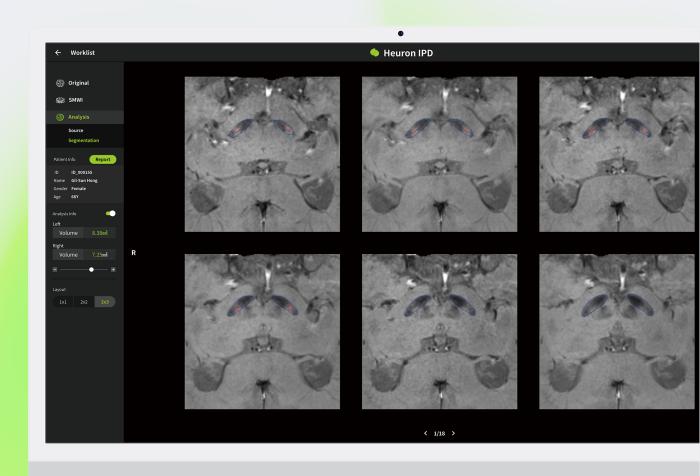


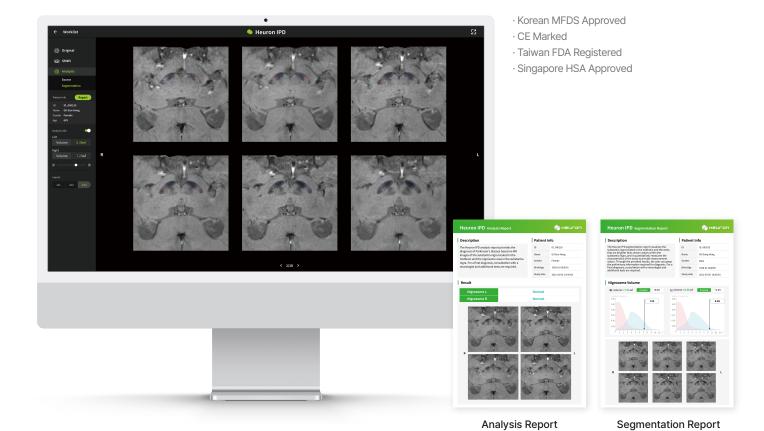
Parkinson's Disease Diagnostic-Aid Al Solution **Heuron IPD**





Detecting Diseases Before Symptoms

Heuron IPD



Optimal Convenience with a Single MRI.

MRI scans, more affordable, faster, and safer compared to PET scans, are ideal for early Parkinson's diagnosis and monitoring.

Enhanced Precision in Early Detection.

Utilizing Al, the visualization of the nigrosome area enables the early detection of Parkinson's disease with high diagnostic accuracy.

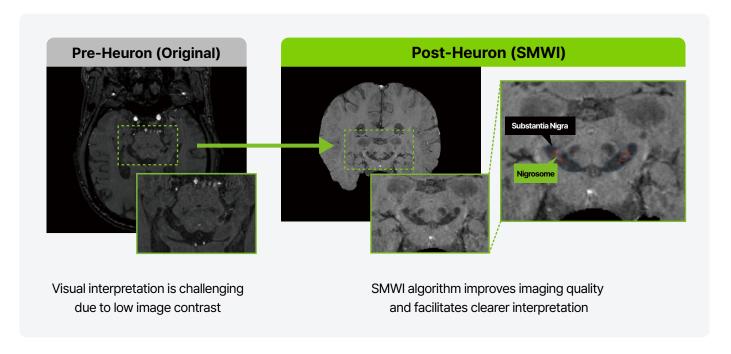
Reduce Patient Burden, Increase Satisfaction.

Through a streamlined and rapid screening process, Parkinson's assessment is simplified, fostering effective patient communication through analysis reports.

Visualizing Parkinson's Key Signal: the Nigrosome

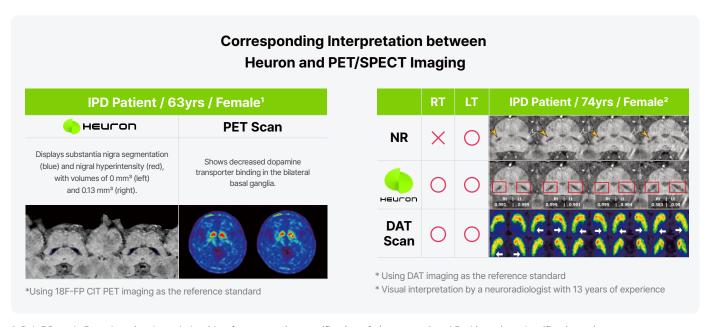
See the Unseen

Automated SMWI (Susceptibility Map-Weighted Imaging) Processing



Maximize Efficiency

Heuron IPD not only reduces variability in results interpretation but also supports the selection of candidates for PET/SPECT imaging.



- 1. Suh PS et al., Deep learning-based algorithm for automatic quantification of nigrosome-1 and Parkinsonism classification using susceptibility map-weighted MRI. Am J Neuroradiol. 2024.
- 2. Shin DH, et al. Automated assessment of the substantia nigra on susceptibility map-weighted imaging using deep convolutional neural networks for diagnosis of Idiopathic Parkinson's disease. Parkinsonism Relat Disord. 2021 Apr 85:84-90.

Don't Wait for Symptoms to Appear

Early Detection of Parkinson's Disease

Idiopathic Parkinson's Disease Detection

- Automatically detects and visualizes the nigrosome area through SMWI
- Comprehensive evaluation of nigrosome status in both hemispheres
- Displays the analyzed images from various angles
- High sensitivity and specificity

Nigrosome Quantification

- Quantifies the volume of the nigrosome area
- Facilitates interpretation with optimized visualization of the substantia nigra and nigrosome area
- Evaluates reductions in nigrosome area volume using z-scores and graphs
- Suggests ongoing monitoring for patients with volume reduction

High Diagnostic Performance¹

Heuron IPD provides essential support for the rapid and accurate quantification of nigral hyperintensity, assisting in the diagnosis of idiopathic Parkinson's disease and the prediction of symptom severity.

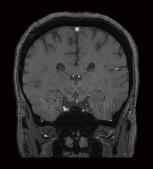
of H	Accuracy in H&Y Score Groups	
Sensitivity 97.0% [93.2, 99.0]	Right AUC 0.976 [0.948, 0.992]	H&Y 1-2.5 96.7% [91.7, 99.6]
Specificity 95.7% [87.8, 99.1]	Left AUC 0.967 [0.936, 0.986]	H&Y 3-5 96.2% [86.8, 99.5]

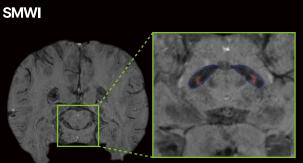
Heuron Parkinson Analysis Results

Clinical Case

Case 1: 61yrs/Female

Original



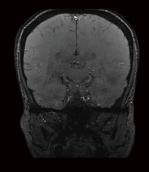


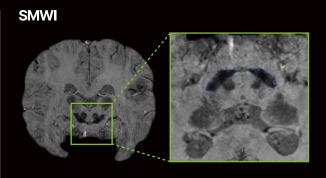


IPD		Volume (mm³)		Z-Score	
RT	LT	RT	LT	RT	LT
Normal	Normal	6.38	8	0.42	1.17

Case 2: 65yrs/Female

Original





Abnormal



IPD		Volume (mm³)		Z-Score	
RT	LT	RT	LT	RT	LT
Abnormal	Abnormal	0.12	0.38	-2.46	-2.35

Detecting Diseases Before Symptoms

Because Well-Aging Matters.



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