Supporting information for Lab on a Chip:

Optical signature of erythrocytes by light scattering in microfluidic flows

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We investigated the cell viability of mature erythrocytes in viscoelastic medium (phosphate-buffered saline with poly-ethylene oxide), by bright field microscope observations, before and after each light scattering measurement. In general, a noticeable difference between healthy (a) and unhealthy (b) erythrocyte morphology can be observed with such a simple microscope observation.

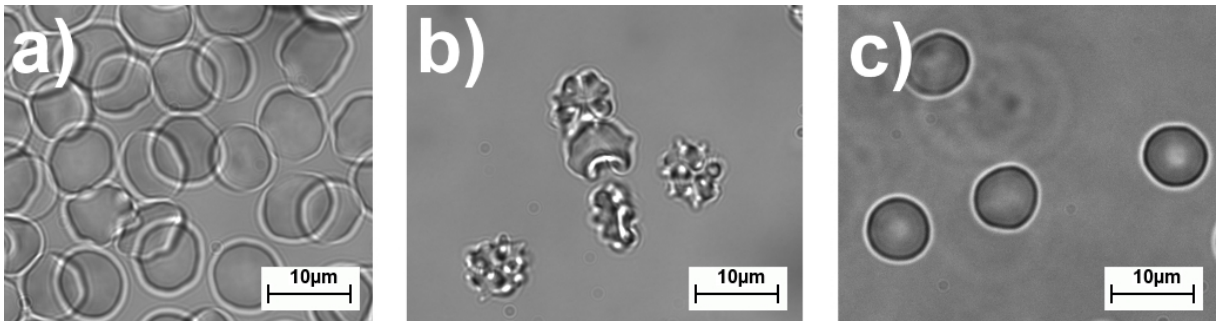

Fig. S1: Micrographs of erythrocytes in a solution of phosphate-buffered saline with poly-ethylene oxide. All cells have been observed by a bright field microscope using a 100x objective. a) shows healthy erythrocytes, while in b) unhealthy erythrocyte are illustrated. c) shows erythrocytes after the light scattering measurements.