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Influence of Graphene Quantum Dots Surface Charge on their Uptake and Clearance in Melanoma Cells

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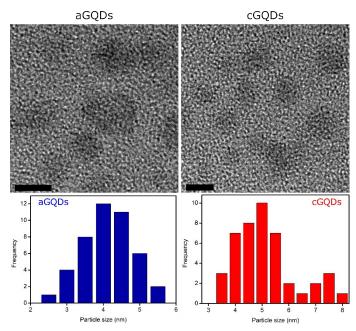


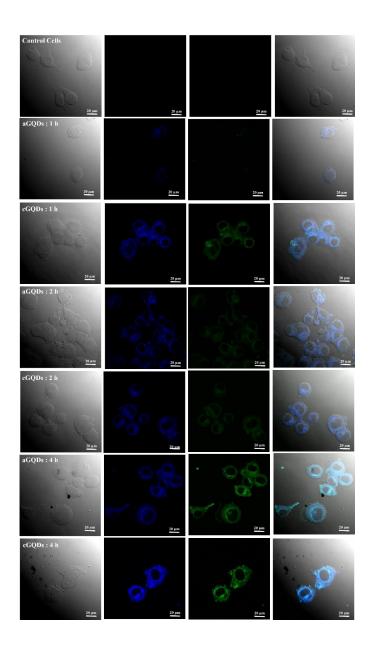
Figure S1. HT-TEM images and particle size distribution of a- and cGQDs. TEM particle size distribution was measured using ImageJ. Scale bar for both a- and cGQDs is 5 nm.

Supporting Information

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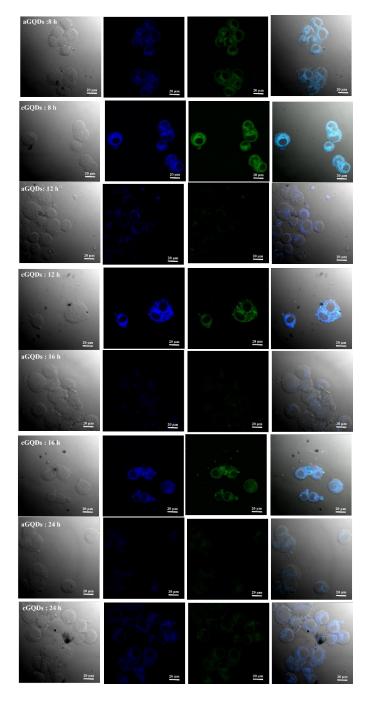


Figure S2. Confocal fluorescence images of SK-Mel-2 cells showcasing GQD uptake when incubated with both types of GQDs over all different time points (1, 2, 4, 8, 12, 16 and 24 h). Control cells represent untreated group. The fluorescence observed in blue and green channels indicate excitation dependent emission of both types of GQDs. First column shows phase contrast image, followed by blue channel, green channel and final column shows merged image. Scale bar = $20 \mu m$

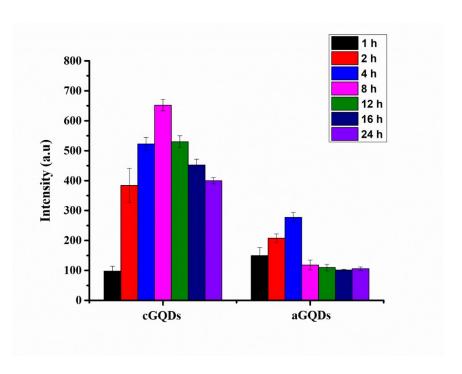


Figure S3. Flow cytometry data showing fluorescence intensity of SK-Mel-2 cells treated with GQDs (50 μ g/mL) at different incubation times measured at 520 nm. Data is presented as average \pm standard deviation (n=3). Maximum intensity was observed after 8h of incubation with cGQDs compared to 4h for aGQDs