Aerpio Therapeutics Announces Positive Results of a Phase 2a Study of AKB-9778 in Diabetic Macular Edema: The TIME-2 Trial

- **The combination of AKB-9778 and Lucentis® provided significant benefit over Lucentis® monotherapy in reduction of macular edema with a trend towards improved visual acuity at the end of a 3-month treatment period**
- **AKB-9778 demonstrated an excellent safety profile in the treatment of diabetic macular edema (DME)**
- **A follow-up DME study is currently under development**

CINCINNATI--(BUSINESS WIRE)--Aerpio Therapeutics, a biopharmaceutical company focused on advancing first-in-class treatments for the eye, today announced top-line results from its TIME-2 study of AKB-9778 in DME. The combination of AKB-9778 (dosed at 15 mg BID) and Lucentis® (ranibizumab injection) provided a clinically significant benefit in reduction of central subfield thickness (CST) compared to Lucentis® alone (p=0.008). In association with this improvement in CST, a positive trend also showed that more patients receiving the combination of AKB-9778 and Lucentis® achieved greater than or equal to three lines of visual acuity compared to Lucentis® alone. The trial additionally included a third treatment arm of patients receiving AKB-9778 alone, dosed at 15 mg BID for 3 months, and this arm did not show a reduction in CST. In regard to the safety profile, there were no clinically significant differences in the percentage of patients that experienced ocular or non-ocular adverse events across the three study arms. Full study results will be presented at an upcoming scientific meeting. The Company is also in the process of planning a follow-on clinical study with combination therapy.

“The results from TIME-2 are very encouraging as AKB-9778 is the first compound to show a benefit in combination with an anti-VEGF agent, the established standard-of-care, in the treatment of DME. The robust effect seen in controlling macular edema suggests the potential of the combination of AKB-9778 and an anti-VEGF agent in the treatment of DME and other retinopathies,” said Dr. David Boyer, Senior Partner of

Retina Vitreous Associates of Los Angeles. “Achieving and maintaining dry retinas is one of the key efficacy drivers in DME. The percentage of patients that achieve this outcome at three months with AKB-9778 combination therapy is promising, and we’d expect significant visual acuity outcomes to follow these types of anatomic outcomes,” added Dr. Pravin Dugel, Managing Partner of Retinal Consultants of Arizona.

“The combination therapy benefit observed in this trial supports the further development of AKB-9778 and our ultimate commercial strategy to launch as adjunctive therapy in combination with anti-VEGF agents,” stated Joseph Gardner, CEO. “Most importantly, the combination approach has the potential to provide better outcomes for DME patients. We are actively planning the next stage of clinical development for this promising compound.”

TIME-2 was a phase 2a, proof-of-concept study meant to validate the biologic signal of efficacy seen in TIME-1. Additionally, TIME-2 sought to establish the safety profile of AKB-9778 in DME. The TIME-2 study evaluated 144 DME patients randomized equally to AKB-9778 as monotherapy or in combination with Lucentis® compared with Lucentis® alone for a treatment period of 3 months. The study’s primary endpoint was mean change from baseline in central subfield thickness. Secondary endpoints included visual acuity and safety outcomes.

“The TIME-2 results are encouraging and demonstrate the importance of multiple pathways in diabetic eye disease. We anticipate the next DME study will feature a longer treatment duration to optimize the anatomic and visual acuity outcomes seen at three months in TIME-2,” said Chief Scientific Officer Kevin Peters. “In addition to optimizing benefits in DME, we are hopeful that longer durations of therapy with systemically administered AKB-9778 will provide collateral benefits in other vascular beds commonly compromised in diabetics, including the kidneys and extremities. The implications of such a treatment could revolutionize the treatment of diabetes mellitus.”

About AKB-9778

AKB-9778 is a first-in-class small molecule that inhibits the human protein tyrosine phosphatase β (HPTPβ) enzyme, which acts as a negative regulator of the Tie2 receptor. By inhibiting this negative regulator, Tie2 signaling is restored, overcoming the

effects of the vascular destabilization. Aerpio is currently focusing development of AKB-9778 in DME.

About Aerpio Therapeutics

Aerpio Therapeutics, Inc. is a clinical-stage biopharmaceutical company focused on the development of novel therapeutics for the treatment of vascular disorders with an emphasis on diseases of the eye. Aerpio is a leader in the development of therapeutics based on Tie2 activation and the stabilization of hypoxia-inducible factor 1α (HIF-1α). The Company's lead program, AKB-9778, is a first-in-class small molecule stabilizer of the Tie2 pathway and is in clinical development for diabetic macular edema. More information is available at www.aerpio.com.

Lucentis® is a registered trademark of Genentech, Inc.

Contacts
Aerpio Therapeutics, Inc.
Dhaval Desai
Vice President of Medical Affairs
ddesai@aerpio.com
or
Burns McClellan on behalf of Aerpio Therapeutics
Investors:
Kimberly Minarovich, 212-213-0006
kminarovich@burnsmc.com
or
Media:
Justin Jackson, 212-213-0006
jjackson@burnsmc.com