VA and IBM Watson Health Extend Partnership to Support Veterans With Cancer

WASHINGTON — Today the U.S. Department of Veterans Affairs (VA) and IBM Watson Health announced the extension of a public-private partnership to apply artificial intelligence (AI) to help interpret cancer data in the treatment of Veteran patients.

First announced two years ago as part of the National Cancer Moonshot Initiative, VA oncologists have now used IBM Watson for Genomics technology to support precision oncology care for more than 2,700 Veterans with cancer.

Precision oncology is the practice of biologically directed cancer care. For example, the mutations in a cancer's genome (the cancer's DNA) can significantly impact the treatment options available to treat that cancer and the likely outcomes after treatment. By knowing the cancer genome, oncologists and patients are able to choose therapies that specifically target the patient's cancer.

VA’s precision oncology program primarily supports stage 4 cancer patients who have exhausted other treatment options. The partnership extension with IBM will enable VA oncologists to continue using Watson for Genomics through at least June 2019.

“Our mission with VA’s precision oncology program is to bring the most advanced treatment opportunities to Veterans, in hopes of giving our nation’s heroes better treatments through these breakthroughs,” said Acting VA Secretary Peter O’Rourke. “We look forward to continuing this strategic partnership to assist VA in providing the best care for our Veterans.”

VA treats 3.5 percent of the nation’s cancer patients — the largest group of cancer patients within any one health-care group. In order to bring precision oncology advances to this large group of patients, with equal access available anywhere in the country, VA established a central “hub” in Durham, North Carolina.

In this facility, a small group of oncologists and pathologists receive tumor samples from patients nationwide and sequence the tumor DNA. They then use AI — the ability of a computer program or a machine to think and learn — to help interpret the genomic data, identifying relevant mutations and potential therapeutic options that target those mutations.

More than one-third of the patients who have benefited from VA’s precision oncology program are Veterans from rural areas where it has traditionally been difficult to deliver cutting-edge medical breakthroughs.

“VA is leading the nation to scale and spread the delivery of high-quality precision oncology care, one Veteran at a time,” said Dr. Kyu Rhee, chief health officer for IBM Watson Health. “It is incredibly challenging to read, understand and stay up-to-date with the breadth and depth of the medical literature, and link them to relevant mutations for personalized cancer treatments. This is where AI can play an important role in helping to scale precision oncology, as demonstrated in our work with VA, the largest integrated health system in the U.S.”

For more information about the VA’s precision oncology program, visit https://www.research.va.gov/pubs/varqu/spring2016/4.cfm.

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