IBM and Illumina Partner to Standardize Genomic Data Interpretation

Data interpretation from Watson will help users translate genomic data from Illumina TruSight® Tumor 170; offering to be available early in 2017

SAN FRANCISCO - 09 Jan 2017: BM Watson Health (NYSE: IBM) and Illumina, Inc. (NASDAQ:ILMN) today announced a groundbreaking partnership to expand access to genome data interpretation by integrating Watson for Genomics into Illumina's BaseSpace®Sequence Hub and tumor sequencing process. The collaboration is designed to help standardize and simplify genomic data interpretation.

By adding Watson for Genomics to Illumina's next-generation sequencing platform, researchers who use Illumina's cancer genome sequencing panel will have rapid access to information to help interpret the broad array of variant data produced by TruSight Tumor 170. Illumina's TruSight® Tumor 170 is a solid tumor profiling panel designed to detect a comprehensive set of variants across 170 genes.

In a matter of minutes, Watson for Genomics will read the genetic alteration files produced by TruSight Tumor 170, comb professional guidelines, medical literature, clinical trials compendia, and other sources of knowledge to provide information for each genomic alteration, and produce a report for use by researchers -- a process that typically takes scientists more than one week to complete. Watson for Genomics ingests data from approximately 10,000 scientific articles and 100 new clinical trials every month.

The Watson for Genomics software will be available to support Illumina's TruSight Tumor 170 assay early in 2017.

Cancer is a leading cause of death worldwide and a growing body of research shows that analyzing the genomic basis of a tumor can be important for understanding the individual patient's disease, a major aspect of precision medicine. However, the output of next generation sequencing panels requires sophisticated analyses to help identify the mutations responsible for cancer growth and correlate that information with potential standard and experimental treatment options. This is where Watson is expected to help.

"To enable precision cancer medicine on a large scale, we need new tools to overcome the data barriers of genomic research," said Francis deSouza, President and CEO of Illumina.. "With a comprehensive assay of Illumina and the power of Watson, we hope to deliver a rapid turnaround of the genomic alteration results."

Genome sequencing has increased in recent years following two decades of research demonstrating the promise of precision medicine. However, access to these advances has been limited by the significant time and expense required to interpret the genomic data.

"This partnership lays the groundwork for more systematic study of the impact of genomics in oncology," said Deborah DiSanzo, general manager, IBM Watson Health. "Together we are poised to help researchers realize the potential of precision oncology by expanding access to valuable genome sequencing from Illumina and reliable, standardized genomic interpretation from Watson."

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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 helps 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 can mask patient identities and allow for 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.

About Illumina

Illumina is improving human health by unlocking the power of the genome. Our focus on innovation has established us as the global leader in DNA sequencing and array-based technologies, serving customers in the research, clinical, and applied markets. Our products are used for applications in the life sciences, oncology, reproductive health, agriculture, and other emerging segments. To learn more, visit www.illumina.com and follow @illumina.

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