

SUPPLEMENTARY DATA

Frequencies of *Plasmodium vivax* merozoite surface protein 3- α gene types of *P. vivax* isolates of different genetic population studies around the world

	Types ^a				Geographical region	Reference
	A	B	C	D		
Frequencies (%)	58.2	32.8	9	0	Asia and Americas	Rayner et al. (2002)
	67.8	15.2	17	0	Brazil	This study
	96.4	1.8	3.6	0	Colombia	Cristiano et al. (2008)
	85.1	9.6	5.3	0	French Guiana	Veron et al. (2009)
	51.7	17	27.6	3.4	India	Prajapati et al. (2010)
	70/24 ^b	12/6 ^b	18/70 ^b	0	Iran	Zakeri et al. (2006)
	77.3	16.7	4	0	Iran	Zakeri et al. (2010)
	82	6	8	2	Pakistan	Khatoon et al. (2010)
	72.7	16	6.4	0	Pakistan	Zakeri et al. (2010)
	86.9	10.1	3	0	Peru	Sutton et al. (2009)
	70.5	6.7	22.8	0	Papua New Guine	Bruce et al. (2000)
	74.8	6.5	18.7	0	Thailand	Cui et al. (2003)
	59.3	21.9	18.8	0	Venezuela	Ord et al. (2005)
	Mean	76	12	8	0.4	-

a: mean of frequencies types; *b*: data from Southern and Northern Iran, respectively. In bold the data from South America *P. vivax* isolates.

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Comparison of genetic population parameters of Brazilian *Plasmodium vivax* isolates using different molecular markers

	$H_E \pm SD$	MI (%)	F_{ST}	Reference
PvMSP-3 α (n = 52) ^a	0.24 \pm 0.19	2	0.003-0.23	This study
TR (n = 44)	0.56 \pm 0.18	27	0.002-0.24	Rezende et al. (2009)
MS (n = 50)	0.71 \pm 0.18	57	0.07-0.24	Rezende et al. (2010)

a: number of *P. vivax* infected patients included in each study, being 33 isolates used in all studies; F_{ST} : fixation index between populations; H_E : expected heterozygosity; MI: multiple-clone infection; MS: microsatellites; PvMSP-3 α : *P. vivax* merozoite surface protein 3- α ; SD: standard deviation; TR: tandem repeats.