Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary Information

Uptake of carbon nanodots into human AML cells in comparison to primary hematopoietic cells

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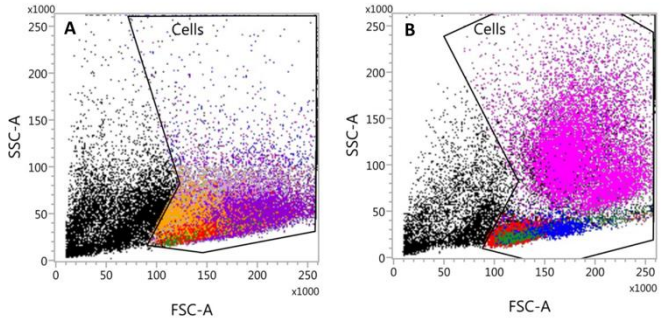

Fig. S1: Examples of FSC vs. SSC plots by which the cell population was selected via suitable gates. Shown are AML 2 in (A) and donor 3 in (B). The colours represent the rear projections of further gates that have been set, namely $CD33^+$ (pink), $CD34^+$ (blue), $CD19^+$ (green), $CD3^+$ (red), $CD33^+/CD34^+$ (purple) and $CD33^-/CD34^-$ (orange).

Tab. S1: Percentage distribution of the $CD33^+$, $CD34^+$, $CD19^+$ and $CD3^+$ populations for all samples.

sample	$CD33^+$	$CD34^+$	$CD19^+$	$CD3^+$
AML 1	7,96%	14,40%	0,25%	0,84%
AML 2	77,01%	72,55%	0,55%	4,87%
AML 3	88,16%	3,82%	1,69%	6,33%
AML 4	42,11%	35,50%	1,11%	31,30%
AML 5	84,82%	77,05%	0,08%	1,21%
donor 1	33,14%	1,89%	2,48%	43,87%
donor 2	43,94%	3,56%	8,75%	36,93%
donor 3	24,15%	2,13%	4,64%	47,12%

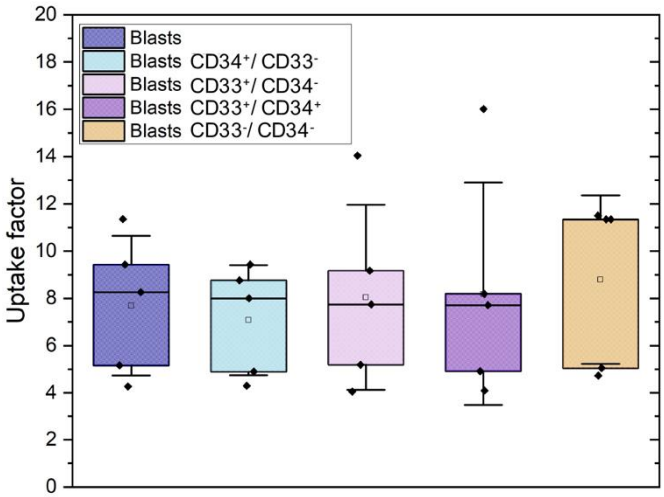

Fig. S2: Uptake factors for all blasts and four subsets which were defined by means of the CD34 and CD33 markers.

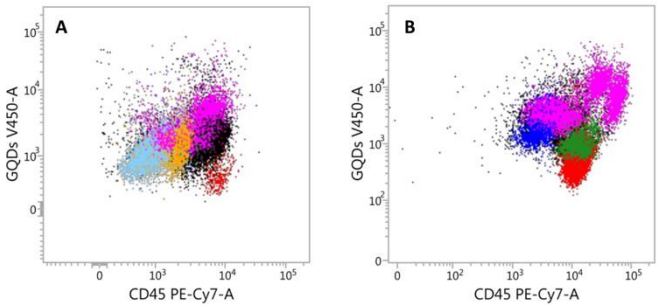

Fig. S3: CD45 vs. V450 plot, shown exemplarily for AML 1 (A) and donor 3 (B). The colours are rear projections of other set gates $CD33^+$ (pink), $CD34^+$ (blue), $CD19^+$ (green), $CD3^+$ (red), $CD34^+/CD33^-$ (light blue) and $CD33^-/CD34^-$ (orange).

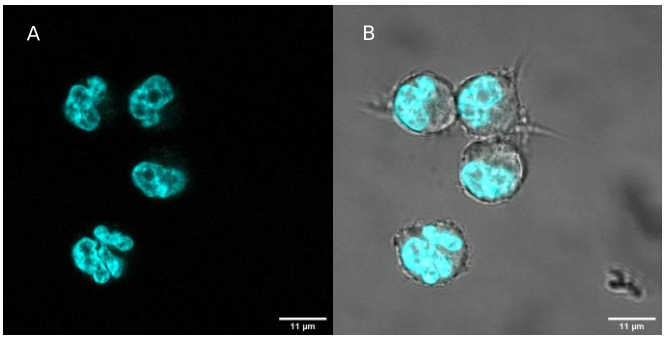

Fig. S4: Control samples (HL-60 cells) without CNDs. The nuclei are stained with Hoechst 33342.

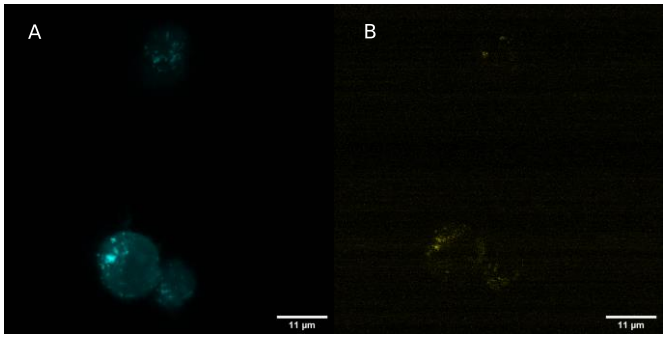

Fig. S5: Control sample of CND-exposed HL-60 cells with the nuclei unstained. The CNDs show fluorescence in the blue (a) and in the yellow (B) channel.