



Phio Pharmaceuticals Presents Positive New Data on PH-894 Demonstrating Antitumor Efficacy in Model of PD-1 Refractory Disease at the AACR Annual Meeting 2022

April 8, 2022

MARLBOROUGH, Mass., April 8, 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 positive new preclinical data showing PH-894, a self-delivering RNAi compound targeting the bromodomain-containing protein 4 (BRD4), provides abscopal efficacy toward untreated distal tumors and potentiates the efficacy of systemic anti-PD-1 antibody therapy. These new data will be presented at the American Association for Cancer Research (AACR) Annual Meeting 2022, which is being held in New Orleans, Louisiana, from April 8-13, 2022.

Logo - https://mma.prnewswire.com/media/786567/Phio_Pharmaceuticals_Logo.jpg

Data from *in vivo* studies demonstrated that PH-894 inhibits tumor growth in both PD-1 inhibition responsive, as well as PD-1 inhibition insensitive models. In both models, after local administration, strong antitumor efficacy was seen in directly treated as well as distal, untreated tumors. Additionally, intratumoral treatment with PH-894 enhanced the antitumor efficacy of systemic anti-PD-1 antibody therapy, not only for the PH-894 locally treated tumors, but for the PH-894 untreated distal tumors. In the PD-1 inhibition insensitive model, local PH-894 therapy was shown to be efficacious as a systemic anti-PD-1 antibody treatment, and enhanced the antitumor efficacy of anti-PD-1 treatment when used together.

"We are excited by these new data on PH-894, our second product candidate, for various reasons," said Dr. Simon Fricker, Phio's VP of Research & Development. "First, these data show that local administration of PH-894 resulted in systemic efficacy, similar to what we have shown with PH-762. In addition, these studies have shown PH-894 to be a potent standalone treatment in a challenging model, while also enhancing the efficacy of systemic anti-PD-1 antibodies. We believe these data provide a strong rationale for the clinical use of PH-894 as a monotherapy, as well as in combination with systemic PD-1 therapy. Considering the novel mechanism of action of PH-894, there is potential for it to play an important role in treating patients who do not respond to anti-PD-1 therapy, or patients who progress after initially responding to such therapy, addressing an important medical unmet need."

Studies were conducted in colon and liver cancer animal models in which the cancer cell lines were implanted subcutaneously into the bilateral flanks of mice. Tumors on only one side were treated with PH-894, and tumors on the opposite side were left untreated. Some of the animals also received systemic anti-PD-1 antibody treatment in addition to local PH-894 administration. These data showed that locally administered PH-894 inhibited tumor growth of both directly-treated and distal tumors in two cancer models. In addition, PH-894 also potentiated the efficacy of a systemic anti-PD-1 antibody toward PH-894 treated and untreated distal tumors. *Ex vivo* analysis showed that PH-894 silenced BRD4 and its downstream effector PD-L1 in tumor dendritic cells and increased migratory dendritic cells in the tumor, suggesting a mechanism by which local PH-894 treatment confers systemic tumor control.

Phio's presentation detailing the data presented at AACR titled, "Local administration of BRD4-targeting self-delivering RNAi (PH-894) provides abscopal efficacy toward untreated distal tumors and potentiates the efficacy of systemic anti-PD-1 antibody therapy" 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.phioharma.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.

Contact Phio Pharmaceuticals Corp.

ir@phiopharma.com

Investor Contact

Ashley R. Robinson

LifeSci Advisors

arr@lifesciadvisors.com

 View original content: <https://www.prnewswire.com/news-releases/phio-pharmaceuticals-presents-positive-new-data-on-ph-894-demonstrating-antitumor-efficacy-in-model-of-pd-1-refractory-disease-at-the-aacr-annual-meeting-2022-301520872.html>

SOURCE Phio Pharmaceuticals Corp.