

FIG S1 2010 *Plasmodium falciparum* endemicity map of Central and South America (1) showing the location of Colombia, and map of Colombia showing the 4 study sites – Córdoba, Antioquia, Chocó, and Nariño – in yellow.

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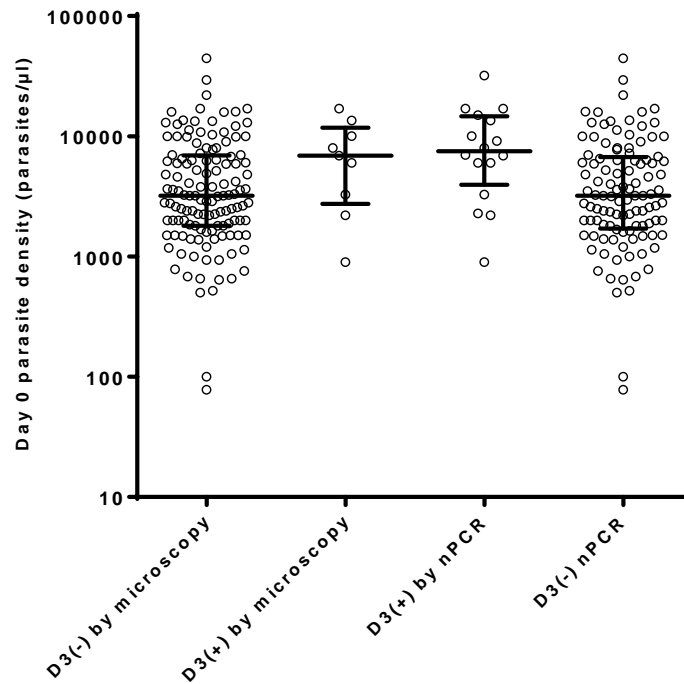


FIG S2 D0 parasite density, according to D3 microscopy and nPCR results. Initial (D0) parasite density is shown for 4 D3 outcomes: D3 negative by microscopy, D3 positive by microscopy, D3 negative by nPCR and D3 positive by nPCR; Kruskal-Wallis test $p < 0.05$ for D3-positive and D3-negative samples by nPCR.

Supplementary tables

TABLE S1 Antimalarial failure rates in Colombia from 1978 to 2013, as estimated by efficacy studies using the WHO standard protocol

State	Monotherapy failure rates (%)				Combination therapy failure rates (%)								Years	Ref.
	CQ	AQ	SP	MQ	CQ SP	AQ SP	AL	AS AQ	AS MQ	MQ SP	AS SP			
Antioquia, Chocó, Meta, Magdalena	85.0												1978-80	"(3)
Chocó	44.0		6.0										1997	(4)
Nariño, Cauca, Valle del Cauca, Chocó, Amazonas	78.0												1998-99	"(3)
Antioquia	67.0	3.0	9.0										1998	"(4)
Antioquia	12.0		15.0										1998	"(5)
Chocó		2.8						0.0					2000-04	"(8)
Antioquia	82.0	30.0	24.0	4.0	17.0	2.0				0.0	3.4		2000-04	(9)
Antioquia	97.0	7.0	13.0										2001	"(:)
Antioquia	77.7		26.5		12.1								2002	"(;)
Antioquia	87.5		22.2		22.6								2002	"(: ;)
Amazonas		100.0	87.0										2002-03	(32) "
Córdoba						5.7							2006	"(5)
Meta							0.0						2006	(33)
Antioquia									0.0				2007	(34)
Nariño							2.5		1.9				2007-08	(13)
Nariño, Córdoba, Guaviare							0.0						2011-2013	(14)
Average	70.0	24.8	28.1	4.0	17.2	3.8	0.8	0.0	0.9	0.0	3.4			
Std. dev.	26.4	38.2	26.7	0.0	5.2	2.6	1.4	0.0	1.3	0.0	0.0			

CQ, chloroquine; AQ, amodiaquine; SP, sulfadoxine-pyrimethamine; MQ, mefloquine; AL, artemether-lumefantrine; AS, artesunate.

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TABLE S2 Patient follow-up

State	No. patients enrolled	No. patients followed up on D3	No. patients followed up on D2, D4, D5, or D8	No. patients lost to follow-up
Chocó	103	67	8	28
Nariño	61	43	13	5
Antioquia	21	13	4	4
Córdoba	2	2	0	0
Total	187	125 (66.8%)	25 (13.4%)	37 (19.8%)

TABLE S3 Patient characteristics

Characteristic	Patients enrolled on D0 <i>n</i>=187	Patients followed up on D3 <i>n</i>=125
Age (years), median (IQR)	26 (18-38.5)	26 (17-37)
Female, no. (%)	69 (36.9)	50 (40.0)
Occupation, no. (%)		
Student	44 (23.5)	34 (27.2)
Gold miner	39 (20.9)	25 (20.0)
Housewife	33 (17.6)	24 (19.2)
Other	71 (38.0)	42 (33.6)
Parasite density (parasites/ μ l), median (IQR)	3,300 (1,840-7,000)	3,400 (1,810-7,940)

TABLE S4 Patients with asexual or sexual *P. falciparum* parasitemia on D3

Patient ID	State	Age (years)	Sex	D0 parasite density (parasites/μl)	D3 microscopy result*	D3 nPCR result
05004F	Chocó	39	M	3,278	400 t/μl	Positive
05057F	Chocó	14	F	900	2,120 t/μl	Positive
05070F	Chocó	30	F	8,000	40 t/μl	Positive
05096F	Chocó	40	M	6,900	40 t/μl	Positive
05002F	Chocó	13	M	10,049	520 g/ μ l	Positive
05003F	Chocó	30	M	13,544	480 g/ μ l	Positive
05032F	Chocó	57	M	2,200	760 g/ μ l	Positive
05037F	Chocó	14	M	6,000	180 g/ μ l	Positive
05053F	Chocó	17	F	17,000	40 g/ μ l	Positive

* t = trophozoites, g = gametocytes

* “D3-positive” patients with asexual parasitemia by microscopy on D3 are indicated in bold.

TABLE S5 Genotypes of parasite isolates from nine D3-positive patients

Patient ID	State	D0 parasite density (parasites/ μ l)	D3 microscopy result*	D3 nPCR result	<i>K13</i>	<i>Mdr1</i> CN	86 N/ <u>Y</u>	184 Y/ <u>E</u>	1034 S/ <u>C</u>	1042 N/ <u>D</u>	1246 D/ <u>Y</u>
05004F	Chocó	3,278	400 t/ μ l	Positive	WT	0.944	N	<u>F</u>	S	<u>D</u>	<u>Y</u>
05057F	Chocó	900	2,120 t/ μ l	Positive	WT	<u>1.806</u>	N	<u>F</u>	S	<u>D</u>	<u>Y</u>
05070F	Chocó	8,000	40 t/ μ l	Positive	WT	<u>2.023</u>	N	<u>F</u>	S	<u>D</u>	D
05096F	Chocó	6,900	40 t/ μ l	Positive	WT	1.279	N	<u>F</u>	S	<u>D</u>	**
05032F	Chocó	2,200	760 g/ μ l	Positive	WT	1.148	N	<u>F</u>	S	<u>D</u>	D
05053F	Chocó	17,000	40 g/ μ l	Positive	WT	1.031	N	<u>F</u>	S	<u>D</u>	<u>Y</u>
05002F	Chocó	10,049	520 g/ μ l	Positive	WT	1.269	N	<u>F</u>	S	<u>D</u>	D
05003F	Chocó	13,544	480 g/ μ l	Positive	WT	0.946	N	<u>F</u>	S	<u>D</u>	D
05037F	Chocó	6,000	180 g/ μ l	Positive	WT	1.176	N	<u>F</u>	S	<u>D</u>	D

* t = trophozoites, g = gametocytes

** missing genotype

Multicopy *mdr1* genotypes and *mdr1* SNPs are underlined and bolded.