

Figure S1. Effect of targeting VEGF isoforms on free VEGF concentration in the body. Free VEGF concentration profiles following a single intravenous injection anti-VEGF given at time 0 in tumors that preferentially secrete various VEGF isoform(s). Three cases were considered: **A-C**, Tumor secretes both VEGF isoforms. **D-F**, Tumor only secretes VEGF₁₂₁. **G-I**, Tumor only secretes VEGF₁₆₅. From left to right: Pan anti-VEGF targeting both VEGF isoforms, anti-VEGF₁₂₁ agent, and anti-VEGF₁₆₅ agent

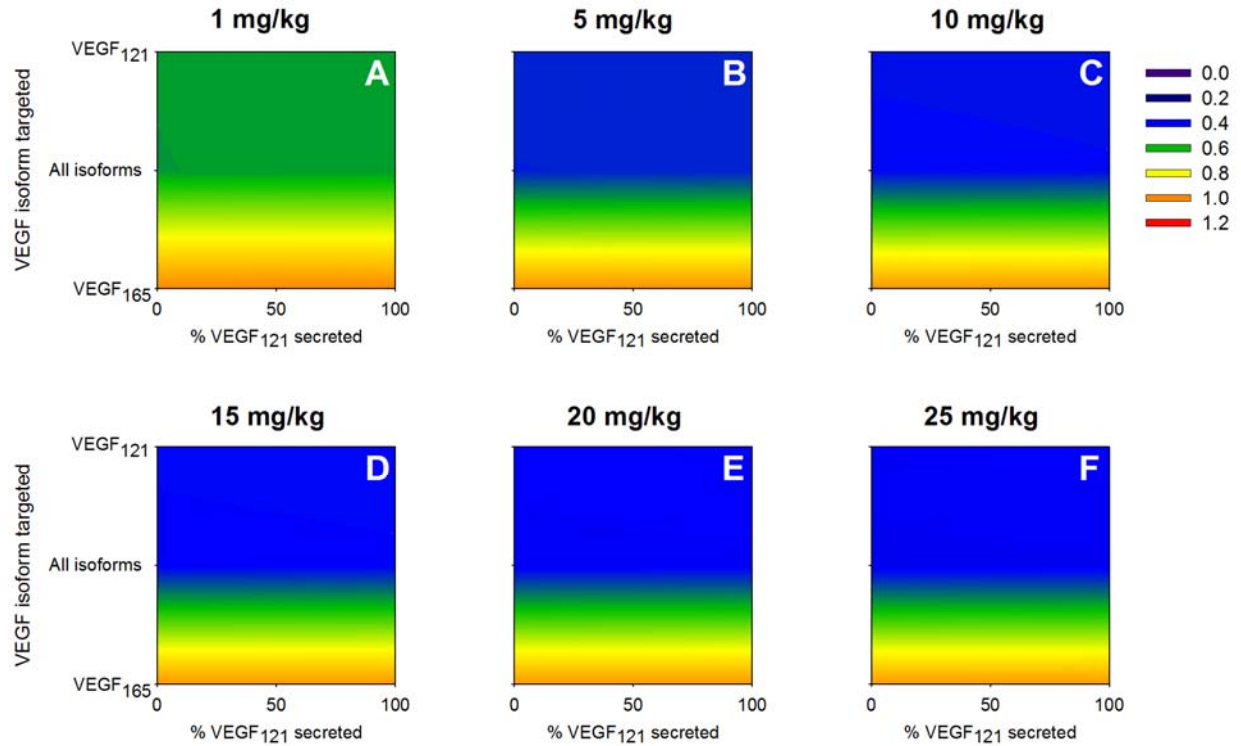


Figure S2. Effect of anti-VEGF dosage on the fold-change in free VEGF in the normal tissue. A single intravenous injection anti-VEGF given at time 0 in tumors that preferentially secrete various VEGF isoform(s). Three VEGF-neutralizing agents were examined: pan anti-VEGF, anti-VEGF₁₂₁, and anti-VEGF₁₆₅. The relative amount of VEGF₁₂₁ secreted by the tumor was varied from zero to 100%. The panels correspond to different dosages of the anti-VEGF agents: **A**, 1 mg/kg. **B**, 5 mg/kg. **C**, 10 mg/kg (base case). **D**, 15 mg/kg. **E**, 20 mg/kg. **F**, 25 mg/kg.

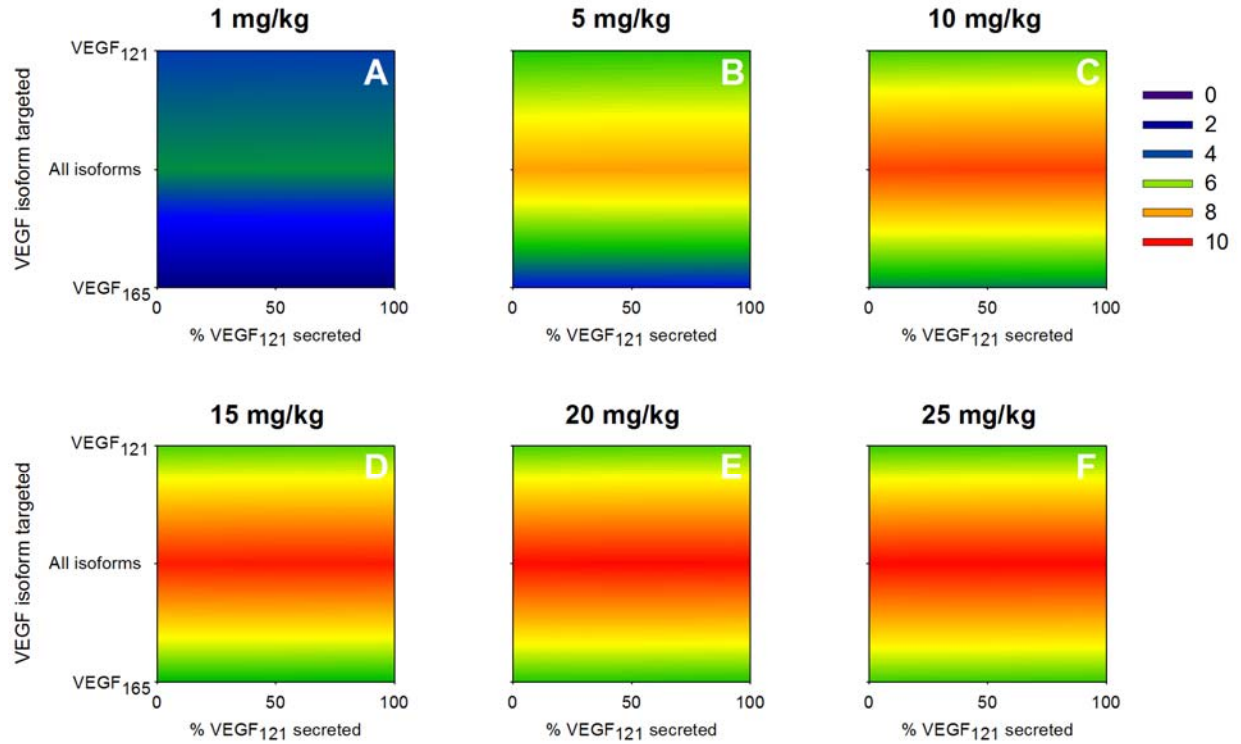
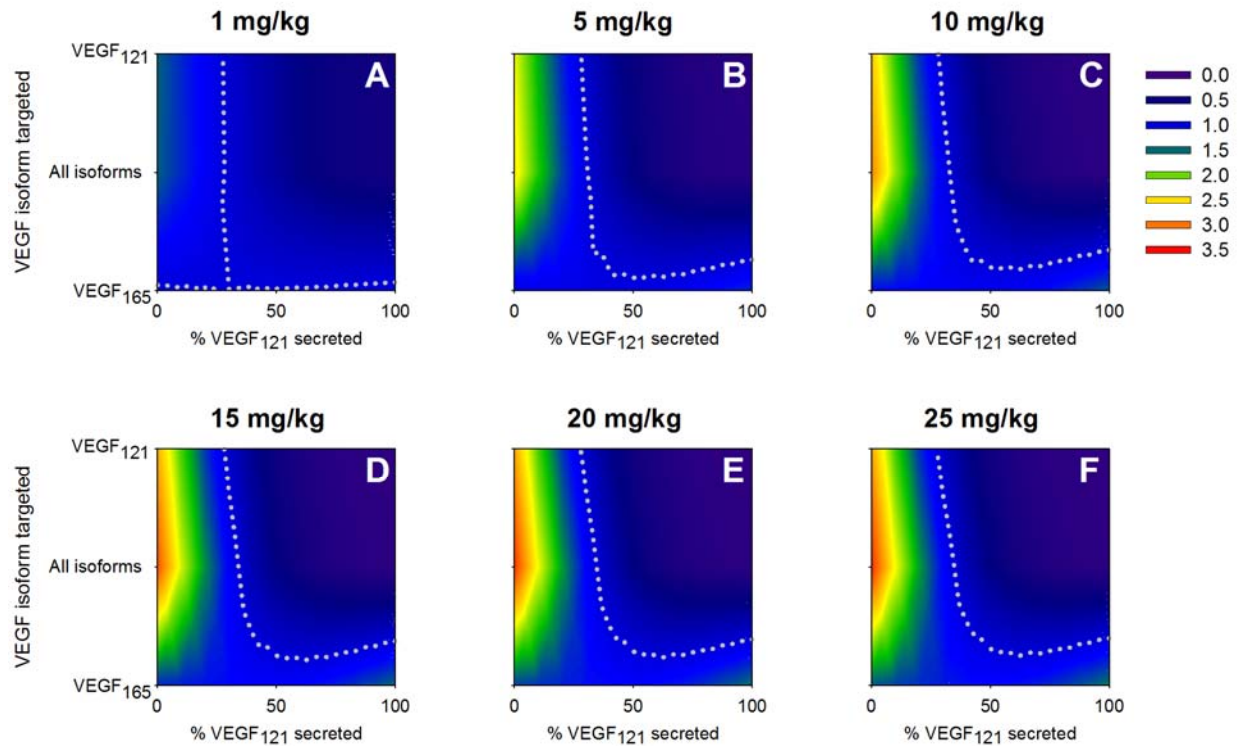


Figure S3. Effect of anti-VEGF dosage on the fold-change in free VEGF in the blood. A single intravenous injection anti-VEGF given at time 0 in tumors that preferentially secrete various VEGF isoform(s). Three VEGF-neutralizing agents were examined: pan anti-VEGF, anti-VEGF₁₂₁, and anti-VEGF₁₆₅. The relative amount of VEGF₁₂₁ secreted by the tumor was varied from zero to 100%. The panels correspond to different dosages of the anti-VEGF agents: **A**, 1 mg/kg. **B**, 5 mg/kg. **C**, 10 mg/kg (base case). **D**, 15 mg/kg. **E**, 20 mg/kg. **F**, 25 mg/kg.



Effect of anti-VEGF dosage on the fold-change in tumor free VEGF. A single intravenous injection anti-VEGF given at time 0 in tumors that preferentially secrete various VEGF isoform(s). Three VEGF-neutralizing agents were examined: pan anti-VEGF, anti-VEGF₁₂₁, and anti-VEGF₁₆₅. The relative amount of VEGF₁₂₁ secreted by the tumor was varied from zero to 100%. The panels correspond to different dosages of the anti-VEGF agents. **A**, 1 mg/kg. **B**, 5 mg/kg. **C**, 10 mg/kg (base case). **D**, 15 mg/kg. **E**, 20 mg/kg. **F**, 25 mg/kg. The gray dotted line in each panel is the isocline for a fold-change of 1.