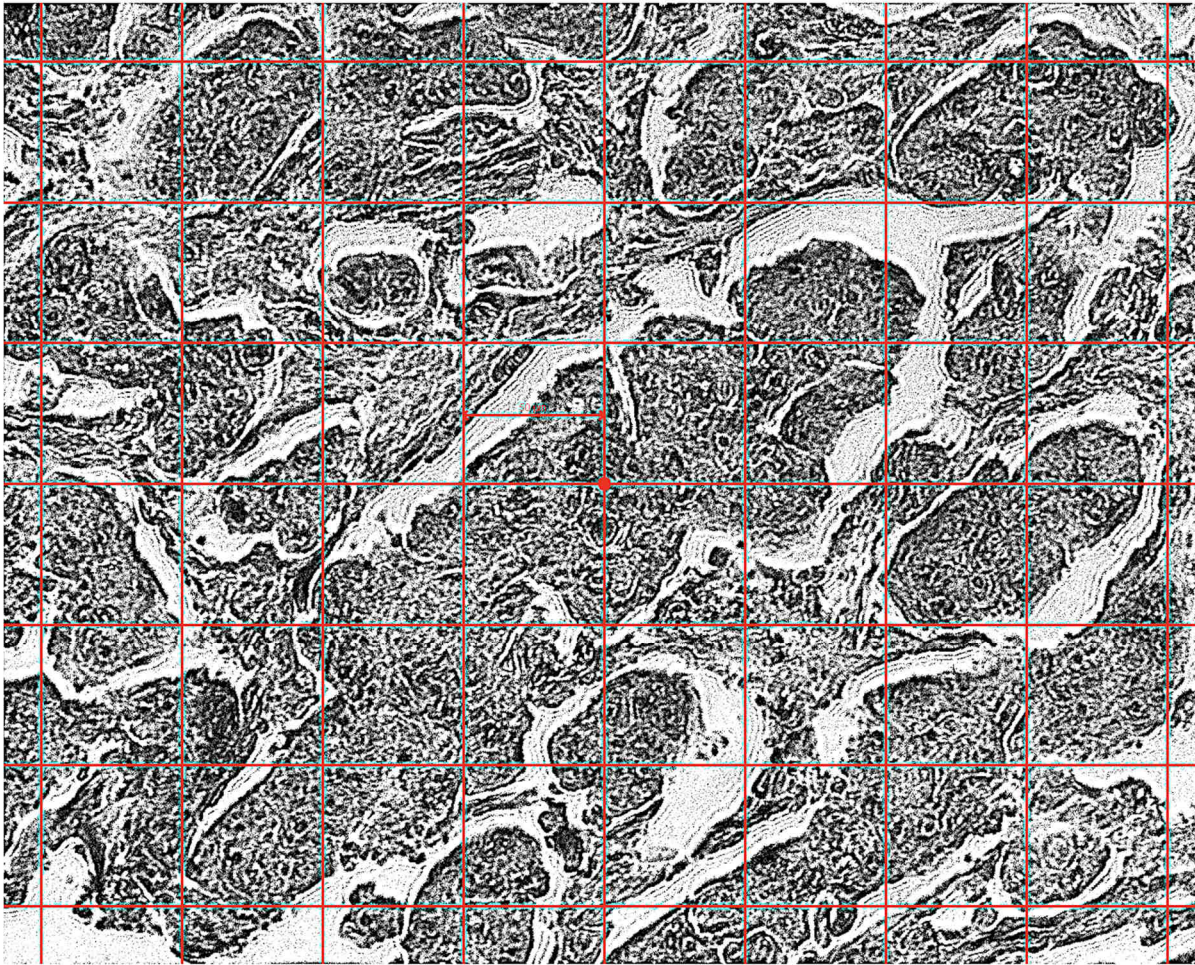


Supplementary Figure 1

Representative image of a region of interest (ROI) selected within a tumor sample with micropapillary-like pattern. The region has an area of $300 \times 400 \mu\text{m}^2$ divided in a grid of 48 spots of $50 \mu\text{m}$ diameter.



Supplementary Figure 2

Representative figure of the optical images referred to the samples' area where Young's modulus measurement were made. Yellow squares represent sample area excluded from measurement, including necrosis, stroma and area without tissues. Regions of interest (ROI) selected within the morphological tumor samples analyzed in this study: A) micropapillary-like pattern, B) Endometrioid-like pattern C) papillary, D) Solid-like pattern E) transitional- like pattern F) stroma. In B) yellow arrows show the acquisition path of Young's modulus measurements within the different ROIs, starting from left to right following a serpentine pattern.

