≥ 140 mmHg or DBP ≥ 90 mmHg (n = 4314)									
CP < 2	706/785 (89.9%)	3184/3529 (90.2%)	1		1		1		
CP ≥ 2	79/785 (10.1%)	345/3529 (9.8%)	1.03 (0.80–1.34)	0.805	1.04 (0.80–1.35)	0.760	1.04 (0.80–1.36)	0.747	
Fasting blood glucose < 100 mg/dL (n = 11,535)									
CP < 2	2134/2381 (89.6%)	8242/9154 (90.0%)	1		1		1		
CP ≥ 2	247/2381 (10.4%)	912/9154 (10.0%)	1.05 (0.90–1.21)	0.548	1.04 (0.89–1.21)	0.627	1.05 (0.90–1.22)	0.548	
Fasting blood glucose ≥ 100 mg/dL (n = 6305)									

CP < 2	1044/1187 (88.0%)	4525/5118 (88.4%)	1		1		1	
CP ≥ 2	143/1187 (12.1%)	593/5118 (11.6%)	1.05 (0.86–1.27)	0.653	1.04 (0.86–1.27)	0.673	1.07 (0.87–1.30)	0.528
Total cholesterol < 200mg/dL (n = 9209)								
CP < 2	1691/1907 (88.7%)	6524/7302 (89.4%)	1		1		1	
CP ≥ 2	216/1907 (11.3%)	778/7302 (10.7%)	1.07 (0.91–1.26)	0.400	1.07 (0.91–1.26)	0.390	1.08 (0.92–1.27)	0.353
Total cholesterol ≥ 200mg/dL (n = 8631)								
CP < 2	1487/1661 (89.5%)	6243/6970 (89.6%)	1		1		1	
CP ≥ 2	174/1661 (10.5%)	727/6970 (10.4%)	1.00 (0.84–1.20)	0.957	1.00 (0.84–1.20)	0.968	1.03 (0.86–1.22)	0.774
CCI score = 0 (n = 11,036)								
CP < 2	1757/1991 (88.3%)	8089/9045 (89.4%)	1		1		1	
CP ≥ 2	234/1991 (11.8%)	956/9045 (10.6%)	1.13 (0.97–1.31)	0.123	1.14 (0.97–1.32)	0.103	1.14 (0.97–1.32)	0.106
CCI score = 1 (n = 3038)								
CP < 2	669/740 (90.4%)	2047/2298 (89.1%)	1		1		1	
CP ≥ 2	71/740 (9.6%)	251/2298 (10.9%)	0.87 (0.66–1.14)	0.308	0.87 (0.66–1.15)	0.336	0.87 (0.66–1.15)	0.336
CCI score ≥ 2 (n = 3766)								
CP < 2	752/837 (89.8%)	2631/2929 (89.8%)	1		1		1	
CP ≥ 2	85/837 (10.2%)	298/2929 (10.2%)	1.00 (0.77–1.29)	0.987	1.00 (0.77–1.29)	0.997	1.00 (0.77–1.29)	0.987

Abbreviations: CP, chronic periodontitis; RA, rheumatoid arthritis; SBP, systolic blood pressure; DBP, diastolic blood pressure; CCI, Charlson Comorbidity Index.

* Conditional or unconditional logistic regression analysis, Significance at $p < 0.05$

† Stratified model for age, sex, income, and region of residence.

‡ Model 1 was adjusted for smoking, alcohol consumption, obesity and CCI scores.

§ Model 2 was adjusted for model 1 plus total cholesterol, systolic blood pressure, diastolic blood pressure, and fasting blood glucose.

Supplementary Table S3. Subgroup analyses of crude and adjusted odds ratios of chronic periodontitis (CP) for rheumatoid arthritis (RA) when participants are diagnosed with CP ≥ 3 within 1 year before index date.

N of RA (exposure/total, %)		N of Control (exposure/total, %)	Odd ratios for RA (95% confidence interval)					
			Crude†	p	Model 1†‡	p	Model 2†§	p
Age < 65 years old (n = 8780)								
CP < 3	1675/1756 (95.4%)	6669/7024 (95.0%)	1		1		1	
CP ≥ 3	81/1756 (4.6%)	355/7024 (5.1%)	0.91 (0.71–1.16)	0.447	0.91 (0.71–1.17)	0.458	0.91 (0.71–1.17)	0.455
Age ≥ 65 years old (n = 9060)								
CP < 3	1673/1812 (92.3%)	6732/7248 (92.9%)	1		1		1	
CP ≥ 3	139/1812 (7.7%)	516/7248 (7.1%)	1.08 (0.89–1.32)	0.417	1.08 (0.88–1.31)	0.468	1.10 (0.91–1.34)	0.331
Men (n = 5275)								
CP < 3	963/1055 (91.3%)	3885/4220 (92.1%)	1		1		1	
CP ≥ 3	92/1055 (8.7%)	335/4220 (7.9%)	1.11 (0.87–1.41)	0.405	1.12 (0.88–1.42)	0.370	1.14 (0.89–1.45)	0.299
Women (n = 12,565)								
CP < 3	2385/2513 (94.9%)	9516/10,052 (94.7%)	1		1		1	
CP ≥ 3	128/2513 (5.1%)	536/10,052 (5.3%)	0.95 (0.78–1.16)	0.637	0.95 (0.78–1.16)	0.618	0.96 (0.79–1.17)	0.709
Low income (n = ,630)								
CP < 3	1630/1726 (94.4%)	6529/6904 (94.6%)	1		1		1	
CP ≥ 3	96/1726 (5.6%)	375/6904 (5.4%)	1.03 (0.81–1.29)	0.830	1.03 (0.81–1.29)	0.834	1.04 (0.82–1.31)	0.760
High income (n = 9210)								
CP < 3	1718/1842 (93.3%)	6872/7368 (93.3%)	1		1		1	
CP ≥ 3	124/1842 (6.7%)	496/7368 (6.7%)	1.00 (0.82–1.23)	1.000	1.00 (0.81–1.22)	0.981	1.02 (0.83–1.25)	0.839
Urban residents (n = 7705)								
CP < 3	1434/1541 (93.1%)	5,737/6164 (93.1%)	1		1		1	
CP ≥ 3	107/1541 (6.9%)	427/6164 (6.9%)	1.00 (0.80–1.25)	0.982	1.00 (0.80–1.25)	0.992	1.00 (0.80–1.25)	0.996
Rural residents (n = 10,135)								
CP < 3	1914/2027 (94.4%)	7,664/8108 (94.5%)	1		1		1	
CP ≥ 3	113/2027 (5.6%)	444/8108 (5.5%)	1.02 (0.82–1.26)	0.861	1.02 (0.82–1.26)	0.849	1.05 (0.85–1.30)	0.651
Underweight (n = 388)								
CP < 3	64/69 (92.8%)	305/319 (95.6%)	1		1		1	
CP ≥ 3	5/69 (7.3%)	14/319 (4.4%)	1.70 (0.59–4.89)	0.324	1.55 (0.52–4.58)	0.432	1.58 (0.53–4.73)	0.416
Normal weight (n = 6468)								
CP < 3	1247/1334 (93.5%)	4,840/5134 (94.3%)	1		1		1	
CP ≥ 3	87/1334 (6.5%)	294/5134 (5.7%)	1.15 (0.90–1.47)	0.272	1.14 (0.89–1.46)	0.303	1.16 (0.91–1.49)	0.239
Overweight (n = 4807)								
CP < 3	898/945 (95.0%)	3606/3862 (93.4%)	1		1		1	
CP ≥ 3	47/945 (5.0%)	256/3862 (6.6%)	0.74 (0.54–1.01)	0.062	0.73 (0.53–1.01)	0.057	0.74 (0.54–1.02)	0.066
Obese (n = 6177)								
CP < 3	1139/1220 (93.4%)	4650/4957 (93.8%)	1		1		1	
CP ≥ 3	81/1220 (6.6%)	307/4957 (6.2%)	1.08 (0.84–1.39)	0.565	1.09 (0.85–1.41)	0.504	1.10 (0.85–1.43)	0.450
Non-smoker (n = 14,404)								
CP < 3	2693/2853 (94.4%)	10,904/11,551 (94.4%)	1		1		1	
CP ≥ 3	160/2853 (5.6%)	647/11,551 (5.6%)	1.00 (0.84–1.20)	0.989	1.00 (0.84–1.20)	0.999	1.02 (0.85–1.22)	0.854
Past smoker and current smoker (n = 3436)								
CP < 3	655/715 (91.6%)	2497/2721 (91.8%)	1		1		1	
CP ≥ 3	60/715 (8.4%)	224/2721 (8.2%)	1.02 (0.76–1.38)	0.890	1.04 (0.77–1.40)	0.819	1.06 (0.78–1.43)	0.724
Alcohol consumption < 1 time a week (n = 13,182)								
CP < 3	2548/2690 (94.7%)	9926/10,492 (94.6%)	1		1		1	
CP ≥ 3	142/2690 (5.3%)	566/10,492 (5.4%)	0.98 (0.81–1.18)	0.813	0.97 (0.80–1.17)	0.747	0.98 (0.81–1.19)	0.864
Alcohol consumption ≥ 1 time a week (n = 4658)								
CP < 3	800/878 (91.1%)	3475/3780 (91.9%)	1		1		1	
CP ≥ 3	78/878 (8.9%)	305/3780 (8.1%)	1.11 (0.86–1.44)	0.429	1.11 (0.86–1.45)	0.419	1.11 (0.86–1.45)	0.426
SBP < 140 mmHg and DBP < 90 mmHg (n = 13,526)								
CP < 3	2603/2783 (93.5%)	10,068/10,743 (93.7%)	1		1		1	
CP ≥ 3	180/2783 (6.5%)	675/10,743 (6.3%)	1.03 (0.87–1.22)	0.719	1.03 (0.87–1.22)	0.744	1.05 (0.88–1.24)	0.592
SBP ≥ 140 mmHg or DBP ≥ 90 mmHg (n = 4314)								
CP < 3	745/785 (94.9%)	3333/3529 (94.5%)	1		1		1	
CP ≥ 3	40/785 (5.1%)	196/3529 (5.6%)	0.91 (0.64–1.29)	0.610	0.92 (0.65–1.30)	0.624	0.92 (0.64–1.30)	0.626
Fasting blood glucose < 100 mg/dL (n = 11,535)								
CP < 3	2240/2381 (94.1%)	8636/9154 (94.3%)	1		1		1	
CP ≥ 3	141/2381 (5.9%)	518/9154 (5.7%)	1.05 (0.87–1.27)	0.618	1.04 (0.86–1.26)	0.678	1.05 (0.87–1.28)	0.593
Fasting blood glucose ≥ 100 mg/dL (n = 6305)								

CP < 3	1108/1187 (93.3%)	4765/5118 (93.1%)	1		1		1		
CP ≥ 3	79/1187 (6.7%)	353/5118 (6.9%)	0.96 (0.75–1.24)	0.769	0.96 (0.75–1.24)	0.757	0.99 (0.76–1.27)	0.908	
Total cholesterol < 200mg/dL (n = 9209)									
CP < 3	1778/1907 (93.2%)	6856/7302 (93.9%)	1		1		1		
CP ≥ 3	129/1907 (6.8%)	446/7302 (6.1%)	1.12 (0.91–1.37)	0.292	1.12 (0.91–1.37)	0.274	1.13 (0.92–1.38)	0.246	
Total cholesterol ≥ 200mg/dL (n = 8631)									
CP < 3	1570/1661 (94.5%)	6545/6970 (93.9%)	1		1		1		
CP ≥ 3	91/1661 (5.5%)	425/6970 (6.1%)	0.89 (0.71–1.13)	0.339	0.89 (0.70–1.12)	0.315	0.91 (0.72–1.15)	0.447	
CCI score = 0 (n = 11,036)									
CP < 3	1859/1991 (93.4%)	8481/9045 (93.8%)	1		1		1		
CP ≥ 3	132/1991 (6.6%)	564/9045 (6.2%)	1.07 (0.88–1.30)	0.512	1.08 (0.88–1.31)	0.462	1.08 (0.88–1.31)	0.468	
CCI score = 1 (n = 3038)									
CP < 3	699/740 (94.5%)	2162/2298 (94.1%)	1		1		1		
CP ≥ 3	41/740 (5.5%)	136/2298 (5.9%)	0.93 (0.65–1.34)	0.703	0.94 (0.66–1.35)	0.747	0.95 (0.66–1.36)	0.766	
CCI score ≥ 2 (n = 3766)									
CP < 3	790/837 (94.4%)	2758/2929 (94.2%)	1		1		1		
CP ≥ 3	47/837 (5.6%)	171/2929 (5.8%)	0.96 (0.69–1.34)	0.810	0.96 (0.68–1.34)	0.791	0.96 (0.69–1.34)	0.810	

Abbreviations: CP, chronic periodontitis; RA, rheumatoid arthritis; SBP, systolic blood pressure; DBP, diastolic blood pressure; CCI, Charlson Comorbidity Index.

* Conditional or unconditional logistic regression analysis, Significance at $p < 0.05$

† Stratified model for age, sex, income, and region of residence.

‡ Model 1 was adjusted for smoking, alcohol consumption, obesity and CCI scores.

§ Model 2 was adjusted for model 1 plus total cholesterol, systolic blood pressure, diastolic blood pressure, and fasting blood glucose.

Supplementary Table S4. Subgroup analyses of crude and adjusted odds ratios of chronic periodontitis (CP) for rheumatoid arthritis (RA) when participants are diagnosed with CP ≥ 1 within 2 years before index date.

N of RA (exposure/total, %)		N of Control (exposure/total, %)	Odd ratios for RA (95% confidence interval)					
			Crude†	<i>p</i>	Model 1†‡	<i>p</i>	Model 2†§	<i>p</i>
Age < 65 years old (n = 8780)								
No CP	1,229/1756 (70.0%)	4961/7024 (70.6%)	1		1		1	
CP ≥ 1	527/1756 (30.0%)	2063/7024 (29.4%)	1.03 (0.92–1.16)	0.597	1.03 (0.92–1.16)	0.596	1.04 (0.93–1.17)	0.509
Age ≥ 65 years old (n = 9060)								
No CP	1087/1812 (60.0%)	4568/7248 (63.0%)	1		1		1	
CP ≥ 1	725/1812 (40.0%)	2680/7248 (37.0%)	1.14 (1.02–1.26)	0.017*	1.14 (1.02–1.26)	0.018*	1.17 (1.05–1.30)	0.005*
Men (n = 5275)								
No CP	617/1055 (58.5%)	2555/4220 (60.6%)	1		1		1	
CP ≥ 1	438/1055 (41.5%)	1665/4220 (39.5%)	1.09 (0.95–1.25)	0.221	1.09 (0.95–1.25)	0.217	1.11 (0.97–1.28)	0.127
Women (n = 12,565)								
No CP	1699/2513 (67.6%)	6974/10,052 (69.4%)	1		1		1	
CP ≥ 1	814/2513 (32.4%)	3078/10,052 (30.6%)	1.09 (0.99–1.19)	0.086	1.09 (0.99–1.20)	0.081	1.11 (1.01–1.22)	0.037*
Low income (n = 8630)								
No CP	1159/1726 (67.2%)	4756/6904 (68.9%)	1		1		1	
CP ≥ 1	567/1726 (32.9%)	2148/6904 (31.1%)	1.08 (0.97–1.21)	0.164	1.09 (0.97–1.22)	0.144	1.10 (0.98–1.24)	0.092
High income (n = 9210)								
No CP	1157/1842 (62.8%)	4773/7368 (64.8%)	1		1		1	
CP ≥ 1	685/1842 (37.2%)	2595/7368 (35.2%)	1.09 (0.98–1.21)	0.115	1.09 (0.98–1.21)	0.120	1.11 (1.00–1.24)	0.053
Urban residents (n = 7705)								
No CP	971/1541 (63.0%)	3971/6164 (64.4%)	1		1		1	
CP ≥ 1	570/1541 (37.0%)	2193/6164 (35.6%)	1.06 (0.95–1.19)	0.302	1.06 (0.94–1.19)	0.329	1.07 (0.95–1.21)	0.243
Rural residents (n = 10,135)								
No CP	1345/2027 (66.4%)	5558/8108 (68.6%)	1		1		1	
CP ≥ 1	682/2027 (33.7%)	2550/8108 (31.5%)	1.11 (1.00–1.23)	0.058	1.11 (1.00–1.23)	0.048*	1.14 (1.02–1.26)	0.018*
Underweight (n = 388)								
No CP	48/69 (69.6%)	224/319 (70.2%)	1		1		1	
CP ≥ 1	21/69 (30.4%)	95/319 (29.8%)	1.03 (0.59–1.82)	0.914	0.97 (0.54–1.75)	0.931	1.03 (0.59–1.82)	0.995
Normal weight (n = 6468)								
No CP	872/1334 (65.4%)	3477/5134 (67.7%)	1		1		1	
CP ≥ 1	462/1334 (34.6%)	1657/5134 (32.3%)	1.11 (0.98–1.26)	0.102	1.11 (0.98–1.26)	0.111	1.14 (1.10–1.30)	0.049*
Overweight (n = 4807)								
No CP	602/945 (63.7%)	2557/3862 (66.2%)	1		1		1	
CP ≥ 1	343/945 (36.3%)	1305/3862 (33.8%)	1.12 (0.96–1.30)	0.146	1.11 (0.96–1.29)	0.164	1.13 (0.97–1.31)	0.116
Obese (n = 6177)								
No CP	794/1220 (65.1%)	3271/4957 (66.0%)	1		1		1	
CP ≥ 1	426/1220 (34.9%)	1686/4957 (34.0%)	1.04 (0.91–1.19)	0.549	1.05 (0.92–1.20)	0.449	1.06 (0.93–1.22)	0.374
Non-smoker (n = 14,404)								
No CP	1885/2853 (66.1%)	7847/11,551 (67.9%)	1		1		1	
CP ≥ 1	968/2853 (33.9%)	3704/11,551 (32.1%)	1.09 (1.00–1.19)	0.057	1.09 (1.00–1.19)	0.048*	1.11 (1.01–1.21)	0.023*
Past smoker and current smoker (n = 3436)								
No CP	431/715 (60.3%)	1682/2721 (61.8%)	1		1		1	
CP ≥ 1	284/715 (39.7%)	1039/2721 (38.2%)	1.07 (0.90–1.26)	0.453	1.08 (0.91–1.28)	0.400	1.11 (0.93–1.31)	0.254
Alcohol consumption < 1 time a week (n = 13,182)								
No CP	1825/2690 (67.8%)	7314/10,492 (69.7%)	1		1		1	
CP ≥ 1	865/2690 (32.2%)	3178/10,492 (30.3%)	1.09 (1.00–1.19)	0.061	1.09 (0.99–1.19)	0.066	1.10 (1.01–1.21)	0.037*
Alcohol consumption ≥ 1 time a week (n = 4658)								
No CP	491/878 (55.9%)	2215/3780 (58.6%)	1		1		1	
CP ≥ 1	387/878 (44.1%)	1565/3780 (41.4%)	1.12 (0.96–1.29)	0.148	1.11 (0.96–1.29)	0.159	1.12 (0.96–1.30)	0.148
SBP < 140 mmHg and DBP < 90 mmHg (n = 13,526)								
No CP	1778/2783 (63.9%)	7101/10,743 (66.1%)	1		1		1	
CP ≥ 1	1005/2783 (36.1%)	3642/10,743 (33.9%)	1.10 (1.01–1.20)	0.029*	1.11 (1.01–1.21)	0.025*	1.13 (1.04–1.24)	0.007*
SBP ≥ 140 mmHg or DBP ≥ 90 mmHg (n = 4314)								
No CP	538/785 (68.5%)	2428/3529 (68.8%)	1		1		1	
CP ≥ 1	247/785 (31.5%)	1101/3529 (31.2%)	1.01 (0.86–1.20)	0.884	1.02 (0.86–1.20)	0.853	1.02 (0.86–1.21)	0.782
Fasting blood glucose < 100 mg/dL (n = 11,535)								
No CP	1561/2381 (65.6%)	6272/9154 (68.5%)	1		1		1	
CP ≥ 1	820/2381 (34.4%)	2882/9154 (31.5%)	1.14 (1.04–1.26)	0.006*	1.14 (1.03–1.25)	0.008*	1.15 (1.05–1.27)	0.004*
Fasting blood glucose ≥ 100 mg/dL (n = 6305)								

No CP	755/1187 (63.6%)	3257/5118 (63.6%)	1		1		1	
CP ≥ 1	432/1187 (36.4%)	1861/5118 (36.4%)	1.00 (0.88–1.14)	0.983	1.00 (0.88–1.14)	0.975	1.03 (0.90–1.18)	0.677
Total cholesterol < 200mg/dL (n = 9209)								
No CP	1245/1907 (65.3%)	4853/7302 (66.5%)	1		1		1	
CP ≥ 1	662/1907 (34.7%)	2449/7302 (33.5%)	1.05 (0.95–1.17)	0.334	1.06 (0.95–1.18)	0.311	1.07 (0.96–1.19)	0.217
Total cholesterol ≥ 200mg/dL (n = 8631)								
No CP	1071/1661 (64.5%)	4676/6970 (67.1%)	1		1		1	
CP ≥ 1	590/1661 (35.5%)	2294/6970 (32.9%)	1.12 (1.00–1.26)	0.043*	1.13 (1.01–1.26)	0.040*	1.15 (1.03–1.29)	0.015*
CCI score = 0 (n = 11,036)								
No CP	1266/1991 (63.6%)	6023/9045 (66.6%)	1		1		1	
CP ≥ 1	725/1991 (36.4%)	3022/9045 (33.4%)	1.14 (1.03–1.26)	0.010*	1.15 (1.04–1.28)	0.007*	1.16 (1.05–1.29)	0.005*
CCI score = 1 (n = 3038)								
No CP	487/740 (65.8%)	1513/2298 (65.8%)	1		1		1	
CP ≥ 1	253/740 (34.2%)	785/2298 (34.2%)	1.00 (0.84–1.19)	0.988	1.02 (0.85–1.21)	0.863	1.02 (0.86–1.22)	0.806
CCI score ≥ 2 (n = 3766)								
No CP	563/837 (67.3%)	1993/2929 (68.0%)	1		1		1	
CP ≥ 1	274/837 (32.7%)	936/2929 (32.0%)	1.04 (0.88–1.22)	0.669	1.04 (0.89–1.23)	0.604	1.06 (0.90–1.25)	0.495

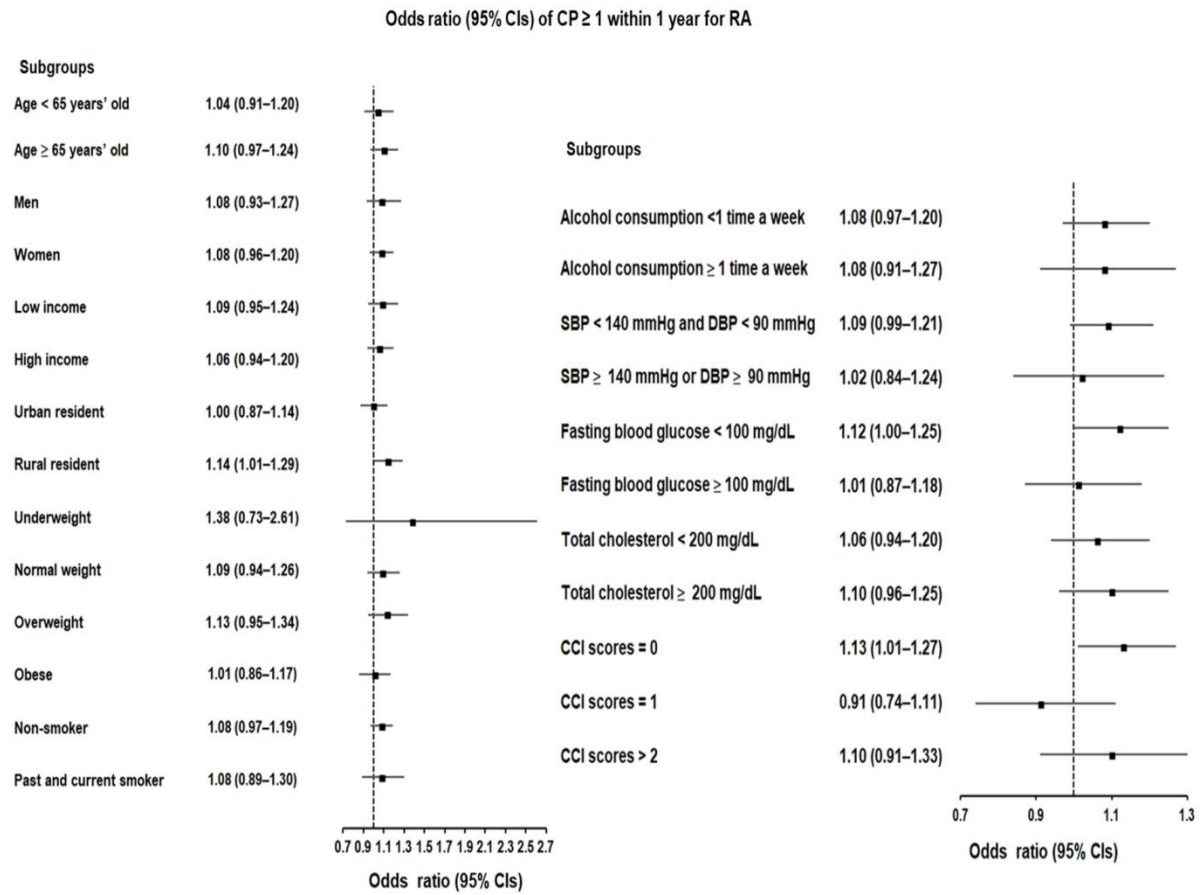
Abbreviations: CP, chronic periodontitis; RA, rheumatoid arthritis; SBP, systolic blood pressure; DBP, diastolic blood pressure; CCI, Charlson Comorbidity Index.

* Conditional or unconditional logistic regression analysis, Significance at $p < 0.05$

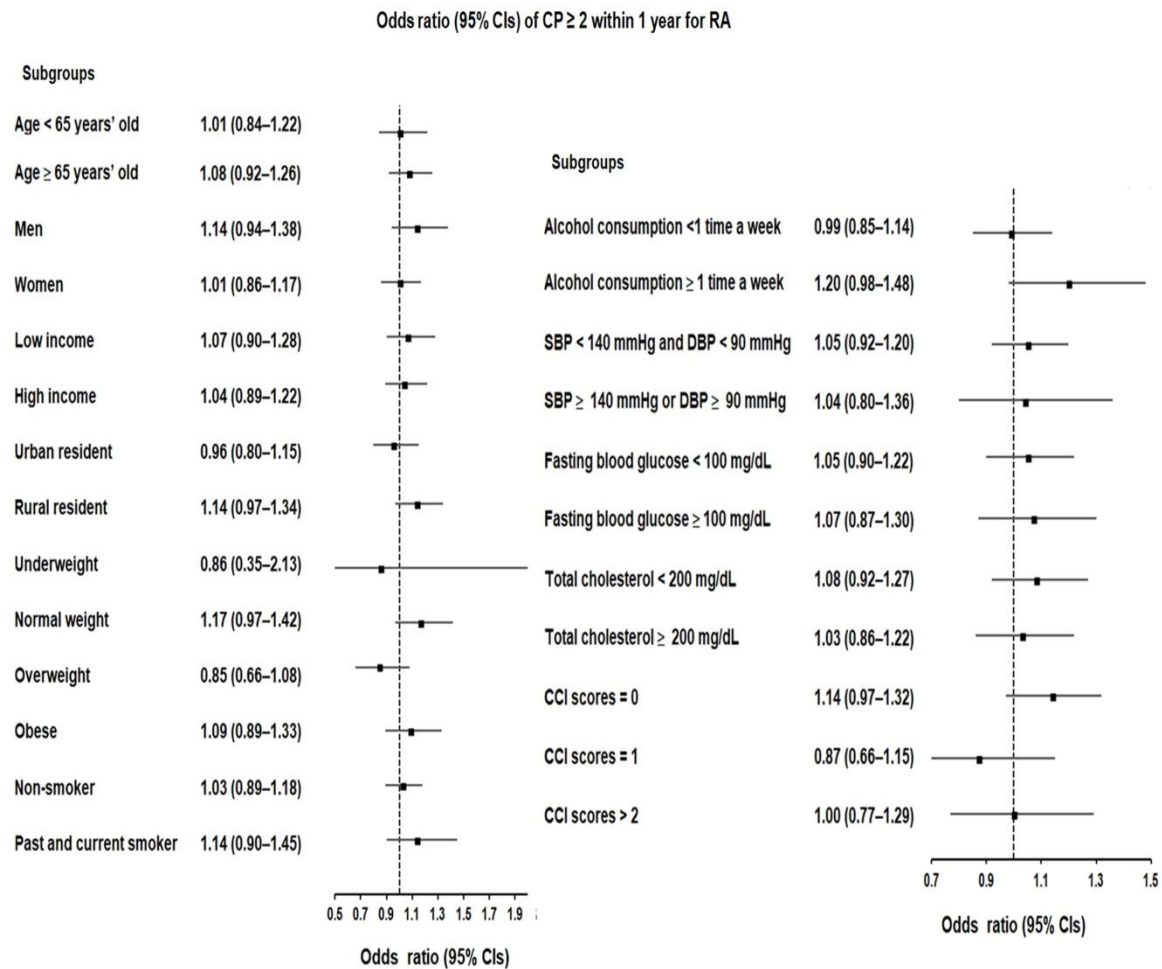
† Stratified model for age, sex, income, and region of residence.

‡ Model 1 was adjusted for smoking, alcohol consumption, obesity and CCI scores.

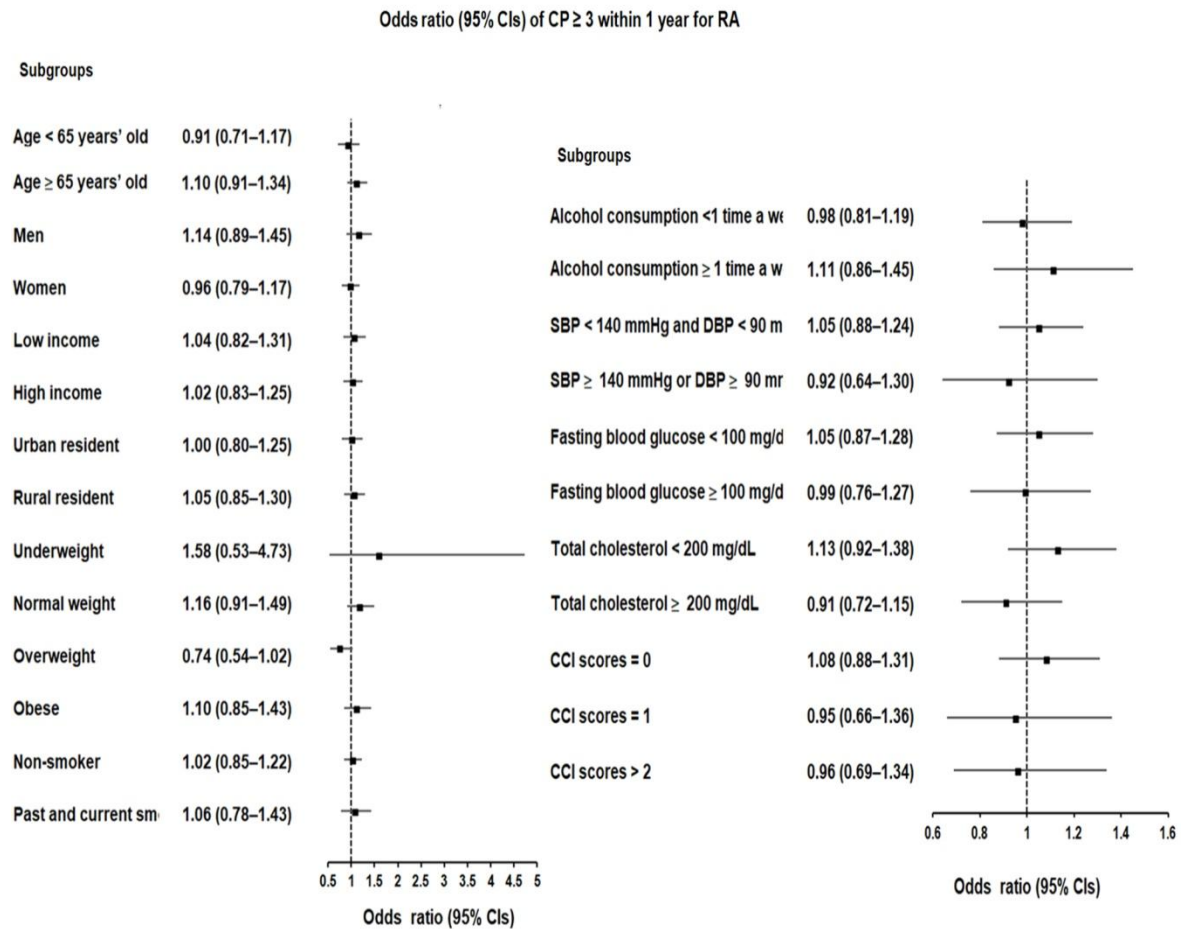
§ Model 2 was adjusted for model 1 plus total cholesterol, systolic blood pressure, diastolic blood pressure, and fasting blood glucose.



Supplementary Figure S1. Forest plots illustrating the adjusted odds ratio and corresponding 95% confidence intervals (CIs) for demographic, lifestyle, and comorbid factors related to chronic periodontitis (CP) concerning the development of rheumatoid arthritis (RA) when individuals are diagnosed with CP \geq 1 within 1 year preceding the index date.



Supplementary Figure S2. Forest plots illustrating the adjusted odds ratio and corresponding 95% confidence intervals (CIs) for demographic, lifestyle, and comorbid factors related to chronic periodontitis (CP) concerning the development of rheumatoid arthritis (RA) when individuals are diagnosed with CP ≥ 2 within 1 year preceding the index date.



Supplementary Figure S3. Forest plots illustrating the adjusted odds ratio and corresponding 95% confidence intervals (CIs) for demographic, lifestyle, and comorbid factors related to chronic periodontitis (CP) concerning the development of rheumatoid arthritis (RA) when individuals are diagnosed with CP \geq 3 within 1 year preceding the index date.