



## Phio Pharmaceuticals Presents New Data Demonstrating PH-894 Enhances Activity of HER2-CAR-T Cells at ASGCT 2022

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MARLBOROUGH, Mass., May 16, 2022 /PRNewswire/ -- Phio Pharmaceuticals Corp. (Nasdaq: PHIO), a clinical stage biotechnology company developing the next generation of therapeutics based on its proprietary self-delivering RNAi (INTASYL™) therapeutic platform, today presented new preclinical data showing that silencing BRD4 with PH-894, a self-delivering RNAi INTASYL compound, can be used to improve the characteristics of CAR-T cell products during the activation and expansion phases of the cell manufacturing process. These new data will be presented at the American Society of Gene & Cell Therapy (ASGCT) 25<sup>th</sup> Annual Meeting, which is being held in Washington D.C., from May 16-19, 2022.

Logo - [https://mma.prnewswire.com/media/786567/Phio\\_Pharmaceuticals\\_Logo.jpg](https://mma.prnewswire.com/media/786567/Phio_Pharmaceuticals_Logo.jpg)

"Hurdles that are faced with current CAR T-cell therapy treatment for solid tumors include cell persistence and cell exhaustion. Due to the immunosuppressive environment of the tumor, CAR T-cells may become exhausted, thereby limiting the efficacy of treatment for cancer patients," said Dr. Simon Fricker, Phio's VP of Research and Development. "These data demonstrate that PH-894 could enhance the activity of CAR-T cells by improving the quality of the final CAR-T cell product by overcoming immunosuppression, reversing exhaustion, and preserving a phenotype associated with cell persistence. There is potential for PH-894 to play a role in boosting the potency of the next generation of CAR-T cell products to enhance adoptive cell therapy for solid tumors without using genetic manipulation."

Data from the studies conducted assessed the potential of PH-894 to improve the quality and potency of HER2-targeted CAR-T cells in a CAR-T expansion model. CAR-T cells were activated with an OKT3 antibody and treated with PH-894. Results showed that PH-894 reduced the expansion-associated production of BRD4 and BRD4-regulated genes and mitigated the production of inhibitory receptors and markers of T cell exhaustion, PD-1, TIGIT and TIM3. Additionally, PH-894 preserved putative T cell stem-cell memory and central memory, phenotypes associated with cell persistence, on HER2-CAR-T cells that were otherwise depleted by cell expansion without the use of PH-894.

Phio's presentation detailing the data presented at ASGCT titled, "Self-delivering RNAi Targeting BRD4 (PH-894) Improves the Phenotype of HER2-CAR-T Cells During Expansion" will be made available on the "Investors – Events and Presentations" section of the Company's website ([click here](#)).

### About Phio Pharmaceuticals Corp.

Phio Pharmaceuticals Corp. (Nasdaq: PHIO) is a clinical stage biotechnology company developing the next generation of immuno-oncology therapeutics based on its self-delivering RNAi (INTASYL™) therapeutic platform. The Company's efforts are focused on silencing tumor-induced suppression of the immune system through its proprietary INTASYL platform with utility in immune cells and the tumor micro-environment. Our goal is to develop powerful INTASYL therapeutic compounds that can weaponize immune effector cells to overcome tumor immune escape, thereby providing patients a powerful new treatment option that goes beyond current treatment modalities. For additional information, visit the Company's website, [www.phiopharma.com](http://www.phiopharma.com).

### Forward Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by words such as "intends," "believes," "anticipates," "indicates," "plans," "expects," "suggests," "may," "would," "should," "potential," "designed to," "will," "ongoing," "estimate," "forecast," "target," "predict," "could" and similar references, although not all forward-looking statements contain these words. Forward-looking statements are neither historical facts nor assurances of future performance. These statements are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results may differ materially from those indicated in the forward-looking statements as a result of a number of important factors, including, but not limited to, the impact to our business and operations by the ongoing coronavirus pandemic, the development of our product candidates, results from our preclinical and clinical activities, our ability to execute on business strategies, our ability to develop our product candidates with collaboration partners, and the success of any such collaborations, the timeline and duration for advancing our product candidates into clinical development, the timing or likelihood of regulatory filings and approvals, the success of our efforts to commercialize our product candidates if approved, our ability to manufacture and supply our product candidates for clinical activities, and for commercial use if approved, the scope of protection we are able to establish and maintain for intellectual property rights covering our technology platform, our ability to obtain future financing, market and other conditions and those identified in our Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q under the caption "Risk Factors" and in other filings the Company periodically makes with the SEC. Readers are urged to review these risk factors and to not act in reliance on any forward-looking statements, as actual results may differ from those contemplated by our forward-looking statements. Phio does not undertake to update forward-looking statements to reflect a change in its views, events or circumstances that occur after the date of this release, except as required by law.

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