

COMMODITY DESCRIPTION

H.S. NO	ITEM NO.	DESCRIPTION	QUANTITY	UNIT
		Cerebral Image Detection and Diagnosis Assistance Software for Cerebral Hemorrhage	1	system

A. FEATURES :

1. This system is an AI-based automated analysis solution for brain CT images of cerebral hemorrhage. Its purpose is to assist in the rapid diagnosis of patients with cerebral hemorrhage by automatically detecting the condition and predetermining the order in which specialists must review the images.
2. In addition to diagnosing the hemorrhage, it provides additional information to aid in diagnosis by analyzing the hemorrhage volume (CC) and location, which can be analyzed by the AI.
3. When the AI detects a cerebral hemorrhage, it provides real-time notifications to medical staff and sorts the treatment order to the top, thereby significantly reducing the treatment time for patients visiting the emergency room.

B. CONSIST OF :

1. Cerebral Image Detection and Diagnosis Assistance SW for Cerebral Hemorrhage 1 set
 - Application Entity Server (Client user license 3copy) 1 set
2. Warranty (same as the subscription service contract)
3. Operating manual 1 copy

C. SPECIFICATIONS :

1. Cerebral Image Detection and Diagnosis Assistance SW for Cerebral Hemorrhage
 - 1) Intended Use
 - Cerebral Hemorrhage
 - 2) Input & output
 - Input : DICOM CT image
 - Output : Location of cerebral hemorrhage (indicated on the image), presence or absence of cerebral hemorrhage, amount of cerebral hemorrhage
 - 3) Training Data Update Frequency : 1cycle/year or more
 - 4) Performance
 - Sensitivity : 90% or more
 - Specificity : 80% or more
 - 4) Security
 - Patient Information Anonymization
 - Data Encryption and Decryption (Using AES-256-bit encryption)
 - User Authentication for Software Usage (User ID/PW Assignment)
 - Unauthorized Access Control
 - 5) Worklist Function
 - Import DICOM CT images into database



- Transmit DICOM from other systems using the DICOM receiver function
 - Search for data by patient ID, patient name, study ID, etc.
 - Transmit and receive DICOM images
 - Anonymize patient information
 - Group data by patient
 - Periodically search for user-entered conditions to match data that meets the criteria, and automatically perform operations (APS: Automatic Processing Server) on the matched data
 - Automatic image priority sorting (Triage) based on the analyzed presence and amount of cerebral hemorrhage
- 6) Analysis Result Display Function
- Displays cerebral hemorrhage location in 2D and 3D images
 - Displays presence and amount of cerebral hemorrhage
 - Function to save analysis results as a CSV file
 - Provides a Report function
- 7) Notification Function (Notification System)
- Notifications regarding analysis results of cerebral hemorrhage presence and amount
 - Provides analysis results and access link information
- 8) Notification Function (Notification System Link)
- Notifications regarding analysis results of cerebral hemorrhage presence and amount
 - Provides analysis results and access link information
- 9) Application Entity Server
- Limited to equipment specifications that have passed the security certification by the KNUH Information Security Team

D. REMARKS :

1. Installation

- It shall be provided free of charge during the contract period, and installation and operation must be supported at a location designated by KNUH.
- The vendor is solely responsible for all tasks and costs related to the installation, initial setup, and normal operation of the server.

2. Operation and Maintenance Requirements

- Provide PACS integration and technical support free of charge.
- Provide updates and security patches for performance improvement during the contract period.
- Maintain a 24-hour operational failure response system and provide remote or on-site technical support in the event of a failure.

