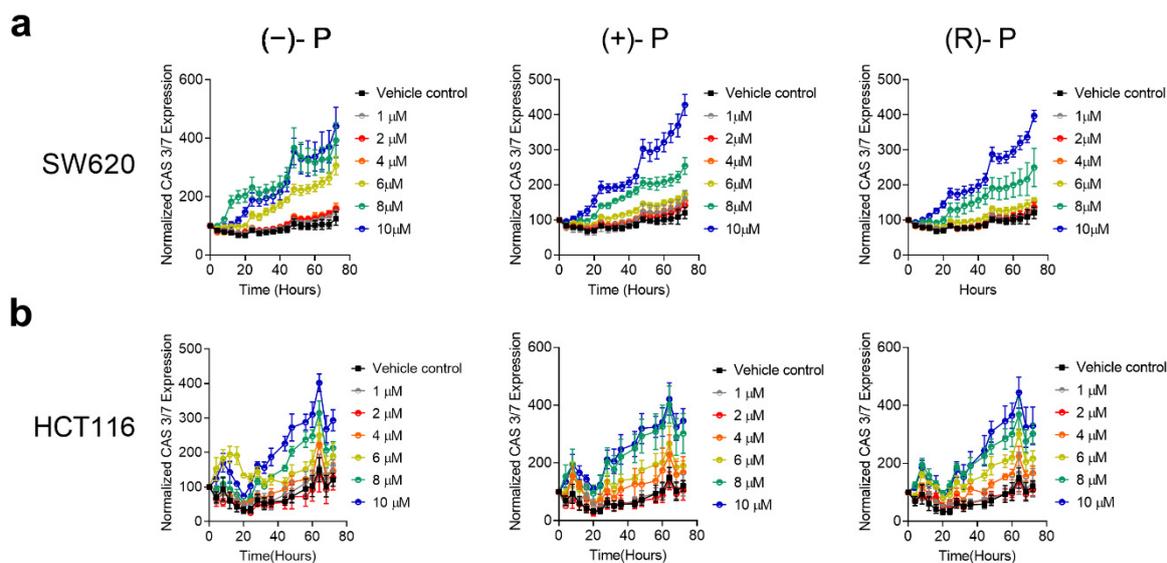
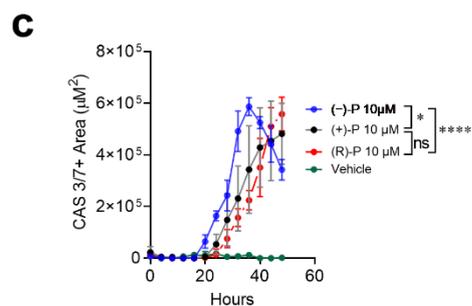
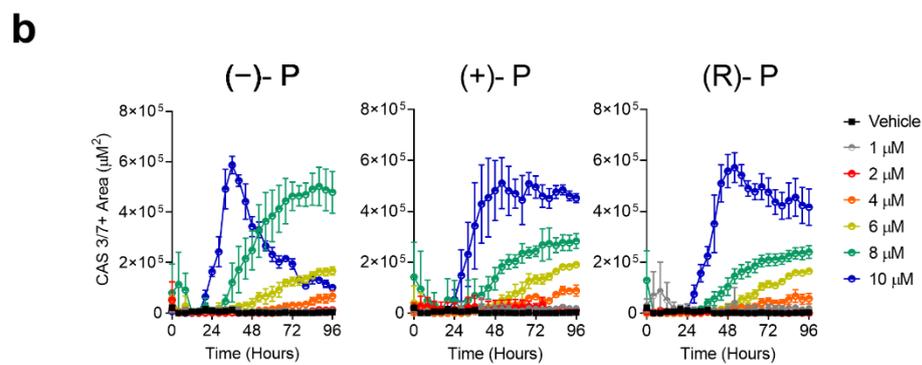
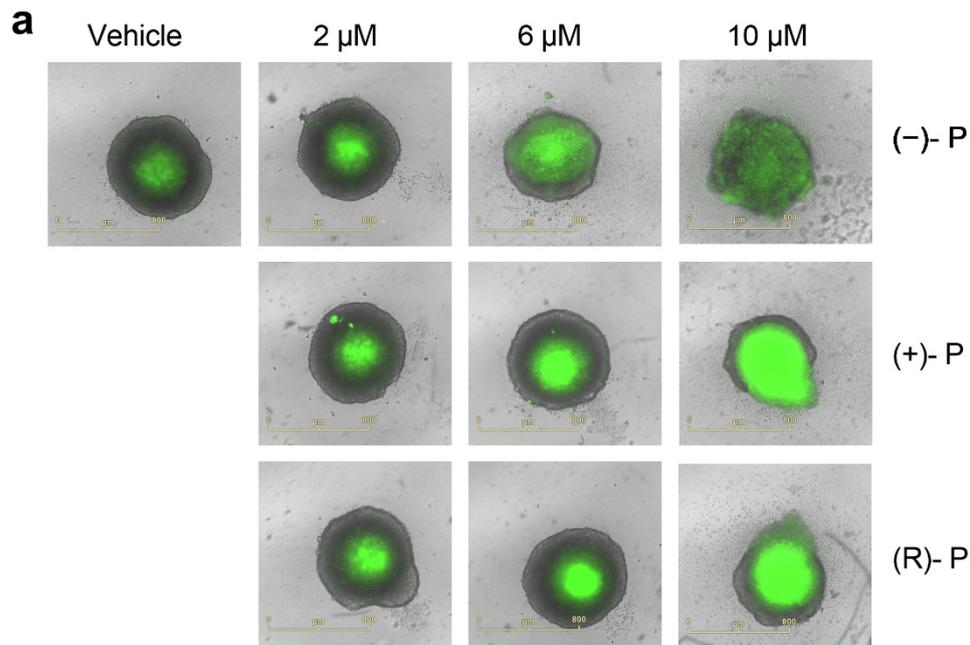


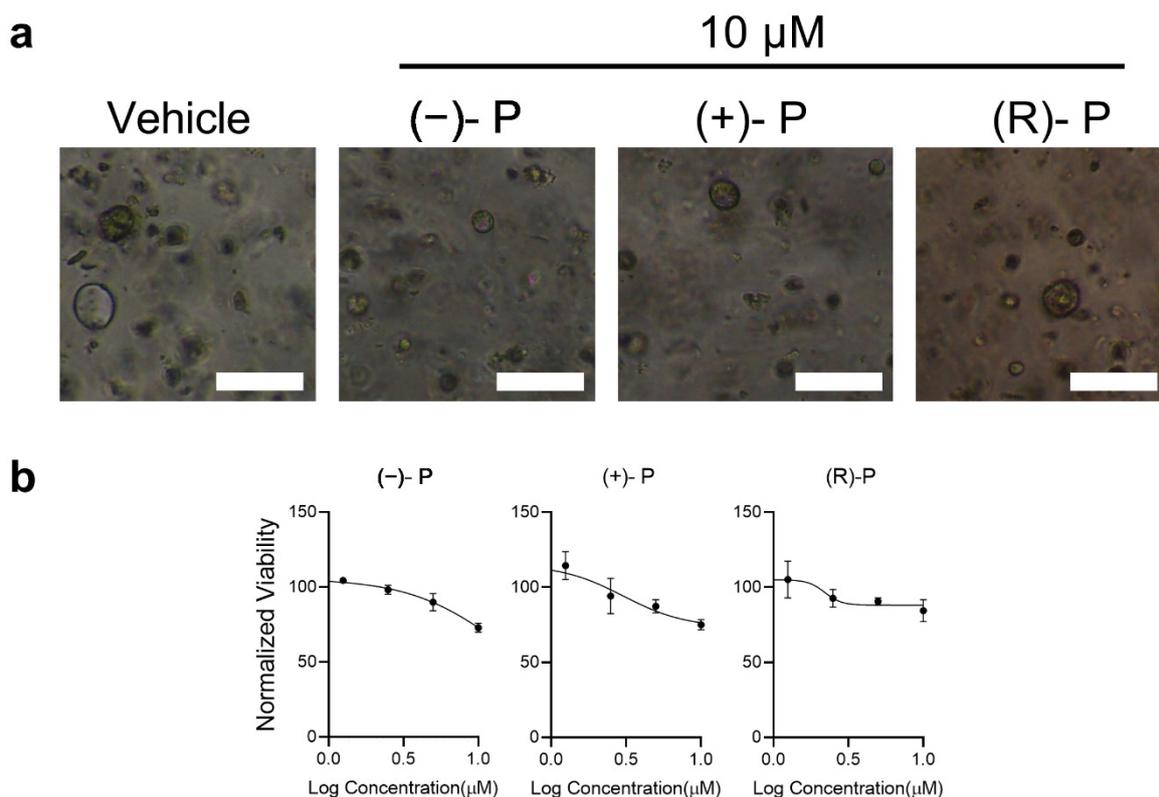
## Supplementary Figures S1-S3



**Figure S1.** The caspase3/7 activation kinetics of (a) SW620 and (b) HCT116 CRC cell lines grown in monolayers for 72 hours in the presence of (-)-P, (+)-P, and (R)-P and Caspase-3/7 Green reagent and monitored using an Incucyte S3 Live Analysis System. The representative curves were generated by calculating the CAS 3/7+ (green) cells measured normalized to time 0. Individual points represent mean  $\pm$  SD from three technical replicates. Data is representative of two independent experiments.



**Figure S2.** The kinetics of (-)-P, (+)-P, and (R)-P induced caspase 3/7 activation in HCT116 cells grown as spheroids. HCT116 spheroids were grown for 96 hours, followed by live cell imaging for a further 96 hours in the presence of (-)-P, (+)-P, and (R)-P and Caspase-3/7 Green reagent using an Incucyte S3 Live analysis system. (a) Representative images of HCT116 spheroids 96 hours post-drug treatment. Yellow bars represent 800  $\mu\text{m}$ . (b) Caspase 3/7 kinetics curves generated by measuring the caspase 3/7 positive area within HCT116 spheroids for (-)-P, (+)-P, and (R)-P over 96 hours. (c) Comparison of caspase 3/7 activation over 48 hours after treatment with vehicle or 10  $\mu\text{M}$  (-)-P, (+)-P and (R)-P. Individual points represent the mean  $\pm$  SD of three technical replicates in a single experiment. \*  $p \leq 0.05$ , \*\*\*\*  $p \leq 0.0001$ . Two-way ANOVA. Data is representative of two independent experiments.



**Figure S3.** Viability of normal liver organoids following treatment with (-)-P, (+)-P or (R)-P. Normal liver organoids were grown for 48 hours followed by treatment with (-)-P, (+)-P and (R)-P for 144 hours. Images were taken before the addition of AlamarBlue dye. (a) Representative images of normal liver organoids treated with (-)-P, (+)-P, and (R)-P. White bars represent 50  $\mu$ m. (b) Representative growth curves for normal liver organoids in the presence of (-)-P, (+)-P, or (R)-P. Mean  $\pm$  SD with individual points representing four technical replicates from 1 patient.

#### Supplementary Videos S1-S4

Supplementary videos in relation to Figure 4. Videos show time-lapse microscopy of HT29 spheroids treated with of (-)-P, (+)-P, and (R)-P and Caspase-3/7 Green reagent captured using an Incucyte S3 Live analysis system. Each video represents the following: Supp Video S1 : Vehicle Treatment; Supp Video S2: 10  $\mu$ M (-)-P ; Supp Video S3:10  $\mu$ M (+)-P; Supp Video S4: 10  $\mu$ M (R)-P .

#### Supplementary Videos S5 and S6

Supplementary videos in relation to Figure 5d. Videos show time-lapse microscopy of CRC organoids (TQEH 196) treated with 10  $\mu$ M of (R)-P and Caspase-3/7 Green reagent captured using an Incucyte S3 Live analysis system. Each video represents the following: Supp Video S5: 10  $\mu$ M (+)-P; Supp Video S6: Vehicle Treatment.