



FOR IMMEDIATE RELEASE:

Ophthotech Enrolls First Patient in a Phase I Complement (Anti-C5) Inhibitor Trial for Macular Degeneration

ARC1905 Represents Second Compound in Clinical Development

Princeton, NJ and New York, NY— October 27, 2008 – Ophthotech Corp. (“Ophthotech”), a privately held biopharmaceutical company focused on developing ophthalmic therapies for back-of-the-eye diseases, announced today the enrollment of its first patient in a complement inhibition trial for the treatment of age-related macular degeneration (AMD). This Phase I trial will assess the safety and tolerability of ARC1905, an anti-C5 complement factor aptamer, in combination with an anti-VEGF agent.

Dr. Donald J. D’Amico, Professor and Chairman, Department of Ophthalmology, Weill Cornell Medical College, New York-Presbyterian Hospital, and a member of Ophthotech’s Scientific Advisory Board, said, “Multiple lines of evidence now point to a fundamental problem with inflammation and complement activation in patients with high susceptibility to develop AMD. Intervention in the complement pathway is the single most promising target for new therapeutic and preventive strategies for AMD.”

“Preclinical and human genetic linkage studies strongly support the significant role of complement-mediated inflammation in both dry and wet AMD,” said Samir Patel, M.D., President and Chief Executive Officer of Ophthotech. “We believe that anti-C5 aptamer blockade represents a potential breakthrough therapy for both wet and dry forms of AMD.”

Published studies in *Science*, the *New England Journal of Medicine* and other leading journals suggest that abnormalities involving the complement pathway may be responsible for the majority of cases of dry and wet forms of AMD in the western world.

ARC1905 represents one of three compounds that Ophthotech is developing to treat AMD. Additional molecular entities include E10030, an anti-PDGF aptamer currently in a Phase I study, and volociximab, an anti-angiogenic monoclonal antibody targeting the $\alpha 5\beta 1$ integrin, which is on track to commence clinical trials in the near future.

About ARC1905

Anti-C5 aptamer ARC1905 inhibits C5, a central component of the complement cascade, which plays multiple roles in innate immunity and inflammatory diseases. Inhibition of this key step in the complement cascade at the level of C5 prevents the formation of key terminal fragments (C5a and C5b-9) regardless of which pathway (alternate, classical or lectin) induced their generation. The C5a fragment is an important inflammatory activator inducing vascular permeability, recruitment and activation of phagocytes. C5b-9 is involved in the formation of

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membrane attack complex (MAC: C5b-9), which initiates cell lysis. By inhibiting these C5-mediated inflammatory and MAC activities, therapeutic benefit may be achieved in both dry and wet AMD. In August 2007, Ophthotech licensed worldwide rights to all ophthalmic uses of Archemix's proprietary aptamers (ARC186 and ARC1905) targeting the C5 component of the complement cascade.

About E10030

E10030, currently being investigated in a Phase I trial, 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 Volociximab (M200)

Volociximab is a monoclonal antibody targeting $\alpha 5\beta 1$ integrin, a key protein involved in the formation of new blood vessels, a process known as angiogenesis. $\alpha 5\beta 1$ integrin is a critical survival factor for proliferating endothelial cells involved in angiogenesis. Inhibition of $\alpha 5\beta 1$ integrin has demonstrated potent anti-angiogenic effects in multiple pre-clinical models of angiogenesis.

About AMD

AMD is the leading cause of blindness for people over the age of 50 in the United States and Europe. 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 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. In August of 2007, Ophthotech announced a Series A venture financing and two separate in-licensing deals with Archemix Corp. and Eyetech, Inc., which recently spun out of (OSI) Eyetech. A third in-license from Biogen Idec and PDL BioPharma was announced in January of 2008. Ophthotech's venture investors include SV Life Sciences, HBM BioVentures and Novo A/S. For more information, please visit www.ophthotech.com.

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