

## Supplemental.

### Movies

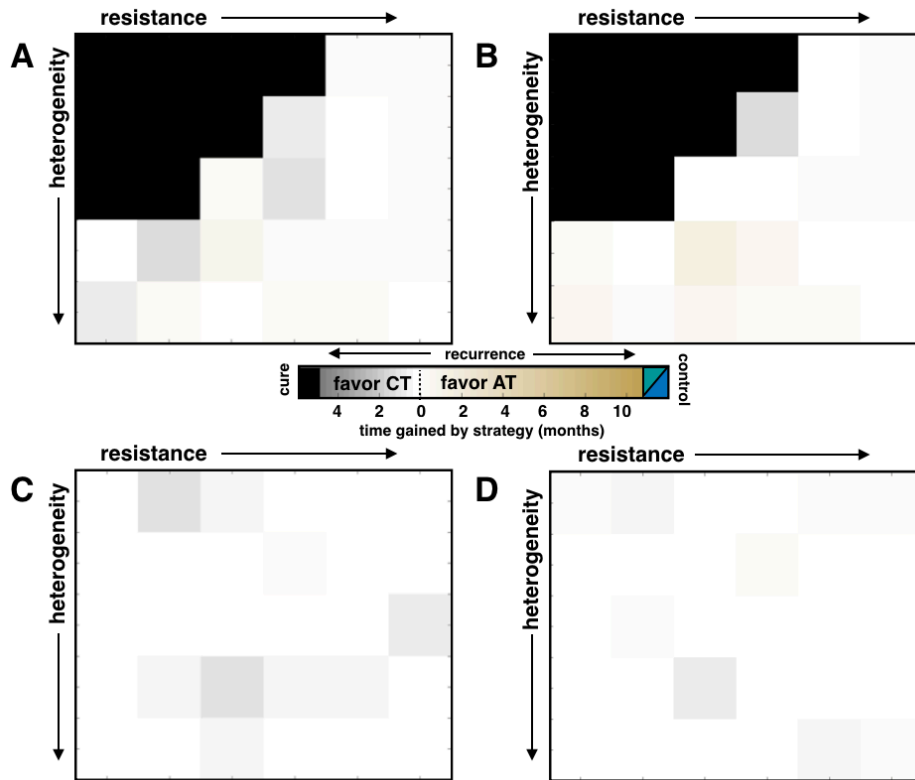


Figure S1. The best 2 of 3 winning treatment strategies over an array of tumor compositions. A-B) Cells have migration speeds of  $10 \mu\text{m}/\text{h}$ . We compare CT vs AT1 (A) and CT vs AT2 (B). C-D) Cells have phenotypic drift, at each division a cell will either increase its IMT by 5%, decrease its IMT by 5% or stay the same (ensuring that the IMT stays within the allowed range of 10-50h). For all cases A-D), each square is colored according to the best-case scenario based on 3 simulations according to the key. Cure by CT is favored first, control is favored next. With recurrence, the treatment with the most time gained before recurrence is favored, and the square is colored according to the average time gained by the winning strategy over the losing strategy.

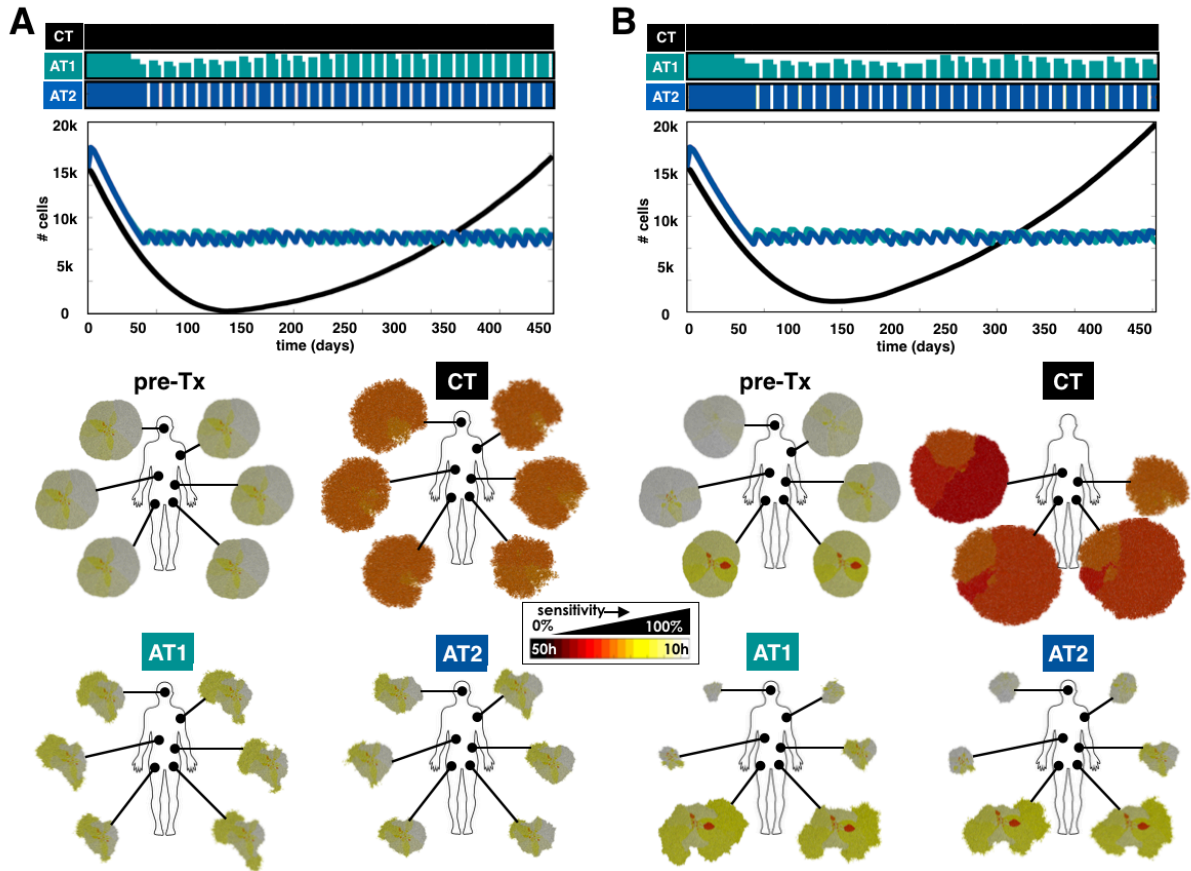


Figure S2. Multiple metastases treated at the same time with CT, AT1, and AT2. A) Metastases of the same composition are treated. B) Metastases with different compositions are treated. The top panels show the dose schedule for each strategy with the bar height representing the percentage of MTD given over time. The middle panel shows the population dynamics for the total burden (sum of all metastases). The bottom portion shows the pre-treatment spatial configuration for all metastases and their final spatial configurations after each treatment.