Supplemental Data S1

Isolation of MPs and flow cytometry analysis

MPs were isolated from plasma obtained from venous blood (3.2% trisodium citrate tube) and analysed as previously described (Nébor *et al*, 2013). Fluoresceinisothiocyanate-conjugated Annexin-V (Beckman Coulter, FL USA) and phycoerythrin-coupled cell type-specific monoclonal antibodies (MoAbs) (Beckman Coulter) were incubated with extracted MPs, thereby allowing the determination of MPs blood cell type-of-origin. The MoAbs used were: anti-CD14 (monocytes), anti-CD15 (granulocytes), anti-CD41 (platelets), anti-CD106 (endothelial cells), anti-CD235a (erythrocytes). Flow-Count^{TM} fluorospheres (Beckman Coulter) were used for absolute MP quantification. The Megamix kit (Biocytex, Marseille, France) allowed standardization of the acquisition gate on a FC500 flow cytometer (Beckman Coulter). Blood MP concentrations were calculated from plasma MP concentrations corrected by the haematocrit values.

Statistical analysis

Biological parameters were compared between groups using ANOVA with repeated measurements (+ post-hoc Tukey tests) or Friedman test (+ Dunn's multiple comparisons test). Spearman correlations were performed to test the associations between parameters. Statistical analyses were conducted using GraphPad Prism (v.7, GraphPad, La Jolla, CA).

Nébor, D., Romana, M., Santiago, R., Vachiery, N., Picot, J., Broquere, C., Chaar, V., Doumdo, L., Odièvre, M.H., Benkerrou, M. & Elion, J. (2013) Fetal hemoglobin and hydroxycarbamide modulate both plasma concentration and cellular origin of circulating microparticles in sickle cell anemia children. *Haematologica*, **98**, 862-867.