

Agenus and Noetik Enter Collaboration to Develop AI-Enabled Predictive Biomarkers for BOT/BAL Using Foundation Models of Virtual Cell Biology

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- Partnership aims to accelerate precision immunotherapy by leveraging AI-powered virtual cell models to identify which patients are most likely to benefit from BOT/BAL treatment
- Collaboration builds on landmark 2024 Cancer Discovery study elucidating botensilimab's unique FcγR-mediated immune activation underlying activity in refractory tumors.
- Supports AI-enabled biomarker discovery, aligning with the national priorities and the FDA to expand access to personalized cancer treatment.

LEXINGTON, Mass. & SAN FRANCISCO--(BUSINESS WIRE)-- Agenesis Inc. (Nasdaq: AGEN) a leader in immuno-oncology innovation and Noetik, a leader in AI-driven spatial and multimodal biology, today announced a research collaboration to develop predictive biomarkers of response to Agenesis' lead clinical stage immuno-oncology (IO) combination, botensilimab (BOT, multifunctional Fc-enhanced anti-CTLA-4) and balstilimab (BAL, anti-PD-1). The collaboration harnesses Noetik's proprietary virtual cell foundation models and large-scale, multimodal tumor data to uncover novel insights into the biology of tumor immunology. Together, the teams will deploy Noetik's first-in-class foundation models directly on clinical results with the aim to enrich clinical efficacy.

Central to this collaboration is Noetik's OCTO virtual cell model, a 1.5 billion parameter foundation model trained on one of the largest proprietary multimodal spatial datasets. This dataset brings together spatial proteomics, spatial transcriptomics, H&E pathology, DNA genotyping, and clinical metadata from nearly 200 million tumor and immune cells collected from thousands of patients with cancers such as colorectal cancer, non-small cell lung cancer, ovarian cancers, and sarcomas. By integrating these diverse data types, Noetik's foundation models provide a systems-level view of the tumor microenvironment in real patients, unlocking novel insights into cancer biology that can drive more precise therapeutic discovery and development.

Botensilimab alone or in combination with BAL, has been evaluated in more than 1,200 patients across nine tumor types, including colorectal cancer, NSCLC, and sarcomas. By targeting complementary immune pathways, the BOT/BAL combination has shown deep and durable clinical responses—even in tumors considered immunotherapy “cold” or resistant to prior IO treatment. The regimen has generated growing recognition within the medical community, supported by compelling data presented in both late-line and neoadjuvant settings, multiple peer-reviewed publications, and presentations at more than a dozen major medical congresses over the past three years.

The collaboration aims to uncover clear, actionable biomarkers that can help predict which patients are most likely to respond to BOT/BAL treatment. Using OCTO virtual cell models to simulate how tumors behave in the body, Noetik will analyze complex biological data from multiple cancer types. The goal is to identify patterns that can predict treatment outcomes and help classify patient groups who may benefit most. Agenus will have exclusive rights to apply these insights in its drug development and commercialization efforts.

“Enhancing clinical efficacy is the most important problem in developing new medicines, and exactly what we’ve trained our foundation models to do. We are excited to deploy Noetik’s virtual cell foundation models on Agenus’s rich clinical data to uncover biomarkers that can enrich patient therapeutic response, improve trial outcomes, and ultimately deliver more precise therapies,” said Ron Alfa, M.D., Ph.D., CEO & Co-Founder, Noetik.

“At Agenus, we are committed to transforming cancer care through scientific innovation and next-generation immunotherapies. This collaboration with Noetik enables us to harness cutting-edge AI to better understand patient biology and tailor treatments more precisely,” said Dr. Garo Armen, Chairman and CEO of Agenus. “By integrating Noetik’s virtual cell models with our expansive BOT/BAL clinical dataset, we have the potential to accelerate the identification of predictive biomarkers, enhance the success of our pivotal trials, and ultimately improve outcomes for patients who currently have limited or no treatment options.”

This collaboration reflects a growing momentum in oncology toward model-driven trial design and AI-enabled precision medicine—an area increasingly prioritized by the FDA under the guidance of the current U.S. administration as central to advancing more equitable, effective cancer care. By applying these technologies to real patient data, the goal is to accelerate the delivery of more personalized treatments, improve outcomes, and expand access to therapies for patients who need them most.

About Noetik

Noetik is an AI-native biotechnology company using machine learning to increase clinical success rates for precision cancer therapies. By training AI models directly on human patient data, the company bridges the gap between drug

development and human biology. Noetik's proprietary platforms, OCTO and Perturb-Map, leverage one of the world's largest datasets of virtual cell models to identify therapeutic targets with unprecedented precision. Founded by biotech and AI veterans from Recursion Pharmaceuticals, Genentech, and the Parker Institute for Cancer Immunotherapy, Noetik is based in San Francisco, CA. To learn more about Noetik, visit <https://www.noetik.ai>.

About Agenus

Agenus is a leading immuno-oncology company targeting cancer with a comprehensive pipeline of immunological agents. The company was founded in 1994 with a mission to expand patient populations benefiting from cancer immunotherapy through combination approaches, using a broad repertoire of antibody therapeutics, adoptive cell therapies (through MiNK Therapeutics) and adjuvants (through SaponiQx). Agenus has robust end-to-end development capabilities, across commercial and clinical cGMP manufacturing facilities, research and discovery, and a global clinical operations footprint. Agenus is headquartered in Lexington, MA. For more information, visit www.agenusbio.com or on social @agenus_bio. Information that may be important to investors will be routinely posted on our website and social media channels.

About Botensilimab (BOT)

Botensilimab is a human Fc enhanced CTLA-4 blocking antibody designed to boost both innate and adaptive anti-tumor immune responses. Its novel design leverages mechanisms of action to extend immunotherapy benefits to “cold” tumors which generally respond poorly to standard of care or are refractory to conventional PD-1/CTLA-4 therapies and investigational therapies. Botensilimab augments immune responses across a wide range of tumor types by priming and activating T cells, downregulating intratumoral regulatory T cells, activating myeloid cells and inducing long-term memory responses.

Botensilimab alone, or in combination with Agenus' investigational PD-1 antibody, balstilimab, has shown clinical responses across nine metastatic, late-line cancers. Approximately 1,100 patients have been treated across the botensilimab/balstilimab program in phase 1 and phase 2 clinical trials. For more information about botensilimab trials, visit www.clinicaltrials.gov.

About Balstilimab (BAL)

Balstilimab is a novel, fully human monoclonal immunoglobulin G4 (IgG4) designed to block PD-1 (programmed cell death protein 1) from interacting with its ligands PD-L1 and PD-L2. It has been evaluated in >900 patients to date and has demonstrated clinical activity and a favorable tolerability profile in several tumor types.

Forward-Looking Statements

This press release contains forward-looking statements that are made pursuant to the safe harbor provisions of the federal securities laws, including statements regarding its botensilimab and balstilimab programs, expected regulatory timelines and filings, and any other statements containing the words "may," "believes," "expects," "anticipates," "hopes," "intends," "plans," "forecasts," "estimates," "will," "establish," "potential," "superiority," "best in class," and similar expressions are intended to identify forward-looking statements. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially. These risks and uncertainties include, among others, the factors described under the Risk Factors section of our most recent Annual Report on Form 10-K for 2024, and subsequent Quarterly Reports on Form 10-Q filed with the Securities and Exchange Commission. Agenus cautions investors not to place considerable reliance on the forward-looking statements contained in this release. These statements speak only as of the date of this press release, and Agenus undertakes no obligation to update or revise the statements, other than to the extent required by law. All forward-looking statements are expressly qualified in their entirety by this cautionary statement.

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