

Supplementary information

Changes in monocyte subsets are associated with clinical outcomes in severe malarial anemia and cerebral malaria

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Supplementary Table S1. Correlation matrix used to choose variables to be tested in the multivariate model of the risk of malaria severity. Interactions were tested mostly by Spearman correlation. *Interactions were tested by the Mann-Whitney U-test.

For the first multivariate model based on malaria severity, correlated variables were excluded. We began our selection by excluding variables correlating with immunologic factors. Thus, the first row leads to the selection of: % CD14^{low} CD16⁺, CD36 MFI (for CD14⁺ CD16⁺ cells), CD14 MFI (for CD14⁺ CD16⁺ cells), TLR2 MFI (CD14^{low} CD16⁺) and plasma IL-1 β . We then tested interactions between these 5 variables. TLR2 MFI (CD14^{low} CD16⁺) and plasma IL-1 β were excluded as they both interact with CD36 MFI (for CD14⁺ CD16⁺ cells). The variables selected were finally: % CD14^{low} CD16⁺, CD36 MFI (for CD14⁺ CD16⁺ cells) and CD14 MFI (for CD14⁺ CD16⁺ cells).

	% CD14 ^{low} CD16 ⁺	% CD14 ⁺ CD16 ⁺	% CD14 ⁺ CD16 ⁻	CD36 MFI (CD14 ⁺ CD16 ⁻)	CD36 MFI (CD14 ⁺ CD16 ⁺)	CD16 MFI (CD14 ⁺ CD16 ⁺)	CD16 MFI (CD14 ^{low} CD16 ⁺)	CD14 MFI (CD14 ⁺ CD16 ⁻)	CD14 MFI (CD14 ^{low} CD16 ⁺)	Pl. IL- 1β	Pl. IL-6	Pl. IL- 10	Pl. MCP-1	Pl. CXCL1 0	Prev. hosp	Temp.	PD
% CD14 ^{low} CD16 ⁺		ns	<0.0001	0.0006	ns	0.0009	<0.0001	0.02	ns	ns	<0.0001	<0.0001	0.0006	<0.0001	0.03*	0.02	0.002
% CD14 ⁺ CD16 ⁺			<0.0001	ns	ns	ns	ns	ns	ns	0.04	ns	ns	ns	ns	ns*	ns	ns
% CD14 ⁺ CD16 ⁻				ns	ns	0.03	0.02	ns	ns	ns	ns	ns	ns	ns	ns*	ns	ns
CD36 MFI (CD14 ⁺ CD16 ⁻)					<0.0001	ns	<0.0001	0.005	ns	0.05	<0.0001	0.0002	0.001	<0.0001	ns*	0.03	0.002
CD36 MFI (CD14 ⁺ CD16 ⁺)						ns	ns	ns	ns	ns	0.02	ns	ns	ns	ns*	ns	0.006
CD16 MFI (CD14 ⁺ CD16 ⁺)							<0.0001	0.0002	0.003	ns	ns	0.05	ns	0.01	0.05*	ns	ns
CD16 MFI (CD14 ^{low} CD16 ⁺)								<0.0001	0.0003	ns	ns	0.03	ns	0.0004	ns*	ns	ns
CD14 MFI (CD14 ⁺ CD16 ⁻)									<0.0001	ns	0.001	<0.0001	0.008	0.0002	0.02*	ns	ns
CD14 MFI (CD14 ^{low} CD16 ⁺)										ns	ns	ns	ns	ns	ns*	ns	0.03
Pl. IL-1β											<0.0001	0.0004	<0.0001	<0.0001	ns*	0.0004	<0.0001
Pl. IL-6												<0.0001	<0.0001	<0.0001	ns*	<0.0001	<0.0001
Pl. IL-10													<0.0001	<0.0001	ns*	<0.0001	<0.0001
Pl. MCP-1														<0.0001	ns*	0.008	0.006
Pl. CXCL10																<0.0001	<0.0001
Pr. hosp																ns*	ns*
Temp.																	0.008
PD																	

Supplementary Table S2. Correlation matrix used to choose variables to be tested in the multivariate model of the risk of malarial death

Interactions were tested mostly by Spearman correlation. *Interactions tested by Mann-Whitney U-test.

For the second multivariate model based on malarial death, the strategy was similar. Thus, the first row leads to the selection of: % CD14^{low} CD16⁺, % CD14⁺ CD16⁺, CD36 MFI (for CD14⁺ CD16⁺ cells), CD14 MFI (for CD14^{low} CD16⁺ cells) and plasma IL-1β. We then tested interactions

between these 5 variables and plasma IL-1 β was excluded as it interacts with % CD14⁺ CD16⁺. The variables selected were finally: % CD14^{low} CD16⁺, % CD14⁺ CD16⁺, CD36 MFI (for CD14⁺ CD16⁺ cells) and CD14 MFI (for CD14^{low} CD16⁺ cells).