



NANTHEALTH UNVEILS WORLD'S FIRST FULLY INTEGRATED GENOMIC, TRANSCRIPTOMIC SUPER COMPUTING ENGINE FOR CANCER

Presents at 2014 ASCO Annual Meeting on the Rapid Molecular Analysis of over 10,000 Tumor and Germline whole Exomes from 5,000 Patients across more than 20 Cancer Tissue Types

The First Large-scale, Cloud-based, Supercomputer Bioinformatics Engine Designed to Empower Truly Molecular-Driven Personalized Clinical Treatment Decisions in Cancer

Los Angeles, CA, June 2, 2014 — NantHealth, the transformational healthcare IT company known for its meaningful advances in converging science and technology through a single integrated clinical platform, announced today at the 2014 ASCO Annual Meeting its latest innovation: a fully integrated genomic, transcriptomic analytic engine that identifies alterations spanning from DNA to RNA to protein pathways more accurately and efficiently, to better inform clinical treatment decisions.

NantHealth's recent execution of rapid analysis of over 10,000 tumor and germline whole exomes or genomes, representing over 5,000 patients across 20 different tumor types, concluded—in stark contrast to widely held medical assumptions today—that the molecular signature of a cancer patient is independent of the anatomical tumor type. For illustration's sake, the finding suggests a hypothetical breast cancer patient could potentially have more in common with a lung cancer patient than another person with the same "type" of cancer.

NantHealth and the bioinformatics team at NantWorks developed the supercomputer engine from a belief that the sheer complexity of molecular cancer profiles demands full analysis of the signaling pathway—especially in the large percentage of cases with more than one alteration in actionable genes. Sequencing the whole genome to decidedly determine chromosomal rearrangements may prove a revolutionary step in identifying actionable targets to increase cancer survivor rates.

At present, NantHealth's study confirms that a truly and fully informed clinical treatment decision requires insight into downstream protein expression (proteomics); not just DNA alterations (genomics) alone.

"We are living our commitment to clinicians and patients alike," said Dr. Patrick Soon-Shiong, Founder and CEO of NantHealth. "Using the most advanced, most sophisticated tools imaginable today, we're on a mission to solve the mystery of cancer, and establish an adaptive learning system where the power of one can inform many."

Dr. Shahrooz Rabizadeh and the bioinformatics team presented today at one of the largest gatherings of oncologists in the world, the American Society of Clinical Oncology, their findings on the comprehensive analysis of molecular profiles across over 10,000 exomes from over 5,000 patients.

NantHealth relied on the advanced algorithm Contraster to complete the 5,000 patient study, written to detect DNA variants, copy-number alterations, and genomic rearrangements. Paradigm, an algorithm that integrates genomic and transcriptomics data, revealed shared pathways amongst 20 independent tumor types in 4,200 patients.

Together, Contraster and Paradigm found that aggregating the top altered genes across all 20 cancer tissue types exposed key “hotspots” of well recognized oncogenes across multiple cancer tissue types, regardless of anatomical location.

Continued Soon-Shiong: “Our supercomputer-driven analysis represents more than just cutting-edge 21st-century clinical decision support, it represents the next chapter in the medical community’s fight against the disease. We now better understand the depth and extent of analysis required to deliver more targeted, effective and efficient treatment for patients. It’s information that, we believe, will ultimately save countless lives.”

About NantHealth

NantHealth, a member of the NantWorks family of companies, is a transformational healthcare IT company converging science and technology through a single integrated clinical platform, to provide actionable health information at the point of care, in the time of need, anywhere, anytime.

NantHealth works to transform clinical delivery with actionable clinical intelligence at the moment of decision, enabling clinical discovery through real-time machine learning systems. The company’s technology empowers physicians, patients, payers and researchers to transcend the traditional barriers of today’s healthcare system.

By converging molecular science, computer science, and big data technology the NantHealth Clinical Operating System (cOS) platform empowers physicians, patients, and payers to coordinate best care, monitor outcomes and control cost in real time. This is the first operating system of its kind in healthcare that is based on supply chain principles and grid service oriented architecture, integrating the knowledge base with the delivery system and the payment system, enabling 21st century coordinated care at a lower cost.

For more information please visit www.nanthealth.com and follow Dr. Soon-Shiong on Twitter @solvehealthcare.

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