Pødenphant et al.

Electronic Supplementary Information
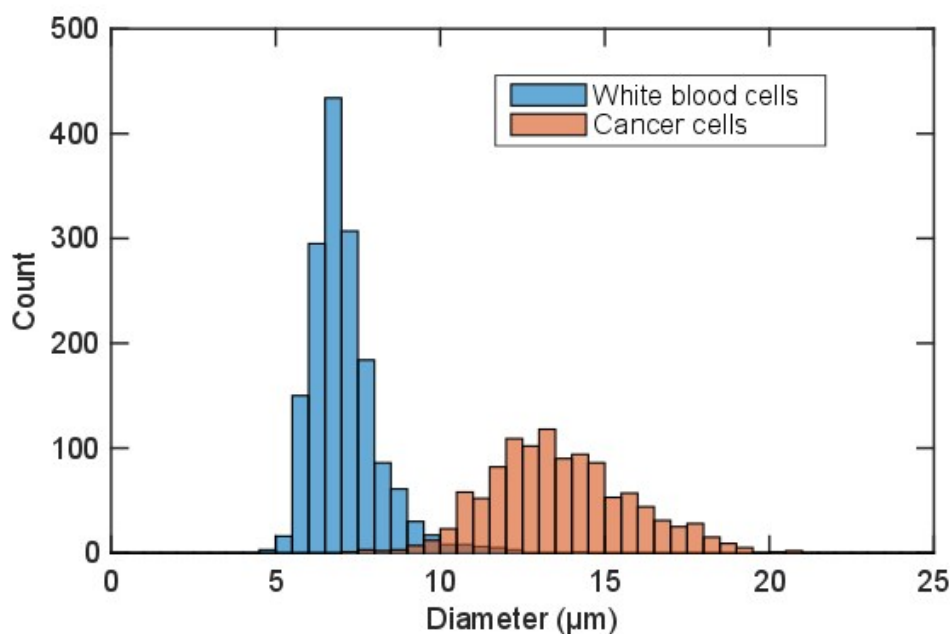

Figure ESI 1. Size distribution of white blood cells and LS174T cancer cells before separation. Mean sizes are 7.1µm ± 1.0µm and 13.6µm ± 2.1µm respectively.

	H [μm]	W_p [μm]	α (R_s/R_l)	β (R_s/R_d)	d_c [μm]
Non-adjusted PFF	30	50	1.9	14.4	13.1
Adjustable PFF	30	30	1.9	14.4	8.3

Table ESI 1. Channel height (H), pinched segment width (W_p) and ratios between hydraulic resistances of the three outlet channels, and the resulting critical diameter d_c for both PFF designs.

Calculation of error bars in figure 2E, 3E-F and 4E-F

The error bars represent the standard deviation of the proportion of particles in the large particle outlet. They were calculated by the following equation assuming the error on the binomially distributed proportion $\hat{p}$ is normally distributed.

$$SD(\hat{p}) = \sqrt{\frac{\hat{p}(1-\hat{p})}{n}}$$

Where

$$\hat{p} = \frac{n_L}{n}$$

For each particle size n_L is the number of particles in the large particle outlet and n is the total number of particles.