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**Acucela Data in Dry AMD to be Highlighted at the
8th International Symposium on Ocular Pharmacology and Therapeutics**

Phase 1 Findings for ACU-4429, a Novel Oral Treatment to be Presented

BOTHELL, Wash. (November 24, 2009) – Acucela, a clinical-stage biotechnology company focused on developing new treatments for blinding eye diseases, announced today that data for the company’s novel visual cycle modulator, ACU-4429, a potential oral treatment for dry age-related macular degeneration (dry AMD), will be featured at the 8th International Symposium on Ocular Pharmacology and Therapeutics (ISOPT) being held in Rome, Italy from December 3 to 6, 2009. The data will be presented during the Retina: Dry AMD portion of the ISOPT program on Saturday, December 5, 2009 at 10:20 a.m. CET in Hall A of the Rome Cavalieri Hilton.

Nancy Boman, M.D., Ph.D., Acucela’s vice president, clinical development and regulatory affairs, will present data from a recently completed Phase 1 study assessing the safety, tolerability, pharmacokinetics and pharmacodynamics of ACU-4429 administration in healthy volunteers aged 55-80. This Phase 1 trial was a single-center, randomized, double-masked, placebo-controlled, dose-escalation study. Data from the trial demonstrated a well-tolerated, dose-dependent modulation of the visual cycle using electroretinography (ERG), an established eye test in the evaluation of response and recovery of the retina that is used to help diagnose disease. Importantly, these data also marked the first time that a non-retinoid therapeutic in a convenient, oral pill form has effectively targeted the visual cycle in a dose-dependent manner.

“Dry AMD is a leading cause of vision loss in people over the age of 50 and there are no therapies currently approved to treat this condition,” stated Dr. Boman. “These data suggest that ACU-4429 may effectively slow the eye’s visual cycle and have broad potential for treating a range of degenerative eye conditions. As we further advance our clinical development program, it is exciting that ACU-4429 clinical data continue to reinforce our preclinical findings and we look forward to discussing these data in greater detail at ISOPT 2009.”

Initial data from this Phase 1 clinical trial have been presented at key scientific meetings earlier this year and, along with these full findings, provide support and clinical rationale for Acucela’s

ACU-4429 clinical development program in patients with dry AMD. The company expects to launch an ACU-4429 Phase 2 clinical trial shortly.

About ACU-4429

ACU-4429 utilizes Acucela's proprietary visual cycle modulation (VCM) technology, and is designed to prevent or inhibit the generation of toxic by-products of the visual cycle that can lead to degenerative eye conditions like dry AMD. Data indicate that ACU-4429 slows the rod visual cycle, resulting in decreased accumulation of a toxic by-product that is the precursor of lipofuscin, which are deposits of toxic substances. The chronic accumulation of lipofuscin has been implicated in degenerative retinal diseases. ACU-4429 is administered to patients as an oral, daily pill rather than by injection into the eye, which is typical of many current eye therapeutics. Acucela has forged a strategic partnership with Otsuka Pharmaceutical, Co. Ltd. to co-develop ACU-4429 in dry AMD as well as other potential indications in North America.

About Acucela Inc.

Acucela Inc. is a clinical-stage biotechnology company focused on leveraging promising science in visual cycle modulation (VCM) to develop new methods for treating blinding eye diseases that affect tens of millions of people worldwide. The company's orally-delivered VCM therapies, which selectively target cells within the retina to protect visual acuity, have the potential to be used to treat several devastating eye diseases, including dry age-related macular degeneration (AMD), retinopathy of prematurity, Stargardt disease and diabetic retinopathy. Acucela is also developing, with Otsuka Pharmaceutical, Rebamipide ophthalmic suspension, a product candidate for dry eye. For more information, please visit www.Acucela.com.

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