Supplementary Table 1. Correlations between hepcidin levels and inflammatory cytokines in the Nigerian cohort

<table>
<thead>
<tr>
<th>Parameters</th>
<th>IL-1β (pg/ml)</th>
<th>IL-4 (pg/ml)</th>
<th>IL-6 (pg/ml)</th>
<th>IL-8 (pg/ml)</th>
<th>IL-10 (pg/ml)</th>
<th>TNFα (pg/ml)</th>
<th>GM-CSF (pg/ml)</th>
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<tbody>
<tr>
<td>Spearman r</td>
<td>r=0.07234</td>
<td>r=0.004478</td>
<td>r=0.2296</td>
<td>r=-0.1695</td>
<td>r=0.3899</td>
<td>r=0.05497</td>
<td>r=0.07828</td>
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<tr>
<td>P value</td>
<td>p=0.3387</td>
<td>p=0.9531</td>
<td>p=0.0022</td>
<td>p=0.0246</td>
<td>p&lt; 0.0001</td>
<td>p=0.4687</td>
<td>p=0.3018</td>
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</tbody>
</table>

* Statistically significant if p<0.01 according to the non-parametric spearman r test

Supplementary Figure 1. Identification of hepcidin by immunodepletion.
Immunodepletion and subsequent SELDI-ToF analysis of hepcidin (peak at 2790 Da). The SELDI-ToF spectra of the supernatant before (A), after the immunodepletion (B) and the eluate from the protein G-sepharose beads (C) confirm the identification of the molecule.

Supplementary Figure 2. Linear regression of proteins levels measured in both plasma and serum for comparative study between both types of samples.
A. Serum ferritin concentration (ng/ml) measured by ELISA versus plasma ferritin concentration (ng/ml) measured by ELISA. B. Serum IL-6 concentration (pg/ml) measured by bead immunoassay versus plasma IL-6 concentration (pg/ml) measured by ELISA. Linear regression (continuous lines) with 95% confidence intervals (discontinuous lines) analyses.
Supplementary Figure 3: Hepcidin levels versus PCV in each disease group

A. Hepcidin peak intensity (m/z ratio) versus Packed Cell Volume (PCV in %) for each patient in each disease group (CC in green, DC in blue, UM in black, CM in red and SMA in purple). B. Spearman correlation analysis between hepcidin peak intensities and PCV from each patient in each study group and all three malaria-positive group.
Supplementary Figure 1. Identification of hepcidin by immunodepletion

A

B

C

Intensity μA

Intensity μA

Intensity μA

MW Da
Serum versus plasma ferritin levels

A

$r^2=0.8046$
$y=0.9816 \pm 0.03861$

Serum versus plasma IL-6 levels

B

$r^2=0.8386$
$y=0.7788 \pm 0.02727$
Supplementary Figure 3:

A. Hepcidin levels versus PCV in each disease group

B. Spearman Correlation Coefficient

<table>
<thead>
<tr>
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<th>Malaria-positive (3 groups)</th>
<th>UM</th>
<th>CM</th>
<th>SMA</th>
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<tbody>
<tr>
<td>n</td>
<td>90</td>
<td>49</td>
<td>19</td>
<td>22</td>
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<tr>
<td>Spearman Coefficient r</td>
<td>0.2009</td>
<td>-0.2266</td>
<td>-0.04857</td>
<td>-0.1684</td>
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<tr>
<td>p</td>
<td>0.0548</td>
<td>0.1255</td>
<td>0.8435</td>
<td>0.4537</td>
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