Supplementary Table 1. Definition of terms and categorization of prenatal malaria exposure

Definition of terms				
Terms	Definition			
Clinical malaria episode	Detection of <i>Plasmodium falciparum</i> parasites by qPCR (regardless of RDT and LM results) and fever			
Non-malaria fever (NMF)	Fever with negative qPCR (regardless of RDT and LM results)			
Asymptomatic infection	Detection of <i>Plasmodium falciparum</i> by qPCR and no fever			
Plasmodium falciparum infection	Positive qPCR regardless of symptoms			
Fever	Axillary temperature \geq 37.5 °C or history of fever in previous 24 hours			
Acute placental malaria	Parasites present but malaria pigment absent			
Chronic placental malaria	Parasites and malaria pigment present			
Past placental malaria	Parasites absent but pigment present			
No placental malaria	Both parasites and malaria pigment absent			
Categorization of prenatal malaria expos	sure			
Types of prenatal malaria exposure	Definition			
Active placental malaria	Presence of <i>Plasmodium falciparum</i> parasites in the placenta at delivery			
Past placental malaria	Presence of malaria pigment by histology but not <i>Plasmodium falciparum</i> parasites at delivery			
Peripheral infection	No evidence of placental malaria but detection of peripheral parasites at any time during pregnancy			
No maternal infection	Negative for placental malaria and peripheral infection at any time during pregnancy			

NOTE. qPCR, quantitative polymerase chain reaction, RDT, rapid diagnostic test, LM, light microscopy

Supplementary Table 2: Effect of CSST/IPTp-SP on *P. falciparum* infections by multivariate logistic regression

Characteristic	Risk factor	Univariate		Multivariate*	
		OR (95% CI)	P value	OR (95% CI)	P value
MiP preventive strategy	Standard IPTp-SP	1		1	
	CSST/IPTp-SP	1.19 (0.82-1.72)	.369	1.20 (0.82-1.74)	.348
Gravidity	Multigravid	1		1	
	Secundigravid	1.84 (1.01-3.36)	.047	1.70 (0.95-3.20)	.075
	Primigravid	0.93 (0.57-1.52)	.772	0.94 (0.57-1.53)	.798
Mother's age	>30	1			
	21-30	0.92 (0.58-1.47)	.742		
	≤20	0.86 (0.50-1.49)	.595		
Birth season	Low-transmission	1			
	High-transmission	0.85 (0.57-1.25)	.407		
ITN use	No	1			
	Yes	0.69 (0.42-1.14)	.151		
Newborn sex	Male	1			
	Female	1.04 (0.72-1.51)	.835		

NOTE. MiP, malaria in pregnancy; ITN, insecticide treated net; 0R, Odd ratio; CI, confidence interval

* Adjusted by variables that showed a *P* value < .1 in univariate analysis.

Supplementary Table 3: Effect of CSST/IPTp-SP strategy on parasite densities during first clinical malaria episodes by linear regression analysis

Characteristic	Risk factor	Univariate		Multivariate*	
		Coef (95% CI)	P value	Coef (95% CI)	P value
MiP preventive strategy	Standard IPTp-SP	1		1	
	CSST/IPTp-SP	1.08 (0.81-1.45)	.591	1.10 (0.82-1.47)	.526
Gravidity	Multigravid	1		1	
	Secundigravid	0.93 (0.63-1.37)	.700	0.92 (0.62-1.36)	.680
	Primigravid	0.73 (0.49-1.09)	.122	0.74 (0.50-1.11)	.152
Mother's age	>30	1			
	21-30	0.81 (0.57-1.16)	.257		
	≤20	0.78 (0.51-1.21)	.268		
ITN use	No	1			
	Yes	1.10 (0.77-1.57)	.589		
Birth season	Low-transmission	1			
	High-transmission	1.02 (0.76-1.37)	.890		
Newborn sex	Male	1		1	
	Female	1.22 (0.91-1.63)	.174	1.20 (0.90-1.62)	.211

NOTE. MiP, malaria in pregnancy; ITN, insecticide treated net; CI, confidence interval; Coef, coefficient

*Adjusted by variables that showed a *P* value < .2 in univariate analyses.

Supplementary Table 4: Proportion of asymptomatic infections by MiP strategy and survey

Survey time point	MiP preventive strategy	Number of infections (%)	P value
3 Months	Standard IPTp-SP (N= 338)	61 (18.0)	.813
	CSST/IPTp-SP (N=340)	59 (17.4)	
6 Months	Standard IPTp-SP (N=313)	58 (18.5)	.321
	CSST/IPTp-SP (N=318)	69 (21.7)	
9 Months	Standard IPTp-SP (N=288)	44 (15.3)	.056
	CSST/IPTp-SP (N= 299)	64 (18.4)	
12 Months	Standard IPTp-SP (N= 324)	96 (29.6)	.496
	CSST/IPTp-SP (N=324)	104 (32.1)	

NOTE. MiP, malaria in pregnancy

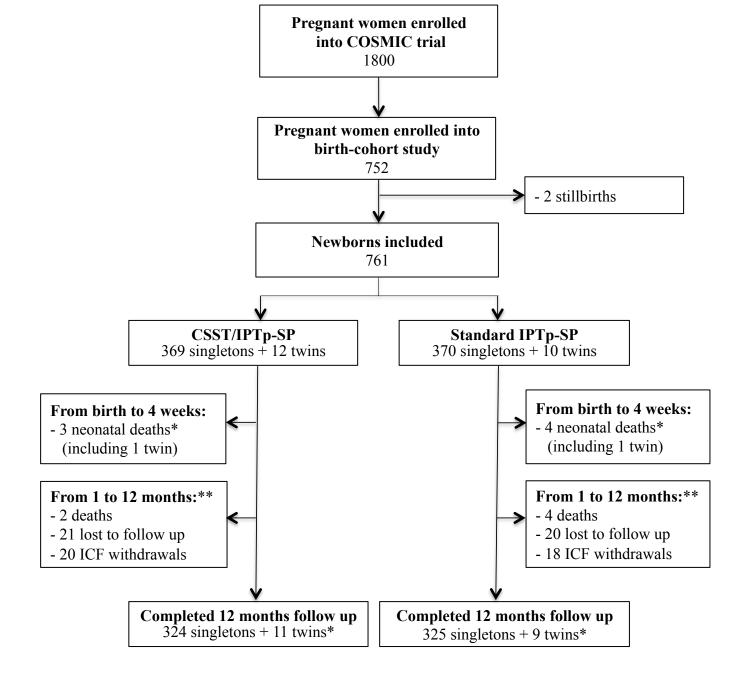
Supplementary Table 5: Negative binomial regression analysis assessing the effect of

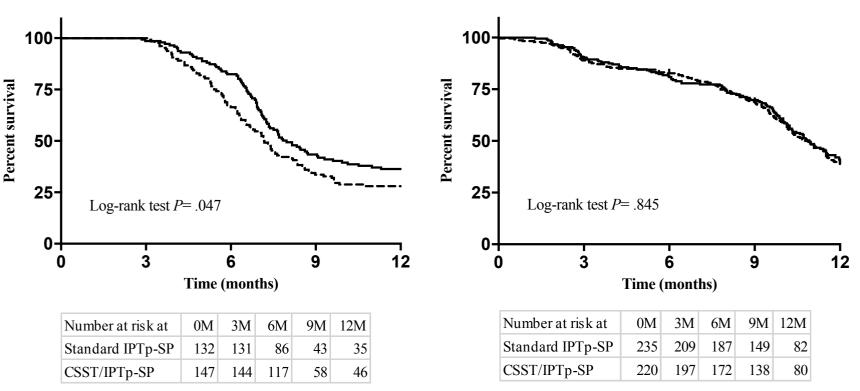
prenatal malaria exposure on the incidence of NMFs

Characteristic	Risk factor	Unadjusted		Adjusted*	
		IRR (95% CI)	P value	IRR (95% CI)	P value
Prenatal malaria exposure	Non-infected mothers	1		1	
	Infected mothers	0.94 (0.70-1.26)	.670	0.94 (0.71-1.26)	.695
	Past PM mothers	0.88 (0.70-1.11)	.284	0.83 (0.66-1.04)	.110
	Active PM mothers	0.92 (0.68-1.24)	.567	0.96 (0.70-1.30)	.780
LBW	No	1			
	Yes	1.06 (0.77-1.47)	.689		
Gravidity	Multigravid	1		1	
	Secundigravid	1.14 (0.90-1.43)	.274	1.24 (0.96-1.62)	.052
	Primigravid	1.32 (1.06-1.67)	.013	1.68 (1.19-2.43)	.005
Mother's age	>30	1		1	
	21-30	1.20 (0.97-1.49)	.089	1.09 (0.87-1.36)	.442
	≤20	1.31 (1.02-1.68)	.035	0.92 (0.63-1.33)	.651
Birth season	Low-transmission	1		1	
	High-transmission	0.75 (0.63-0.89)	.001	0.77 (0.65-0.93)	.006
ITN use	No	1			
	Yes	1.02 (0.83-1.26)	.839		
Newborn sex	Male	1			
	Female	0.89 (0.75- 1.05)	.174		

NOTE. PM, placental malaria; ITN, insecticide treated net; LBW, low birth weight; CI, confidence interval; IRR,

incidence rate ratio. *Adjusted by variables that showed a P value < .1 in univariate analyses.





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--· Standard IPTp-SP

- CSST/IPTp-SP