



Adolore Biotherapeutics Enters into Exclusive License Agreement with University of Pittsburgh for Patents Protecting Non-Toxic Replication-Defective HSV Vectors for Efficient Gene Delivery Applications and Complementing Cells for Their Production

Company developing next generation, disease-modifying, non-opioid analgesic gene therapies for the treatment of chronic pain

DELRAY BEACH, FL.—May 23, 2023 – [Adolore Biotherapeutics, Inc.](#) (“Adolore” or the “Company”) a biotechnology company focused on developing breakthrough opioid-free pain relieving (analgesic) gene therapy treatments for pain, today announced it has entered into an exclusive licensing agreement with the University of Pittsburgh (or the “University”) for its intellectual property portfolio entitled, “*Non-Toxic Herpes Simplex Virus Vectors for Efficient Gene Delivery Applications and Complementing Cells for their Production.*” The University’s intellectual property embodies a proprietary production cell line plus disease-free, replication-defective Herpes Simplex Virus vectors (“rdHSV”) for the treatment of all types of pain, including nociceptive, inflammatory and neuropathic pain.

The Company is utilizing this licensed technology from the University of Pittsburgh to produce and deliver its novel transgene CA8* (*Carbonic Anhydrase-Like Analgesic Peptides, CA8 Variants) for the treatment of chronic pain. Adolore is developing CA8* gene-therapy treatments for erythromelalgia, an Orphan Drug disease, and for knee osteoarthritis under an NIH/NINDS UG3 HEAL grant.

University of Pittsburgh researchers have demonstrated that this innovative rdHSV vector is injected locally and stays local providing many advantages including the following:

- Does not migrate after injection thereby avoiding off-target effects;
- Does not integrate into the genome and evades immune surveillance thereby enabling redosing;
- Provides for injection directly into the joint, which is highly effective due to superior retrograde transport;
- Non-toxic and does not reactivate like zoster, due to the replication-defective feature; and
- Enables prolonged transgene expression within the targeted neurons and avoids systemic exposure.

Pursuant to the terms of the license agreement, the University of Pittsburgh will receive an upfront payment and certain development, regulatory, and sales milestone payments, as well as royalties on net sales of products covered by the license.

About Carbonic Anhydrase-8 (CA8*) Gene Therapy

CA8* (*Carbonic Anhydrase-Like Analgesic Peptides, CA8 Variants) are a novel class of Kv7 activators that are long-acting and locally administered with proven analgesic efficacy. They provide for versatile dosing regimens and routes of administration, including intra-articular, intra-neuronal (nerve block) and intradermal injection. This non-opioid CA8* mechanism-of-action addresses neuropathic, inflammatory, and nociceptive pain, which apply to a broad range of chronic pain indications, including osteoarthritis pain, diabetic neuropathy, post herpetic neuralgia, lower back pain, and cancer pain, as well as rare pain conditions such as erythromelalgia, an orphan drug disease. Using a replication-defective HSV vector enables disease-free localized delivery to the peripheral somatosensory nervous system with an excellent safety profile. HSV vectors are known for their stability and prolonged gene-expression, providing an excellent basis for long-term treatment.

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 lead programs are long-acting locally acting gene-therapies that are opioid-free Disease Modifying Anti-Pain therapies (DMAPs) for the treatment of a variety of chronic pain indications.

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 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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