



## Personalis Announces the Launch of NEOPS™, a Neoantigen-based Composite Biomarker for Cancer Immunotherapy Response

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MENLO PARK, Calif.--(BUSINESS WIRE)--Dec. 17, 2020--Personalis, Inc. (Nasdaq: PSNL), a leader in advanced genomics for cancer, today announced the launch of its proprietary Neoantigen Presentation Score (NEOPS). NEOPS combines analysis from Personalis' state-of-the-art tumor neoantigen prediction tool, SHERPA™, with mechanisms of immune evasion to better predict response to cancer therapy.

NEOPS combines the tumor genomic and immune-related analytics of the Personalis® NeXT Platform™ to create a composite biomarker that can be more effective in predicting immunotherapy response than other, simpler biomarkers. NEOPS leverages Personalis' recently-launched machine learning-based tool, Systematic HLA Epitope Ranking Pan Algorithm (SHERPA), which provides more accurate prediction of neoantigen presentation, a core mechanism in determining immunotherapy response.

Data presented at the AACR virtual meeting in June demonstrated that NEOPS significantly outperformed tumor mutational burden in predicting response to anti-PD-L1 therapy in a cohort of late-stage, unresectable melanoma patients, highlighting the potential of composite, neoantigen-based biomarkers to more effectively stratify responders and non-responders to immunotherapy. The prevalence of immune evasion events incorporated into NEOPS suggests that such composite neoantigen-based biomarkers are potentially applicable to a range of immunotherapies and cancer types.

"Identifying effective biomarkers for cancer immunotherapy has proven challenging due to the complex biological mechanisms underlying patient response. We believe that more sophisticated, multimodal biomarker models like NEOPS represent the next step in this pursuit. By combining accurate tumor neoantigen prediction with mechanisms of immune evasion, we can create a more predictive model of therapy response," said Richard Chen, MD, Personalis CSO. "NEOPS is the first of a new class of composite biomarkers for our pharma partners to utilize in their clinical trials. In the future, such biomarkers may be used to inform treatment decisions for patients."

NEOPS, SHERPA, and other recent enhancements to the company's HLA typing and HLA LOH analytics represent the latest update to the comprehensive suite of advanced analytical engines of the Personalis NeXT Platform™. Utilizing an augmented exome and transcriptome-based approach, NeXT enables the simultaneous analysis of both a tumor and its immune microenvironment from a single tumor specimen to explore critical immunotherapy-related resistance mechanisms and novel composite biomarkers of response.

### About Personalis, Inc.

Personalis, Inc. is a leader in cancer genomics, with a focus on data, scale, efficiency and quality. Personalis operates one of the largest sequencing operations globally. In oncology, Personalis is transforming the development of next-generation therapies by providing more comprehensive molecular data about each patient's cancer and immune response. The Personalis [NeXT Platform](#) is designed to adapt to the complex and evolving understanding of cancer, providing its biopharmaceutical customers with information on all of the approximately 20,000 human genes, together with the immune system, from a single tissue sample. The Personalis [Clinical Laboratory](#) is GxP aligned as well as CLIA88-certified and CAP-accredited. For more information, please visit [www.personalis.com](http://www.personalis.com) and follow Personalis on Twitter ([@PersonalisInc](#)).

### Forward-Looking Statements

All statements in this press release that are not historical are "forward-looking statements" within the meaning of U.S. securities laws, including statements relating to attributes or advantages of NEOPS, SHERPA or the Personalis NeXT Platform, the company's business opportunities, leadership or growth, or other future events. Such forward-looking statements involve risks and uncertainties, including those related to the COVID-19 pandemic, that could cause actual results to differ materially from any anticipated results or expectations expressed or implied by such statements. Factors that could materially affect actual results can be found in Personalis' filings with the U.S. Securities and Exchange Commission, including the company's most recent reports on Forms 8-K, 10-K and 10-Q, and include those listed under the caption "Risk Factors." Personalis disclaims any obligation to update such forward-looking statements.

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