**Supplementary material**

**TABLES**

**T 1**. Factor loadings of 30% or greater using principal component analysis on antibody levels against EBV and *P. falciparum* antigens.

**T 2**. Factors associated with antibody levels to EBV and *P. falciparum* antigens among controls (N= 171).

**Table 1.** Factor loadings of 30% or greater using principal component analysis on antibody levels against EBV and *P. falciparum* antigens



**Table 2.** Factors associated with antibody levels to EBV and *P. falciparum* antigens among controls (N= 171)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | | | |
|  |  |  | **Age** | **Sex** | **BMI** | **Region** |
| **EBV** | **IgG** | **EBNA-1 (tr)** |  |  |  |  |
| **VCAp18** |  |  |  |  |
| **ZEBRA** | **↗\*** |  |  |  |
| **Ea(D)** | **↗\*** |  |  |  |
| **IgM** | **EBNA-1 (tr)** | **↗\*** |  |  |  |
| **VCAp18** |  |  |  |  |
| **ZEBRA** | **↗\*** | **↘\*male** |  |  |
| **Ea(D)** | **↗\*** |  |  |  |
|  |  |  |  |  |  |  |
| ***P. falciparum*** | **IgG** | **MSP-3** | **↗\*** |  |  |  |
| **PTRAMP** |  |  |  |  |
| **Rh2** | **↗\*** |  |  |  |
| **Rh5** | **↗\*** |  |  |  |
| **AMA-1 3D7** | **↗\*** |  | **↘\*** |  |
| **AMA-1 FVO** | **↗\*** |  | **↘\*** |  |
| **MSP-1 42 3D7** | **↗\*** |  |  |  |
| **MSP-1 42 FVO** | **↗\*** |  |  |  |
| **EBA-175** | **↗\*** |  |  |  |
| **CelTOS** |  |  |  |  |
| **LSA-1** | **↗\*** |  |  |  |
| **SSP2** | **↗\*** |  |  |  |
| **DBL-α** | **↗\*** |  |  |  |
| **CSP** | **↗\*** |  |  |  |
| **CyRPA2** |  |  |  |  |
| **IgM** | **MSP-3** | **↗\*** | **↘\*male** |  |  |
| **PTRAMP** |  | **↘\*male** |  |  |
| **Rh2** |  | **↘\*male** |  |  |
| **Rh5** | **↗\*** |  |  |  |
| **AMA-1 3D7** |  |  |  |  |
| **AMA-1 FVO** |  |  |  |  |
| **MSP-1 42 3D7** |  | **↘\*male** |  |  |
| **MSP-1 42 FVO** |  | **↘\*male** |  |  |
| **EBA-175** | **↗\*** | **↘\*male** |  |  |
| **CelTOS** |  | **↘\*male** |  |  |
| **LSA-1** | **↗\*** |  |  |  |
| **SSP2** | **↗\*** |  |  |  |
| **DBL-α** |  |  |  |  |
| **CSP** |  |  |  |  |
| **CyRPA2** |  | **↘\*male** |  |  |

\*: P< 0.05. Unadjusted linear models were used.

EBV: Epstein-Barr virus, BMI: body mass index.