October 3, 2024

TCBP Announces Artificial Intelligence Initiative with Partner Carnegie Mellon University for Donor Screening

- *TC BioPharm Limited is partnering with Dr. Wei Wu of Carnegie Mellon University to create an artificial intelligence solution to optimize the donor screening and matching process*
- *The software could have additional applications across cell therapy for donor/patient matching*

EDINBURGH, Scotland, Oct. 3, 2024 /PRNewswire/ -- TC BioPharm (Holdings) PLC ("TC BioPharm" or the "Company") (NASDAQ: TCBP), a clinical-stage biotechnology company developing platform allogeneic gamma-delta T cell therapies for cancer and other indications, today announced it has entered into a sponsored research agreement with Carnegie Mellon University to explore the potential use of artificial intelligence to optimize the patient screening process.

The Company will partner with Dr. Wei Wu, a faculty member in the Ray and Stephanie Lane Computational Biology Department within the School of Computer Science at the renowned university, and her lab to leverage AI to build a solution that enhances the donor selection process and matching process. Dr. Wu's research focuses on understanding complex human diseases through integrative approaches, combining biology, computational and statistical learning, bioinformatics, and genomics. The applications for advanced and accurate donor screening and potential donor/patient matching extend from increased manufacturing yields, better production processes, and enhanced patient outcomes among many other benefits. The amount of variability between donors, similar patients, and the volume of donors and patients across diseases represents a "big data problem" which is ideal for applying Artificial Intelligence for a better understanding and potential solution.

"TC BioPharm is pleased to partner with Carnegie Mellon University as we continue to research cutting-edge solutions for the advancement of the cell therapy industry," stated Bryan Kobel, CEO of TC BioPharm. "Dr. Wu and her laboratory are helping us tackle another 'big problem' with this endeavor, which has the potential to revolutionize both the donor selection and matching processes. An issue the cell therapy industry faces as a whole is donor variability as well as how to more accurately predict outcomes and responses between donors and patients. Finding a solution for how to select the best donors for allogeneic cell therapies to generate the best product, and also how to match the best cell therapy and donor to the best patient beyond the current HLA matching process, represents a massive opportunity from a market perspective and also would have far-reaching applications for CDMOs and other industry players. Bringing in Dr. Wu for this 'big data problem' is the first step. She and Carnegie Mellon University are at the forefront of the AI industry, and it's an honor to work with her and the esteemed university. Artificial intelligence has the potential to deliver significant breakthroughs in the worlds of medicine and science,

and we are excited to embrace its possibilities."

Dr. Wei Wu added, "I am excited about this partnership with TC BioPharm. With the integration of cutting-edge AI technology into cell therapy research, this collaboration holds a lot of promise for advancing the field and addressing key challenges such as donor variability. Optimizing donor selection and donor/patient pairing with AI could lead to solutions to some of the most pressing challenges in cell therapy, with the potential to improve patient outcomes. I'm excited that our team will be part of this effort. Given the significant potential of AI to transform industries, this partnership could open new doors for precision medicine and personalized cell therapies."

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this Current Report on Form 8-K that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements regarding the Company's intent or ability to affect any budget savings or execute on any M&A or capital raising strategy. These statements are based on management's current assumptions and are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. For other important factors that could cause actual results to differ materially from the forward-looking statements in this Current Report on Form 8-K, please see the risks and uncertainties identified under the heading "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2023, and our other reports filed with the SEC, all of which is available on the Company's Investor Relations website at www.tcbiopharm.com and on the SEC website at www.sec.gov. All forward-looking statements reflect the Company's beliefs and assumptions only as of the date of this Current Report on Form 8-K. The Company undertakes no obligation to update forward-looking statements to reflect future events or circumstances.

About TC BioPharm (Holdings) PLC

TC BioPharm is a clinical-stage biopharmaceutical company focused on the discovery, development, and commercialization of gamma-delta T cell therapies for the treatment of cancer with human efficacy data in acute myeloid leukemia. Gamma-delta T cells are naturally occurring immune cells that embody properties of both the innate and adaptive immune systems and can intrinsically differentiate between healthy and diseased tissue.

TC BioPharm is the leader in developing gamma-delta T cell therapies, and the first company to conduct phase II/pivotal clinical studies in oncology. The Company is conducting two investigator-initiated clinical trials for its unmodified gamma-delta T cell product line - Phase 2b/3 pivotal trial in treatment of acute myeloid leukemia using the Company's proprietary allogeneic CryoTC technology to provide frozen product to clinics worldwide.

View original content:https://www.prnewswire.com/news-releases/tcbp-announces-artificial-intelligence-initiative-with-partner-carnegie-mellon-university-for-donor-screening-302265858.html

SOURCE TC BioPharm