

**Supplementary Table 1.** Analysis of urine cotinine, cigarette per day, TTFC, and HSI by gender

Variable	Male				Female			
	CC user	EC user	Dual user	P-value	CC user	EC user	Dual user	P-value
Sample size (%)	3,036/6,493,982 (89.2)	41/101,923 (1.4)	271/684,343 (9.4)		521/908,951 (90.5)	11/19,082 (1.9)	37/76,331 (7.6)	
Urine cotinine (ng/mL)	1,328.0±19.7	806.9*	1,424.0*	<0.001	858.0*	1,185.3*	752.7*	0.3177
Sample size (%)	3,036/6,491,082 (90.4)	-	271/689,318 (9.6)		521/908,404 (92.2)	-	37/76,849 (7.8)	
Cigarette per day <sup>†</sup>				0.698				*
0 (≤10)	40.8 (1.0)		40.1 (3.0)		78.1*		80.3*	
1 (11–20)	51.6 (1.0)		50.9 (3.1)		19.3*		14.5*	
2 (21–30)	5.7 (0.5)		7.5 (1.7)		2.2*		3.8*	
3 (>30)	1.9 (0.3)		1.5 (0.7)		0.4*		1.4*	
Sample size (%)	817/1,724,857 (92.7)	-	60/135,830 (7.3)		162/270,018 (96.3)	-	6/10,374 (3.7)	
TTFC <sup>‡,§</sup>				0.019				*
0 (>60 min)	29.5 (1.9)		15.5 (5.3)		41.0*		16.5*	
1 (31–60 min)	15.5 (1.7)		29.5 (6.8)		14.2*		26.1*	
2 (6–30 min)	33.2 (1.9)		26.1 (6.3)		24.9*		20.1*	
3 (≤5)	21.8 (1.9)		28.9 (6.1)		19.9*		37.3*	
HSI <sup>  </sup>				0.693				
Low (0–1)	35.1 (2.1)		29.2 (6.9)		51.6*		42.6*	*
Medium (2–4)	60.0 (2.0)		65.0 (7.2)		47.8*		57.4*	
High (5–6)	4.9 (0.8)		5.9 (3.4)		0.5*		0.0*	

Values are presented as unweighted sample size/weighted sample size (%), mean±SE, or % (SE), unless otherwise stated. P-value from chi-square test for categorical variables.

TTFC, time to first cigarette; HSI, Heaviness of Smoking Index; CC, combustible cigarette; EC, electronic cigarette; SE, standard error.

\*SE or P-value were missing because of strata with single sampling unit such as mean age and urine cotinine geometric mean in the exclusive EC and dual user group. <sup>†</sup>Question about cigarette per day; on average, how many cigarettes do you smoke per day (for current smoker)? <sup>‡</sup>Question about TTFC; How soon do you smoke your first cigarette in the morning (for current smoker)? <sup>§</sup>Since the TTFC questionnaire was only conducted in 2016, TTFC and HSI analysis is only for respondents to the 2016 TTFC questionnaire out of the 4 years in 2014–2017. <sup>||</sup>HSI is the sum of cigarette per day (0–3 points) and TTFC (0–3 points), total of 6 points divided into three categories according to the score.