

Predictive Oncology Issues Letter to Shareholders

March 9, 2023

EAGAN, Minn., March 09, 2023 (GLOBE NEWSWIRE) -- Predictive Oncology (**Nasdaq: POAI**), a science-driven company leveraging its proprietary artificial intelligence and machine learning capabilities to accelerate oncologic drug discovery and enable drug development, today issued the following letter to shareholders:

Dear Shareholders and Stakeholders,

As all of you know, on November 1, 2022, I had the privilege of being asked to serve as Chief Executive Officer of Predictive Oncology Inc. It is a responsibility that I take very seriously, and a commitment that I made without the slightest reservation. Predictive Oncology is a company that I believe in, with a mission that is achievable, and a vision that is honorable. That mission is to expedite oncologic drug discovery, enable drug development and that vision is to bring hope to cancer patients waiting for therapies that might improve or extend their lives faster than currently thought possible.

As you also know, we began this journey under less-than-optimal circumstances: management was in transition, milestones had been delayed, the stock price had dipped below \$0.24, and the company was deficient. While disheartening, to be sure, the Company has managed to weather the deleterious effect of intensely volatile capital markets and the still-lingering impact of a global pandemic. We have not only survived these external pressures, but have made significant progress with respect to validating our commercial platform and publishing our proof of concept.

As frustrating as this process has been, however, the Company is now able to focus all of its energy and resources on conducting transactions with biopharmaceutical partners and driving adoption of our proprietary PEDAL™ platform. While we believe that PEDAL is the drug discovery engine that will ultimately drive the future growth of the Company, it is the synergy and interoperability of PEDAL, in concert with the Company's foundational assets of a CLIA laboratory, biorepository of tumor samples and GMP facility that will transform our business. At the center of these developments and activities is a highly specialized team of world class scientists whose collective intellectual capital is invaluable.

Lastly, it is important for me to say that, even during the silence that has permeated this difficult transition, one must appreciate the fact that all of the progress that has been made during the past few months has only been possible because of the significant and sustained investment in this Company. While it may not be immediately obvious, I believe that the results of this investment will become self-evident. While we may have been slowed by circumstance, we have never given up on the Company, the shareholders nor ourselves. I believe that Predictive Oncology will ultimately succeed, not only because of the ongoing support of our shareholders, stakeholders and customers, but because of the unflinching commitment of our Board of Directors, Senior Management and the entire team of professionals at Predictive Oncology.

Achievements

Beginning in November, if not several months before, a concerted effort has been made to completely rebrand and reposition Predictive Oncology as a science-driven company utilizing proprietary artificial intelligence (AI) to accelerate drug discovery and enable drug development.

As we continue to move from R&D through commercialization, we have pivoted from an 'umbrella' organization, under which multiple business units operated independently, to a singular Company providing highly specialized service offerings along the entire continuum of drug discovery through drug development. We have consolidated infrastructure, merged assets, reassigned personnel and gained domain expertise, thereby creating operational efficiencies and lowering overhead. We are not retracting; we are positioning ourselves for future growth.

In the process of this consolidation and reassessment of all Company assets and core competencies, we have identified currently existing opportunities which we believe will significantly broaden our intellectual property portfolio. This includes the expansion of our extensive biobank of 150,000 tumor samples, the digitization of an historic library of nearly 200,000 pathology slides, the further development of ongoing inventions and emerging co-development opportunities with strategic partners.

We believe that the biobank itself, as well as the slide library, which can be used for both clinical assessment and drug discovery, each has significant value that is not reflected on the company's balance sheet or in the market value of our common stock. The biobank has been internally and externally assessed at approximately \$435 million and the slide library is currently being appraised for purposes of valuation and monetization.

With respect to potential strategic partnerships moving forward, and specifically with regarding the recently announced collaboration with Cvergenx, Inc., the intent is to leverage Predictive Oncology's artificial intelligence drug discovery engine (PEDAL) and machine learning capabilities (CORE™) against the Cvergenx precision genomics radiation therapy platform (pGRT™). In so doing, we now have the ability to optimize radiotherapy (RT) in a way that may lead to the discovery of medicinal radiosensitizers and radioprotectors and, potentially, to the repurposing of existing compounds or the development of an entirely new class of drugs.

In addition to launching PEDAL as a commercial platform, the Company has also unveiled an initiative targeting top-tier institutions in the academic and oncology research community with whom the Company would like to partner. This program — Accelerating Compound Exploration (ACE) — aims to assist academic drug development groups and technology transfer offices in either accelerating the data generation needed to bring a drug compound to market, or to reinvigorate drug compounds that may not have sufficient traction to have reached the clinic. In return, the Company gains access to novel compounds and molecular data to investigate and model.

The Company

As a science-driven company at the forefront of oncology drug discovery, Predictive Oncology provides a highly precise suite of solutions for the biopharma industry. By combining fundamental scientific rigor and a pioneering approach to the utilization of artificial intelligence (AI) and machine learning (ML) techniques, the Company has accelerated and refined the ability to identify or validate target molecules that could successfully advance along the drug development continuum. This proprietary PEDAL platform is able to confidently predict optimal drug/tumor combinations by introducing human diversity earlier into the pre-clinical discovery process, enabling drug developers to determine, with a high degree of confidence, whether or not a compound will elicit a response in a particular tumor type and, if so, increase its probability of success in clinical trials. Predictive Oncology's expanded service offerings also include tumor models and biologics development at our CLIA certified wet lab, with formulation design and solubility testing in our GMP facility.

Predictive Oncology also operates a medical device and supplies segment, Skyline, which provides the STREAMWAY® System, a wall-mounted fully automated waste management system, which virtually eliminates staff exposure to blood, irrigation fluid, and other infectious fluids found in the healthcare environment.

The Platform

The PEDAL platform relies on a unique component that no other AI drug discovery platform currently has: access to a proprietary biobank of tumor specific tissues consisting of more than 150,000 real-world longitudinal samples and drug response data which have been processed, analyzed and compiled over the past 15 years. This biobank is the largest privately-owned tissue repository of its kind in the world. The Company is able to utilize this historical data, as well as query publicly available datasets of drug and tissue features, to confidently create predictive models of drug response involving hundreds of diverse tumor samples against hundreds of drug compounds very early in the drug discovery process.

The Company's ability to test these predictive models in a CLIA-certified wet lab environment should not be underestimated. The scientific domain expertise, intellectual capital and physical plant itself represent a measurable competitive advantage over other companies that are only able to conduct in silico testing or immortalized cell-line experimentation. Moreover, the passage of the FDA Modernization Act 2.0, which allows new drug candidates to bypass animal testing using computer modeling, represents a significant competitive advantage for Predictive Oncology. The ability to seize upon this promising opportunity is achievable because of the unique computational capabilities of our PEDAL platform.

At the center of the PEDAL platform is the Computational Research Engine (CORE), the underlying machine learning technology developed at Carnegie Mellon University to which Predictive Oncology holds world-wide exclusive rights. CORE uses active learning to iteratively direct experimentation to improve its predictive models. CORE utilizes a polypharmacological/polygenomic approach that constructs a large set of predictive models and selects the optimal pairing of data and algorithms using a comprehensive machine learning methodology. The more recently developed CORE Portal is a customer-centric graphical interface that enables the visualization of PEDAL campaigns, displays computational interactions and provides reports.

Market Conditions*

The rapidly growing global AI drug discovery market size was valued at USD 1.1 billion in 2022 and is expected to increase at a compound annual growth rate (CAGR) of 29.6% from 2023 to 2030 to nearly \$7 billion. The growing demand for the discovery and development of novel drug therapies and increasing manufacturing capacities of the life science industry are driving the demand for AI solutions in the drug discovery processes. Manufacturers in the life science industry constantly focus on replenishing their product pipelines, driven in part by hugely successful drugs losing patent protection. In addition, momentum is growing with respect to the number of public-private partnerships that are furthering the adoption of AI-powered solutions in drug discovery and development processes are driving the market.

Drug discovery and development is a cost-intensive and time-consuming process. On average, it takes ten years and costs \$2.6 billion to discover and develop a novel drug therapy. Most therapeutic candidates are eliminated within the initial phases of the development process, specifically during preclinical testing and phase 1 clinical trials. This narrowing development testing funnel directly contributes to the high costs and extended timelines required to facilitate this process. The adoption of AI solutions in the clinical trial process eliminates possible obstacles, reduces clinical trial cycle time, and increases the productivity and accuracy of the clinical trial process. Therefore, the adoption of these advanced AI solutions in drug discovery processes is gaining popularity amongst many life science industry stakeholders.

According to Clinical Trials Arena data estimates in 2021, the strategic collaborations and partnerships between major AI-based drug discovery companies and pharmaceutical companies increased from four partnerships in 2015 to 27 partnerships in 2020.

Digitalization in the biomedical and clinical research space is clearing a path for the application of artificial intelligence solutions. The range and depth of datasets generated by the drug discovery processes, such as molecule screening and preclinical studies, is hastening the adoption of AI-powered solutions. Moreover, the Covid-19 pandemic dramatically changed the perception toward clinical trials and increased the penetration and utilization of AI solutions. Top-tier pharmaceutical companies such as Pfizer, Novartis, Bayer, Sanofi, and Johnson & Johnson are all collaborating with AI-based drug discovery solutions providers.

Amongst the different phases of drug development, preclinical testing is associated with the highest failure rate, and is therefore extremely costly to biopharma companies. Through the adoption of AI solutions, the preclinical testing phase can be optimized to minimize costs. AI-based models are implemented to accurately analyze human physiological responses and eliminate experimental costs. Stringent regulations pertaining to clinical trial studies laid down by regulatory authorities across the globe are anticipated to drive the demand for AI solutions in drug discovery processes. At the same time, government health authorities in both developed and emerging economies are implementing favorable initiatives to increase the penetration of AI solutions and increase the number of active and ongoing clinical trials.

**(Artificial Intelligence In Drug Discovery Market Size, Share & Trends Analysis Report By Application (Drug Optimization & Repurposing, Preclinical Testing), By Therapeutic Area, By Region, And Segment Forecasts, 2023 – 2030).*

Financial Overview

Balance Sheet: Predictive Oncology holds a strong cash position providing approximately 18 months of liquidity and is not currently in need of additional funding. The cash balance is further supported by a large warrant position, the exercise of which may represent an additional source of capital, and combined with the anticipation of increased revenue over the next 2 -3 years, we believe that this cash position can be managed and maintained. Other than normal liabilities, the Company has no debt and maintains a strong equity balance.

NASDAQ Deficiency: In May 2022, Predictive Oncology received a price per share deficiency notification. The Company filed an extension to remedy that deficiency in November 2022. The Company now has until May 8, 2023 to attain a minimum \$1 trading price per share over ten consecutive trading days. The process of drafting proxies, notifying investors, holding a special shareholder meeting and filing with the SEC is lengthy and proscribed. To manage the notification requirements regarding a potential reverse stock split, the Company must be prepared to act as early as mid-March in order to comply with those reporting requirements.

If, at any time during this process, the Company achieves compliance with Nasdaq's minimum bid price requirement prior to effecting a reverse stock split, there would be no reason to proceed and, instead, the Company would terminate the process.

Stock Buy Back: The Company's Board of Directors believes that the Company value and prospects are not accurately reflected in the trading price of its common stock, and may consider repurchasing shares of its common stock when it is able and advisable to do so in compliance with securities

laws. Based on our schedule for filing periodic reports that publicly report our financial condition and results of operations, and specifically with respect to the ongoing Blackout Period, the Company does not expect to be in a position to consider share repurchases until mid-May 2023.

Plans and Measures

The Senior Management and Board of Directors of Predictive Oncology have been entirely focused on addressing the most critical issues facing the Company over the past few months: compliance with Nasdaq's listing requirements, stabilizing the Company's equity, restoring investor confidence, negotiating agreements and executing new customer contracts.

Throughout this entire process, Management has endeavored to be completely transparent and has maintained open lines of communication with shareholders, brokers and potential new investors. We have responded, and continue to respond, to all emails, telephone calls and other requests for information, and we have proactively reached out to new investors and have participated in multiple investor and biopharma conferences. Our emphasis has been, and will continue to be, on closing deals, driving adoption of the PEDAL platform and satisfying existing contracts. Our proposals, negotiations and engagements range from fee-for-service, upfront compensation, short-term milestone payments and long-term royalty fees. Opportunities currently in the pipeline include national and international biopharmaceutical, biologics, therapeutics and cancer research organizations, as well as government agencies.

We will continue to pursue every opportunity to reach and maintain Nasdaq compliance, expedite sales efforts, close on contracts and improve shareholder value.

Acknowledgements

It is important for me to reiterate and acknowledge that virtually all of the progress that has been made during the past few months was only possible because of the significant investment that has been made in this Company. It is my sincere belief that this Company will succeed, not only because of the ongoing support of our shareholders, stakeholders and customers, but because of the unflinching commitment of our Board of Directors, Senior Management and the entire team of professionals at Predictive Oncology. I look forward to keeping you apprised of our continued progress, and I am optimistic for what the future holds for our company.

Respectfully,



Raymond F. Vennare
Chief Executive Officer

About Predictive Oncology Inc.

As a science-driven company on the leading edge of oncology drug discovery, Predictive Oncology (NASDAQ: POAI) offers an unrivaled suite of solutions for the biopharma industry. Through the integration of scientific rigor and machine learning, the company has developed the ability to advance molecules into medicine more confidently by introducing human diversity earlier into the discovery process with the pairing of artificial intelligence and the world's largest privately held biobank of over 150K tumor samples. Predictive Oncology's solutions additionally include tumor models, biologics development, formulation design, a GMP facility, a CLIA laboratory and substantial scientific domain expertise.

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, 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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A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/0618c6d3-202c-4951-b52c-9049a5211041>