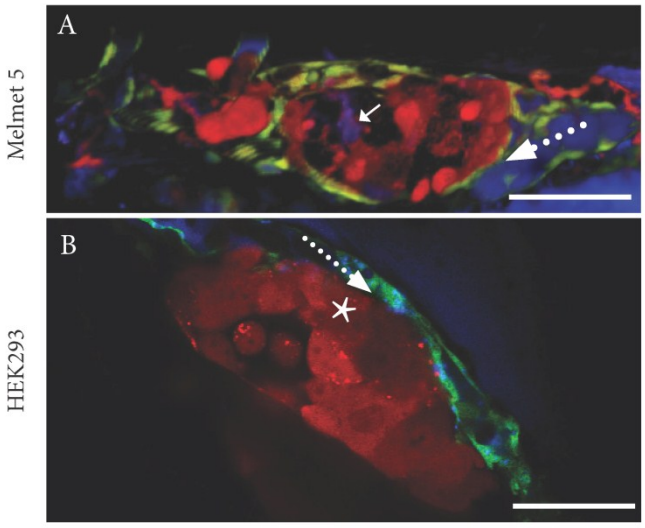
Supplementary Information



Supplementary Figure 1

Supplementary Figure 1. No leakage of dextran into tumor-like structures. (A) Confocal stack of a Melmet 5 tumor-like structure (red) surrounded by the vasculature (green) in which the dextran flows (blue). The dotted arrow indicates the direction of the blood flow. We could not observe any leakage of 10 kDa dextran into the tumor-like structure. A blood vessel behind the tumor-like structure (arrow) is transporting dextran but it is not leaking out. (B) Confocal image of a HEK293 tumor-like structure (red, asterisk) located next to a blood vessel (green) transporting dextran (blue). The dotted arrow indicates the direction of the blood flow. No leakage of dextran into the tumor-like structure could be observed. N = 4. Scale bars: 30 µm.

Description of movies:

Supplementary video 1. 200 nm green fluorescent NoPEG PSNPs in zebrafish embryo circulation 20 seconds post injection.

Supplementary video 2. 200 nm green fluorescent NoPEG PSNPs in zebrafish embryo circulation 140 seconds post injection

Supplementary video 3. 1000 nm NoPEG PSNP adhering to a RAW macrophage in vitro.

Supplementary video 4. 1000 nm PEG PSNP do not adhere to a RAW macrophage in vitro.

Supplementary video 5. 200 nm green fluorescent PEG PSNPs in zebrafish circulation 20 seconds post injection

Supplementary video 6. 200 nm green fluorescent PEG PSNPs in zebrafish circulation 140 seconds post injection

Supplementary video 7. 200 nm green PEG liposomes in zebrafish embryo circulation 24 h post injection.

Supplementary video 8. 200 nm PEG green liposomes in zebrafish embryo circulation 46 h post injection.

Supplementary video 9. 200 nm PEG green liposomes taken up by macrophages 70 h post injection

Supplementary video 10. 200 nm green PEG liposomes circulating in zebrafish embryo with red tumor-like structures.

Supplementary video 11. 200 nm green liposomes accumulated in Melmet 5 tumor-like structure. Tumor-like structures are invisible but the embryo is the same as in Figure 6B where the tumor-like structures can be seen.

Supplementary video 12. 3D view of a confocal stack (ImageJ) of a red Melmet 5 tumor-like structure with accumulated green liposomes.

Supplementary video 13. 3D view of a confocal stack (ImageJ) of a red HEK293 tumor-like structure with accumulated green liposomes.