

Supplementary Table 3. Demographic and clinic characteristics according to PPIs use after PSM. NHANES 2007–2018*

Characteristics	Total Adults (N = 4,864)	Non-user (N = 2,432)	PPIs user (N = 2,432)	P value
Age, years, mean (SE)	59.15(0.35)	59.24(0.42)	59.05(0.47)	0.733
Female, n (%)	2679(56.73)	1303(57.02)	1376(56.43)	0.800
Race (Non-Hispanic White), n (%)	2634(78.13)	1317(78.63)	1317(77.61)	0.460
Education, n (%)				0.760
Grades 0–12	1379(17.54)	682(17.24)	697(17.85)	
High school graduate/GED	1217(26.31)	621(25.95)	596(26.69)	
Some college or above	2268(56.14)	1129(56.80)	1139(55.46)	
Smoking [†] , n (%)	904(18.71)	462(19.46)	442(17.93)	0.715
Alcohol consumption, n (%)	952(22.76)	493(22.89)	459(22.63)	0.902
BMI, kg/m ² , mean (SE)	30.64(0.17)	30.41(0.23)	30.89(0.22)	0.113
Weight status (≥ 25 kg/m ²), n (%) [‡]	4013(82.25)	2029(82.531)	1984(81.948)	0.715
Sedentary time, hours/day, mean (SE)	390.48(4.72)	386.03(6.16)	395.13(5.96)	0.236
Mean arterial pressure, mmHg, mean (SE)	89.92(0.29)	90.25(0.40)	89.59(0.35)	0.194
Total water intake, g, mean (SE)	1058.14(24.20)	1047.33(32.08)	1069.41(30.63)	0.582
HbA1c, %, mean (SE)	5.89(0.02)	5.89(0.03)	5.89(0.03)	0.917
Triglycerides, mmol/L, mean (SE)	1.96(0.03)	1.95(0.03)	1.97(0.04)	0.716
Albumin-adjusted calcium, mmol/L, mean (SE)	2.30(0.00)	2.30(0.00)	2.30(0.00)	0.939
eGFR, mL/min, mean (SE)	81.68(0.45)	82.11(0.63)	81.23(0.61)	0.306
Gout, n (%)	169(2.83)	75(2.44)	94(3.23)	0.216
CVD history, n (%)	989(20.33)	444(14.83)	545(17.44)	0.070
Thiazide user, n (%)	983(17.98)	491(18.20)	492(17.75)	0.776
Loop diuretics user, n (%)	436(7.13)	186(5.97)	250(8.35)	0.016
H2RAs user, n (%)	168(3.11)	75(3.10)	93(3.12)	0.979
Kidney stones, n (%)	658(13.51)	286(11.23)	372(15.88)	0.002

Abbreviations: PPIs, proton pump inhibitors; PSM, propensity score matching; NHANES, National Health and Nutrition Examination Survey; SE, standard error; GED, General Equivalency Diploma; BMI, body mass index; eGFR, effective glomerular filtration rate; CVD, cardiovascular disease; H2RAs, H2-receptor antagonist.

*Means and percentages were adjusted for survey weights of NHANES.

[†]Smoking was defined as smoking at least 100 cigarettes during their lifetime.

[‡]BMI was calculated by dividing weight in kilograms (kg) by height in meters squared (m²). Participants were classified as normal weight (BMI < 25 kg/m²), and overweight/obese (BMI \geq 25 kg/m²).