Panobinostat induced spatial *in situ* biomarkers predictive of anti-PD-1 efficacy in mouse mammary carcinoma

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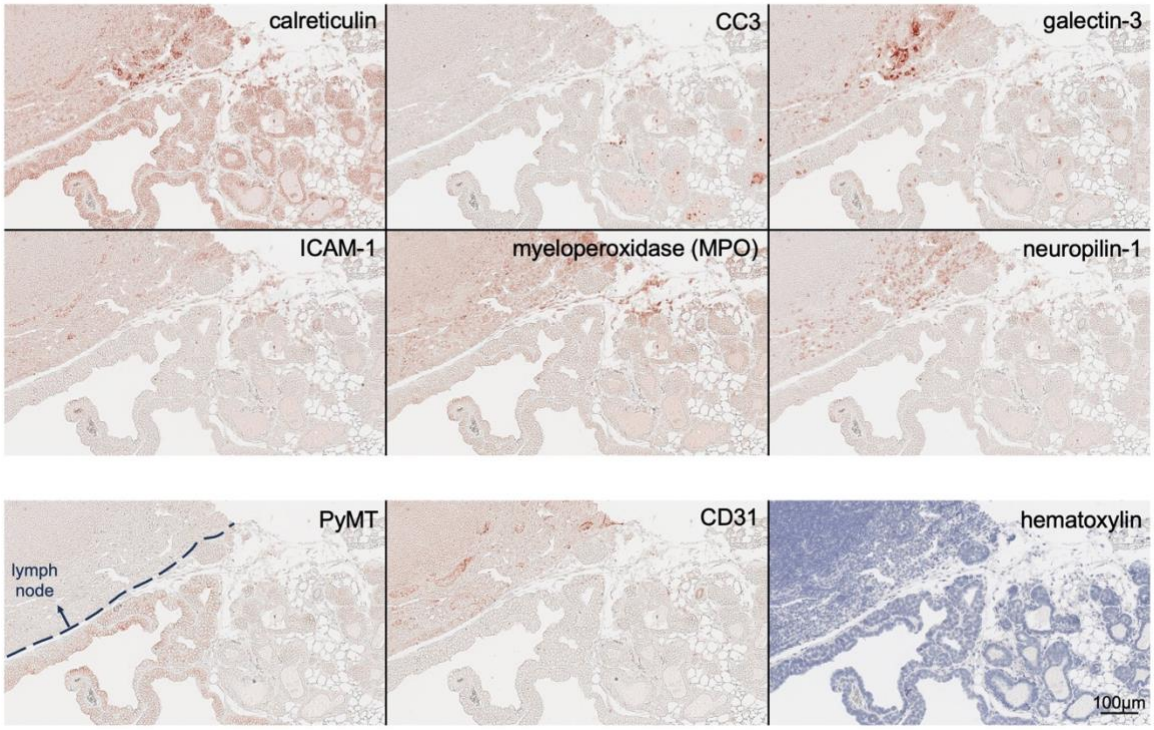
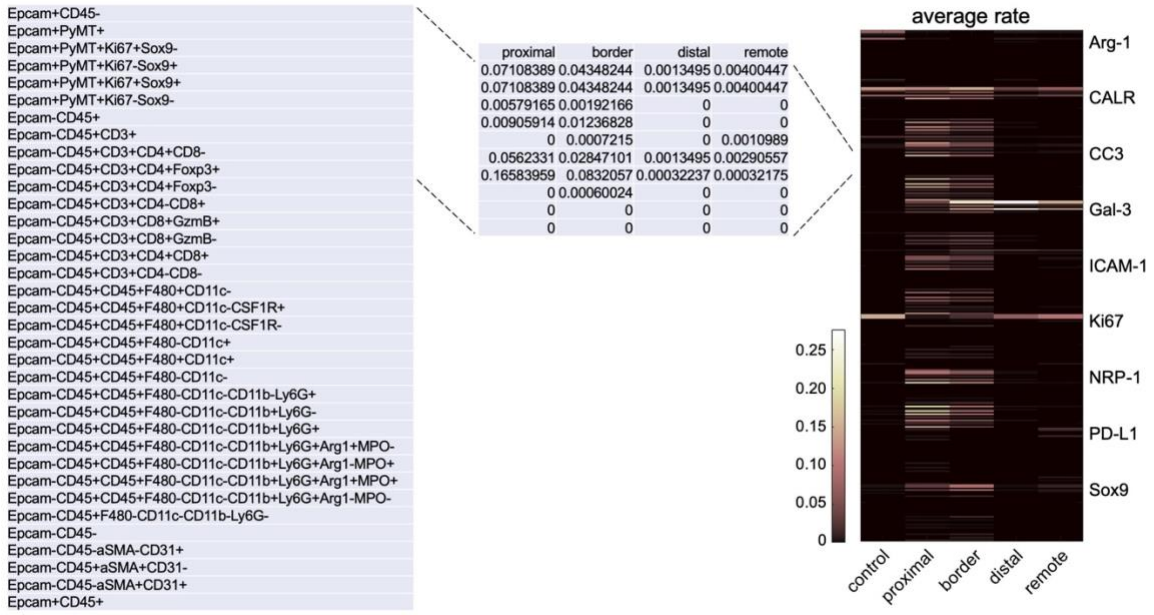
Supporting Fig. 1



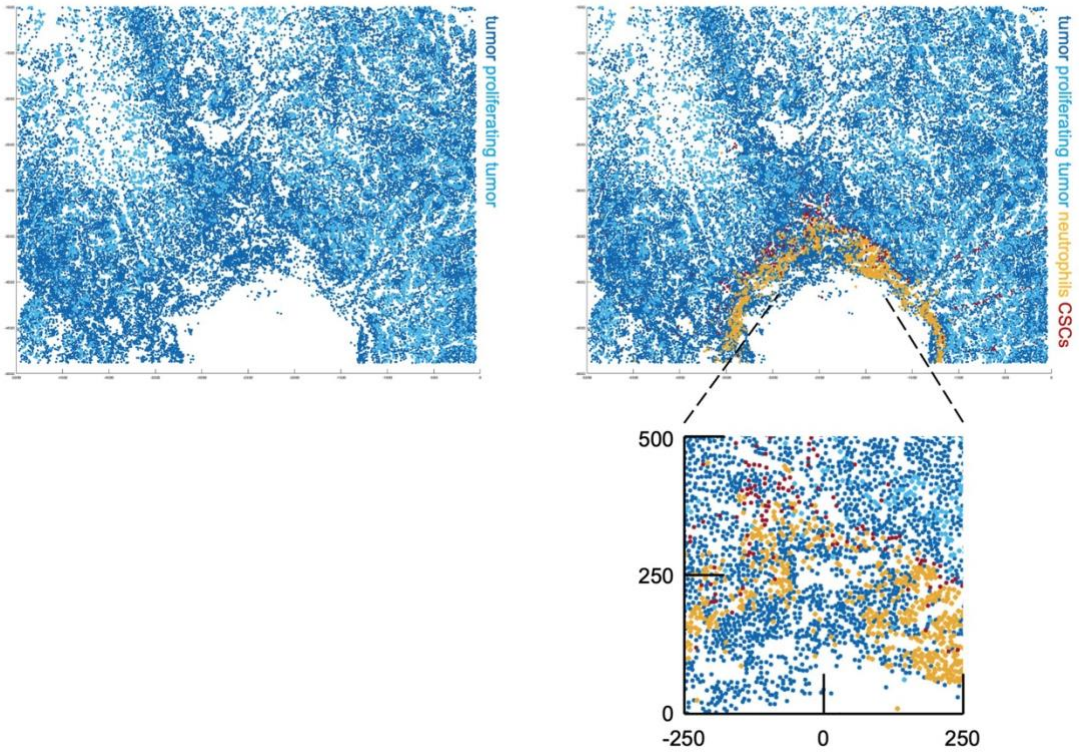
Supporting Figure S1. Multiplex IHC (mIHC) of candidate markers using positive control FFPE tissue. Brightfield images of stated markers using mIHC (red signal from 3-amino-9ethylcarbazol, AEC, precipitate). FFPE tissue section containing an early tumor (<0.5cm in the longest dimension) from MMTV-PyMT mouse model of breast cancer and adjacent lymph node (border depicted by dashed line; bottom left). Hematoxilin staining; bottom right image. Scale bar; shown.

Supporting Fig. 2



Supporting Figure S2. Marker combinations and their spatial quantification at the panobinostat drug-releasing site. Expression of each candidate ICD marker was measured within "standard cell type" population as defined by marker combination; left list. Zoomed view of quantitative presentation of average cell rates in different panobinostat zones; middle table. Quantification of all 324 marker combinations per panobinostat zone (x-axis) presented in form of a heatmap; right. Average rate and colorbar; presented.

Supporting Fig. 3



Supporting Figure S3. Zoom view of cell types in XY coordinate space. Each dot represents a single cell as color-coded on the right. Neutrophil and cancer stem cells (CSCs) are localized into non-proliferating tumor regions; top. Magnified view; bottom right.