

Supplementary Materials for

Prostate cancer histopathology using label-free multispectral deep-UV microscopy quantifies phenotypes of tumor aggressiveness and enables multiple diagnostic virtual stains

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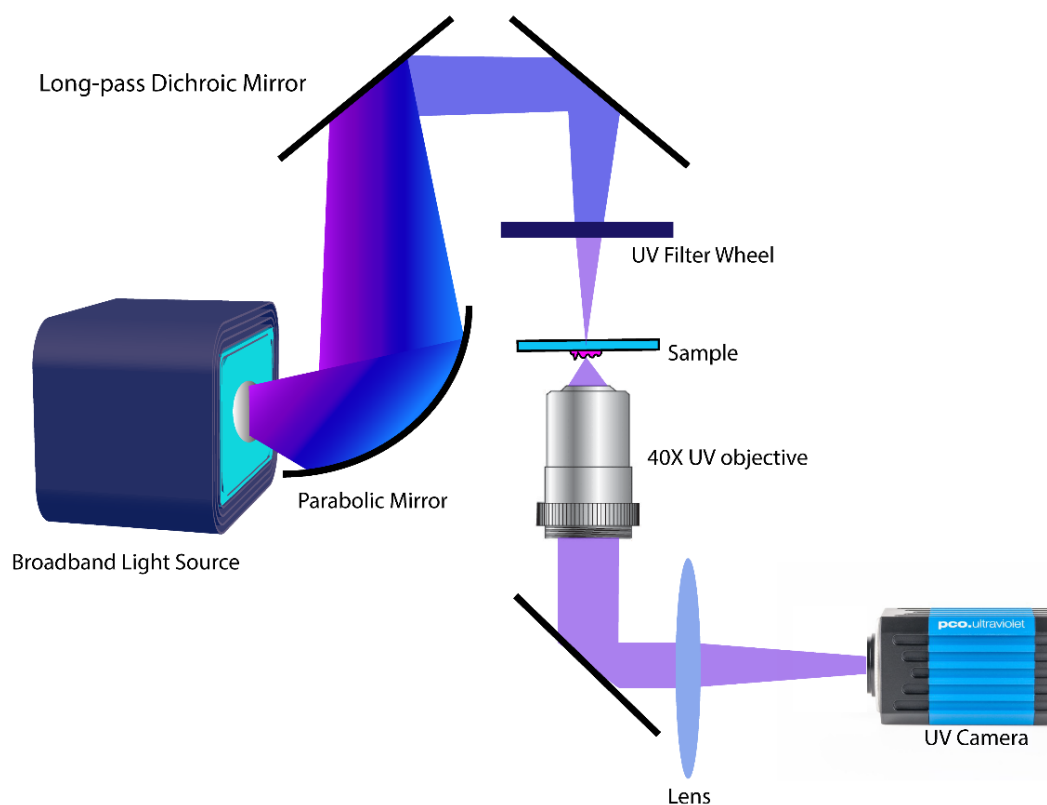
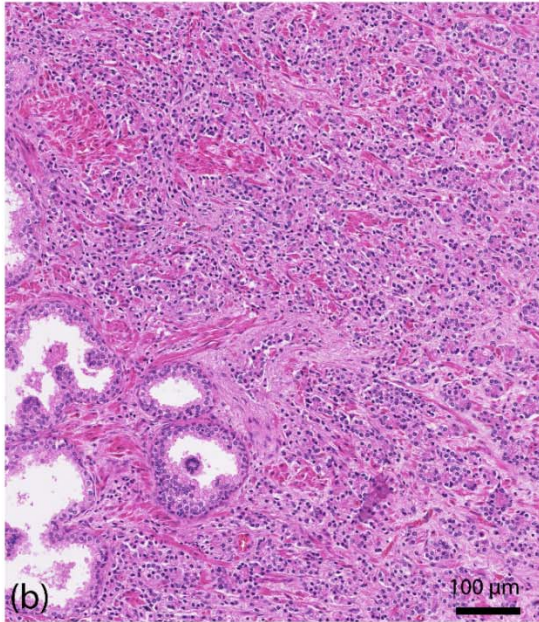
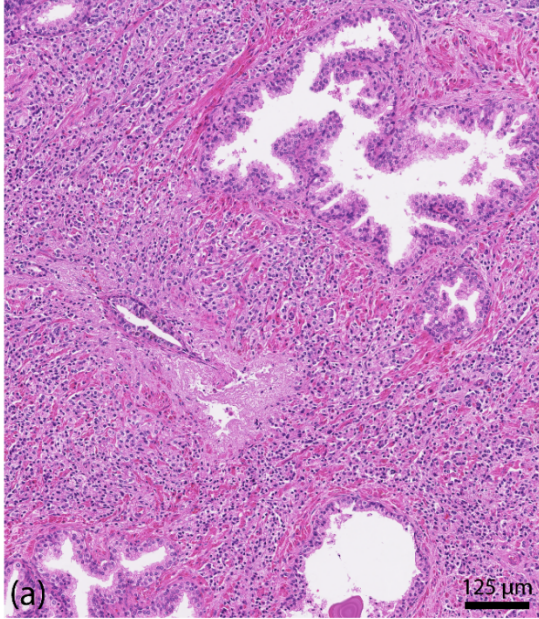
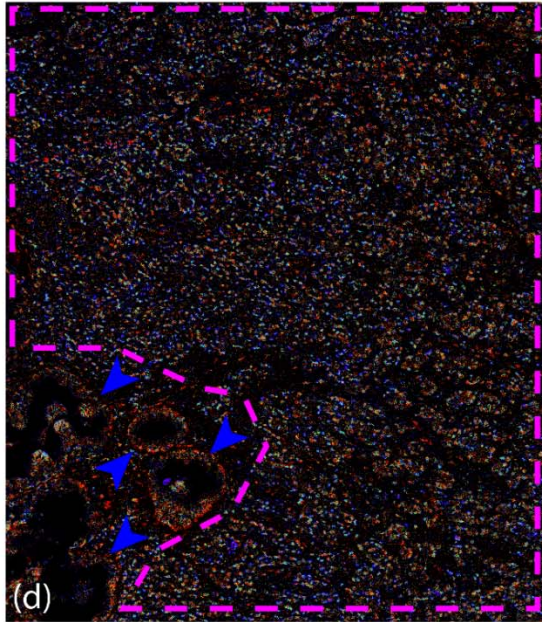
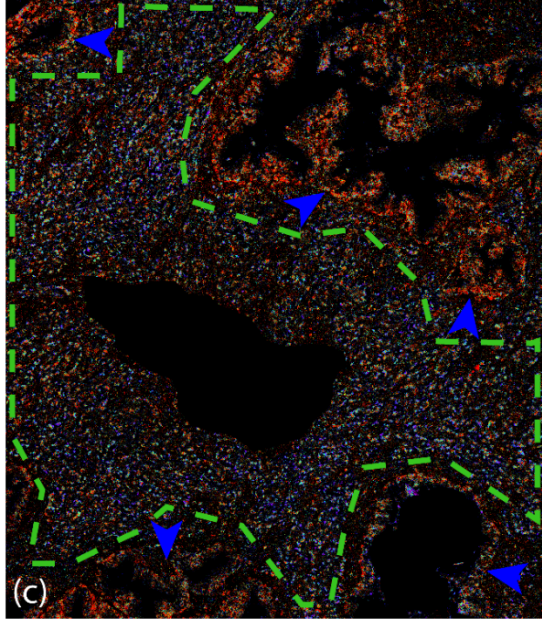


Fig. S1. A schematic of the multi-spectral deep UV microscope. The source provides a broadband output beam (~200 nm to 2000 nm) that is focused on the sample using a parabolic mirror. A dichroic mirror is used to only select deep UV region of the spectrum (200-550 nm). The transmitted light is collected using a 40X UV objective and is relayed on the camera using a biconvex lens

H&E



UV






Benign  Gleason Grade 4 and 5 mix  Gleason Grade 5 

Fig. S2. Two examples of prostate cancer regions with aggressive forms of cancer (Gleason Grade 5). It is important to mention that the region in (b) starts from foci of Gleason Grade 4 in the right side of the image and gradually cancer regions with Gleason Grade 5 appear in the top left side of the region (there are not pure Gleason Grade 4 or Gleason Grade 5 regions). Some levels of inflammation are also present.

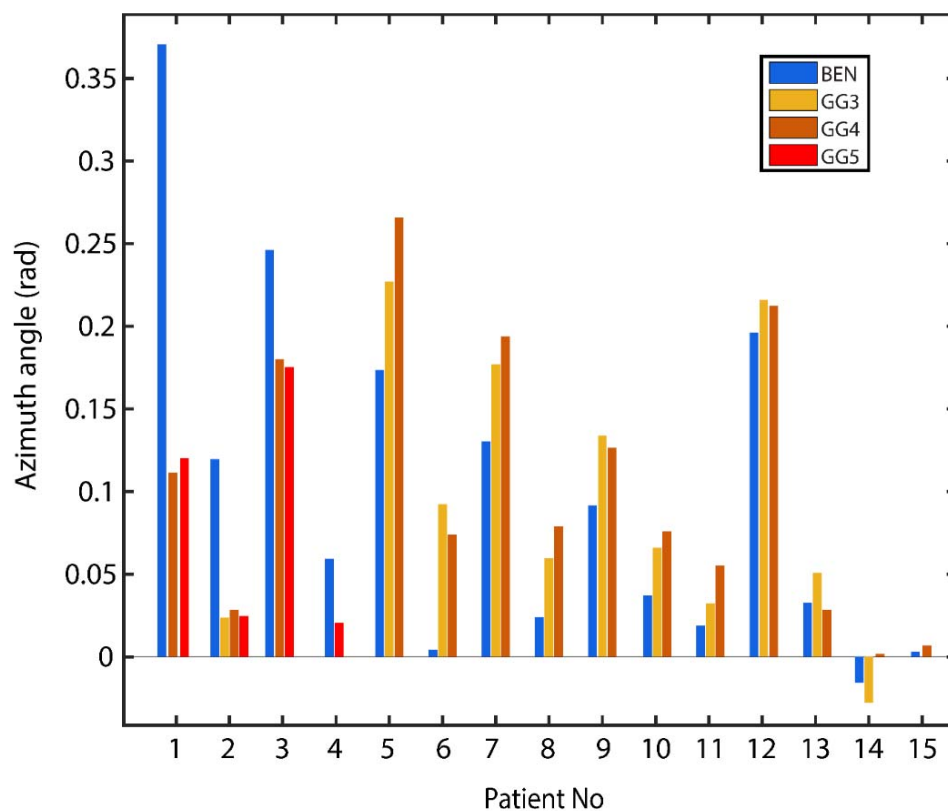


Fig. S3. Bar plot of the absolute azimuth angle CoM.