Seer Launches First-of-its-kind Proteogenomics Workflow to Link Genetic Changes with Protein Variants with Proteograph™ Analysis Suite 2.0

August 3, 2022

Scalable, high-resolution, sample-specific analysis brings genomics and proteomics together to enable novel biological insights with the click of a button

REDWOOD CITY, Calif., Aug. 03, 2022 (GLOBE NEWSWIRE) -- Seer Inc. (NASDAQ: SEER), a life sciences company commercializing a disruptive new platform for proteomics, today announced a new Proteogenomics Workflow that integrates deep, unbiased proteomics with genomics, powered by the Proteograph Analysis Suite 2.0, Seer's software suite for data analysis and results visualization. The release of the workflow marks another milestone on Seer's journey to enabling accurate, high-resolution, peptide-level proteogenomics at scale and follows the formation of its Proteogenomics Consortium in the first half of this year.

Understanding the connection between genes and proteins at the peptide sequence-level is necessary to understand human health and disease, drive biomarker discovery and enable the development of novel therapeutics. Proteins dictate the body's physiological response to disease and are in turn influenced by disease state. A single gene typically gives rise to multiple protein variants, such as splice variants, which can have distinct physiological roles and impact on biology. Each protein variant gives rise to a different profile of peptides, which the Proteograph Product Suite can identify and quantify, resolving known and novel protein variants at the peptide level. Current affinity-based approaches survey changes for a set of predefined protein targets, missing potentially important variants of these predefined proteins and delivering an incomplete view of the relationship between the genome and the proteome.

Seer's Proteograph Analysis Suite 2.0 is a key component of the Proteograph™ Product Suite, which provides unbiased, deep, rapid proteomics at scale that is peptide-centric, and enables high-resolution identification of protein variants. This next version of the Proteograph Analysis Suite incorporates a Proteogenomic Workflow that maps proteomic, peptide-level data to genomic data to identify sample-specific variant peptides not captured in canonical reference databases. The workflow summarizes results in interactive tables and plots, enables the visualization of identified peptides' relationship to gene structure, protein domain information, and functional regions; and creates browsable peptide data maps at the amino acid level. The Proteograph Analysis Suite's intuitive visualizations make it faster and easier to discover protein targets for a wide range of applications.

"We're thrilled to deliver PAS 2.0, this new Proteogenomic Workflow, and our other exciting future improvements that make it easier for different customer groups to adopt deep, unbiased proteogenomics at scale," said Serafim Batzoglou, Ph.D., Senior Vice President, Data at Seer. "Making proteomic analysis tools more accessible for researchers is one of Seer's main priorities, and today's announcement is another step towards achieving that goal."

The launch of the Proteogenomic Workflow furthers Seer's commitment to enabling broader access to proteogenomic tools. In January, Seer formed the Proteogenomics Consortium with Discovery Life Sciences, a global leader in biomarker development and biospecimen solutions utilizing proteomic, genomic, cell, and immunohistochemistry technologies, and SCIEX, a global leader in life science analytical technologies. The collaboration is intended to enable genomics customers to add deep, unbiased proteomics data more easily to their studies, allowing the discovery of new protein variants and novel biomarkers that could lead to therapeutic breakthroughs.

"At Discovery Life Sciences, we are excited by the features we've seen demonstrated by this new tool and are eager to incorporate the new features in the Proteograph Analysis Suite 2.0 into our services pipeline at our new facility outside Boston," said Michael Pisano, Ph.D., Executive Vice President, Proteomics at Discovery Life Sciences.

The Proteograph Analysis Suite v2.0 rollout is underway, with Seer customers having immediate access to the new workflow and features in the software. For more information, visit https://seer.bio/PAS.

About Seer

Seer is a life sciences company developing transformative products that open a new gateway to the proteome. Seer's Proteograph™ Product Suite is an integrated solution that includes proprietary engineered nanoparticles, consumables, automation instrumentation and software to perform deep, unbiased proteomic analysis at scale in a matter of hours. Seer designed the Proteograph workflow to be efficient and easy to use, leveraging widely adopted laboratory instrumentation to provide a decentralized solution that can be incorporated by nearly any lab. Seer's Proteograph Product Suite is for research use only and is not intended for diagnostic procedures. For more information, please visit www.seer.bio.

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Such forward-looking statements are based on Seer's beliefs and assumptions and on information currently

available to it on the date of this press release. Forward-looking statements may involve known and unknown risks, uncertainties and other factors that may cause Seer's actual results, performance, or achievements to be materially different from those expressed or implied by the forward-looking statements. These statements include but are not limited to statements regarding Seer's Proteograph Analysis Suite's functionality and ability to enable accurate, high-resolution, peptide-level proteogenomics at scale and Seer's collaboration with Discovery Life Sciences and SCIEX. These and other risks are described more fully in Seer's filings with the Securities and Exchange Commission ("SEC") and other documents that Seer subsequently files with the SEC from time to time. Except to the extent required by law, Seer undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made.

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