POAI Reports Strong Results From Its AI Cancer Drug Evaluation

January 13, 2022

MINNEAPOLIS, Jan. 13, 2022 (GLOBE NEWSWIRE) -- Predictive Oncology Inc. (NASDAQ: POAI) reported the preliminary results of its Discovery 2021 program today, announcing that its Helomics subsidiary's evaluation demonstrated their proprietary Artificial Intelligence (AI) program CoRE™ (Computational Research Engine), combined with their tumor profile data and matched ovarian cancer samples, could identify potential new chemotherapy drug uses. These drugs are not currently approved for ovarian cancer, but, with further study, could be used for ovarian cancer treatment following clinical trial and regulatory approval.

The Discovery 2021 program has combined Helomics' proprietary knowledgebase, its AI Machine Learning Program and its TruTumor™ platform to create PeDAL™ (Patient-centric Discovery by Active Learning). PeDAL is a unique approach to drug discovery, accelerating the selection process to identify potential lead compounds for use in all cancers, not just ovarian. POAI is ready to partner with biopharmaceutical companies.

Active learning-driven experimentation iteratively improves a predictive model until it reaches a specific desired goal. Helomics' evaluation demonstrated that PeDAL made confident predictions for at least 9 times the number of drug-cancer sample combinations studied while identifying potential drugs for repurposing in ovarian cancer treatment. "The study constructed a model of the effects of 175 cancer drugs on 130 patient tumor cell lines. The results indicate that after measuring only 2.6% of all combinations of drugs and cell lines, high confidence predictions could be made for an additional 24% of the combinations," said Dr. Robert F. Murphy, Professor of Computational Biology Emeritus at Carnegie Mellon University and co-inventor of CoRE and a member of Predictive Oncology's Scientific Advisory Board. PeDAL predicted drugs to inhibit cancer in up to 40% of the samples in the study. In addition, variation was observed in the effectiveness of different drugs with the same identified mechanism of action.

"PeDAL leads to a better selection of drugs, matching the different cancer types to the patients associated with those cancers and potential treatments, improving the scientific and clinical success of drug development. This also translates to millions of dollars in reduced development costs for our future partners. PeDAL can now deliver a proven system that efficiently drives drug response experiments and pulls patient-centric data into the discovery process," said J. Melville (Mel) Engle, CEO, Chairman of Predictive Oncology Inc.

About Predictive Oncology Inc.

Predictive Oncology Inc. (NASDAQ: POAI) is a knowledge-driven company focused on applying artificial intelligence (AI) to develop personalized cancer therapies, which can lead to more effective treatments and improved patient outcomes. Using artificial intelligence, Predictive Oncology uses a database of 150,000+ cancer tumors, categorized by patient type, against drug compounds to determine optimal therapies to be used to ultimately eliminate cancer. As the drug discovery community has now realized, a genomics-based approach to cancer research and drug development is insufficient to achieve the promise of personalized therapeutics. Predictive Oncology instead takes a multiomic approach, which considers the vast multitude of factors that make each cancer unique.

Forward-Looking Statements: Certain matters discussed in this release contain forward-looking statements. These forward-looking statements reflect our current expectations and projections about future events and are subject to substantial risks, uncertainties and assumptions about our operations and the investments we make. All statements, other than statements of historical facts, included in this press release regarding our strategy, future operations, future financial position, future revenue and financial performance, projected costs, prospects, plans and objectives of management are forward-looking statements. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "would," "target" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Our actual future performance may materially differ from that contemplated by the forward-looking statements as a result of a variety of factors including, among other things, risks that we will not be successful in entering into partnerships with biopharmaceutical companies, risks that the results of future evaluations of PeDAL will not be as favorable as the preliminary results of our internal evaluation, risks related to the recent acquisition of zPREDICTA, including no assurance of future operating results of zPREDICTA, no assurance that zPREDICTA's customers will continue to utilize zPREDICTA's services at historical levels or at all, risk of higher than anticipated expenses, integration risk, risk of future impairment of goodwill that would impact POAI's operating results and reliance on zPREDICTA's management and employees, and the factors discussed under the heading "Risk Factors" in our filings with the SEC. Except as expressly required by law, the Company disclaims any intent or obligation to update these forward-looking statements.

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Source: Predictive Oncology Inc.