IBM UK Newsroom

Gachon University Gil Medical Center adopts IBM Watson for Oncology Trained by Memorial Sloan Kettering, marking Watson's first deployment in Korea

- Watson for Oncology identifies treatment options to help physicians develop individualized, evidence-based cancer care by analyzing individual patients' clinical information and massive volumes of medical evidence - Watson for Oncology will be delivered as Software as a Service (SaaS) on IBM cloud

SEOUL - 07 Sep 2016: Gachon University Gil Medical Center will adopt IBM (NYSE: IBM) Watson for Oncology trained by Memorial Sloan Kettering, which is designed to provide physicians with evidence-based medical treatment options. The cloud-based platform analyzes large volumes of structured and unstructured data to help physicians offer individualized, data-driven treatment options for cancer patients. This will be the first deployment of IBM Watson in Korea.

Last year alone, nearly 44,000 oncology research papers were published in medical journals around the world (1). This amounts to nearly 122 new papers published every day, outpacing the ability of humans to keep up with the proliferation of medical knowledge. Using natural language processing, clinicians using Watson for Oncology will be able to quickly extract clinically relevant information from this trove of data to gather evidence specific to a patients' individual health needs. Watson for Oncology has ingested nearly 15 million pages of medical content, including more than 200 medical textbooks and 300 medical journals. Watson provides doctors with access to information from peer reviewed studies, clinical guidelines, and expert perspectives.

According to the Korea National Cancer Incidence Database, a total of 254,952 new cancer cases and 75,172 cancer deaths are expected to occur in South Korea in 2016(2). The five leading primary cancer incident sites in 2016 were estimated colorectal, stomach, lung, liver and thyroid cancer in men: thyroid, breast, colorectal, stomach, and lung cancer in women.

Located in Incheon, South Korea, Gachon University Gil Medical Center (President: Lee Geun, www.gilhospital.com), is the fifth largest of Korea's general hospitals with 1,400 licensed beds. Oncologists at Gil Medical Center care for 50,000 cancer patients each year. Initially, Gil Medical Center clinicians will use Watson for Oncology to help treat breast, lung, colon, rectal and gastrointestinal cancers. IBM will work with Gil Medical Center to localize the offering based on Korean medical guidelines and language needs.

Uhn Lee, Director of Al-based Precision Medicine at Gachon University Gil Medical Center, said, "Our clinical staff always aims to provide effective, personalized, and evidence-based care to every patient we treat, yet it can be difficult to keep up with the latest scientific studies from around the world. With its ability to analyze large volumes of disparate data and synthesize that data into actionable information, Watson for Oncology will help our clinicians deliver world-class, data-driven care to their patients."

As explained by Mark Kris, MD, lead physicain for Watson for Oncology trained by Memorial Sloan Kettering, "By combining Memorial Sloan Kettering's world-renowned cancer expertise with the analytical speed of IBM Watson, oncologists in Korea will be able to make more specific and nuanced treatment decisions more quickly, based on the latest data."

IBM Watson for Oncology has already been adopted at Bumrungrad International Hospital in Thailand and Manipal Hospital in India. 21 hospitals across China also plan to adopt Watson for Oncology through an IBM partnership with Hangzhou CognitiveCare of China.

"By integrating Watson technology into cancer care, Gil Medical Center will have the ability to advance its leadership in personalized medicine and technology innovation," said Rob Merkel, Vice President of Oncology and Genomics, IBM Watson Health. "Our goal with Watson for Oncology is to democratize access to the growing body of cancer knowledge available today. This trove of information could dramatically improve the ability of doctors to deliver effective, evidence-based care to their patients, but it's too much for any one person to keep up with. Watson cultivates actionable information based on that data at the point of care for the treating oncologist."

Watson for Oncology will be delivered to Gachon University Gil Medical Center through the IBM cloud as Software as a Service (SaaS), enabling clinicians to access Watson's capabilities in Korea when and where they are needed. To protect patient privacy, data will reside with Gil Medical Center, and information that can directly identify an individual will not be provided to Watson.

Earlier this year, IBM announced it would bring Watson technology to the Korea market. This deal with Gil Medical Center shows ongoing momentum for Watson in the Korea market.

Sources:

(1) PubMed

(2) Cancer Research and Treatment, Cancer Statistics in Korea: Incidence, Mortality, Survival, and Prevalence in 2012, accessed at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4398120/

About Gachon University Gil Medical Center

Founded by Dr. Gil Ya Lee, Gachon University Gil Medical Center started off as a small Obstetrics and Gynecology clinic in 1958. After half a century, it has become one of the leading medical centers in Korea. As a tertiary general hospital with 1,400 number of beds, Gil Medical Center offers world-class medical services through more than 30 medical departments and specialized centers, such as Heart Center, Women's Center, Eye & ENT Center, Cancer Center, Brain Health Center, and Emergency Center, Trauma Center just to name a few. Moreover, we are operating Neuroscience Research Institute and Lee Gil Ya Cancer and Diabetes Institute, which enabled us to be chosen as representative research-centered hospital of Korea by government.

About IBM Watson Health

Watson is the first commercially available cognitive computing capability representing a new era in computing. The system, delivered through the cloud, analyzes high volumes of data, understands complex questions posed in natural language, and proposes evidence-based answers. Watson continuously learns, gaining in value and knowledge over time, from previous interactions. In April 2015, the company launched IBM Watson Health and the Watson Health Cloud platform. The new unit will help improve the ability of doctors, researchers and insurers to innovate by surfacing insights from the massive amount of personal health data being created and shared daily. The Watson Health Cloud will allow this information to be shared and combined with a dynamic and constantly growing aggregated view of clinical, research and social health data. For more information on IBM Watson, visit: ibm.com/watson. For more information on IBM Watson Health, visit: ibm.com/watsonhealth.

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