**Supplementary Table S1**: Changes in tumor deposition in the control and cyclophosphamide-treated groups as measured by PET/CT

Results were analyzed in Graphpad Prism by paired two-tailed Student’s t test. The data is reported as Mean ± Standard Deviation.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Group | Cycle 1 | | | | Cycle 2 | | |
|  | *Week 1* | *Week 2* | *p* | *Week 5* | | *Week 6* | *p* |
| Control (n=5) | 7.67±0.93 | 6.61±1.17 | n.s. | 3.84±0.73 | | 4.4±1.19 | n.s. |
| Cyclophosphamide (n=6) | 6.06±0.91 | 9.68±2.94 | p=0.0218 (\*) | 3.26±0.47 | | 5.03±0.58 | p=0.0005 (\*\*\*) |

**Supplementary Table S2**: Effects of cyclophosphamide on HER2 expression, collagen type I deposition and vascular parameters in BT474-M3 tumors

|  |  |  |
| --- | --- | --- |
| Read-out | CTL vs cyclophosphamide treated (4 days) | *P value* |
| Mean HER2 (number/cell) | 1.6 x 106 ± 9.67 x 105 vs 1.82 x 106 ± 3.03 x 105 | n.s. |
| Collagen type I (area % of total) | 23.75 ± 2.47 vs 26.09 ± 3.09 | n.s. |
| Vascular parameters | | |
| * MVD, Number vessels/mm2 | 123.4 ± 20.18 vs 138.2 ± 13.13 | *n.s.* |
| * MVD, Vascular Area (fraction) | 0.046 ± 0.0086 vs 0.039 ± 0.0044 | *n.s.* |
| * % Perfused Vessels (all sizes) | 85.03% ± 0.27 vs 87.05% ± 0.85 | *n.s.* |
| * % Perfused Vessels (Small) | 64.92 ± 1.06 vs 74.98 ± 1.28 | *0.0159 (\*)* |
| * % Perfused Vessels (Medium) | 85.81% ± 0.77 vs 89% ± 1.03 | *0.0317 (\*)* |
| * % Perfused Vessels (Large) | 96.52% ± 0.41 vs 98.07% ± 0.46 | *n.s.* |

**Supplementary Table S3**. Reagents for immunofluorescence on FFPE and frozen tumor sections

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Staining | Tissue type | Antigen retrieval | Endogenous peroxidase block | Protein blocking | Primary antibody | Secondary antibody | Amplification |
| cleaved caspase 3 | FFPE | Citrate Buffer pH6.0 | Peroxidaze 1 | Background Sniper | rabbit anti-human cleaved caspase 3 | goat anti-rabbit Alexa Fluor® 647 | n.a. |
| γ-H2AX | FFPE | Citrate Buffer pH6.0 | Peroxidaze 1 | Background Sniper | mouse anti-human phospho-histone H2AX | goat anti-mouse Alexa Fluor® 488 | n.a. |
| cleaved PARP | FFPE | Citrate Buffer pH6.0 | Peroxidaze 1 | Background Sniper | rabbit anti-human cleaved PARP | EnVision+ System-HRP labeled polymer anti-rabbit | TSA™ Cyanine 5 Tyramide |
| HER2 | FFPE | Tris-EDTA pH 9 | Peroxidaze 1 | Background Sniper | rabbit anti-human HER2 | EnVision+ System-HRP labeled polymer anti-rabbit | TSA™ Cyanine 5 Tyramide |
| cytokeratin | FFPE | Citrate Buffer pH6.0/  Tris-EDTA pH 9 | Peroxidaze 1 | Background Sniper | mouse anti-human cytokeratin | goat anti-mouse Alexa Fluor® 555 | n.a. |
| collagen type I | Frozen | n.a. | n.a. | Background Sniper | rabbit anti-collagen type I | goat anti-rabbit Alexa Fluor® 647 | n.a. |
| CD31 | Frozen | n.a. | n.a. | Background Sniper | armenian hamster anti-mouse CD31 | goat anti-armenian hamster Alexa Fluor® 647 | n.a. |