A

1 Count_Nuclei

< 27.5   ≥ 27.5

2 Count_Microglia

< 0.5   ≥ 0.5

Node 3 (n = 389)   Node 4 (n = 89)   Node 5 (n = 1302)
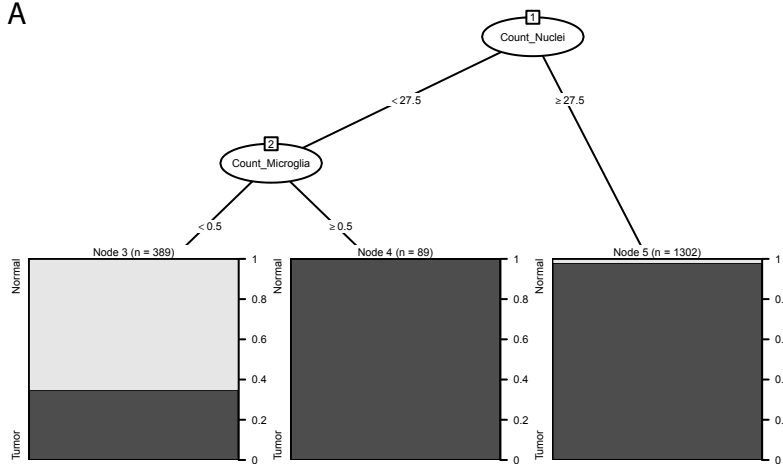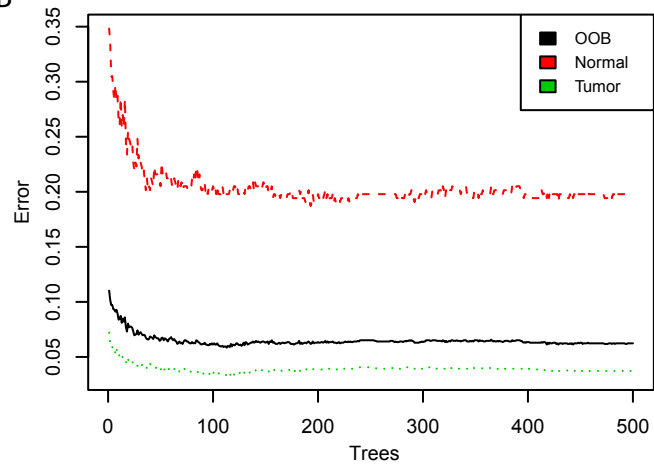
B

OOB
Normal
Tumor

Error

Trees

C

Importance of image features for SRH random forest machine learning model 1 (normal vs. lesional)

Nuclei count
Tumor-associated macrophage count
Nuclei compactness
Nuclei orientation
Nuclei minimum feret diameter
Nuclei maximum radius
Nuclei eccentricity
Nuclei solidity
Nuclei area
Nuclei maximum feret diameter
Nuclei form factor
Nuclei extent
Nuclei perimeter

Nuclei count
Tumor-associated macrophage count
Nuclei maximum radius
Nuclei minimum feret diameter
Nuclei eccentricity
Nuclei compactness
Nuclei orientation
Nuclei area
Nuclei extent
Nuclei maximum feret diameter
Nuclei form factor
Nuclei solidity
Nuclei perimeter

Mean decrease in accuracy

Supplementary Figure 1