

NEWS & PRESENTATIONS

Arcellx CART-ddBCMA Cell Therapy Demonstrates Deep and Durable Responses in the Treatment of Relapsed and Refractory Multiple Myeloma

Company announces initial results in first-in-human trial utilizing novel synthetic binding domain

6/6 (100%) overall response rate (ORR) per International Myeloma Working Group (IMWG) criteria observed at Dose Level 1

GAITHERSBURG, Md., Dec. 07, 2020 (GLOBE NEWSWIRE) — Arcellx, a clinical-stage biopharmaceutical company developing adaptive and controllable cell therapies, today announced initial clinical data from the first six patients treated in the company's ongoing Phase 1 Study of CART-ddBCMA for the treatment of patients with relapsed and refractory multiple myeloma. CART-ddBCMA is a genetically modified cell therapy utilizing a novel synthetic binding domain that is computationally designed, highly stable, and engineered to reduce immunogenicity. CART-ddBCMA was well tolerated and rapid, deep, and durable responses were observed at the first dose level of 100 million cells, with six of six evaluable patients responding per IMWG criteria. Four of six patients achieved stringent complete responses, two patients achieved a partial response, and all patients are ongoing in the trial. All patients treated were penta-refractory with multiple poor prognostic factors, including high-risk cytogenetics. The initial results were presented today at the 62nd American Society of Hematology (ASH) Annual Meeting.

“These initial clinical data suggest the promise of CART-ddBCMA as a BCMA-targeted therapy,” commented Matthew J. Frigault, M.D., study investigator and Assistant Director of the Cellular Therapy Service at Massachusetts General Hospital Cancer Center and Instructor at Harvard Medical School. “The observations of rapid, durable responses in patients in this difficult-to-treat patient population are highly encouraging. We are eager to see results with additional patients and longer follow-up from this ongoing study.”

The full presentation is available online on the ASH annual meeting website. The clinical data is available on the **Scientific Publications** section of the Arcellx website at www.arcellx.com.

About the Arcellx ddBCMA Cell Therapy Phase 1 Trial

CART-ddBCMA is a Phase 1 study of Arcellx's BCMA-specific CAR-modified T-cell therapy utilizing the company's novel BCMA-targeting binding domain for the treatment of patients with relapsed and refractory multiple myeloma. Arcellx's proprietary binding domains—a central component of Arcellx's ARC-sparX platform—are novel synthetic proteins engineered for reduced immunogenicity and



designed to bind specific therapeutic targets. The Arcellx dBCMA cell therapy has been granted Fast Track Designation and Orphan Drug Designation by the U.S. Food and Drug Administration. The Phase 1 study is currently enrolling patients. Additional information about the trial can be found at <https://www.clinicaltrials.gov/ct2/show/NCT04155749>.

About Arcellx's ARC-sparX Platform Technology

The two-part ARC-sparX platform separates the disease recognition and killing functions of conventional cell therapies, enabling a controllable cell therapy that can be adapted to the patient's disease. First, sparX proteins bind to specific antigens on diseased cells using a novel synthetic binding domain, then flag those cells for destruction by ARC-T cells. Next, ARC-T cells, which cannot recognize diseased cells on their own, bind to sparX proteins and kill the flagged cells. Arcellx has developed a collection of sparX proteins with unique binding domains directed at a number of therapeutic targets. Administration of alternate sparX proteins can redirect ARC-T cells to different disease antigens to potentially address relapsed and refractory disease due to tumor heterogeneity or antigen escape. ARC-T cell activity can be curbed as needed by controlling the dose and frequency of sparX administration, which has the potential to improve patient safety.

About Arcellx, Inc.

Arcellx is a clinical-stage biopharmaceutical company developing adaptive and controllable cell therapies for the treatment of patients with cancer and autoimmune diseases. The Arcellx vision is to utilize our novel proprietary platform to bring superior cell therapies to more patients through the care of academic and community practices worldwide. More information can be found at www.arcellx.com.

Contact:

Solebury Trout
Zara Lockshin (media)
Tel: +1 646-378-2960
Email: zlockshin@troutgroup.com

Alan Lada (investors)
Tel: +1 646-378-2927
Email: alada@troutgroup.com

Arcellx, Inc.
25 West Watkins Mill Road, Suite A
Gaithersburg, MD 20878

info@arcellx.com

