Supplementary Materials

Multimodal Detection and Analysis of a New Type of Advanced Heinz Body-Like Aggregates (AHBA) and Cytoskeleton Deformations in Human RBCs

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Figure SM1. The chosen area of RBCs monolayer before (A) and after (B) 1% glutaraldehyde treatment, where the AHBA formation were formed. In places were AHBA were formed other type of abnormal RBCs were also observed before glutaraldehyde treatment what suggested vulnerability of such fraction before fixation and AHBA formation in these areas.



Figure SM2. Microphotographs of the heart sections in the control Perl's (A, B) and Tirmann Schmelzers's method stainings (C, D). Red arrows - functional RBCs in the blood vessels; blue arrows - non-functional RBCs in the thrombus; green arrow – macrophage with erythrophagocyted RBCs.



Figure SM3. Green line - The UV–Vis spectra of RBCs in monolayer treated with 1% glutaraldehyde (5 ml solution in Petri dish); Gray line - The UV–Vis spectra of RBCs in in suspension treated with 1% glutaraldehyde (5 ml solution in an Eppendorf tube); The inset shows spectra after background correction to enhance visibility of Q bands.



Figure SM4. (A) White-light optical images (×100) with marked ROI for chosen isolated RBC with AHBA, dried and measured in air; (B) The 3D view image of AFM topography and (C) the AFM topography cross sections prepared according to marked line.