Motion of red blood cells near microvessel walls: effects of a porous wall layer

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1. Supplementary material

MovieKappa=0.avi: Movie showing motion and deformation of a cell initially placed at 0.9 μm from the centre-line, as in Figures 2 and 3, with no layer ($\bar{\kappa} = 0$). In each frame, time in ms, velocity in mm/s, overall cell length and width and coordinates of centre of mass in μm are indicated. The frame of reference moves with the cell centre of mass; the cumulative shift in μm is indicated at upper left.

MovieKappa=10.avi: Movie showing motion and deformation of a cell initially placed at 0.9 μm from the centre-line, as in Figures 2 and 3, with a layer with low hydraulic resistivity $\kappa = 10^{10}$ N·s/m^4 ($\bar{\kappa} = 10$). In each frame, time in ms, velocity in mm/s, overall cell length and width and coordinates of centre of mass in μm are indicated. The frame of reference moves with the cell centre of mass; the cumulative shift in μm is indicated at upper left.

MovieKappa=100.avi: Movie showing motion and deformation of a cell initially placed at 0.9 μm from the centre-line, as in Figures 2 and 3, with a layer with high hydraulic resistivity $\kappa = 10^{11}$ N·s/m^4 ($\bar{\kappa} = 100$). In each frame, time in ms, velocity in mm/s, overall cell length and width and coordinates of centre of mass in μm are indicated. The frame of reference moves with the cell centre of mass; the cumulative shift in μm is indicated at upper left.

MovieKappa=inf.avi: Movie showing motion and deformation of a cell initially placed at 0.9 μm from the centre-line, as in Figures 2 and 3, with an impermeable layer, equivalent to a channel of width 8 μm with no layer ($\bar{\kappa} \to \infty$). In each frame, time in ms, velocity in mm/s, overall cell length and width and coordinates of centre of mass in μm are indicated. The frame of reference moves with the cell centre of mass; the cumulative shift in μm is indicated at upper left.

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