Supplementary Table 1: Association between rs1451240 and smoking phenotypes.

| | FTCD ≤ 3 vs FTCD ≥ 4 | | | FTCD | | CPD | |
| | logistic regression | | | linear regression | | linear regression | |
	n	OR	p	β	p	β	p
ever-smokers	3,359	0.65	2.1E-08	-0.48	4.0E-04	-0.08	4.0E-04
smoked ≥ 100 cigs	2,800	0.64	1.6E-07	-0.38	1.0E-04	-0.08	2.0E-03
daily smoking ≥ one month	2,597	0.64	3.8E-07	-0.37	3.5E-04	-0.08	4.3E-04

Supplementary Table 2: Association between rs1451240 and smoking phenotypes.

	n	OR/β	p
FTCD ≤ 3 vs FTCD ≥ 4	3,359	0.65	2.1E-08
FTCD ≤ 1 vs FTCD ≥ 4	3,058	0.64	4.0E-07
CPD ≤ 10 vs CPD > 20	2,572	0.69	2.0E-04
Time to first Cigarette	3,359	-0.23	2.8E-02
FTCD residual from CPD	3,359	-0.19	1.0E-01

Supplementary Table 3: Characteristic of sample, by contributing study.

	Nicotine Dependent Smokers			Controls		
	COGEND	COGA	FSCD	COGEND	COGA	FSCD
	n=275	n=649	n=370	n=1,082	n=553	n=436
no comorbid diagnosis	94%	12%	4%	83%	52%	63%
alcohol dependence	5%	88%	96%	17%	48%	37%
cocaine dependence	24%	42%	14%	14%	19%	25%
cigarettes per day	-			-		
0-10	8%	14%	8%	93%	84%	86%
11-20	37%	46%	46%	7%	16%	12%
21-30	23%	20%	15%	0%	1%	1%
≥ 31	31%	20%	31%	0%	0%	0%
Age						
< 35	27%	19%	34%	36%	19%	36%
35-39	30%	22%	25%	27%	21%	20%
40-44	41%	22%	24%	34%	18%	22%
≥ 45	2%	37%	18%	4%	42%	22%
male	54%	62%	54%	30%	50%	47%
female	45%	38%	46%	70%	50%	53%
Income < $20,000	7%	18%	36%	2%	9%	14%
No High School Degree	15%	22%	30%	2%	9%	8%