Digital Histopathology: Applications in Prostate Cancer

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Digital Histology
Gleason Grading System

Gleason Grade
Morphological assessment: 1 to 5

Gleason Score
Sum of two most prominent grades: 2 to 10

Gleason, D.F. In Tannenbaum M (ed.)
Example prostate tissue patterns

Non-cancer

Stroma

BPH

Inflammation

Cancer

Gleason Grade 3

Gleason Grade 4

Gleason Grade 5
Data Workflow

Heat Map Visualization

Annotated Original

No Feature Smoothing

With Feature Smoothing

Anatomic-Disease Atlas