## Modeling small cell lung cancer (SCLC) biology through deterministic and stochastic mathematical models

## SUPPLEMENTARY MATERIALS

**Supplementary Video 1: Most common metastasis sites of SCLC.** Simulation of early time points and the endpoint (from top left to bottom right) of tumor cells (purple) metastasizing to different organs (colored as indicated). See Supplementary\_Video\_1

**Supplementary Video 2: The cellular automaton model of SCLC growth and necrosis.** Growth of tumor (scale on left side) and oxygen levels within the tumor (color scale on right side) at different time points. See Supplementary\_Video\_2

**Supplementary Video 3: The cellular automaton model of SCLC growth and necrosis.** Growth of tumor showing the extent of the necrosis at different times (red = live cells, green = apoptotic cells, and blue = necrotic cells). The necrosis of the tumor initiates at > 180 hours. See Supplementary Video 3

**Supplementary Video 4: Simulation of tumor heterogeneity and tumor burden in SCLC.** Tumor heterogeneity and cellular automata at different time points. Tumor burden at corresponding time points, indicating the growth of wild-type cells (red) and cells containing mutations (blue). See Supplementary\_Video\_4