Al for Human Benefit, Everywhere

AI based Prostate Cancer Digital Pathology Platform



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MEDIHUB PATHOLOGY





JDP-01K AI based Prostate Cancer Digital Pathology Platform

Summary

According to the survey on the global cancer rate, prostate cancer is one of the fatal cancers in the world. It lists as the second most common cancer and the fifth leading cause of cancer-related death in men. In order to confirm the presence of prostate cancer, biopsy tissue is extracted for pathologists to inspect.

JDP-01K is an AI medical solution platform that diagnoses prostate cancer on the whole slide image of biopsy tissue. The solution utilizes H&E stain normalization technique to precisely detect and locate cancer in the image. Digital pathology images can be zoomed in 40 times more than the traditional microscope image. We used digital pathology data to train our artificial neural network to detect cancer and label its Gleason score accordingly.

Key Components & Performance

- Single Data Center Accuracy 94.00%
- · Analysis Time : within 120 seconds
- \cdot Display analysis result within the web-based user interface
- · Provide customized patient report

Input / Output

Output Information

· Input Data

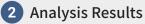
Whole slide image Prostate cancer locations and Gleason Pattern score

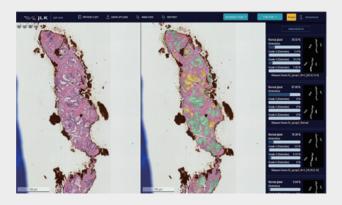
Solution UI



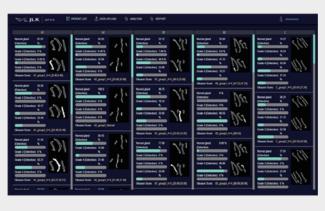








3 High Resolution Results



4 Gleason Score Report

Unique Functionality

- · Prostate cancer lesion auto detection
- \cdot Segmentation of Gleason score from 3 to 5
- · Support various slide scanners
- \cdot Support full resolution viewer for whole-slide image
- · Annotation tools & Report analysis







AI R&D Center

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