

ADDITIONAL FILE 14: SUPPLEMENTARY TABLES

Genetic Determinants Of Anti-Malarial Acquired Immunity In A Large Multi-Centre Study

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This file contains **Additional Table ST8: Results of linear regression analysis investigating the effect of age, gender, malaria status as determined by microscopy and bednet use* on logged antibody levels to AMA1, MSP1, MSP2, NANP and IgE**. Results shown as betas, which indicate the direction of effect of the clinical covariate on antibody levels. Beta<0 indicate a decrease in antibody levels and beta>0 indicate an increase in antibody levels. 95% confidence intervals that do not span 0 indicate an effect that is significant at p=0.05. Data from Mali (Pongonon), Mali (Manteourou), Sudan and Tanzania (Moshi) are not included as bednet usage was not recorded at these sites.

Additional Table ST8: Results of linear regression analysis investigating the effect of age, gender, malaria status as determined by microscopy and bednet use* on logged antibody levels to AMA1, MSP1, MSP2, NANP and IgE. Results shown as betas, which indicate the direction of effect of the clinical covariate on antibody levels. Beta<0 indicate a decrease in antibody levels and beta>0 indicate an increase in antibody levels. 95% confidence intervals that do not span 0 indicate an effect that is significant at p=0.05. Data from Mali (Pongonon), Mali (Manteourou), Sudan and Tanzania (Moshi) are not included as bednet usage was not recorded at these sites.

Factor	anti-AMA1 levels (n=5105)		anti-MSP1 levels (n=5280)		anti-MSP2 levels (n=5365)		anti-NANP levels (n=5294)		total IgE levels (n=4751)	
	beta (95% CI)	p-value	beta (95% CI)	p-value	beta (95% CI)	p-value	beta (95% CI)	p-value	beta (95% CI)	p-value
<i>Age (years)</i>										
<1	0		0		0		0		0	
1-2	0.27 (-0.09 to 0.64)	0.137	-0.12 (-0.40 to 0.16)	0.418	0.34 (0.06 to 0.63)	0.017	0.26 (0.01 to 0.52)	0.044	0.07 (-0.20 to 0.33)	0.630
2-5	0.84 (0.56 to 1.12)	<0.001	0.07 (-0.15 to 0.29)	0.520	0.75 (0.53 to 0.98)	<0.001	0.44 (0.23 to 0.64)	<0.001	0.08 (-0.14 to 0.29)	0.483
5-15	1.28 (1.01 to 1.55)	<0.001	0.43 (0.22 to 0.64)	<0.001	1.25 (1.04 to 1.46)	<0.001	0.89 (0.70 to 1.09)	<0.001	0.21 (0 to 0.42)	0.048
15-30	1.03 (0.76 to 1.30)	<0.001	0.61 (0.39 to 0.82)	<0.001	1.23 (1.02 to 1.45)	<0.001	1.45 (1.25 to 1.64)	<0.001	0.24 (0.03 to 0.45)	0.023
>30	0.89 (0.62 to 1.17)	<0.001	0.76 (0.54 to 0.97)	<0.001	1.18 (0.96 to 1.39)	<0.001	1.64 (1.45 to 1.84)	<0.001	0.16 (-0.05 to 0.38)	0.131
<i>Gender</i>										
Female	0		0		0		0		0	
Male	-0.07 (-0.13 to -0.02)	0.009	-0.14 (-0.18 to -0.09)	<0.001	-0.11 (-0.15 to -0.06)	<0.001	-0.07 (-0.11 to -0.03)	0.001	0.12 (0.09 to 0.16)	<0.001
<i>Microscopy result</i>										
Negative	0		0		0		0		0	
Positive	0.17 (0.09 to 0.24)	<0.001	0.07 (0.01 to 0.12)	0.026	0.24 (0.18 to 0.30)	<0.001	-0.03 (-0.08 to 0.03)	0.331	0.06 (0.01 to 0.11)	0.018
<i>Bednet in use</i>										
No	0		0		0		0		0	
Yes	-0.01 (-0.10 to -0.07)	0.759	0.02 (-0.05 to 0.08)	0.640	-0.04 (-0.11 to 0.03)	0.249	0.03 (-0.03 to 0.09)	0.327	-0.02 (-0.08 to 0.04)	0.576

NB: CI = confidence interval; results significant at 0.05 level are highlighted in bold.

* Also adjusted for village (>20), ethnicity (>20), sample month (>20) and study; results not shown but ANOVA p-values were <0.001 for all antibodies.