



ArsenalBio Announces First Patient Dosed in Phase 1 Clinical Trial of AB-1015 in Development as a Treatment for Ovarian Cancer

Company will provide a business overview including product pipeline during an upcoming presentation on January 10th at the J.P. Morgan 41st Annual Healthcare Conference

South San Francisco, Calif. – January 5, 2023 – Arsenal Biosciences, Inc. (ArsenalBio), a privately held, clinical stage, programmable cell therapy company engineering advanced CAR T cell therapies for solid tumors, today announced that the first patient has been dosed with AB-1015 in a Phase 1, first-in-human clinical trial for patients with ovarian cancer that is resistant to platinum-based regimens. AB-1015 is ArsenalBio’s first internally discovered T cell medicine to enter clinical development and uses synthetic DNA programming to overcome tumor defenses, increase potency, and target ovarian cancer cells without harming normal tissues.

“The initiation of this first-in-platform trial marks the beginning of a new chapter in the story of cell therapy and will enable ArsenalBio to validate our Integrated Circuit T (ICT) cell technology in humans,” said Ken Drazan, M.D., ArsenalBio’s co-founder and Chief Executive Officer. “To date, first generation T cell-based technologies have failed to drive deep and durable responses in solid tumors, leaving a large unmet need for effective immunotherapies across many types of solid tumor cancers. We hope this study succeeds in identifying a safe and therapeutic dose to further study in larger patient cohorts; thereby demonstrating the utility of our technology platform and the benefit of our pipeline of potential medicines.”

Dr. Drazan will provide a business overview and update inclusive of information about the clinical trial during the company’s upcoming presentation on January 10th at the 41st Annual J.P. Morgan Healthcare Conference.

J.P. Morgan Healthcare Conference Presentation Details

Date: January 10, 2023

Time: 10:00am PST

Location: The Westin St. Francis San Francisco, Mission Bay Room

The Phase 1 trial ([NCT05617755](#)) is a multi-center, dose escalation trial that will evaluate the safety of AB-1015 in patients with platinum-resistant ovarian cancer. The goal of the study is to determine the maximum tolerated dose of AB-1015, which is administered intravenously via a single infusion following completion of lymphodepleting chemotherapy. The study is expected to enroll up to 60 patients in the United States.

“Immunotherapy offers great promise for ovarian cancer patients who have already failed or relapsed following treatment with platinum-based chemotherapies because it uses the patient’s own immune cells to kill cancer cells,” said Susie Jun, M.D., Ph.D., ArsenalBio’s Chief Medical

Officer. “Following our AB-1015 study, we plan to initiate subsequent clinical studies to explore the use of our ICT cell technology in other solid tumor cancers with high unmet medical need including kidney and prostate cancers.”

AB-1015 is an ICT cell therapy engineered to treat ovarian cancer. The foundational manufacturing technique is precise and specific CRISPR insertion of a large synthetic double-stranded DNA cassette into a novel Chromosome 11 safe harbor site. The cassette encodes several features: a synthetic logic gate designed to optimize how the ICT cells target tumors and avoid normal tissues by requiring the co-expression of two distinct antigens within ovarian cancer; and a module containing synthetic short hairpin RNAs designed to pharmacologically modulate gene expression thus enabling enhanced T cell function in the tumor microenvironment.

About Arsenal Biosciences Inc.

Arsenal Biosciences, Inc. (ArsenalBio), headquartered in South San Francisco, Calif., is a privately held, clinical stage, programmable cell therapy company discovering and developing a pipeline of next-generation autologous T cell therapies to defeat cancer. Our full-stack R&D engine generates multifunctional T cell medicines, enabled by precise and specific CRISPR-mediated insertion of large synthetic DNA cassettes. ArsenalBio is building the industry’s largest DNA library of therapeutic enhancing integrated circuits, incorporating logic gating for improved tumor targeting and synthetic features enabling multiple pharmaceutical functions. In pioneering a computationally driven approach alongside nonviral clinical manufacturing, we aspire to deliver enhanced efficacy, increased patient safety, reduced stakeholder costs, and expanded market access. To learn more, visit www.arsenalbio.com and follow us on Twitter [@ArsenalBio](https://twitter.com/ArsenalBio), [LinkedIn](https://www.linkedin.com/company/arsenalbio) and [Facebook](https://www.facebook.com/arsenalbio).

Contacts:

For Media

Gwen Gordon

858-245-5684

gwen@gwengordonpr.com