

**Inotek Pharmaceuticals' Novel Glaucoma Candidate, INO-8875, Significantly Reduces  
Intraocular Pressure in Phase 1/2 Study**

**-- INO-8875 represents new mechanism of action to treat glaucoma by targeting the  
trabecular meshwork --**

**LEXINGTON Mass.,-- June 25, 2009** – Inotek Pharmaceuticals today announced positive top-line results from a Phase 1/2 randomized, double-blind, placebo-controlled clinical trial of the Company's lead candidate, INO-8875, in patients with glaucoma. Treatment with INO-8875 was well tolerated and resulted in a statistically significant reduction in intraocular pressure (IOP). Elevated IOP can be a risk factor in the development and progression of optic nerve changes and vision loss associated with glaucoma and is thought to be a causal factor in the neuropathology of the disease. INO-8875 represents a new approach to treating glaucoma patients by increasing the outflow of ocular fluid via the trabecular meshwork, the main pathway used by healthy eyes to maintain normal IOP.

“The glaucoma market has not seen the introduction of a therapeutic with a new mechanistic approach for over a decade,” said Paul G. Howes, President and Chief Executive Officer of Inotek. “We believe INO-8875 is an important investigational agent that holds great potential for the treatment of glaucoma and other indications marked by elevated IOP. We intend to continue our Phase 2 program with INO-8875 in glaucoma in 2010, while also continuing to advance our pipeline which includes novel therapeutic approaches to other serious ophthalmic diseases, including age-related macular degeneration and diabetic retinopathy.”

The Phase 1/2 single ascending dose study, involving 84 subjects with primary open-angle glaucoma or ocular hypertension, was designed to evaluate the safety, tolerability, and efficacy of INO-8875 administered topically to the eye. INO-8875 was well tolerated up to the highest dose tested, with no evidence of serious adverse events and no observed dose-limiting toxicities. INO-8875 demonstrated linear, dose-proportional pharmacokinetics, with minimal systemic absorption.

IOP was measured at multiple time points during the treatment period. Dose-dependent reductions in IOP were observed with INO-8875 treatment. While the trial was not powered to achieve statistical significance, and none was expected given the sample size, statistically significant reductions in IOP

compared to placebo were attained at the two highest doses of INO-8875 tested. Full results from the study will be presented at a future medical meeting.

“These data suggest that INO-8875 has the potential to become a meaningful therapeutic for patients with glaucoma,” said Rudolf Baumgartner, M.D., Chief Medical Officer of Inotek. “By leveraging the effects of INO-8875, physicians may be able to add a new mechanism of action for lowering IOP to their treatment armamentarium to reach individualized target IOP levels and reduce vision loss associated with glaucoma.”

### **About INO-8875**

INO-8875 is a highly selective adenosine A1 receptor agonist currently being studied in patients with primary open-angle glaucoma or ocular hypertension. Adenosine A1 receptor agonists are believed to reduce intraocular pressure (IOP) by increasing the outflow of ocular fluid (aqueous humor) via the trabecular meshwork, the main pathway used by healthy eyes to maintain normal IOP. INO-8875 thus represents a new mechanism of action to treat glaucoma and other serious diseases of the eye marked by elevated IOP. Clinical and preclinical studies of INO-8875 administered to the eye have consistently demonstrated an IOP-lowering effect and a favorable safety profile. INO-8875 successfully completed a Phase 1/2 study in glaucoma in 2009 and the initiation of a multiple dose Phase 2 study is planned for 2010.

### **About Glaucoma**

Glaucoma is the leading cause of irreversible blindness worldwide, affecting more than 65 million people. The most common form of glaucoma is characterized by a build up of pressure in the eye when aqueous humor - the fluid inside the eye - is unable to flow out of the eye at its normal rate. As IOP increases, damage may occur to the optic nerve and retina, and patients gradually lose the ability to see, often progressing until total blindness occurs.

### **About Inotek Pharmaceuticals**

Inotek is a clinical-stage pharmaceutical company developing therapeutics with novel mechanisms of action to address significant diseases of the eye. The Company has an emerging pipeline of drug candidates targeting a broad range of ophthalmic diseases, including glaucoma, age-related macular degeneration and diabetic retinopathy. Inotek has been a pioneer in poly (ADP-ribose) polymerase (PARP) research and has developed a substantial portfolio of novel PARP inhibitors. PARP

inhibitors hold great potential in multiple therapeutic areas, including ophthalmology, oncology and cardiovascular disease. The Company also has a portfolio of superoxide dismutase (SOD) mimetics. Both PARP and SOD are attractive new targets for the treatment of retinal disease. The Company's business strategy is to advance its internal ophthalmic pipeline and, in parallel, partner its technologies for other therapeutic areas. To learn more, please visit the Company's website at [www.inotekcorp.com](http://www.inotekcorp.com).

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