

Adolore Biotherapeutics Presents Encouraging Preclinical Data of Innovative Gene Therapy Approach to Chronic Pain at the 2023 American Society of Pain and Neuroscience (ASPN) Annual Conference

Data demonstrate preclinical proof-of-concept for rdHSV-based CA8* gene therapy as a disease-modifying long-acting local anesthetic that has the potential to replace opioids in chronic osteoarthritis (OA) knee pain management

Company continues to advance development of rdHSV-CA8* gene-therapy injected in the knee joint for chronic OA knee pain towards IND

DELRAY BEACH, FL. – July 17, 2023 – Adolore Biotherapeutics ("Adolore" or the "Company"), a biotechnology company focused on developing breakthrough opioid-free gene therapy treatments for chronic pain, today announced the presentation of preclinical data for its innovative CA8* (*Carbonic Anhydrase-Like Analgesic Peptides, CA8 Variants) gene therapy, rdHSV-CA8*, at the 2023 ASPN Annual Conference, held July 13-16, 2023 in Miami, FL.

Data were presented in a poster entitled, "Non-Opioid Analgesic Gene Therapy for Chronic Osteoarthritis Pain," by Gerald Zhuang, PhD, Vice President of Discovery at Adolore.

Preclinical safety and efficacy of rdHSV-CA8* was evaluated via intra-articular knee administration in a monoiodoacetate (MIA)-induced murine chronic osteoarthritis pain model, in support of Adolore's ADB-102 development program for chronic osteoarthritis pain Intra-articular rdHSV-CA8*. Knee administration produced dose-dependent prolonged anti-hyperalgesia and profound analgesia (equivalent to >100 mg oral morphine in an average sized adult - estimated using allometric conversion) treating chronic OA knee pain in this model. Non-GLP safety, biodistribution and shedding studies show rdHSV-CA8* is safe, stays locally where it is injected, and transduces sensory neurons critical to pain sensation from the intra-articular knee space. Additional data show no change to knee joint cartilage after rdHSV-CA8* treatment. These preclinical data support the continued IND development of Adolore's unique replication defective vector-transgene construct rdHSV-CA8*.

"Chronic pain continues to be a major health problem that represents an annual cost of \$650 billion. Beyond that, most of the currently available/widely used pain treatments are systemic or locally administered and short acting and there is a significant need for safe and effective non-opioid pain therapies. We remain encouraged by our growing body of data that support our innovative approach to chronic pain treatment through our proprietary nontoxic JDNI8-replication defective (rd)HSV-based disease-free gene therapy vectors expressing long-term carbonic anhydrase-8 analgesic peptide variants (CA8*) to produce profound persistent analgesia," commented Dr. Levitt. "We are committed to the continued advancement of these next generation therapies and potentially address the significant unmet need for safe and effective non-opioid pain therapies."

Leveraging its innovative CA8* gene therapy, the Company is currently advancing two development programs, ADB-101 and ADB-102 for treatment of patients suffering from erythromelalgia and chronic osteoarthritis knee pain, respectively. Based on compelling data generated to date, the Company is progressing these programs towards an IND filing and a Phase 1 study.

About Adolore Biotherapeutics, Inc.

Adolore Biotherapeutics, Inc., is a biotechnology company focused on developing novel therapies for the treatment of chronic pain and other pain and nervous system conditions or disorders. Our best-in-class programs are long-acting, locally acting gene-therapies that are opioid-free Disease Modifying Anti-Pain therapies (DMAPs) for the treatment of chronic pain.

The Company's two current CA8* gene therapy programs are in preclinical development for treatment of patients suffering from erythromelalgia, a life-long heritable chronic pain condition representing an orphan drug disease with no approved therapy, and chronic osteoarthritis knee pain, affecting a large number of patients that is often treated with opioids due to the lack of good alternatives, thus contributing to the ongoing opioid crisis.

For more information, visit adolore.com.

Forward Looking Statements

To the extent this announcement contains information and statements that are not historical, they are considered forward-looking statements within the meaning of the federal securities laws. You can identify forward-looking statements by the use of the words "believe," "expect," "anticipate," "intend," "estimate," "project," "will," "should," "may," "plan," "intend," "assume" and other expressions which predict or indicate future events and trends and which do not relate to historical matters. You should not rely on forward-looking statements, because they involve known and unknown risks, uncertainties and other factors, some of which are beyond the control of the Company. These risks and uncertainties include, but are not limited to, those associated with drug development. These risks, uncertainties and other factors may cause the actual results, performance or achievements of the Company to be materially different from the anticipated future results, performance or achievements expressed or implied by the forward-looking statements.

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