Supplementary Information

Essential arterial hypertension patients present higher cell adhesion forces, contributing for fibrinogen-dependent cardiovascular risk

Ana F. Guedes^{a,#}, Filomena A. Carvalho^{a,#,*}, Carlos Moreira^b, José B. Nogueira^b, Nuno C. Santos^{a,*}

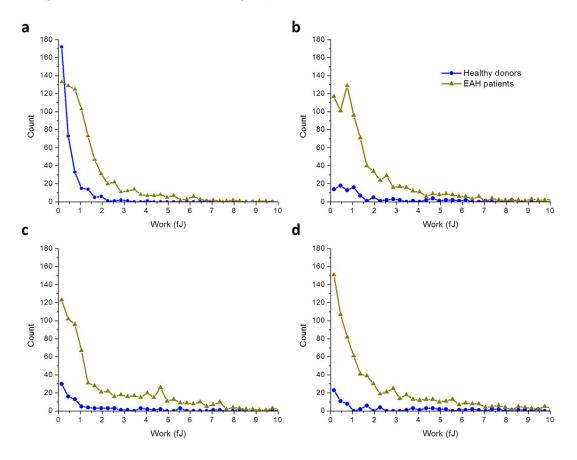
^aInstituto de Medicina Molecular, Faculdade de Medicina, Universidade de Lisboa, Lisbon, Portugal

^bHospital de Santa Maria, Centro Hospitalar Lisboa Norte, Lisbon, Portugal

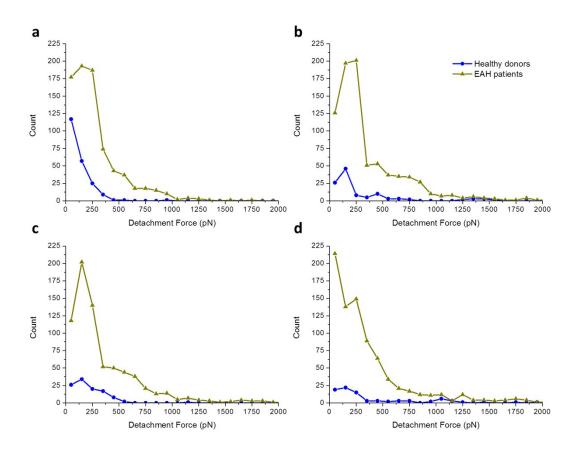
Supplementary Results

AFM cell-cell adhesion

To better understand the shape of the distribution of the values of work and detachment force of the adhesion between two erythrocytes, histograms of both parameters were build up (Supplementary Figures S1 and S2). Comparisons between the histograms of the adhesion of erythrocytes from EAH patients *vs.* healthy donors, in the absence or in the presence of fibrinogen, were performed. The work and maximum force required to detach two erythrocytes from essential arterial hypertension (EAH) patients were higher than for healthy donors, at each fibrinogen concentration (from 0 to 1 mg/mL).



Supplementary Figure S1 | Histograms of the work necessary to detach two erythrocytes on AFM cell-cell adhesion measurements. Data obtained with erythrocytes isolated from healthy donors (blue) and EAH patients (olive) for each studied condition: (A) without fibrinogen; (B) with 0.4 mg/mL fibrinogen; (C) with 0.7 mg/mL fibrinogen; and, (D) with 1 mg/mL fibrinogen.



Supplementary Figure S2 | Histograms of the maximum force necessary to detach two erythrocytes on AFM cell-cell adhesion measurements. Data obtained with erythrocytes isolated from healthy donors (blue) and EAH patients (olive) for each studied condition: (A) without fibrinogen; (B) with 0.4 mg/mL fibrinogen; (C) with 0.7 mg/mL fibrinogen; and, (D) with 1 mg/mL fibrinogen.