



# Medical Insight+

Brain Hemorrhage Detection Solution





# Cerebral hemorrhage is a representative serious disease, and the golden hour is important.



**99,235 people per year**

Number of incidences of hemorrhagic stroke in South Korea (cerebral hemorrhage)<sup>1</sup>



**2 times increase**

Disability/mortality rate when golden hour(1 hours) is exceeded<sup>2</sup>



**35%**

Mortality rate within one month after breakout<sup>3</sup>



**7,092 people per year**

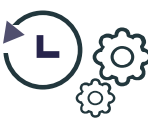
Death due to cerebral hemorrhage in South Korea<sup>4</sup>

## Product Value Proposition



Provides Images by Overlaying Suspected Brain Hemorrhage

- ◆ The information on the suspected brain hemorrhage area analyzed by AI is overlaid the original image, when searching individual slice unit images.
- ◆ Provides brain hemorrhage probability value(score) not only study unit but also in slice unit.



AI Algorithms to Help Rapid Clinical Decision Making

- ◆ Diagnosis priority is provided in 7 levels when searching worklist(Triage).
- ◆ It supports the rapid clinical decision making of doctors.



Provides Cloud/On-Premise Platform that can Add Various AI Algorithms.

- ◆ Provides an AI runtime platform that can add various AI algorithms in the product.
- ◆ Cloud or On-Premise platform can be selected depending on the situations of the medical institutions.

1. HIRA, 2022.05.10

2. Ebinger, Martin et al. "Effects of golden hour thrombolysis: a Prehospital Acute Neurological Treatment and Optimization of Medical Care in Stroke (PHANTOM-S) substudy." JAMA neurology vol. 72,1 (2015): 25-30. doi:10.1001/jamaneurol.2014.3188

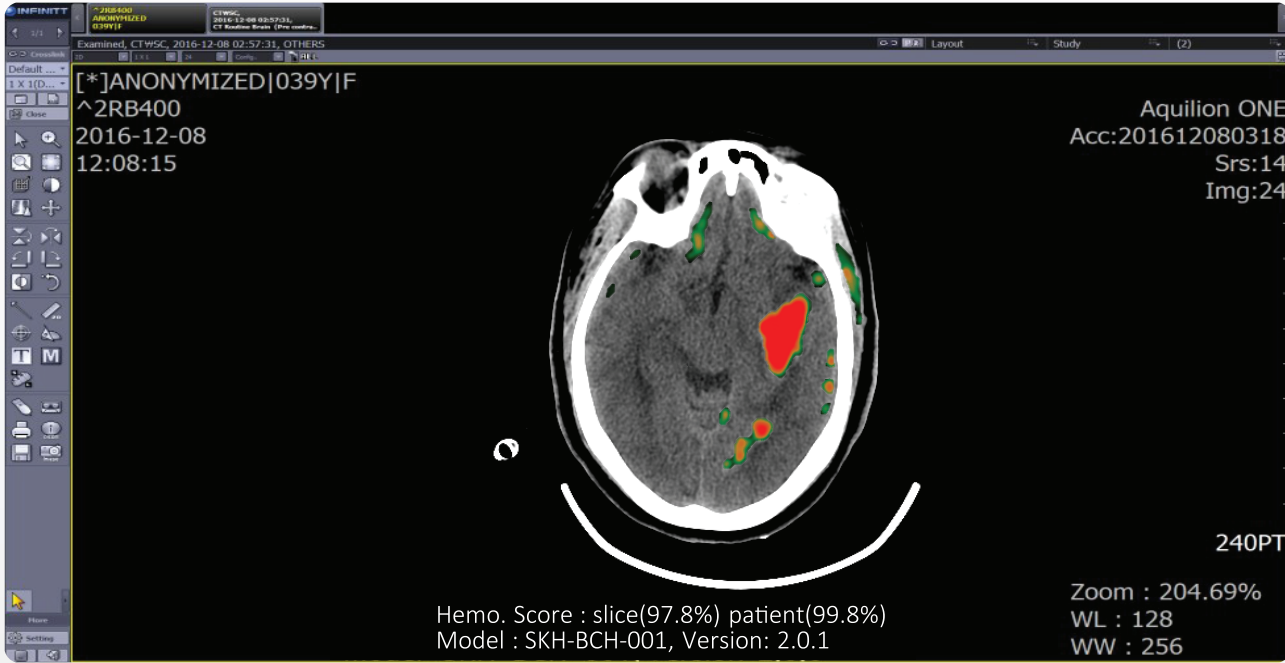
3. <https://health.kdca.go.kr> (KDCA, '심뇌혈관질환정보, 뇌혈관질환, 뇌졸중')

4. KOSIS, 2022.05.10



# Brain Hemorrhage Analysis for each slice unit

## Key Features



Marking suspected brain hemorrhage

- ◆ After analyzing the brain CT images of the patient, provide an overlaid image of the area suspected brain hemorrhage in the form of a heat map.

Providing possibility information on suspected bleeding

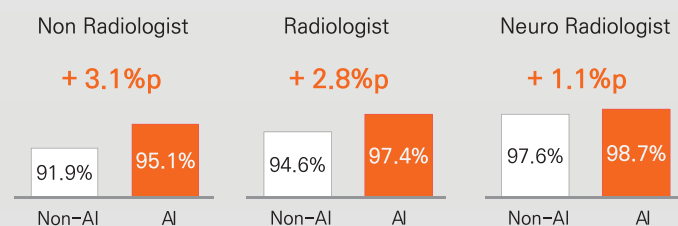
- ◆ By converting the analysis result of the brain CT images into a numerical value, the patient's brain hemorrhage probability is displayed as a number between 0 and 100%.

## Accuracy

☑ Algorithm accuracy 97.7%

Evaluation Metric	Score
Sensitivity	98.5%
Specificity	96%
Accuracy	97.7%
AUROC	98.74

☑ Accuracy improvement effect by AI-aided image reading (9 Physicians participated in clinical trial)





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