



Supplementary Figure 1: Control groups for heat-induced MSC-mediated *NIS* gene therapy *in vivo*

Three days after systemic injections of HSP70B-NIS-MSCs, hyperthermia was administered to mice harboring HuH7 xenograft tumors. 12 to 18 h later, saline was applied instead of ¹³¹I as control. This treatment cycle was repeated for a total of three times. Tumor growth (A) and overall survival (B) were evaluated for the treatment with HSP70B-NIS-MSCs, hyperthermia, and NaCl (HSP-NIS-MSCs + 41 °C + NaCl; *n* = 7), compared to a normothermic control group (HSP70B-NIS-MSCs + 37 °C +

NaCl; $n = 8$), and saline control group (NaCl + 37 °C + NaCl; $n = 5$). Results are expressed as mean \pm SEM.