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Clinically approved PEGylated nanoparticles are covered by a protein corona that boosts uptake

by cancer cells

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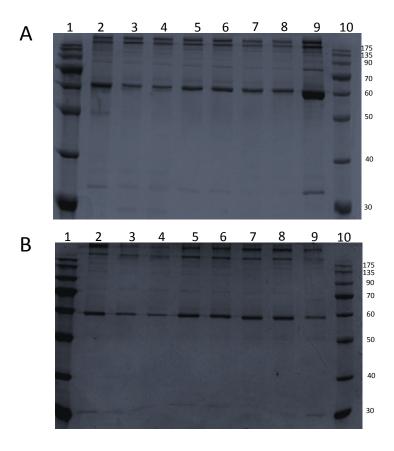


Figure S1. Representative one-dimensional SDS-PAGE gel of plasma proteins obtained from Onivyde (**A**) and "unPEGylated Onivyde" (**B**) following 1-hour incubation with plasma of four pancreatic ductal adenocarcinoma (PDAC) patients. (lane 2: patient "P1"; lanes 3-4: patient "P2"; lanes 5-6: patient "P3"; lanes 7-8: patient "P4"; lane 9: patient "P1"). The molecular weights (kDa) of the proteins on the standard ladder are reported on lanes 1 and 10 (the amount of ladder in lane 1 is double that of lane 10).

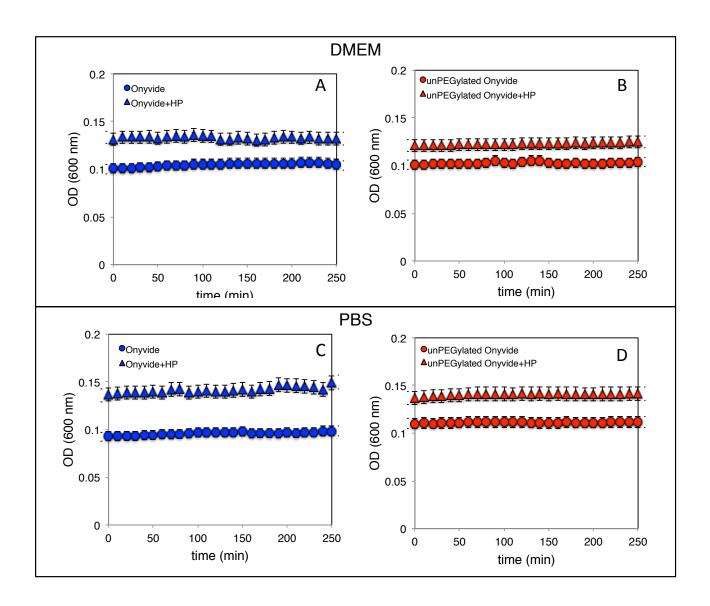


Figure S2. Temporal aggregation and sedimentation of liposomes and liposome-protein corona (PC) in Phosphate-buffered saline (PBS) and cell culture medium (Dulbecco's modified Eagle's medium, DMEM) were explored by measuring Optical Density (OD) at 600 nm. OD measurements were performed by means of a Cytation 3 multimode reader (Biotek, USA). To this end, 10 μ L of each sample has been re-suspended in a final volume of 100 μ L of PBS or DMEM and OD has been measured every 10 minutes for 4 hours. Measurements have been done in triplicate, PBS or RPMI alone have been use as blanks. Results are given as average \pm standard deviation (S.D.).

Table S1. Inclusion citeria in healty and pancreatic cancer group.

PANCREATIC CANCER GROUP	
1) Age ≥ 18 years	
2) Cyto-histologically proven diagnosis of pancreatic adenocarcinoma	
3) Personal medical history negative for neoplastic, renal or liver disease or blood disorders	
4) Adequate renal function: creatinine <1.5 mg/dl, blood urea nitrogen <1.5 times the upper limit	
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5) Absence of uncontrolled infections 6) Written informed consent

7) No previous chemotherapy or radiotherapy

 Table S2. Clinical/pathological stage in pancreatic cancer patients group.

Stage of pancreatic cancer	N.
cT2N+M0	1
cT3N+M0	2
cT4N+M0	1
cT2N+M+	1
cT3N+M+	2
cT4N+M+	1
pT3N1MxG2	2