Personalis Forms Research Collaboration to Better Predict Immunotherapy Response for Gastroesophageal Cancer

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MENLO PARK, Calif.--(BUSINESS WIRE)--Oct. 4, 2022--Personalis, Inc. (Nasdaq: PSNL) has joined with Duke University and Olink Proteomics AB to form a research collaboration to study the effects of immunotherapy on advanced gastroesophageal cancer. Specifically, the collaboration will focus on identifying composite biomarkers—those that integrate multiple biological entities into a single readout—to help guide therapeutic decision making.

Gastroesophageal cancer is the fourth most common cancer worldwide, with nearly 50% of patients having developed unresectable or metastatic disease at the time of diagnosis. Chemotherapy is currently the standard of care for patients with this type of advanced disease; however, its effectiveness is often diminished as many patients develop therapeutic resistance. When this happens, the median overall survival for patients drops to less than 9 months.

Fortunately, *pembrolizumab*, an immunotherapeutic targeting PDL1/PD1, has been approved by the FDA for use in patients with chemorefractory gastroesophageal cancer. The effectiveness of this biologic has inspired significant interest in applying it as a first-line, standard of care treatment for patients with advanced disease.

To that end, the goal of the collaborative study is to characterize key tumor and immunological responses to *pembrolizumab* and, in so doing, shine light on the potential mechanisms that lead to either sensitivity or resistance to immunotherapeutics in gastroesophageal cancer. By detailing how tumors respond to treatment at the genomic, transcriptomic, and proteomic levels, the team aims to uncover biomarkers that may help physicians predict tumor responses to *pembrolizumab* and adjust treatment strategies accordingly.

“Biomarkers that predict and characterize tumor responses to anti-PDL1/PD1 therapy remain poorly understood, largely due to the complex and multifaceted interactions between the tumor and immune system. Through comprehensive plasma and tumor immune profiling, we aim to clarify the interconnected roles of tumor genomics and proteomics, as well as the development of composite biomarkers to clinically predict and follow immunotherapy response,” said Andrew Nixon, PhD, Director of the Phase I Biomarker Laboratory, Duke University School of Medicine.

“This study has the potential to identify the mechanisms of immune resistance in metastatic gastroesophageal cancer, which may enable strategies to optimize response rates to existing immunotherapies and develop novel therapeutics that overcome resistance,” said Marijana Rucevic, PhD, Senior Scientific Director, Olink Proteomics. “We are honored to participate in this essential and exciting research effort with Duke and Personalis, and to further direct the strengths of Olink’s PEA technology against the growing challenge of cancer drug development and personalized cancer treatment.”

“We believe the clinical management of cancer can substantially improve with early determination of patient response and by accurately informing changes to treatment regimens. Such determinations offer the potential to avoid unnecessary toxicities and increase survival,” said Dr. Richard Chen, MD, Chief Medical Officer and Senior Vice President of R&D at Personalis. “By collaborating with researchers at Duke and Olink, we hope to accelerate advances in oncology practice via ultra-sensitive MRD detection.”

Personalis’ ImmunoID NeXT Platform® will be used for characterization of tumor genomic and transcriptomic alterations, as well as differences between responders and non-responders. Additionally, Personalis’ NeXT Personal ™ assay will be used to analyze circulating tumor DNA (ctDNA) collected from patients in order to profile and accurately track molecular residual disease (MRD) over the course of therapy. Olink® Explore panels will be used to analyze plasma samples and tumor tissues from metastatic gastroesophageal cancer patients being treated with anti-PD1 and anti-PD1/chemotherapy.

About NeXT Personal

NeXT Personal is a next-generation, tumor-informed liquid biopsy assay designed to detect and quantify MRD and recurrence in patients previously diagnosed with cancer. The assay is designed to deliver industry-leading MRD sensitivity down to the 1 part-per-million range, an approximately 10- to 100-fold improvement over other available technologies. It leverages whole genome sequencing of a patient’s tumor to identify up to 1,800 specially selected somatic variants that are subsequently used to create a personalized liquid biopsy panel for each patient. This may enable earlier detection across a broader variety of cancers and stages, including typically challenging early-stage, low mutational burden, and low-shedding cancers. NeXT Personal is also designed to simultaneously detect and quantify clinically relevant mutations in ctDNA that may be used in the future to help guide therapy when cancer is detected. These include known targetable cancer mutations, drug resistance mutations, and new variants that can emerge and change over time, especially under therapeutic pressure.

About Personalis

Personalis, Inc. is a leader in advanced cancer genomics, enabling the next generation of precision cancer therapies and diagnostics. The Personalis NeXT Platform® is designed to adapt to the complex and evolving understanding of cancer, providing its biopharmaceutical customers and clinicians with information on all of the approximately 20,000 human genes, together with the immune system, from a single sample. To enable cancer sequencing, Personalis' Clinical Laboratory was built with a focus on clinical accuracy, quality, big data, scale and efficiency. The laboratory is GxP-aligned as well as Clinical Laboratory Improvement Amendments of 1988-certified and College of American Pathologists-accredited. For more information, visit the Personalis website and follow Personalis on LinkedIn and Twitter.

About Olink Holding AB

Olink Holding AB (publ) (Nasdaq: OLK) is a company dedicated to accelerating proteomics together with the scientific community, across multiple disease areas to enable new discoveries and improve the lives of patients. Olink provides a platform of products and services which are deployed

across major pharmaceutical companies and leading clinical and academic institutions to deepen the understanding of real-time human biology and drive 21st century healthcare through actionable and impactful science. The Company was founded in 2016 and is well established across Europe, North America and Asia. Olink is headquartered in Uppsala, Sweden.

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 NeXT Personal or the NeXT Platform, expected benefits of the company’s collaboration with Duke University and Olink Proteomics AB, expected performance or adoption of the NeXT Personal assay, Personalis’ business opportunities, leadership, plans or expectations, or other future events. Such forward-looking statements involve risks and uncertainties 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 Personalis’ 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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