

Inotek Pharmaceuticals Presents Preclinical Data at ARVO Confirming that INO-8875 Lowers IOP by Increasing Outflow through the Trabecular Meshwork

-- INO-8875 to begin Phase 2 trials in glaucoma in mid-2010 --

LEXINGTON, Mass.,-- May 4, 2010 – Inotek Pharmaceuticals Corp., a leader in the development of innovative drug candidates to address significant diseases of the eye, today presented results confirming the mechanism of action of the Company’s lead glaucoma candidate, INO-8875, as a trabecular meshwork outflow enhancer. Studies were conducted in human trabecular meshwork cells and multiple preclinical models. INO-8875 has successfully completed a single-dose Phase 1/2 trial in glaucoma and is expected to enter Phase 2 trials with an eye-drop formulation in mid-2010. The data was presented in a poster presentation at the Association for Research in Vision and Ophthalmology (ARVO) Annual Meeting in Ft. Lauderdale, FL.

Highlights from the ARVO poster entitled, “INO-8875, an Adenosine A1 Agonist, Lowers Intraocular Pressure Through the Conventional Outflow Pathway” included:

- INO-8875 in an eye-drop formulation dose-dependently lowered intraocular pressure (IOP) by 20-25% from baseline at 1-2 hours after single doses in normotensive eyes. The IOP-lowering effect of INO-8875 was sustained for 4-6 hours post-dose.
- In human trabecular meshwork cells, INO-8875 rapidly activated the extracellular signal-regulated kinases 1/2 and stimulated the release of matrix metalloproteinase-2 (MMP-2). MMP-2 is thought to be a key player in the processing of extracellular matrix that can accumulate in the trabecular meshwork and impede aqueous humor outflow.
- In isolated, perfused anterior segments of the eye, INO-8875 significantly increased conventional outflow (i.e., outflow through the trabecular meshwork) compared to vehicle.

About Inotek

Inotek is a leader in the development of innovative drug candidates that address significant diseases of the eye, with a major focus on glaucoma. Inotek’s lead product candidate INO-8875 is a potential first-in-class eye-drop treatment for glaucoma that significantly reduced intraocular pressure (IOP) in

glaucoma subjects following single doses applied to the eye in a Phase 1/2 clinical trial. The Company believes INO-8875 will be a breakthrough treatment that can be used alone or combined with other IOP-lowering products because it increases the outflow of aqueous humor through the trabecular meshwork, the primary drainage system used by healthy elderly eyes to maintain normal IOP. The Company is also advancing a broad pipeline of PARP inhibitors and SOD mimetics that alleviate oxidative injury and inflammation, which it believes may address significant unmet medical needs in retinal diseases, such as the dry form of age-related macular degeneration (dry AMD). The Company is located in Lexington, MA. For further information on Inotek, please visit www.inotekcorp.com.

###

Company Information

Adam L. Muzikant, Ph.D.
Senior Director, Business Development
Inotek Pharmaceuticals
(781) 676-2125

Media Relations

Sarah Cavanaugh
MacDougall Biomedical Communication
scavanaugh@macbiocom.com
(781) 235-3060