

PROSPECTUS SUPPLEMENT NO. 1
(To Prospectus Dated June 23, 2017)



Aerpio Pharmaceuticals, Inc.
27,367,117 Shares
Common Stock

This prospectus supplement no. 1 supplements the prospectus dated June 23, 2017, relating to the offering and resale of up to 27,367,117 shares of our common stock, par value \$0.0001 per share, that were privately issued to selling stockholders in connection with a merger transaction and a private placement.

This prospectus supplement incorporates into our prospectus the information contained in our attached current report on Form 8-K, which was filed with the Securities and Exchange Commission on June 29, 2017.

You should read this prospectus supplement in conjunction with the prospectus, including any supplements and amendments thereto. This prospectus supplement is qualified by reference to the prospectus except to the extent that the information in the prospectus supplement supersedes the information contained in the prospectus.

This prospectus supplement is not complete without, and may not be delivered or utilized except in connection with, the prospectus, including any supplements and amendments thereto.

There is not currently, and there has never been, any established public trading market for any of our securities. Our securities are not currently eligible for trading on any national securities exchange, including the NASDAQ Stock Market, or any over-the-counter markets, including the OTC Markets—OTCQB tier, or OTCQB. We cannot assure you that our securities will become eligible for trading on any exchange or market. In connection with this offering, we have arranged for a registered broker-dealer to apply to have our common stock quoted on the OTCQB or another over-the-counter system. Until such time as our common stock is quoted on the OTCQB or another public trading market otherwise develops, the selling stockholders identified in the prospectus may only sell their shares of our common stock pursuant to the prospectus at a fixed price of \$5.00 per share. At and after such time, the selling stockholders may sell all or a portion of their shares through public or private transactions at prevailing market prices or at privately negotiated prices.

You should carefully consider matters discussed under the caption “Risk Factors” beginning on page 9 of the prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is June 29, 2017.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): June 29, 2017

Aerpio Pharmaceuticals, Inc.

(Exact Name of Company as Specified in Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

000-53057
(Commission
File Number)

61-1547850
(IRS Employer
Identification No.)

9987 Carver Road
Cincinnati, OH 45242
(Address of Principal Executive Offices) (Zip Code)

Company's telephone number, including area code: (513) 985-1920

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 8.01 Other Events.

On June 29, 2017, Aerpio Pharmaceuticals, Inc. (the “**Company**”) announced the initiation of patient dosing in the Company’s TIME-2b study, a Phase 2b clinical trial designed to assess the efficacy and safety of the Company’s lead candidate, AKB-9778, for patients with moderate to severe non-proliferative diabetic retinopathy.

On June 29, 2017, the Company issued a press release announcing the initiation of patient dosing. A copy of the press release is attached hereto as Exhibit 99.1 and is incorporated into this Item 8.01 by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release of Aerpio Pharmaceuticals, Inc., dated June 29, 2017

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

AERPIO PHARMACEUTICALS, INC.

Date: June 29, 2017

By: /s/ Joseph H. Gardner
Joseph H. Gardner
Chief Executive Officer



Aerpio Announces Initiation of Patient Dosing in the TIME-2b Study, a Phase 2b Clinical Trial of Lead Candidate AKB-9778 in Patients with Diabetic Retinopathy

June 29, 2017, CINCINNATI-- Aerpio Pharmaceuticals, Inc., a biopharmaceutical company focused on advancing first-in-class treatments for ocular diseases, today announced the initiation of patient dosing in the company's TIME-2b study, a Phase 2b clinical trial designed to assess the efficacy and safety of Aerpio's lead candidate AKB-9778 for patients with moderate to severe non-proliferative diabetic retinopathy.

The TIME-2b study is a double-masked, placebo-controlled, multi-center trial that will enroll 150 patients randomized 1:1:1 to receive either AKB-9778 15 mg subcutaneously once daily, AKB-9778 15 mg twice daily, or placebo for a 12-month period. The primary endpoint of the TIME-2b study is the percentage of patients who improve by at least 2 steps in diabetic retinopathy Severity Score (DRSS) in the study eye. Secondary objectives include assessment of safety and tolerability of both dosing regimens. Victor H. Gonzalez, MD of Valley Retina Institute (McAllen, TX), who enrolled the first patient in TIME-2b, stated "TIME-2b is an exciting study because it allows us to evaluate a patient self-administered investigational drug for the treatment of moderate to severe non-proliferative diabetic retinopathy. An early treatment option that potentially improves diabetic retinopathy in both eyes without the need for intraocular injections could completely change our approach to diabetic eye disease." More information about the clinical trial is available at: <https://clinicaltrials.gov/ct2/show/NCT03197870>.

"The start of our TIME-2b study builds upon our clinical proof of concept data, for which we reported that AKB-9778 monotherapy was able to improve underlying diabetic retinopathy by 2 or more steps in DRSS in both eyes" said Joseph Gardner, President & CEO of Aerpio. "Diabetic retinopathy remains an area of significant unmet medical need. An estimated one out of three individuals with diabetes has retinopathy, which generally progresses over time and can lead to loss of vision due to proliferative diabetic retinopathy or diabetic macular edema. Our goal with AKB-9778 is to treat early diabetic eye disease before the onset of these vision threatening conditions."

About Aerpio Pharmaceuticals

Aerpio Pharmaceuticals, Inc. is a biopharmaceutical company focused on advancing first-in-class treatments for ocular diseases. The Company's lead compound, AKB-9778, is a small molecule activator of the Tie2 pathway and is in clinical development for the treatment of non-proliferative diabetic retinopathy. For more information please visit www.aerpio.com.

About AKB-9778

AKB-9778 is being developed as a subcutaneous injection for the treatment of non-proliferative diabetic retinopathy. AKB-9778 binds to and inhibits the intracellular domain of VE-PTP, the most critical negative regulator of Tie2. AKB-9778 has demonstrated the ability to activate the Tie2 receptor irrespective of extracellular levels of its binding ligands, angiopoietin-1 (agonist) or angiopoietin-2 (antagonist), and may be the most efficient pharmacologic approach to activating Tie2.

About Diabetic Retinopathy

Diabetic retinopathy (DR) is a complication of diabetes caused by damage to blood vessels in the retina. Severity of DR ranges from mild non-proliferative diabetic retinopathy to more advanced proliferative diabetic retinopathy, the hallmark of which is the development of new abnormal blood vessels. DR is the leading cause of blindness among working aged adults around the world.

Forward Looking Statements

This press release contains forward-looking statements. Statements in this press release that are not purely historical are forward-looking statements. Such forward-looking statements include, among other things, the timeline of, and other developmental plans for, AKB-9778 for non-proliferative diabetic retinopathy or otherwise, the therapeutic potential of the Company's product candidates, including AKB-9778. Actual results could differ from those projected in any forward-looking statements due to several risk factors. Such factors include, among others, the ability to raise the additional funding needed to continue to develop AKB-9778 or other product development plans, the inherent uncertainties associated with the FDA and drug development process, including the timing of patient enrollment and progress in our study, competition in the industry in which the Company operates and overall market conditions. These forward-looking statements are made as of the date of this press release, and the Company assumes no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements, except as required by law. Investors should consult all the information set forth herein and should also refer to the risk factor disclosures set forth in the reports and other documents the Company files with the SEC available at www.sec.gov.

Contacts

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