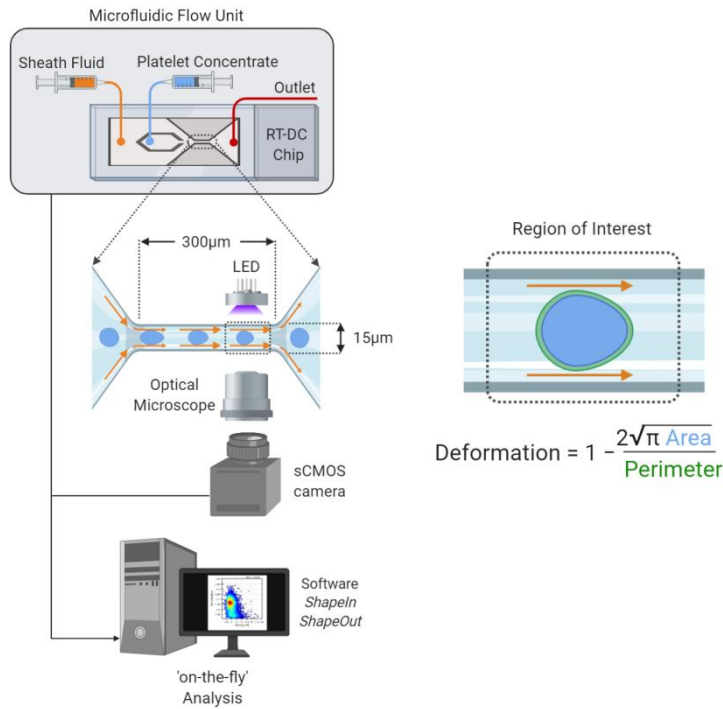
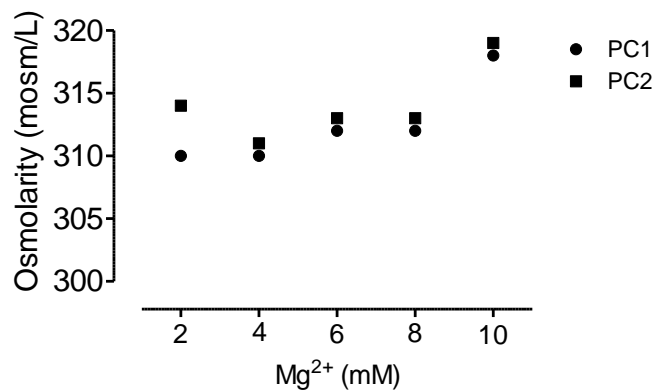


Supplementary Figures



Supplementary figure S1. Real-time fluorescence and deformability cytometry. (A) The setup consists of a microfluidic chip, with a central constriction of 300 μm length and 15 μm × 15 μm cross-section, where cells in the sample fluid are surrounded by a sheath fluid and deformed by shear and normal forces where cell/platelets undergo deformation as a result of hydrodynamic compression brought about by sheath fluid. A high-powered light-emitting diode (LED) is used to illuminate the samples. Images are recorded by a scientific complementary metal–oxide–semiconductor (sCMOS) camera working at high frame rates (≈2000 images/s) that is synchronized with the frequency of illumination time. This combined together with microfluidic flow, RT-DC allows for mechanoprofiling of >100 unique cells/platelets per second in a contact- and label-free manner. (B) Deformation of cells is calculated from the circularity using ratio of cell area and perimeter.



Supplementary Figure S2. Total osmolarity of two platelet concentrates after Mg²⁺ addition