

Commonly Used Features for Analyzing Histology Images

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Feature extraction

- Color
- Texture
- Morphology
 - Area
 - Perimeter
 - Compactness
 - coordinates of the center of gravity of the cells
 - integrated optical density (IOD). a computer-assisted method usually used to quantify both the area and the intensity of the positive staining
 - Major and minor axis length
 - Major axis direction
- Architecture
 - Pattern recognition
 - Spatial arrangement of objects

color

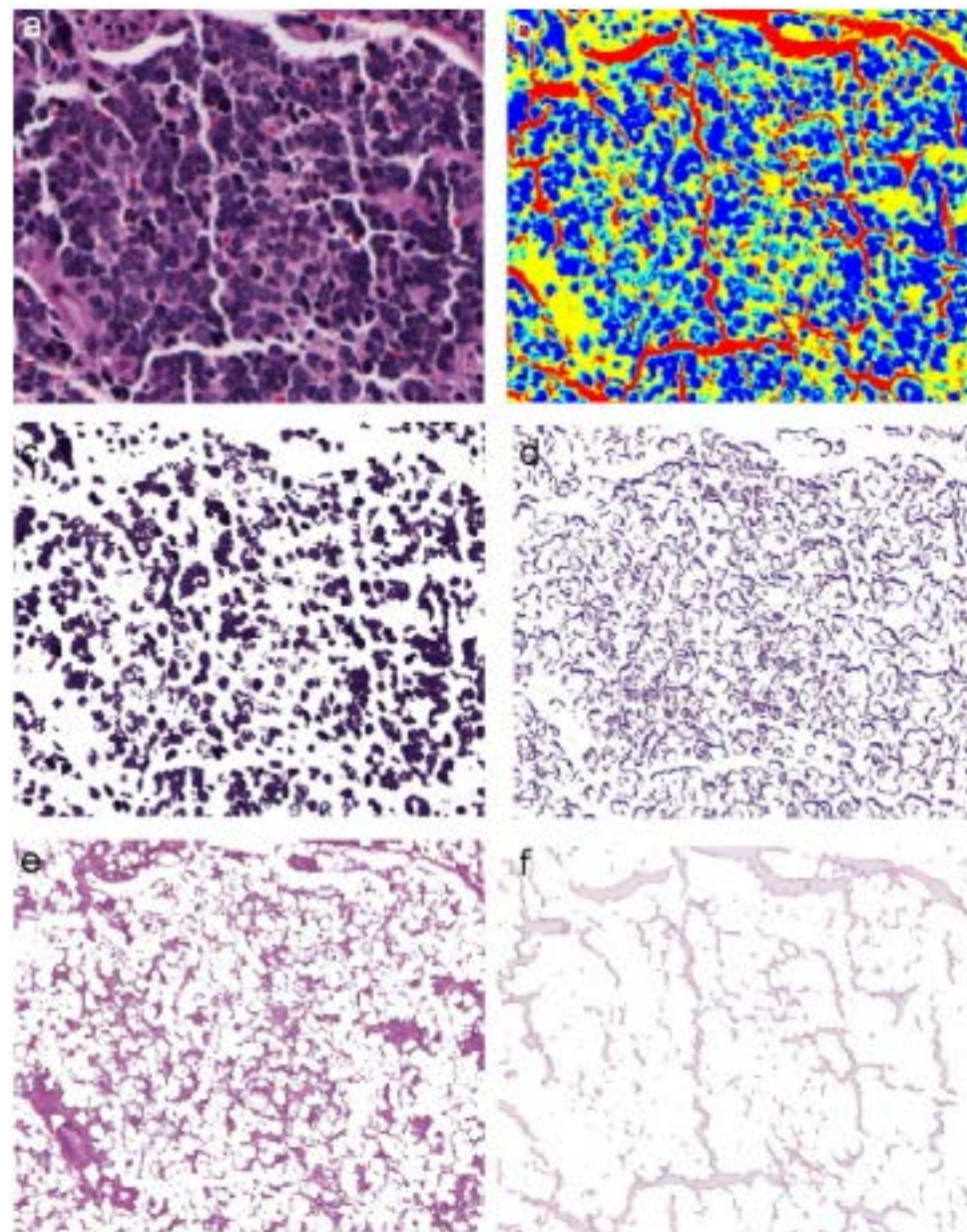


Fig. 5.

The segmented components in a typical image from undifferentiated subtype are shown. (a) Original image. (b) Partitioned image shown in colors with nuclei in blue, cytoplasm in cyan, neuropil in yellow, red blood cells in gray, and background in red. (c) Nuclei component. (d) Cytoplasm component. (e) Neuropil component. (f) Background component.

texture

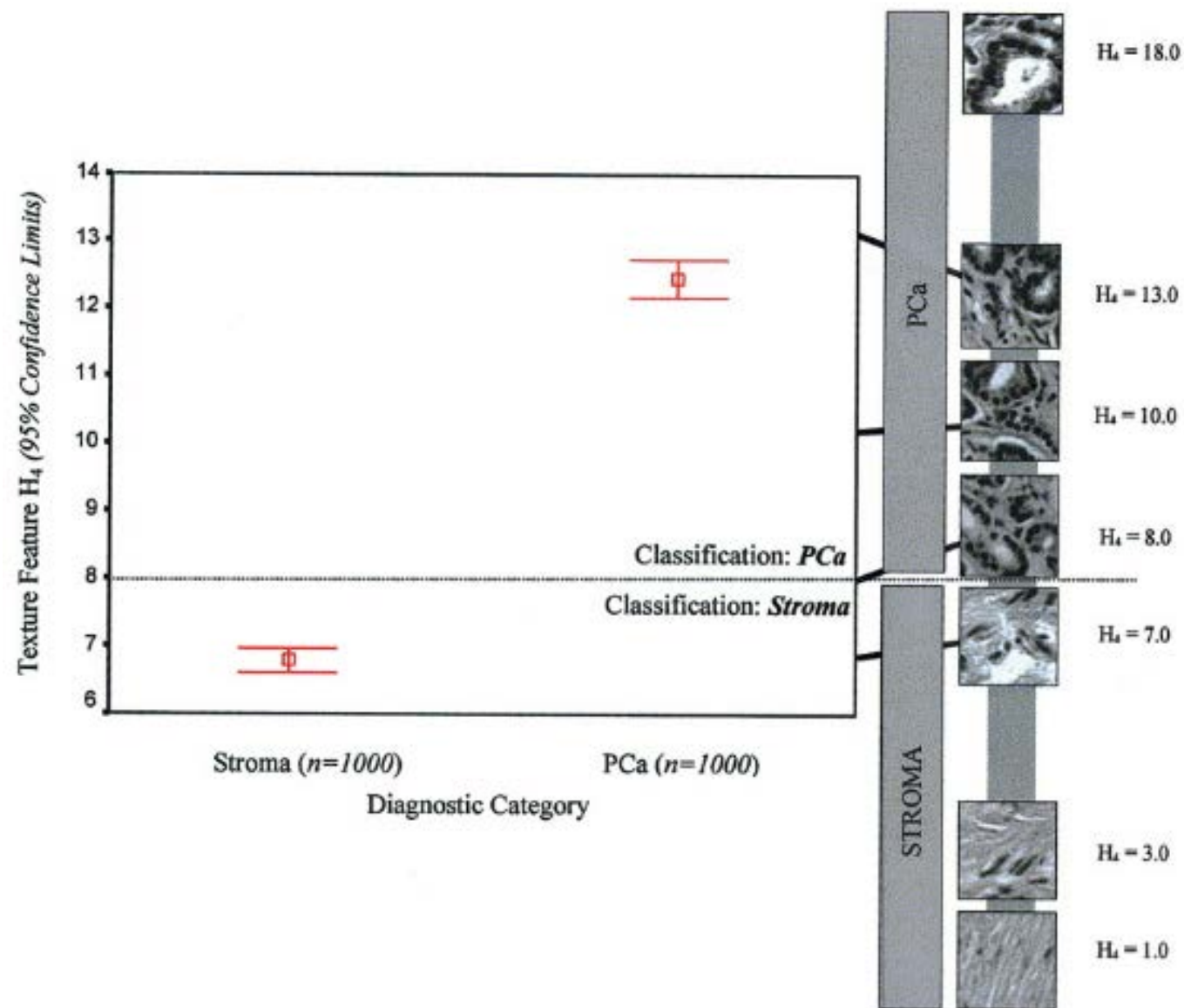
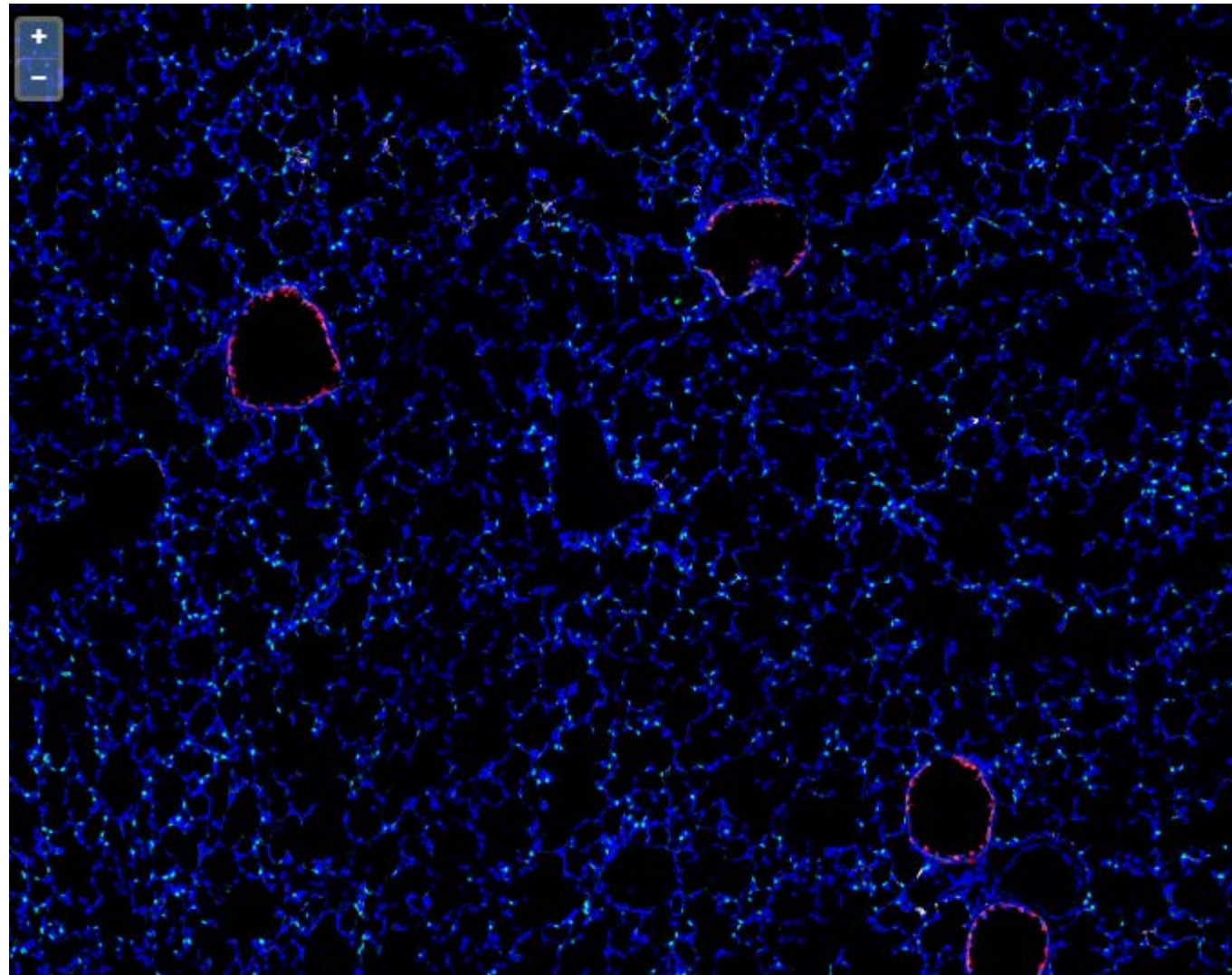


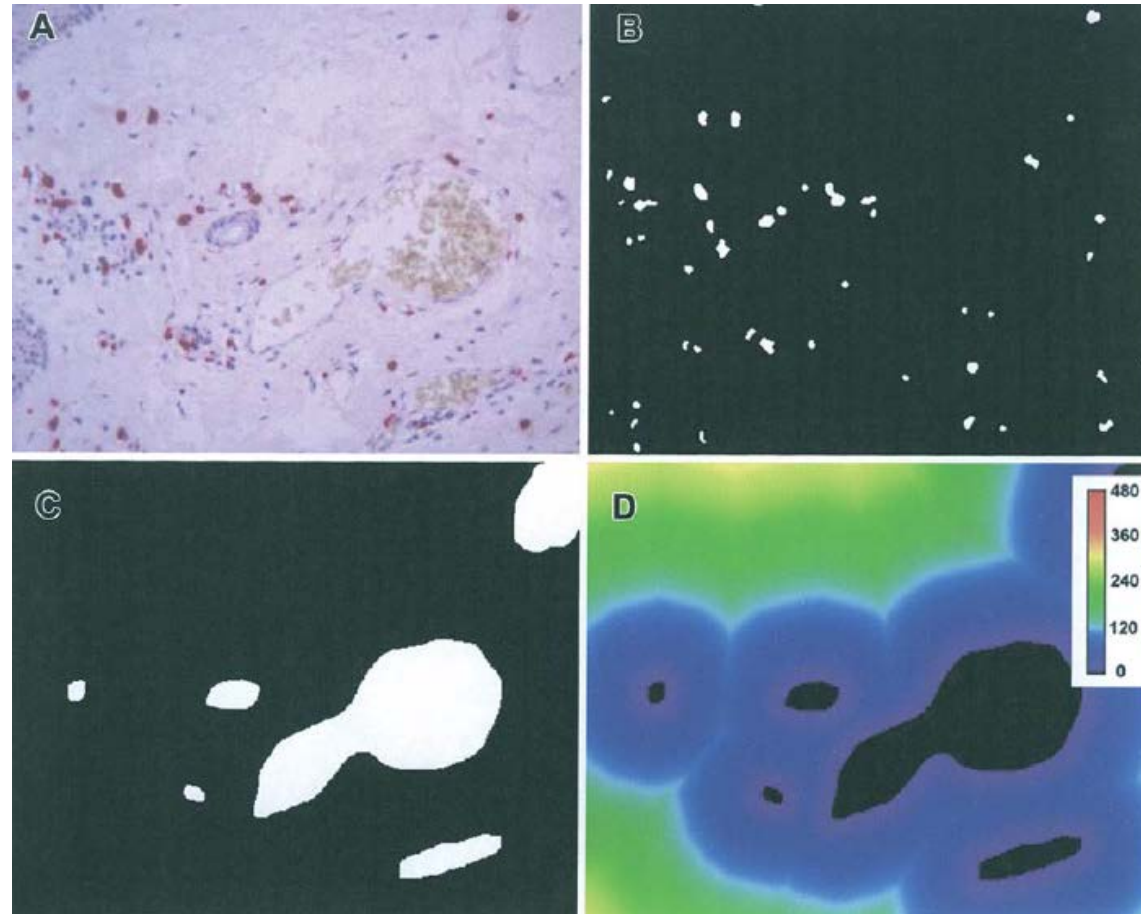
FIGURE 4.
Threshold boundary for the discrimination of stroma and PCa.

Potential applications



Spatial analysis

- Distance from vessels to mast cells



Potential applications

