

TC BioPharm Increases Allogeneic Car and Partnering Focus for Advancement of TCB-008

Company highlights 2023 plan as it progresses towards IND submittal and Ovarian Cancer Treatments

EDINBURGH, Scotland, April 26, 2023 /PRNewswire/ -- TC BioPharm (Holdings) PLC ("TC BioPharm" or the "Company") (NASDAQ: TCBP) a clinical stage biotechnology company today laid out a fundamental shift in the ongoing development and manufacture of its lead product TCB-008, an allogeneic gamma-delta T cell therapies for cancer, and the Company's CAR modified gamma-delta T cell.



Following an analysis of current and emerging trends in the cell therapy landscape, the Company intends to pursue exclusive partnerships for test research and combination trial with complimentary therapies using allogeneic gamma delta t-cells, subvariant 2 ("GDT v2s"), the Company's lead asset TCB-008. The Company's current plans around the advancement of TCB-008 as a monotherapy for Acute Myeloid Leukemia and the ability to manufacture the product to GMP standards will continue with the FDA IND filing in Q3 of 2023 will continue as scheduled and as the final monotherapy trial for TCB-008.

A collaborative integration of TC BioPharm's primary asset, TCB-008, will further enable the Company to expand operations into CAR Therapy with a focus on binder B7H3 for the treatment of ovarian cancer. The shift should enable the company to maximize the potential of its therapies and increase the value of the assets and the company. At present the Company has executed three research collaborations around TCB-008 in combination with complimentary approaches and expects to finalize a partnership from one of these collaborations in 2023 for trial in 2024.

"Our 2023 plan is rooted in enabling research teams to work together on preclinical and clinical studies to evaluate the potential for gamma-delta T cell therapies and better understand the behaviors of these cells in patients," said Bryan Kobel, CEO of TC BioPharm. "TCB-008 is an extremely promising therapeutic in cancer, and given its versatility, its mechanism of action, and the numerous arenas where other companies are attempting to activate, interact with or draw gamma delta t-cells to tumors, we believe TCB-008 will be a best-in-class asset for these companies to partner with in the future. This will give TCBP multiple shots on goal and maintain our leadership position as the de facto

partner for companies looking to explore gamma delta t-cells sub variant 2 in combination with their asset. Our approach is already beginning to show signs of success, with multiple research collaborations and increasing interest from other potential strategic partners. In today's capital markets environment, we firmly believe partnering will have an increased importance for development stage biotech companies and with TCB-008 as a best-in-class asset, we hope to leverage our success into non-dilutive capital and expanded data sets with partners. Having just completed a capital raise on the heels of extending our cash runway via corporate restructuring, I am confident we are better positioned for long-term growth."

TCBP will increase the focus on the CAR program, looking to shorten the timeline to completing a pre-clinical package and pursuing a US Phase I trial. The current target indication will be Ovarian cancer, with more than 313,000 new cases of ovarian cancer in 2020. The Five year Relative Survival rate is 49.7%

This approach should drive an increase in the company's patent portfolio and IP, increasing the value of the Company in a potential acquisition scenario as well as increasing the competitive advantage of the Company with IP and patent protection.

Clinical development to-date has enabled the company to pivot to logical, more agile clinical strategy towards U.S. FDA trials for TCB-008 for AML. Completing dosing of the safety cohort was another step in TCBP's efforts and firmly plant TCBP as the leader in the allogeneic gamma delta space.

TCBP will review external assets with pre-clinical packages/early data Cell therapies across the spectrum including TCR/CAR/Other immunotherapy opportunities and other areas where TCB-008 might be effective. Potential near-term collaborations could include fungal infection therapies in Rare Disease indications and combination research to assist private companies seeking capital where it can leverage equity capital to stockpile assets.

"Prioritizing partnerships as we head towards US trials realigns us with our long-term goal of becoming a leading commercial stage company," Kobel said. "These partnerships will expand the data set on TCB-008, give us more knowledge around both our product and GDTs and provide investors with multiple shots on goal and additional inflection points at a lower cash expenditure. We firmly believe in the potential of TCB-008 and we continue to position the Company to be more economically efficient."

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 uses an allogeneic approach in both unmodified and CAR modified gamma-delta T cells to effectively identify, target and eradicate both liquid and solid tumors in cancer.

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 for OmnImmune® in treatment of acute myeloid leukemia using the Company's proprietary allogenic CryoTC technology to provide frozen product to clinics worldwide. TC BioPharm also maintains a robust pipeline for future indications in solid tumors as well as a significant IP/patent portfolio in the use of CARs with gamma-delta T cells and owns our manufacturing facility to maintain cost and product quality controls.

Forward Looking Statements

This press release may contain statements of a forward-looking nature relating to future events. These forward-looking statements are subject to the inherent uncertainties in predicting future results and conditions. These statements reflect our current beliefs, and a number of important factors could cause actual results to differ materially from those expressed in this press release. We undertake no obligation to revise or update any forward-looking statements, whether as a result of new information, future events or otherwise. The reference to the website of TC BioPharm has been provided as a convenience, and the information contained on such website is not incorporated by reference into this press release.

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