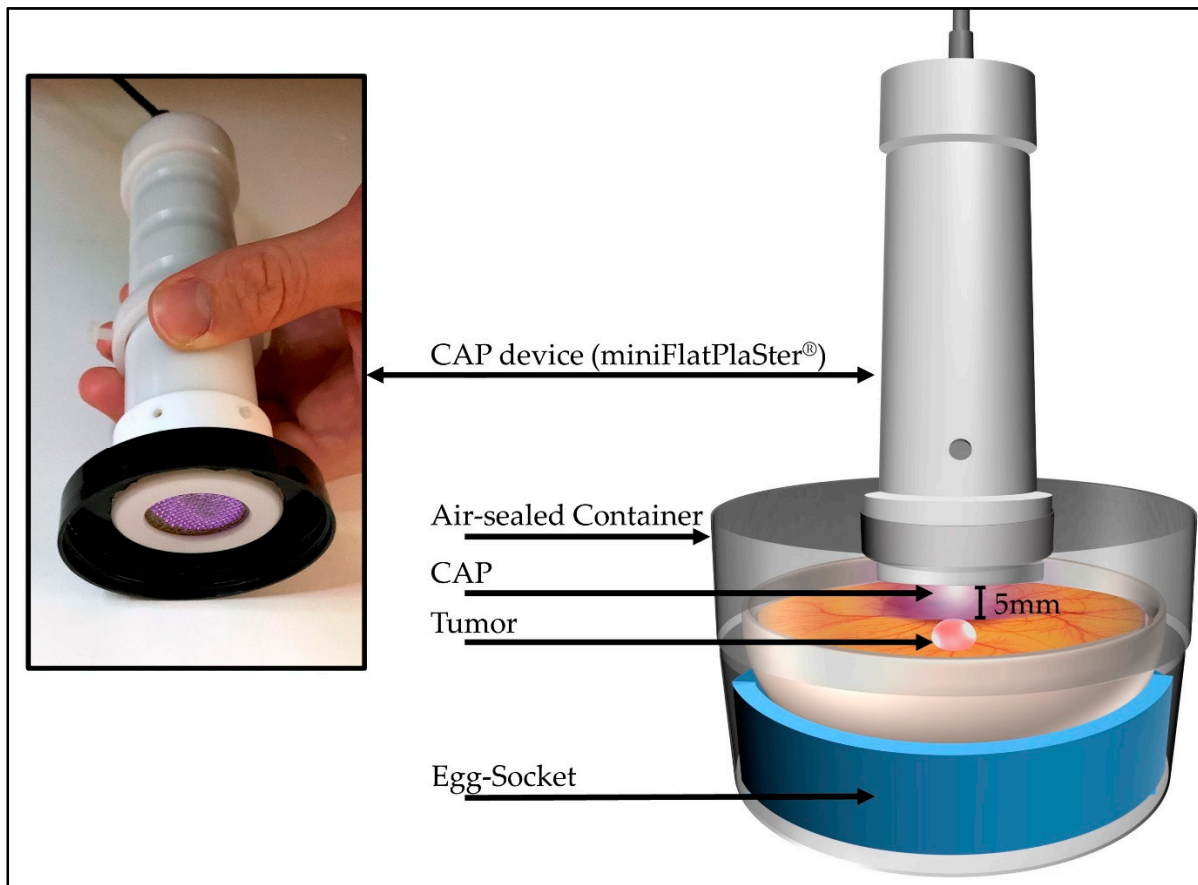# Supplementary Material

Experimental Setup

Figure S1. Tumor-bearing eggs were placed in a sealed container with the CAP device incorporated in the lid. This avoided air circulation and ensured the CAP device was located at an average distance of 5 mm from the CAM bearing the tumor.

Supplementary Material S2

Depth dependency of apoptotic cells

Depth dependency of CAP effects was confirmed using Kruskal-Wallis testing comparing apoptotic cell rates in depth-specific ROI within each treatment group. To evaluate the effective tissue penetration of CAP, Kruskal-Wallis testing comparing apoptotic cell rates in varying tissue depths was performed for both groups separately. CAP treated specimens showed to be highly significant ($p < 0.001$), while sham treated tumors did not show significant results ($p = 0.717$). For CAP specimens, Dunn-Bonferroni's post-hoc-tests with Bonferroni correction showed significant higher apoptotic cell rates in ROI within the upper 200 µm to ROI between 500–600 µm and 700–800 µm (0–100 µm*500–600 µm $p = 0.001$, 0–100 µm*700–800 µm $p = 0.004$, 100–200 µm*500–600 µm $p = 0.009$, 100–200 µm*700–800 µm $p = 0.021$).

Table S1. ROI sample sizes in varying depths of cleaved caspase-3 stained tumor slides.

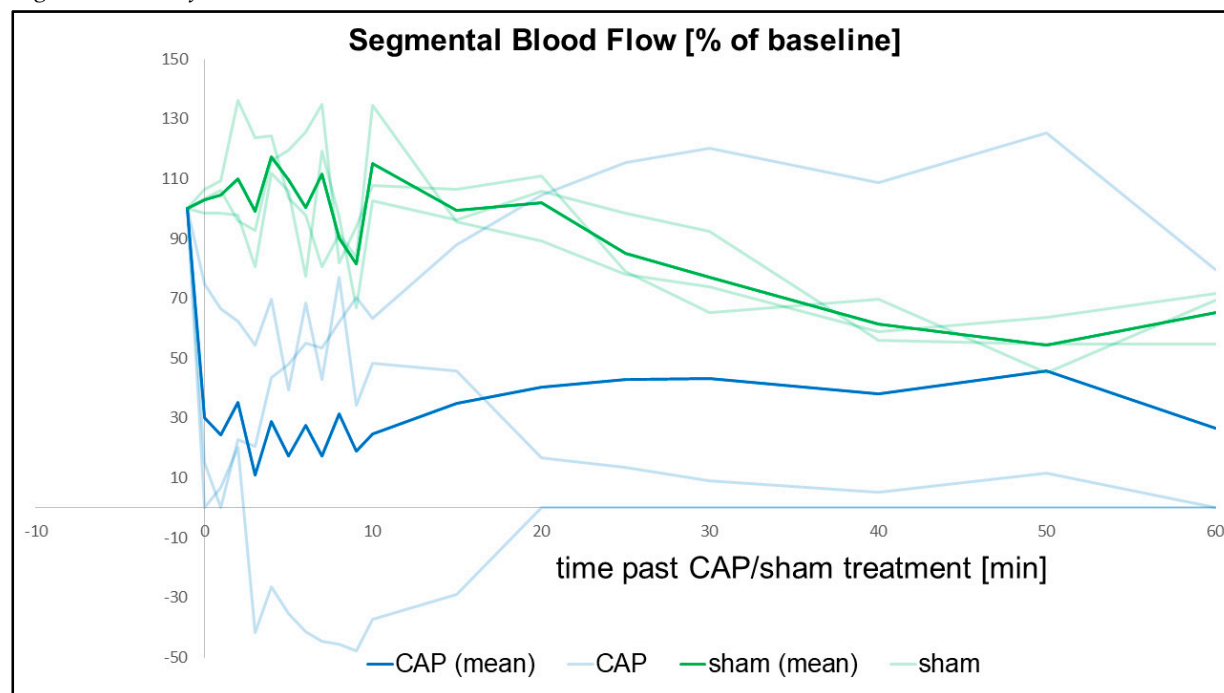| distance from tumor surface	*n* (CAP)	*n* (Control)
0–100 µm	44	51
100–200 µm	43	50
200–300 µm	42	46
300–400 µm	34	38
400–500 µm	30	27
500–600 µm	27	14
600–700 µm	20	11
700–800 µm	17	8

Segmental blood flow

Figure S2. Changes of segmental blood flow in tumor associated blood vessels. Mean values in bold lines, individual values in thin lines (green: CAP, blue: sham). Immediate drop in segmental blood flow could be observed in all vessels after CAP exposure, with recovery to normal blood flow after 20 minutes in one blood vessel. Two vessels showed the occurrence of intravascular blood coagulation leading to a slower but irreversible decrease in blood flow and ultimate occlusion of the vessel. (CAP: *n* = 3, sham: *n* = 3)