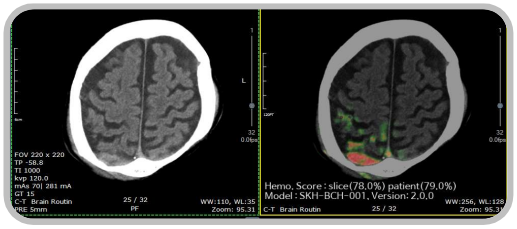
# Medical Insight+

## Product line of our Solution

SK Inc. C&C's 『 Medical Insight+ 』 supports the rapid and accurate diagnosis of brain diseases within the existing diagnostic workflow used by healthcare institutions.

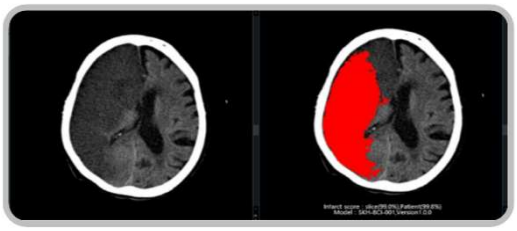
## Medical Insight+ 『 Brain Hemorrhage 』

- ✓ Cerebral hemorrhage diagnosis assistance solution based on Non-contrast CT image
- ✓ Medical device approved by Korean FDA , FDA approval in progress in US



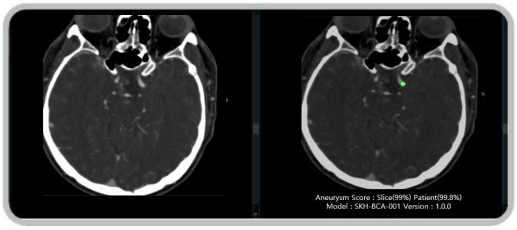
## Medical Insight+ 『 Infarction 』

- ✓ Cerebral infarction diagnosis assistance solution based on Non-contrast CT image
- ✓ Simultaneous reading of cerebral hemorrhage and infarction in the entire brain area



## Medical Insight+ 『 Aneurysm 』

- ✓ Cerebral infarction diagnosis assistance solution based on CT-Angiography (CTA)
- ✓ 3 mm brain lesions or less can be detected.



## Mobile Diagnostic Support Tool

✓ *Anytime, anywhere, automatic notification of suspected cases, mobile DICOM viewer, Communication*

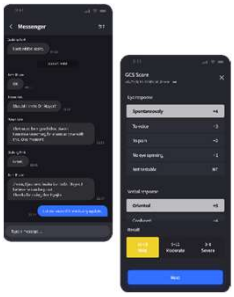
### 01 Suspected patient notification

*Check the results of AI analysis in your cellphone as the emergency patient's CT scan at the same time*

### 02 Mobile DICOM Viewer

*Check patient and AI analysis images anytime, anywhere*

### 03 Team communication



*Supports smooth collaboration between medical staff*

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## Clinical Study

Deep learning based automatic detection algorithm for acute intracranial hemorrhage
: a pivotal randomized clinical trial

*T. J. Yun, J.W. Choi et al, npj Digital Medicine (2023)*

## Clinical Trial

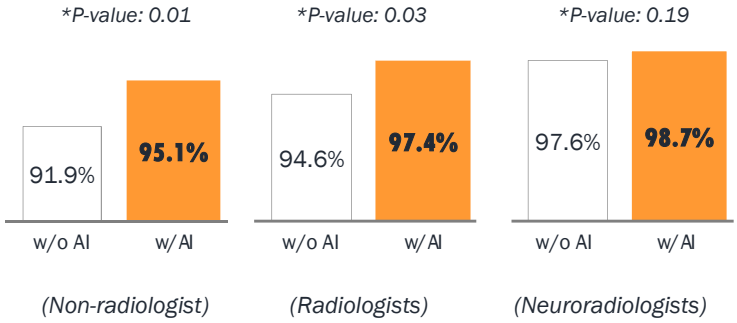
✓ **A multi-center, randomized retrospective, crossover design, superiority, pivotal study**

- **Brain CTs from 296 patients**
  (146 AIH and 150 normal)
- **By nine reviewers**
  - Non-radiologist physicians (n = 3)
  - Board-certified radiologists (n =3)
  - Neuroradiologists (n = 3)

***[All Reviewers]***

| | Without AI | With AI | *P-value* |
|---|---|---|---|
| Sensitivity | 94.4% | 97.2% | *0.0017* |
| Specificity | 95.0% | 96.9% | *0.0376* |
| **Accuracy** | **94.7%** | **97.0%** | ***0.0075*** |

***[Each Reviewers Group]***




## External Validation

✓ **Three institutions, 49,841 patients,**

- **6,442 patients showed AIH**
  - 2,424 cases (SAH)
  - 2,738 cases (SDH)
  - 371 cases (EDH)
  - 1,266 cases (IVH)
  - 3,367 cases (ICH)

***[AI Performance in Patient-wise Analysis]***

| | Accuracy | Sensitivity | Specificity | AUC |
|---|---|---|---|---|
| *(N = 49,841)* | 0.977 | 0.944 | 0.982 | 0.992 |

***[AI Sensitivity by AIH Subtype]***

| | SAH | SDH | EDH | IVH | IPH |
|---|---|---|---|---|---|
| *(N = 6,442)* | 0.954 | 0.933 | 0.933 | 0.994 | 0.977 |

***[AI Accuracy by Scanner]***

| | GE | Philips | Siemens | Toshiba |
|---|---|---|---|---|
| *(N = 49,841)* | 0.97 ~ 0.98 | 0.95 ~ 0.99 | 0.94 ~ 0.98 | 0.99 |

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