

Supplementary information

Importance of viscosity contrast for the motion of erythrocytes in microcapillaries

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Description of supplementary movies

Different RBC states (e.g., parachute, tank-treading, tumbling) in microcapillary flow are best illustrated by movies described below. The movies correspond to the insets of Fig. 1 in the main text, $\lambda = 5$ in all cases. For each movie, only a small segment of the corresponding simulation is displayed. The frame of reference is at the center of mass of each RBC.

Movie S1: The movie shows a parachute state of a RBC in microcapillary flow for $\chi = 0.71$ and $\dot{\gamma}^* = 0.123$.

Movie S2: The movie illustrates an off-center tank-treading-like dynamics of a RBC in the tube flow for $\chi = 0.44$ and $\dot{\gamma}^* = 0.111$.

Movie S3: The movie shows an off-center tumbling dynamics of a RBC in the tube flow for $\chi = 0.44$ and $\dot{\gamma}^* = 0.041$.