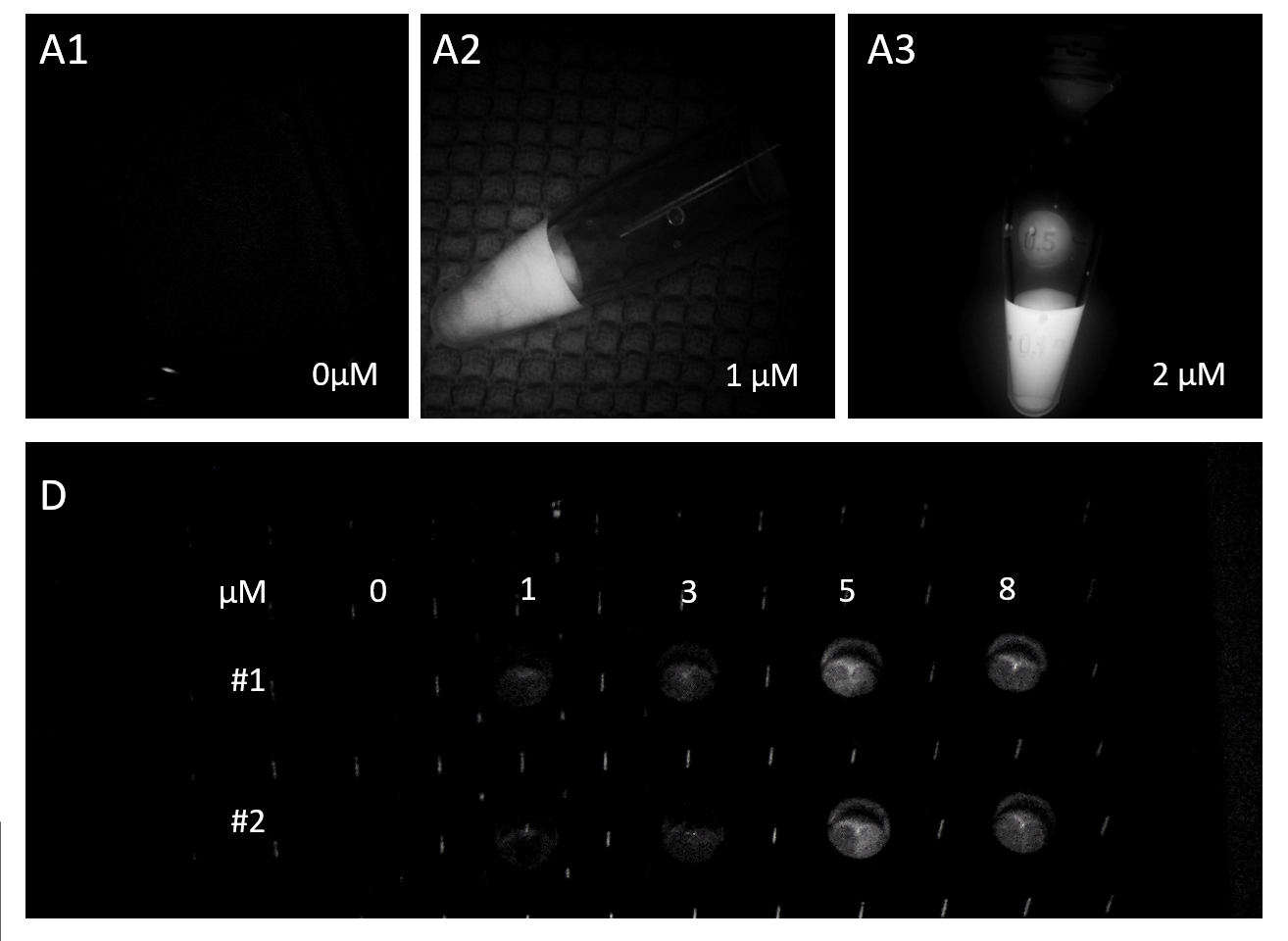
Supplementary Figures

Visualization of Glioblastoma with Infrared-Labeled Aptamers for Fluorescent Guided Surgery



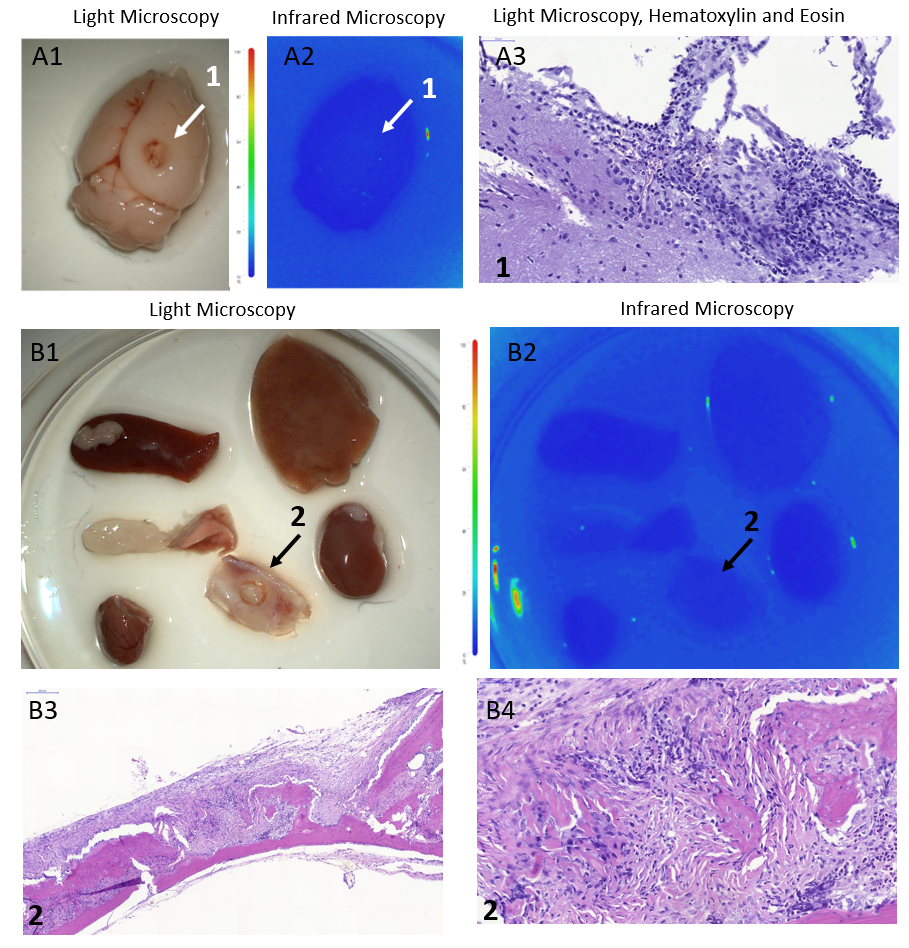
**Figure S1.** Fluorescent microscopy of IR-Glint (A) in solution of DPBS in concentrations 0µM (1); 1 µM (2) and 2 µM (3). Glial tumor tissues incubated with Cy 7.5-labeled aptamers (#1 – Gli-233 nt and 233, #2 – Gli-55 3L) in 1 – 8 µM under IR-module of surgical microscope Zeiss Kinevo 900. In panel A IR-Glint were in 1.5 ml vials. In panel B the tissue samples were in 96-well plate.



**Figure S2.** Distribution of IR-Glint in healthy mice after intravenous injection registered at Brightfield (1), IR fluorescence (F). Mice prior injection (A), 5 minutes (B), 40 minutes (C), 90 minutes (D), and 24 hours (E) after the tail vein injection. Accumulation of IR-Glint in organs (F): 1 - brain, 2 – kidneys, 3 - spleen, 4 - liver, 5 - intestines, 6 - gallbladder, 7 - lungs, and 8 - heart.



**Figure S3.** Distribution of IR-Glint in healthy mice with intracranial window after subcutaneous injection registered at Brightfield (1), IR fluorescence (2). Mice 5 minutes (A), 40 minutes (B), 90 minutes (C). Accumulation of IR-Glint in organs (D): 1 – brain, 2 – kidneys, 3 – spleen, 4 – liver, 5 – intestines, 6 – gallbladder, 7 – lungs, and 8 – heart, 9 – peritoneal fat.



**Figure S4.** Backgraund IR frluorescence (A2, B2) and light microscopy (A1, B1) of ortotopicaly xenotransplanted glioblastoma (A1, arrow 1), tumor inside the skull (B1, arrow 2) and organs (B1) without IR-Glint administration. H&E staining confirmed glial tumor formation in mice brains (A3) and inside the skull (B3, B4).

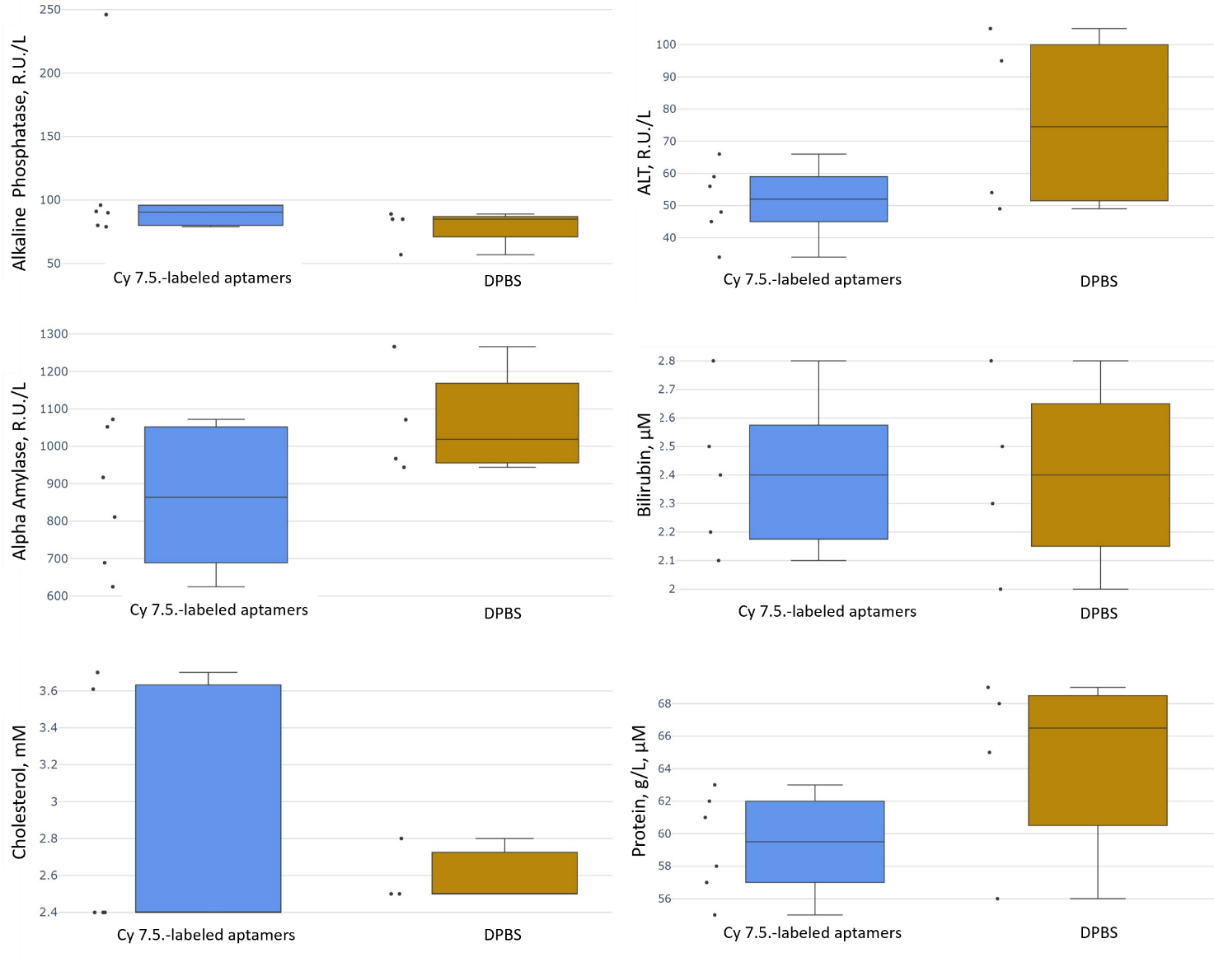
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Figure S5. Blood biochemical parameters of mice injected with IR-Glint (pooled Gli-233nt and Gli-55\_3L).