



Acucela Inc.
21720 23rd Dr. SE
Suite 120
Bothell, WA 98021
Tel:425.527.3260
Fax:425.527.3156

ACUCELA ANNOUNCES PRESENTATION OF DATA IN PRECLINICAL STUDY OF RETINOPATHY

Bothell, WA—April 22, 2008—Acucela Inc., a clinical-stage biotechnology company discovering new drug therapies for eye diseases, today announced that data from a preclinical study in retinopathy of prematurity (ROP) will be presented at the Association for Research in Vision and Ophthalmology (ARVO) Annual Meeting being held April 27 through May 1 in Fort Lauderdale, Florida. The data will be presented by researchers from Children's Hospital Boston.

Presentation Details:

- Date and Time: April 29, 2008, 8:30 a.m. – 10:15 a.m. EDT
- Retinal Cell Biology Session: Retinal and Choroidal Angiogenesis II, Hall B/C
- Abstract Number: 2629 / A354
- Poster Presentation: Effects of a Vitamin-A Derivative (AG-787-14-2) on Retinal Function in Oxygen-Induced Retinopathy
- Presenter: James D. Akula, Ph.D.

About Visual Cycle Modulation and its Impact on Blinding Eye Diseases

Visual cycle modulation may have the ability to impact multiple blinding eye diseases. Acucela is developing an orally available drug that inhibits the visual cycle potentially impacting the processes that can lead to blinding eye diseases such as age-related macular degeneration (AMD), diabetic retinopathy, retinopathy of prematurity and Stargardt disease.

About Acucela

Acucela Inc. is focused on developing new drug therapies for eye diseases, and particularly neurodegenerative retinal diseases such as macular degeneration. The company has proprietary disease-specific assays and technologies to identify and develop compounds that may safely and effectively treat retinal diseases and injuries. The company's novel approaches have significant therapeutic potential to treat retinal diseases such as Age-related Macular Degeneration (AMD) and Stargardt disease, which affect 50 million people worldwide. The Bothell-based, privately-held, biotechnology company was founded in 2002. For more information, please visit <http://www.acucela.com>.

Forward-Looking Statement

This press release contains "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements involve risks and uncertainties, which may cause results to differ materially from those set forth in the statements. The forward-looking statements include statements regarding product development. No forward-looking statement can be guaranteed, and actual results may differ materially from those projected. Acucela undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise.

Press Contact

Acucela Inc.

Sayuri Refsland (U.S.): sayuri@acucela.com

Kenzo Ogiwara (Japan): 03-5789-4748, kogiwara@acucela.com