Additional file 5. Cox proportional hazard regression using various antibodies to predict time to first malaria infection (detection by PCR)

| Name | High Malaria |  |  | Low Malaria |  |  | Combined |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HR | 95\%CI | p-val ${ }^{\text {² }}$ | HR | 95\%CI | $\mathrm{p}-\mathrm{val}{ }^{*}$ | HR | 95\%CI | P-val ${ }^{*}$ |
| MSPDBL1 | 0.96 | 0.53-1.74 | 0.91 | 1.29 | 0.87-1.91 | 0.21 | 1.09 | 0.81-1.48 | 0.56 |
| MSPDBL2 | 0.87 | 0.53-1.41 | 0.57 | 1.05 | 0.72-1.54 | 0.79 | 0.95 | 0.74-1.22 | 0.70 |
| AMA-3D7 | 1.26 | 0.89-1.77 | 0.19 | 0.97 | 0.73-1.28 | 0.83 | 1.03 | 0.86-1.22 | 0.77 |
| AMA-FVO | 1.26 | 0.89-1.79 | 0.19 | 0.96 | 0.73-1.27 | 0.78 | 1.01 | 0.85-1.19 | 0.94 |
| CEITOS | 1.05 | 0.76-1.45 | 0.77 | 0.89 | 0.62-1.27 | 0.52 | 1.02 | 0.81-1.28 | 0.84 |
| CSP | 0.87 | 0.63-1.19 | 0.38 | 1.06 | 0.77-1.45 | 0.73 | 0.97 | 0.77-1.16 | 0.62 |
| EBA-140 | 0.61 | 0.38-0.97 | 0.04 | 1.16 | 0.87-1.55 | 0.32 | 0.95 | 0.76-1.20 | 0.68 |
| EBA-175 W2mef | 0.87 | 0.62-1.23 | 0.44 | 1.15 | 0.79-1.65 | 0.47 | 1.00 | 0.80-1.26 | 0.99 |
| EBA-175 3D7 | 0.76 | 0.51-1.13 | 0.18 | 1.06 | 0.80-1.38 | 0.70 | 0.93 | 0.77-1.13 | 0.46 |
| EBA-181 | 0.75 | 0.52-1.04 | 0.08 | 1.00 | 0.73-1.38 | 1.00 | 0.92 | 0.73-1.15 | 0.45 |
| LSA1 | 0.95 | 0.64-1.42 | 0.82 | 1.14 | 0.80-1.62 | 0.46 | 1.04 | 0.81-1.34 | 0.75 |
| MSP1-3D7 | 0.58 | 0.41-0.82 | <0.0001 | 0.83 | 0.58-1.08 | 0.12 | 0.77 | 0.63-0.95 | 0.01 |
| MSP1-FUP | 0.57 | 0.39-0.83 | <0.0001 | 0.76 | 0.55-1.05 | 0.10 | 0.67 | 0.53-0.85 | <0.0001 |
| MSP1-FVO | 0.69 | 0.51-0.92 | 0.01 | 0.82 | 0.58-1.06 | 0.10 | 0.74 | 0.61-0.91 | <0.0001 |
| MSP2-FC27 | 0.87 | 0.55-1.38 | 0.56 | 0.95 | 0.69-1.31 | 0.76 | 0.94 | 0.73-1.22 | 0.65 |
| MSP6 | 0.77 | 0.47-1.25 | 0.29 | 1.06 | 0.67-1.68 | 0.81 | 0.93 | 0.66-1.30 | 0.66 |
| MSP7 | 0.94 | 0.67-1.30 | 0.69 | 1.08 | 0.75-1.55 | 0.69 | 1.01 | 0.80-1.28 | 0.93 |
| MSP3 | 0.68 | 0.46-1.01 | 0.06 | 1.03 | 0.70-1.51 | 0.88 | 0.81 | 0.62-1.07 | 0.14 |
| Rh4.9 | 0.83 | 0.64-1.08 | 0.18 | 0.88 | 0.65-1.18 | 0.39 | 0.86 | 0.73-1.02 | 0.08 |
| Rh2 | 0.82 | 0.56-1.19 | 0.29 | 0.91 | 0.63-1.31 | 0.61 | 0.90 | 0.71-1.13 | 0.36 |
| RIPR CT | 0.85 | 0.57-1.24 | 0.39 | 1.20 | 0.83-1.74 | 0.33 | 1.02 | 0.79-1.32 | 0.87 |
| RIPR NT | 1.01 | 0.70-1.44 | 0.97 | 0.97 | 0.640-1.47 | 0.89 | 1.02 | 0.79-1.3 | 0.87 |
| SERA5 | 0.92 | 0.59-1.43 | 0.71 | 0.99 | 0.67-1.46 | 0.95 | 0.98 | 0.74-1.32 | 0.92 |

* p -val was determined based on the significance of the hazard ratio (proportional Cox regression - not corrected for multiple comparison).

