

Supplementary Material

Probing Vasoreactivity and Hypoxic Phenotype in Different Tumor Grafts Grown on the Chorioallantoic Membrane of the Chicken Embryo in ovo Using MRI

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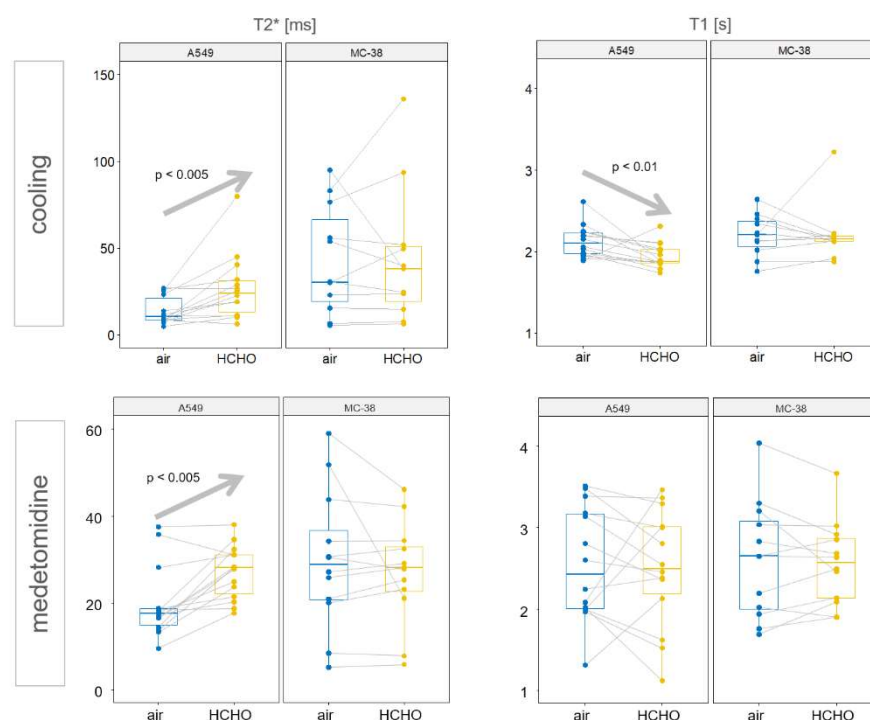


Figure S1. Comparison of sedation protocols and their impact on HCHO gas challenge for A549 and MC-38 tumor grafts. Sedation with medetomidine was compared with sedation by cooling at 4 °C. Impact on T1 and T2* for selected samples was assessed. *p* values refer to Wilcoxon test statistics; arrows indicate observed trends and changes upon gas challenge.

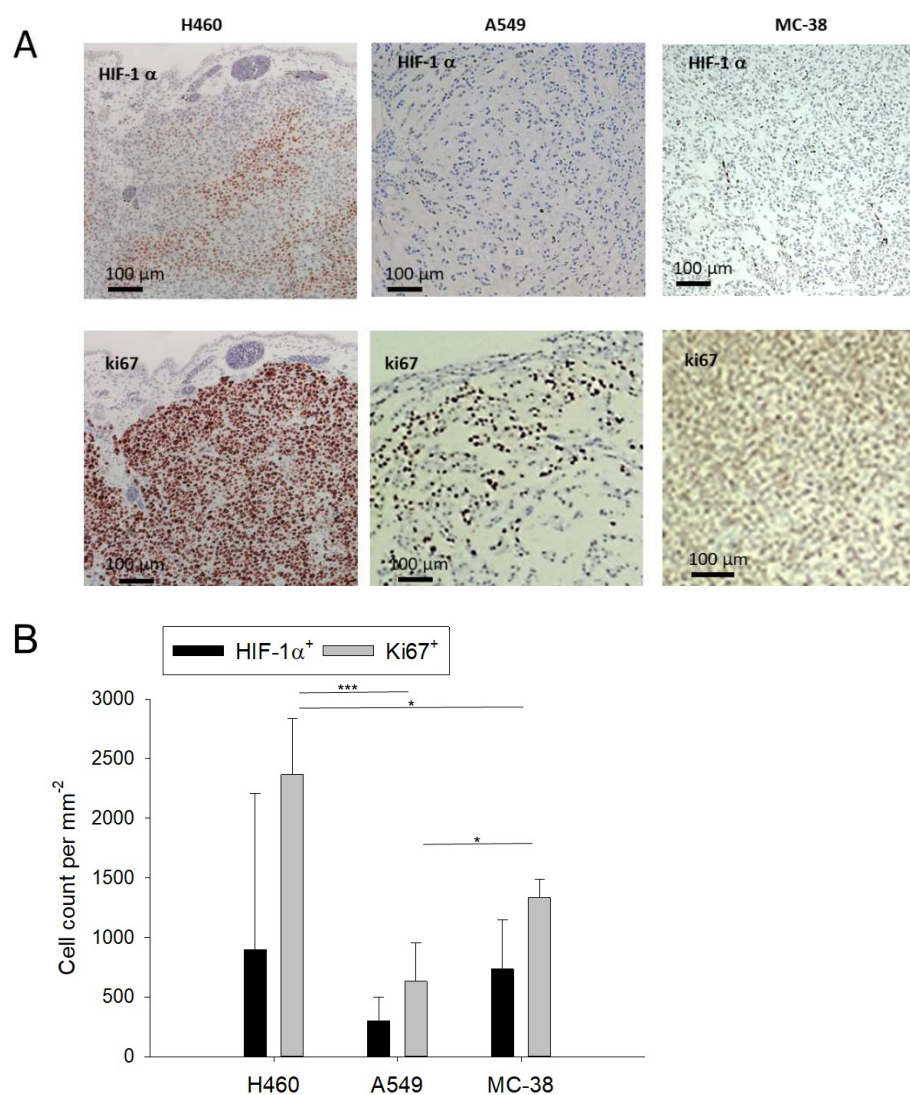


Figure S2. Immunohistochemical staining of H460, A549 and MC-38 tumor tissues grown on the CAM. Image taken at 100 \times magnification for a representative field of view. In the core tissue of H460 and MC-38 tumors, hypoxic areas are visible (numerous HIF-1 α -positive brown cells), while in A549 tumors, only a few HIF-1 α ⁺ cells can be seen. ki67, as a proliferation marker, shows that practically all H460 and MC-38 cells were proliferating (ki67-positive brown cells), while the pattern for A549 tumors was patchier in this regard (A). Quantitative assessment revealed no significant differences in HIF-1 α ⁺ cells per area, while ki67⁺ cell density was significantly different for all three tumor types (B). One-way ANOVA; $p < 0.05$ (*), $p < 0.01$ (**) and $p < 0.001$ (***).