FOR IMMEDIATE RELEASE

Positive Results for Ophthotech's Novel Therapy for Wet AMD - Study of Anti-PDGF and Anti-VEGF Therapy Shows Significant Neovascular Regression and Enhanced Visual Outcome

59% of patients showed 3-line gain (significant visual gain) and 100% neovascular regression

Fort Lauderdale, Fla, May 4, 2009 – Ophthotech Corp. today announced positive results of a phase 1 clinical study evaluating E10030, its novel anti-platelet derived growth factor (anti-PDGF) in conjunction with an anti-vascular endothelial growth factor (anti-VEGF), to treat wet age-related macular degeneration (wet AMD). Anti-PDGF therapy resulted in enhanced visual outcome and was associated with significant neovascular regression. The results were presented at the Association for Research in Vision and Ophthalmology (ARVO) 2009 Annual Meeting in Fort Lauderdale.

59% percent of patients treated with anti-PDGF and anti-VEGF gained significant vision (3-line gain) at week 12 after therapy. 100% of treated patients demonstrated neovascular regression. E10030 was well tolerated with no evidence of drug-related adverse events. Current standard of care treatment utilizing monotherapy anti-VEGF results in 3-line visual gain in approximately one third of patients and without significant neovascular regression.

"Marked neovascular regression, a first in any study, with an outstanding level of visual gain, is very promising for our patients. My clinical experience with current monotherapy anti-VEGF regimen in wet AMD is consistent with published studies, which show that on average neovascular regression does not occur," said Dr. Lawrence J. Singerman, Clinical Professor at Case Western Reserve University and a principal investigator in over 50 macular clinical trials.

E10030 is an aptamer targeting PDGF, a key molecule involved in the recruitment and maturation of pericytes. Pericytes in neovascular tissue have been shown to be protective and play a major role in anti-VEGF treatment resistance. E10030 strips the pericytes from the neovascular tissue rendering it highly sensitive to an anti-VEGF attack.

"The objective and robust response of neovascular regression is consistent with the biologic activity of E10030. I look forward to a randomized trial design to confirm the strong proof of concept data of this study," said Dr. Donald J. D'Amico, Professor and Chairman, Department of Ophthalmology, Weill Cornell Medical College, New York-Presbyterian Hospital.

"It is exciting to see our clinical trial confirm the strong preclinical data from oncology and ophthalmic studies targeting the molecules regulating pericyte and endothelial cell survival. Ophthotech will continue to devote its resources towards an accelerated development of our anti-PDGF compound," said Dr. Samir C. Patel, President and CEO of Ophthotech Corp.

Wet AMD is characterized by the abnormal growth of blood vessels (neovascularization) beneath the retina, which leak blood and fluid and can cause permanent damage to cells in the center of the retina (the macula). This form of AMD is the most severe form of the disease, and often leads to permanent vision loss.

E10030 is one of three compounds that Ophthotech is developing to treat wet and dry AMD. Additional molecular entities include an anti-C5 aptamer and volociximab, an anti-angiogenic monoclonal antibody targeting the α5β1 integrin, both currently in a Phase I study.

About anti-PDGF E10030
E10030 is an aptamer-based compound directed against PDGF-B. Pharmacology studies indicate that E10030 binds to PDGF-B with high specificity and affinity and inhibits the functions of PDGF-B both *in vitro* and *in vivo*. In preclinical studies, E10030 demonstrated the potential to regress neovascularization when used in combination with a VEGF-A inhibitor. In experiments involving models of ocular vascularization, concurrent inhibition of PDGF-B and VEGF-A signaling was superior to inhibition of the VEGF-A pathway alone.

About AMD
Age-related macular degeneration (AMD) is the leading cause of blindness for people over the age of 50 in the United States and Europe. The role of abnormal neovascularization, or angiogenesis, in the pathogenesis of neovascular AMD has been well established. There are two forms of the disease, namely "dry" and "wet" AMD. The “wet” form is characterized by the growth of new blood vessels into the central region of the retina. These new vessels cause severe visual loss due to retinal damage caused by subsequent leakage and scar formation. Anti-VEGF therapies and photodynamic therapies have been approved for “wet” AMD. “Dry” AMD accounts for up to 90 percent of all cases of AMD. There is no approved therapy for “dry” AMD, which afflicts 8 million patients in the United States and an additional 8 million in Europe. Visual loss in “dry” AMD is typically not as severe as “wet” AMD, however, over time, “dry” AMD can progress to the wet form of the disease.

About Ophthotech
Ophthotech Corp. is a privately held biopharmaceutical company based in Princeton, NJ and New York, NY focused on developing and commercializing therapies for back-of-the-eye diseases. Ophthotech plans to develop a pipeline of compounds with strong scientific foundations for the treatment of AMD and bring them to market in an accelerated manner. For more information, please visit http://www.ophthotech.com.

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