

Supplemental Appendix:

Supplemental Table 1: Frequencies of CYP2C19 alleles in biogeographical groups

Supplemental Table 2: Frequencies of CYP2C19 phenotypes in biogeographical groups

Frequencies of CYP2C19 alleles in biogeographical groups									
CYP2C19 allele	African American/Afro-Caribbean	American	Central/South Asian	East Asian	European	Latino	Near Eastern	Oceanian	Sub-Saharan African
*1	54.68%	79.22%	54.36%	59.55%	62.51%	71.66%	67.23%	18.71%	55.15%
*2	18.15%	12.14%	26.99%	28.35%	14.69%	10.42%	11.98%	60.95%	15.68%
*3	0.28%	0.04%	1.57%	7.25%	0.16%	0.08%	1.65%	14.64%	0.27%
*4	0.00%	0.00%	0.00%	0.02%	0.24%	0.05%	0.00%		0.00%
*5	0.00%	0.00%	0.00%	0.32%	0.00%	0.00%	0.00%		0.00%
*6	0.00%		0.00%	0.06%	0.03%	0.00%	0.00%		0.00%
*7	0.00%		0.00%	0.01%	0.00%	0.00%			0.00%
*8	0.11%	0.00%	0.00%	0.00%	0.34%	0.13%	0.00%		0.00%
*9	1.43%			0.01%	0.07%	0.08%			2.70%
*10	0.33%			0.01%	0.00%	0.12%	0.00%		0.00%
*11				0.00%			0.00%		
*12	0.11%			0.01%	0.00%	0.00%			0.00%
*13	1.20%			0.01%	0.22%	0.40%			0.00%
*14	0.00%	0.00%		0.01%	0.00%	0.00%			0.00%
*15	1.40%			0.14%	0.20%	0.40%			5.29%
*16	0.00%			0.00%	0.00%	0.00%			
*17	20.72%	8.61%	17.08%	2.05%	21.54%	16.66%	19.14%	5.70%	17.33%
*18				1.99%					
*19				0.02%					
*22	0.00%			0.00%	0.00%	0.00%			
*23				0.06%					
*24				0.02%					
*25				0.02%					
*26				0.00%					
*28				0.00%					0.37%
*29				0.02%					
*30				0.02%					
*31				0.02%					
*32				0.02%					
*33				0.02%					
*34				0.00%					
*35	1.59%			0.00%	0.00%				3.21%

Supplemental Table 1: Clinical Pharmacogenetics Implementation Consortium (CPIC®) multiethnic CYP2C19 allelic frequencies. This table was obtained on the CCO 1.0 Universal (CCO 1.0) Public Domain Dedication. Obtained from: CPIC®. “Guideline for Clopidogrel and CYP2C19”. cpicpgx.org; Date Accessed 09/17/2023. Gene-specific information tables can be found at <https://www.pharmgkb.org/page/pgxGeneRef>. Original publication by Lee et al. ^{39,40}

Frequencies of CYP2C19 phenotypes in biogeographical groups									
Phenotype	African American/Afro-Caribbean	American	Central/South Asian	East Asian	European	Latino	Near Eastern	Oceanian	Sub-Saharan African
Ultrarapid Metabolizer	4.29%	0.74%	2.92%	0.04%	4.64%	2.77%	3.66%	0.32%	3.00%
Rapid Metabolizer	23.74%	13.64%	18.57%	2.53%	27.12%	24.14%	25.74%	2.13%	21.08%
Poor Metabolizer	4.05%	1.48%	8.16%	12.98%	2.39%	1.14%	1.86%	57.14%	3.67%
Normal Metabolizer	32.81%	62.76%	29.55%	38.06%	39.61%	52.50%	45.19%	3.50%	36.98%
Likely Poor Metabolizer	0.71%	0.00%	0.00%	0.04%	0.02%	0.04%	0.00%	0.00%	1.03%
Likely Intermediate Metabolizer	2.78%	0.00%	0.00%	0.08%	0.11%	0.37%	0.00%	0.00%	4.29%
Intermediate Metabolizer	31.40%	21.38%	40.81%	45.93%	26.11%	19.04%	23.55%	36.90%	29.95%
Indeterminate	0.22%	0.00%	0.00%	0.34%	0.00%	0.00%	0.00%	0.00%	0.00%

Supplemental Table 2: Clinical Pharmacogenetics Implementation Consortium (CPIC®) multiethnic CYP2C19 phenotype frequencies. This table was obtained on the CCO 1.0 Universal (CCO 1.0) Public Domain Dedication. Obtained from: CPIC®. Guideline for Clopidogrel and CYP2C19”cpicpgx.org; Date Accessed 09/17/2023. Gene-specific information tables can be found at <https://www.pharmgkb.org/page/pgxGeneRef>. Original publication by Lee et al. ^{39,40}