

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

**SCHEDULE 13D**

Under the Securities Exchange Act of 1934  
(Amendment No. )\*

**Aerpio Pharmaceuticals, Inc.**

(Name of Issuer)

**Common Stock, par value \$0.0001 per share**  
(Title of Class of Securities)

**None**  
(CUSIP Number)

**Michael Jones**  
**General Counsel**  
**Novartis Bioventures Ltd.**  
**131 Front Street**  
**Hamilton HM12, Bermuda**  
**+1 441 298 1602**

(Name, Address and Telephone Number of Person  
Authorized to Receive Notices and Communications)

**March 15, 2017**  
(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Section 240.13d-7 for other parties to whom copies are to be sent.

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of section 18 of the Securities Exchange Act of 1934, as amended ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(1)	Names of reporting persons Novartis Bioventures Ltd.	
(2)	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
(3)	SEC use only	
(4)	Source of funds (see instructions) WC	
(5)	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
(6)	Citizenship or place of organization Bermuda	
Number of shares beneficially owned by each reporting person with:	(7)	Sole voting power 0
	(8)	Shared voting power 5,805,550
	(9)	Sole dispositive power 0
	(10)	Shared dispositive power 5,805,550
(11)	Aggregate amount beneficially owned by each reporting person 5,805,550	
(12)	Check if the aggregate amount in Row (11) excludes certain shares (see instructions)	
(13)	Percent of class represented by amount in Row (11) 21.5%(1)	
(14)	Type of reporting person (see instructions) CO	

- (1) This calculation is based on 27,049,555 shares of Common Stock, par value \$0.0001 per share, outstanding as of March 15, 2017 upon the closing of the Merger and the Offering, as reported in the Issuer's current report on Form 8-K filed with the Securities and Exchange Commission (the "SEC") on March 17, 2017.

(1)	Names of reporting persons Novartis AG	
(2)	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
(3)	SEC use only	
(4)	Source of funds (see instructions) WC	
(5)	Check if disclosure of legal proceedings is required pursuant to Items 2(d) or 2(e)	
(6)	Citizenship or place of organization Switzerland	
Number of shares beneficially owned by each reporting person with:	(7)	Sole voting power 0
	(8)	Shared voting power 5,805,550
	(9)	Sole dispositive power 0
	(10)	Shared dispositive power 5,805,550
(11)	Aggregate amount beneficially owned by each reporting person 5,805,550	
(12)	Check if the aggregate amount in Row (11) excludes certain shares (see instructions)	
(13)	Percent of class represented by amount in Row (11) 21.5%(1)	
(14)	Type of reporting person (see instructions) CO	

(1) This calculation is based on 27,049,555 shares of Common Stock, par value \$0.0001 per share, outstanding as of March 15, 2017 upon the closing of the Merger and the Offering, as reported in the Issuer's current report on Form 8-K filed with the SEC on March 17, 2017.

**Item 1. Security and Issuer.**

This Statement on Schedule 13D relates to the common stock, par value \$0.0001 per share (the "Common Stock") of Aerpio Pharmaceuticals, Inc., a Delaware corporation (the "Issuer"). The Issuer's principal executive offices are located at 9987 Carver Road, Cincinnati, Ohio 45242.

On March 7, 2017, the Issuer and Aerpio Therapeutics, Inc. ("Aerpio") entered into an Agreement and Plan of Merger and Reorganization (the "Merger Agreement"). Pursuant to the terms of the Merger Agreement, on March 15, 2017 (the "Closing Date"), a wholly owned subsidiary of the Issuer merged with and into Aerpio, which was the surviving corporation and thus became a wholly-owned subsidiary of the Issuer. On the Closing Date, the 2,895,994 shares of Aerpio's common stock issued and outstanding immediately prior to the Closing Date were converted into 1,240,925 shares of the Issuer's Common Stock, and the 32,706,307 shares of Aerpio's preferred stock issued and outstanding immediately prior to the Closing Date were converted into 14,015,016 shares of the Issuer's Common Stock. In addition, immediately prior to the Closing Date, the outstanding amounts under certain Senior Secured Convertible Promissory Notes issued by Aerpio to its pre-Merger noteholders were converted into an aggregate of 6,403,748 shares of Aerpio common stock, which shares of Aerpio common stock were converted into 2,744,059 shares of the Issuer's Common Stock, together with the other shares of Aerpio common stock described above (the "Conversion"). As a result, an aggregate of 18,000,000 shares of the Issuer's Common Stock were issued to the holders of Aerpio's capital stock.

Following the Closing Date, the Issuer closed a private placement offering (the "Offering") of 8,049,555 shares of the Issuer's Common Stock, at a purchase price of \$5.00 per share.

**Item 2. Identity and Background.**

(a) This Schedule 13D is being filed by Novartis Bioventures Ltd. ("NBV") and Novartis AG ("Novartis"). NBV and Novartis are hereinafter sometimes collectively referred to as the "Reporting Persons."

(b) The principal business address of NBV is 131 Front Street, Hamilton HM12 Bermuda, Mail: PO Box HM 2899, Hamilton HM LX, Bermuda. The principal business address of Novartis is Lichtstrasse 35, CH-4056 Basel, Switzerland.

(c) NBV is a company organized under the laws of Bermuda and is a wholly-owned indirect subsidiary of Novartis. NBV is a financially driven corporate life science venture fund whose purpose is to foster innovation, drive significant patient benefit and generate superior returns by creating and investing in innovative life science companies at various stages of their development, independent from Novartis' strategy.

Novartis is a corporation organized under the laws of Switzerland and is the publicly owned parent of a multinational group of companies specializing in the research, development, manufacturing and marketing of a broad range of healthcare products led by innovative pharmaceuticals. Novartis is the 100% indirect owner of NBV.

(d)-(e) Neither the Reporting Persons nor, to the best knowledge of each of them, any of the executive officers and members of the Board of Directors of each of the Reporting Persons set forth on Schedule I hereto during the last five years, (i) has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

(f) The name, function, citizenship and present principal occupation or employment of the executive officers and members of the Board of Directors of each of the Reporting Persons is set forth on Schedule I hereto and is incorporated herein by reference.

**Item 3. Source and Amounts of Funds or Other Consideration.**

NBV acquired (i) 1,004,507 shares of Aerpio's Series A Preferred Stock, (ii) 7,665,450 shares of Aerpio's Series A-1 Preferred Stock, (iii) 1,585,609 shares of Aerpio's Series A-2 Preferred Stock, and (iv) \$3,956,468.06 of Aerpio's Senior Secured Convertible Promissory Notes at various times between March 2016 and January 2017.

Upon closing of the Merger, these shares were cancelled and were automatically converted into the right to receive shares of the Issuer's common stock on 2.3336572-1 basis.

In addition, NBV acquired 560,000 shares in the Offering pursuant to a Subscription Agreement, dated as of March 15, 2017.

The source of funds for the purchases of the Issuer's securities was working capital of NBV.

**Item 4. Purpose of Transaction.**

The information contained in Item 3 above is incorporated herein by reference.

All shares of Common Stock reported acquired by the Reporting Persons in this Schedule 13D were acquired for the purpose of investment and were not intended to and did not affect any change in the control of the Issuer.

The Reporting Persons from time to time intend to review their investment in the Issuer on the basis of various factors, including the Issuer's business, financial condition, results of operations and prospects, general economic and industry conditions, the securities markets in general and those for the Issuer's shares of Common Stock in particular, as well as other developments and other investment opportunities. Based upon such review, the Reporting Persons will take such actions in the future as the Reporting Persons may deem appropriate in light of the circumstances existing from time to time. If the Reporting Persons believe that further investment in the Issuer is attractive, whether because of the market price of the Common Stock or otherwise, they may acquire shares of Common Stock or other securities of the Issuer either in the open market or in privately negotiated transactions. Similarly, depending on market and other factors, the Reporting Persons may determine to dispose of some or all of the shares of Common Stock currently owned by the Reporting Persons or otherwise acquired by the Reporting Persons either in the open market or in privately negotiated transactions.

Except as described above, none of the Reporting Persons currently has any plan or proposal that relates to or would result in any of the actions specified in clauses (a) through (j) of Item 4 of Schedule 13D.

**Item 5. Interest in Securities of the Issuer.**

(a) As of the date hereof, the Reporting Persons may be deemed, for purposes of Rule 13d-3 of the Act, directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of the shares of Common Stock described in Item 3 above. NBV is a wholly-owned indirect subsidiary of Novartis.

Based on 27,049,555 shares of Common Stock outstanding as of March 15, 2017, giving effect to the Merger, the Conversion and the Offering, as reported in the Issuer's Form 8-K filed with the SEC on March 17, 2017, the Common Stock held by the Reporting Persons constitutes 21.5% of the outstanding shares of Common Stock of the Issuer.

(b) With respect to the number of shares of Common Stock as to which each Reporting Person has:

(i) sole power to vote or to direct the vote with respect to such shares of Common Stock, please see row 7 of the applicable cover sheet to this Schedule 13D for such Reporting Person;

(ii) shared power to vote or to direct the vote with respect to such shares of Common Stock, please see row 8 of the applicable cover sheet to this Schedule 13D for such Reporting Person;

(iii) sole power to dispose or direct the disposition of such shares of Common Stock, please see row 9 of the applicable cover sheet to this Schedule 13D for such Reporting Person; and

(iv) shared power to dispose or to direct the disposition of such shares of Common Stock, please see row 10 of the applicable cover sheet to this Schedule 13D for such Reporting Person.

(c) Except as described above, during the past 60 days, there were no transactions in shares of Common Stock, or any securities directly or indirectly convertible into or exchangeable for shares of Common Stock, by either Reporting Person.

(d) Not applicable.

(e) Not applicable.

**Item 6. Contracts, Arrangements, Understandings or Relationships With Respect to Securities of the Issuer.**

Except as disclosed herein, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the Reporting Persons and any other person with respect to any securities of the Issuer, including but not limited to transfer or voting of any of the securities, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies.

***Lock-Up Agreement***

In connection with the Merger, NBV entered into a lock-up agreement, whereby NBV is restricted for a period of nine months after the Merger (the "Restricted Period") from certain sales or dispositions of the Issuer's Common Stock held by (or issuable to) it. The restrictions will not apply to the resale of shares of Common Stock by NBV in any registered secondary offering of equity securities by the Issuer (and, if such offering is underwritten, with the written consent of the lead or managing underwriter), or to certain other transfers customarily excepted. In addition NBV agreed, for a period of 12 months following the Closing Date, that it will not, directly or indirectly, effect or agree to effect any short sale (as defined in Rule 200 under Regulation SHO of the Exchange Act), whether or not against the box, establish any "put equivalent position" (as defined in Rule 16a-1(h) under the Exchange Act) with respect to the Common Stock, borrow or pre-borrow any shares of Common Stock, or grant any other right (including, without limitation, any put or call option) with respect to the Common Stock or with respect to any security that includes, relates to or derives any significant part of its value from the Common Stock or otherwise seek to hedge its position in the Common Stock.

***Registration Rights Agreement***

In connection with the Merger and the Offering, NBV entered into a Registration Rights Agreement with the Issuer, pursuant to which the Issuer has agreed that promptly, but no later than 60 calendar days from the final closing of the Offering, it will file a registration statement with the SEC (the "Registration Statement"), covering (a) the shares of Common Stock issued in the Offering, (b) the shares of Common Stock issuable upon exercise of certain warrants, (c) the shares of Common Stock issued in exchange for the equity securities of Aerpio outstanding prior to the Merger and (d) 1,000,000 other shares of Common Stock (the "Registrable Shares"). The Issuer will use its commercially reasonable efforts to ensure that such Registration Statement is declared effective within 150 calendar days after the final closing of the Offering. The Issuer must keep the Registration Statement effective for five years from the date it is declared effective by the SEC or until (i) the Registrable Shares have been sold in accordance with such effective Registration Statement or (ii) the Registrable Shares have been previously sold in accordance with Rule 144. The Issuer will pay all expenses in connection with any registration obligation provided in the Registration Rights Agreement, including, without limitation, all registration, filing, stock exchange fees, printing expenses, all fees and expenses of complying with applicable securities laws, and the fees and disbursements of our counsel and of our independent accountants and reasonable fees and disbursements of counsel to the investors. Each investor will be responsible for its own sales commissions, if any, transfer taxes and the expenses of any attorney or other advisor such investor decides to employ.

***Aerpio Registration Rights Agreement***

In connection with the Merger, NBV entered into a registration rights agreement with the Issuer (the "Aerpio Registration Rights Agreement"). The rights granted to such stockholders under the Aerpio Registration Rights Agreement take effect following such time as the Registration Statement described above no longer remains effective. The Aerpio Registration Rights Agreement includes demand registration rights, short-form registration rights and piggyback registration rights. All fees, costs and expenses of underwritten registrations under this agreement will be borne by the Issuer and all selling expenses, including underwriting discounts and selling commissions, will be borne by the holders of the shares being registered.

Following the date on which the Aerpio Registration Rights Agreement takes effect, the Issuer will be required, upon the written request of the holders of 30% of the registrable securities under the Aerpio Registration Rights Agreement, to file a registration statement on Form S-1 (if Form S-3 is not then available to us to use) and use commercially reasonable efforts to effect the registration of all or a portion of these shares for public resale. The Issuer is required to effect only two registrations pursuant to this provision of the Aerpio Registration Rights Agreement. In addition, if the Issuer is eligible to file a registration statement on Form S-3, upon the written request

of the holders of at least 20% of the registrable securities, the Issuer will be required to use commercially reasonable efforts to effect a registration of such shares.

**Item 7. Material to be Filed as Exhibits.**

<u>EXHIBIT</u>	<u>DESCRIPTION</u>
1	Joint Filing Agreement among the Reporting Persons
2	Form of Lock-Up and No Shorting Agreement
3	Registration Rights Agreement, dated March 15, 2017, by and among the Issuer and certain former stockholders of Aerpio (attached as Exhibit 10.5 to the Issuer's Current Report on Form 8-K (File No. 000-53057) filed with the Securities and Exchange Commission on March 15, 2017 and incorporated herein by reference)
4	Registration Rights Agreement, dated March 15, 2017, by and among the Issuer and the persons listed on Exhibit A attached thereto (attached as Exhibit 10.9 to the Issuer's Current Report on Form 8-K (File No. 000-53057) filed with the Securities and Exchange Commission on March 15, 2017 and incorporated herein by reference)

**Signature**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: March 27, 2017

NOVARTIS BIOVENTURES LTD.

By: /s/ Simon Zivi

Name: Simon Zivi

Title: Chairman

By: /s/ Laurieann Chalkowsky

Name: Laurieann Chalkowsky

Title: Authorized Signatory

NOVARTIS AG

By: /s/ Simon Zivi

Name: Simon Zivi

Title: Authorized Signatory

By: /s/ Laurieann Chalkowsky

Name: Laurieann Chalkowsky

Title: Authorized Signatory



**SCHEDULE I****DIRECTORS AND EXECUTIVE OFFICERS OF  
NOVARTIS AG AND NOVARTIS BIOVENTURES LTD.**Directors and Executive Officers of Novartis AG

The name, function, citizenship and present principal occupation or employment of each of the directors and executive officers of Novartis AG are set forth below. Unless otherwise indicated below, (i) each occupation set forth opposite an individual's name refers to employment with Novartis AG and (ii) the business address of each director and executive officer of Novartis AG is Novartis Campus, Lichtstrasse 35, CH-4056, Basel, Switzerland.

<u>Name</u>	<u>Relationship to Novartis AG</u>	<u>Present Principal Occupation</u>	<u>Citizenship</u>
Joerg Reinhardt, Ph.D.	Chairman of the Board of Directors	Chairman of the Board of Directors	German
Enrico Vanni, Ph.D.	Vice Chairman of the Board of Directors	Independent Consultant	Swiss
Nancy C. Andrews, M.D., Ph.D.	Director	Dean of the Duke University School of Medicine and Vice Chancellor for Academic Affairs at Duke University	American
Dimitri Azar, M.D., MBA	Director	Dean of the College of Medicine and Professor of Ophthalmology, Bioengineering and Pharmacology at the University of Illinois	American
Ton Buechner	Director	CEO and Chairman of the executive board of AkzoNobel	Dutch
Srikant Datar, Ph.D.	Director	Arthur Lowes Dickinson Professor at the Graduate School of Business Administration at Harvard University	American
Elizabeth (Liz) Doherty	Director	Non-executive director and chairman of the audit committee of Dunelm Group plc; Member of the supervisory board and audit committee of Corbion NV	British
Ann Fudge	Director	Vice Chairman and Senior Independent Director of Unilever NV; Director of Northrop Grumman Corporation	American
Franz van Houten	Director	CEO and Chairman of the Executive Committee and the Board of Management of Royal Philips; Vice-Chairman and Member of the Supervisory Board of Philips Lighting	Dutch

<u>Name</u>	<u>Relationship to Novartis AG</u>	<u>Present Principal Occupation</u>	<u>Citizenship</u>
Pierre Landolt, Ph.D.	Director	Chairman of the Sandoz Family Foundation	Swiss
Andreas von Planta, Ph.D.	Director	Board member of Helvetia Holding AG; Partner at Lenz & Staehelin	Swiss
Charles L. Sawyers, M.D.	Director	Chair of the Human Oncology and Pathogenesis Program at Memorial Sloan-Kettering Cancer Center; Professor of Medicine and of Cell and Developmental Biology at the Weill Cornell Graduate School of Medical Sciences; Investigator at the Howard Hughes Medical Institute	American
William T. Winters	Director	CEO and a board member of Standard Chartered	British
Joseph Jimenez	Member of the Executive Committee; Chief Executive Officer	Member of the Executive Committee, Chief Executive Officer	American
Steven Baert	Member of the Executive Committee; Head of Human Resources	Member of the Executive Committee, Head of Human Resources	Belgian
Felix R. Ehrat, Ph.D.	Member of the Executive Committee; Group General Counsel	Member of the Executive Committee; Group General Counsel	Swiss
Paul Hudson	Member of the Executive Committee; CEO, Novartis Pharmaceuticals	Member of the Executive Committee; CEO, Novartis Pharmaceuticals	British
James (Jay) Bradner, M.D.	Member of the Executive Committee; President, Novartis Institutes for BioMedical Research	Member of the Executive Committee; President, Novartis Institutes for BioMedical Research; 250 Massachusetts Avenue, Cambridge, MA 02139, USA	American
Richard Francis	Member of the Executive Committee; CEO, Sandoz	Member of the Executive Committee; CEO, Sandoz	British
F. Michael (Mike) Ball	Member of the Executive Committee; CEO, Alcon	Member of the Executive Committee; CEO, Alcon; 6201 South Freeway Fort Worth, TX 76134, USA	American
Harry Kirsch	Member of the Executive Committee; Chief Financial Officer	Member of the Executive Committee; Chief Financial Officer	German

<u>Name</u>	<u>Relationship to Novartis Bioventures Ltd.</u>	<u>Present Principal Occupation</u>	<u>Citizenship</u>
André Wyss	Member of the Executive Committee; President, Novartis Operations and Country President for Switzerland	Member of the Executive Committee; President, Novartis Operations and Country President for Switzerland	Swiss
Vasant (Vas) Narasimhan, M.D.	Member of the Executive Committee; Global Head Drug Development and Chief Medical Officer	Member of the Executive Committee; Global Head Drug Development and Chief Medical Officer	American
Bruno Strigini	Member of the Executive Committee; CEO, Novartis Oncology	Member of the Executive Committee; CEO, Novartis Oncology	French

Directors and Officers of Novartis Bioventures Ltd.

The name, address, citizenship and present principal occupation or employment of each of the directors and executive officers of Novartis Bioventures Ltd. are set forth below. Unless otherwise indicated below, (i) each occupation set forth opposite an individual's name refers to employment with Novartis Bioventures Ltd. and (ii) the business address of each director and executive officer of Novartis Bioventures Ltd. is 131 Front Street, Hamilton HM12, Bermuda.

<u>Name</u>	<u>Relationship to Novartis Bioventures Ltd.</u>	<u>Present Principal Occupation</u>	<u>Citizenship</u>
Henri Simon Zivi	Chairman of the Board of Directors	General Manager of Novartis International Pharmaceutical Ltd.	Swiss
Michael Jones	Director	General Counsel of Novartis International Pharmaceutical Ltd.	British
Sarah Demerling	Director	Business executive	British

## Joint Filing Agreement

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, each of the persons named below agrees to the joint filing of a Statement on Schedule 13D (including amendments thereto) with respect to the Common Stock of Aerpio Pharmaceuticals, Inc., a Delaware corporation, and further agree that this Joint Filing Agreement shall be included as an exhibit to such joint filings.

This Joint Filing Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original instrument, but all of such counterparts together shall constitute one agreement.

In evidence thereof, the undersigned, being duly authorized, hereby execute this Joint Filing Agreement as of March 27, 2017.

NOVARTIS BIOVENTURES LTD.

By: /s/ Simon Zivi

Name: Simon Zivi

Title: Chairman

By: /s/ Laurieann Chalkowsky

Name: Laurieann Chalkowsky

Title: Authorized Signatory

NOVARTIS AG

By: /s/ Simon Zivi

Name: Simon Zivi

Title: Authorized Signatory

By: /s/ Laurieann Chalkowsky

Name: Laurieann Chalkowsky

Title: Authorized Signatory

## LOCK-UP AND NO SHORTING AGREEMENT

This LOCK-UP AND NO SHORTING AGREEMENT (this "Agreement") is made as of March 15, 2017, by and between the undersigned person or entity (the "Restricted Holder") and Aerpio Pharmaceuticals, Inc. (formerly known as Zeta Acquisition Corp. II), a Delaware corporation (the "Parent"). Capitalized terms used and not otherwise defined herein shall have the meanings given to such terms in the Merger Agreement (as defined below).

WHEREAS, pursuant to the transactions contemplated under that certain Agreement and Plan of Merger and Reorganization, dated as of March 7, 2017 (the "Merger Agreement"), by and among the Parent, Aerpio Acquisition Corp., a Delaware corporation, and Aerpio Therapeutics, Inc., a Delaware corporation ("Aerpio"), Aerpio will become a wholly owned subsidiary of Parent, and all of the outstanding capital stock of Aerpio (including those issued upon conversion of convertible promissory notes issued by Aerpio) will be exchanged for shares of common stock of the Parent, par value \$0.0001 per share (the "Parent Common Stock"), and outstanding Aerpio stock options will be converted into options to purchase shares of Parent Common Stock on the terms set forth in the Merger Agreement (the "Merger");

WHEREAS, following the closing of the Merger, Parent will complete a private placement offering (the "Private Placement Offering") of a minimum of 7,000,000 shares of Parent Common Stock, at a purchase price of \$5.00 per share; and

WHEREAS, the closing of the Merger and the Private Placement Offering are each conditioned on, among other things, the Restricted Holder's entering into this Agreement with the Parent;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. Definitions.

(a) "Affiliate" shall have the meaning set forth in Rule 405 under the Securities Act of 1933, as amended (the "Securities Act").

(b) "Business Day" means any day other than a Saturday, a Sunday or a day on which banks in the state of New York are required or authorized by applicable law to close.

(c) "Change of Control" means the transfer (whether by tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of Affiliated persons, of the Parent's voting securities if, after such transfer, such person or group of Affiliated persons would hold more than 50% of the outstanding voting securities of the Parent (or the surviving entity).

(d) "Immediate Family:" means any relationship by blood, domestic partnership, marriage or adoption, not more remote than first cousin.

(e) “Restricted Period” means the period of nine (9) months commencing on the Closing Date of the Merger.

(f) “Restricted Securities” means all shares of Parent Common Stock held by the Restricted Holder and all securities held by the Restricted Holder that are convertible into or exercisable or exchangeable for shares of Parent Common Stock, in each case held immediately following the closing of the Private Placement Offering or thereafter acquired by any means (including, for the avoidance of doubt, any shares of Parent Common Stock or other securities of Parent received by the Restricted Holder pursuant to the Merger Agreement), and whether held beneficially or of record, but excluding any shares of Parent Common Stock purchased by the Restricted Holder in the Private Placement Offering or in the open market following the Private Placement Offering.

2. Restrictions.

(a) During the Restricted Period, the Restricted Holder will not, directly or indirectly: (i) offer, sell, assign, transfer, pledge, hypothecate, contract to sell, grant an option to purchase or otherwise dispose of, or announce the intention to so dispose of, any Restricted Securities or (ii) enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic consequence of ownership of any Restricted Securities (the actions described in clause (i) or (ii) above being hereinafter referred to as a “Disposition”). The foregoing restrictions are expressly agreed to preclude the Restricted Holder from engaging in any hedging or other transaction which is designed to or which reasonably could be expected to lead to or result in a sale or disposition of any of the Restricted Securities of the Restricted Holder during the Restricted Period, even if such securities would be disposed of by someone other than the Restricted Holder.

(b) In addition, during the period of twelve (12) months commencing on the Closing Date of the Merger, the Restricted Holder will not, and the Restricted Holder will cause its Affiliates not to, directly or indirectly, effect or agree to effect any short sale (as defined in Rule 200 under Regulation SHO of the Securities Exchange Act of 1934, as amended, (the “Exchange Act”)) with respect to any shares of Parent Common Stock, whether or not against the box, establish any “put equivalent position” (as defined in Rule 16a-1(h) under the Exchange Act) with respect to any shares of Parent Common Stock, borrow or pre-borrow any shares of Parent Common Stock, or grant any other right (including, without limitation, any put or call option) with respect to shares of the Parent Common Stock or with respect to any security that includes, is convertible into or exercisable for or derives any significant part of its value from shares of the Parent Common Stock or otherwise seek to hedge the Restricted Holder’s position in the Parent Common Stock.

(c) Notwithstanding anything contained herein to the contrary, the restrictions set forth in Section 2(a) shall not apply to:

(i) if the Restricted Holder is a natural person, any transfers made by the Restricted Holder (A) to any member of the Immediate Family of the Restricted Holder or to a trust the direct or indirect beneficiaries of which are exclusively the Restricted

Holder or members of the Restricted Holder's Immediate Family, or (B) by bona fide gift, will or intestacy;

(ii) if the Restricted Holder is a corporation, partnership, limited liability company or other business entity, any transfers to a charitable organization, or to any stockholder, partner, manager, director, officer, Affiliate, employee or member of, or owner of a similar equity interest in, the Restricted Holder or its Affiliates, as the case may be;

(iii) if the Restricted Holder is a corporation, partnership, limited liability company or other business entity, any transfer made by the Restricted Holder:

(A) in connection with the sale or other bona fide transfer in a single transaction of all or substantially all of the Restricted Holder's capital stock, partnership interests, membership interests or other similar equity interests, as the case may be, or all or substantially all of the Restricted Holder's assets, in any such case not undertaken for the purpose of avoiding the restrictions imposed by this Agreement,

(B) to another corporation, partnership, limited liability company or other business entity so long as the transferee is an Affiliate of the Restricted Holder, or

(C) to any investment fund or other entity that controls or manages the Restricted Holder (including, for the avoidance of doubt, a fund managed by the same manager or managing member or general partner or management company or by an entity controlling, controlled by, or under common control with such manager or managing member or general partner or management company as the Restricted Holder) if such transfer is not for value;

(iv) if the Restricted Holder is a trust, to a trustor or beneficiary of the trust if such transfer is not for value;

(v) any transfers of Restricted Securities to the Parent upon a vesting event or upon the exercise of options or warrants to purchase the Parent's securities, in each case on a "cashless" or "net exercise" basis, including to cover tax withholding obligations of the Restricted Holder in connection with such vesting or exercise (and for the avoidance of doubt, any securities issued to the Restricted Holder upon such exercise shall be Restricted Securities subject to the restrictions set forth herein);

(vi) any transfers of the Restricted Securities pursuant to a court order or by operation of law, including pursuant to a domestic order or a negotiated divorce settlement;

(vii) any transfers of the Restricted Securities to the Parent pursuant to agreements under which the Parent has the option to repurchase such Restricted Securities or the Parent has a right of first refusal with respect to transfers of such Restricted Securities; or

(viii) any transfers of the Restricted Securities pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction made to all holders of Restricted Securities involving a Change of Control of the Parent (it being further understood that this Agreement shall not restrict the undersigned from entering into any agreement or arrangement in connection therewith, including an agreement to vote in favor of, or tender Restricted Securities or other securities of the Parent in, any such transaction or taking any other action in connection with any such transaction), provided that the restrictions set forth herein shall continue to apply should the completion of such transaction not occur, and provided, further, that such transaction has been approved by the Board of Directors of Parent.

*provided, however, that*

(A) in the case of any transfer described in clause (i), (ii), (iii), (iv), or (vi) above, it shall be a condition to the transfer that the transferee execute and deliver to the Parent, not later than one Business Day prior to such transfer, a written agreement in substantially the form of this Agreement covering the transferred Restricted Securities for the balance of the Restricted Period (it being understood that any references to "Immediate Family" in the agreement executed by such transferee shall expressly refer only to the Immediate Family of the Restricted Holder and not to the Immediate Family of the transferee) and otherwise reasonably satisfactory in form and substance to the Parent;

(B) in the case of any transfer described in clause (i), (ii), (iii), (iv), (vi), or (x) above, such transfers are not required to be reported under Section 16 of the Exchange Act, and the Restricted Holder does not otherwise voluntarily effect any public filing or report regarding such transfers during the Restricted Period (other than a filing on Form 5);

(C) in the case of any transfer to the Parent described in clause (v) above, if the transfer is required to be reported under Section 16 of the Exchange Act, any filing under Section 16 of the Exchange Act related to such transfer shall clearly indicate in the footnotes thereto that (a) the filing relates to the circumstances described in clause (v) above, (b) no shares were sold by the reporting person and (c) any remaining shares received upon exercise of an option or a warrant (net of any shares transferred in connection with such "cashless" or "net exercise" to cover tax withholding obligations) or the remaining vested shares are subject to a written agreement with the Parent in substantially the form of this Agreement for the balance of the Restricted Period;

(D) in the case of any transfer described in clause (viii) above, in the event that the tender offer, merger, consolidation or other such transaction is not completed, the Restricted Securities owned by the Restricted Holder shall remain subject to the restrictions contained in this Agreement; and

(E) in the case of clause (ix) above, no actual transfer or other Disposition of the Restricted Holder's Restricted Securities registered pursuant to the exercise of such rights under clause (ix) shall occur during the Restricted Period.



(d) Furthermore, during the Restricted Period, the Restricted Holder may exercise any rights to purchase, exchange or convert any stock options granted to the Restricted Holder pursuant to the Parent's equity incentive plans or awards existing after the closing of the Merger or warrants or any other securities held by the Restricted Holder after the closing of the Merger, which securities are convertible into or exchangeable or exercisable for Parent Common Stock, and the Restricted Holder agrees that the shares of Parent Common Stock received upon such exercise, purchase, exchange or conversion shall be and remain Restricted Securities subject to the terms of this Agreement.

(e) In addition, the restrictions set forth in Section 2(a) shall not apply to the repurchase of Restricted Securities by the Parent in connection with the termination of the Restricted Holder's employment or other service with the Parent or any of its subsidiaries.

(f) Notwithstanding anything herein to the contrary, nothing herein shall prevent the Restricted Holder from establishing a 10b5-1 trading plan that complies with Rule 10b5-1 under the Exchange Act ("10b5-1 Trading Plan") or from amending an existing 10b5-1 Trading Plan so long as there are no sales or other Dispositions of Restricted Securities under such plans during the Restricted Period; and *provided* that no public announcement or filing under the Exchange Act, if any, is required or voluntarily made by or on behalf of the Restricted Holder or the Parent during the Restricted Period regarding the establishment of a 10b5-1 Trading Plan or the amendment of a 10b5-1 Trading Plan.

(g) In the event that, during the Restricted Period, Parent waives any of the restrictions on the transfer of any Restricted Securities held by any executive officer or director of Parent or any holder of more than 1.0% of the outstanding Parent Common Stock of the Parent (on a fully-diluted basis) that is subject to a lock-up and no shorting agreement similar in terms or form to this Agreement, then Parent shall be deemed to have also waived, on the same terms, the restrictions set forth in this Agreement that would otherwise have applied to the undersigned on a pro-rata basis with respect to the same proportion of the undersigned Restricted Holder's Restricted Securities subject to this Agreement as (x) the aggregate Restricted Securities held by such party receiving the waiver that is subject to the waiver bears to (y) the aggregate Restricted Securities held by such party that is subject to a lock-up agreement and no shorting agreement similar in terms or form to this Agreement. The provisions of this paragraph will not apply: (i) unless and until the Parent has first waived more than one percent (1%) of the Parent's total outstanding Common Stock (determined as of immediately following the Private Placement Offering and giving effect thereto) from such prohibitions, (ii) (a) if the release or waiver is effected solely to permit a transfer not involving a disposition for value and (b) the transferee has agreed in writing to be bound by the same terms described in this Agreement to the extent and for the duration that such terms remain in effect at the time of the transfer, or (iii) if the release or waiver is granted to a holder of Restricted Securities in connection with an underwritten public offering during the Restricted Period, whether or not such offering is wholly or partially a secondary offering, of securities pursuant to a registration statement under the Securities Act of 1933, as amended, provided that the undersigned Restricted Holder is offered the opportunity to participate in the offering on a pro rata basis. In the event that any percentage

of such Restricted Securities released from the restrictions set forth in this Agreement are subject to any restrictions of the type set forth in this Agreement, the same restrictions shall be applicable to the release of the same percentage of the undersigned's Restricted Securities. In the event that, as a result of this paragraph, any Restricted Securities held by the undersigned are released from the restrictions imposed by this Agreement, Parent shall use commercially reasonable efforts to notify the undersigned within two Business Days thereafter that the same percentage of aggregate Restricted Securities held by the undersigned has been released from the restrictions set forth in this Agreement; provided that the failure to give such notice to the undersigned shall not give rise to any claim or liability against Parent.

3. Legends; Stop Transfer Instructions.

(a) In addition to any legends to reflect applicable transfer restrictions under federal or state securities laws, each certificate representing Restricted Securities shall be stamped or otherwise imprinted with the following legend:

“THE SECURITIES REPRESENTED HEREBY ARE SUBJECT TO THE TERMS AND CONDITIONS OF A LOCK-UP AGREEMENT, DATED AS OF MARCH 15, 2017, BETWEEN THE HOLDER HEREOF AND THE ISSUER, AND MAY ONLY BE SOLD OR TRANSFERRED IN ACCORDANCE WITH THE TERMS THEREOF.”

(b) The Restricted Holder hereby agrees and consents to the entry of stop transfer instructions with the Parent's transfer agent and registrar against the transfer of the Restricted Securities except in compliance with this Agreement.

4. Miscellaneous.

(a) Material Inducement and Consideration. The Restricted Holder acknowledges and agrees that its entering into this Agreement with Parent and its covenants and agreements herein are a material inducement to the Parent's entering into the Merger Agreement and proceeding with the Merger and the Private Placement Offering, and Parent's so doing constitute valuable consideration to the Restricted Holder.

(b) Specific Performance. The Restricted Holder agrees that in the event of any breach or threatened breach by the Restricted Holder of any covenant, obligation or other provision contained in this Agreement, then the Parent shall be entitled (in addition to any other remedy that may be available to the Parent) to: (i) a decree or order of specific performance or mandamus to enforce the observance and performance of such covenant, obligation or other provision; and (ii) an injunction restraining such breach or threatened breach. The Restricted Holder further agrees that neither the Parent nor any other person or entity shall be required to obtain, furnish or post any bond or similar instrument in connection with or as a condition to obtaining any remedy referred to in this Section, and the Restricted Holder irrevocably waives any right that he, she, or it may have to require the obtaining, furnishing or posting of any such bond or similar instrument.

(c) Periodic Reports. The Parent shall be permitted to request from the Restricted Holder copies of such person's brokerage statements with respect to the Restricted Securities covering any period during the Restricted Period.

(d) Other Agreements. Nothing in this Agreement shall limit any of the rights or remedies of the Parent under the Merger Agreement, or any of the rights or remedies of the Parent or any of the obligations of the Restricted Holder under any other agreement between the Restricted Holder and the Parent or any certificate or instrument executed by the Restricted Holder in favor of the Parent; and nothing in the Merger Agreement or in any other agreement, certificate or instrument shall limit any of the rights or remedies of the Parent or any of the obligations of the Restricted Holder under this Agreement.

(e) Notices. All notices, consents, waivers, and other communications which are required or permitted under this Agreement shall be in writing and will be deemed given to a party (i) on the date of delivery, if delivered to the appropriate address by hand or by nationally recognized overnight courier service (costs prepaid); (ii) the date of transmission if sent by facsimile or e-mail with confirmation of transmission by the transmitting equipment if such notice or communication is delivered prior to 5:00 P.M., Eastern Time, on a Business Day, or the next Business Day after the date of transmission, if such notice or communication is delivered on a day that is not a Business Day or later than 5:00 P.M., Eastern Time, on a Business Day; (iii) the date received or rejected by the addressee, if sent by certified mail, return receipt requested; or (iv) seven days after the placement of the notice into the mails (first class postage prepaid), to the party at the address, facsimile number, or e-mail address furnished by the such party,

If to the Parent:

Aerpio Pharmaceuticals Inc.  
9987 Carver Road, Suite 420  
Cincinnati, OH 45242  
Attn: Joseph Gardner, CEO  
Facsimile: 513.985.0999

With a copy (which copy shall not constitute notice hereunder) to:

Goodwin Procter  
100 Northern Avenue  
Boston, MA 02210  
Attn: Kingsley Taft or Danielle Lauzon  
Facsimile: 617.523.1231

If to the Restricted Holder:

To the address set forth on the signature page hereto.

Any party may give any notice, request, demand, claim or other communication hereunder using any other means (including personal delivery, expedited courier, messenger service, telecopy, telex, ordinary mail or electronic mail), but no such notice, request, demand, claim or other communication shall be deemed to have been duly given unless and until it actually is received by the party for whom it is intended. Any party may change the address to which notices, requests, demands, claims, and other communications hereunder are to be delivered by giving the other Parties notice in the manner herein set forth.

(f) Severability. Any term or provision of this Agreement that is invalid or unenforceable in any situation in any jurisdiction shall not affect the validity or enforceability of the remaining terms and provisions hereof or the validity or enforceability of the offending term or provision in any other situation or in any other jurisdiction. If the final judgment of a court of competent jurisdiction declares that any term or provision hereof is invalid or unenforceable, the parties hereto agree that the court making such determination shall have the power to limit the term or provision, to delete specific words or phrases, or to replace any invalid or unenforceable term or provision with a term or provision that is valid and enforceable and that comes closest to expressing the intention of the invalid or unenforceable term or provision, and this Agreement shall be enforceable as so modified. In the event such court does not exercise the power granted to it in the prior sentence, the parties hereto agree to replace such invalid or unenforceable term or provision with a valid and enforceable term or provision that will achieve, to the extent possible, the economic, business and other purposes of such invalid or unenforceable term.

(g) Applicable Law; Jurisdiction. THIS AGREEMENT IS MADE UNDER, AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK APPLICABLE TO AGREEMENTS MADE AND TO BE PERFORMED SOLELY THEREIN, WITHOUT GIVING EFFECT TO PRINCIPLES OF CONFLICTS OF LAW. In any action between or among any of the parties arising out of this Agreement, (i) each of the parties irrevocably and unconditionally consents and submits to the exclusive jurisdiction and venue of the courts of the State of Ohio sitting in Cincinnati, and the United States District Court for the Southern District of Ohio sitting in Cincinnati; (ii) if any such action is properly commenced in a state court, then, subject to applicable law, no party shall object to the removal of such action to such United States District Court; (iii) EACH OF THE PARTIES IRREVOCABLY WAIVES THE RIGHT TO TRIAL BY JURY; and (iv) each of the parties irrevocably consents to service of process (in addition to any other means of service authorized by law) by first class certified mail, return receipt requested, postage prepared, to the address at which such party is to receive notice in accordance with this Agreement.

(h) Waiver; Termination. No failure on the part of the Parent to exercise any power, right, privilege or remedy under this Agreement, and no delay on the part of the Parent in exercising any power, right, privilege or remedy under this Agreement, shall operate as a waiver of such power, right, privilege or remedy; and no single or partial exercise of any such power, right, privilege or remedy shall preclude any other or further exercise thereof or of any other power, right, privilege or remedy. The Parent shall not be deemed to have waived any claim arising out of this Agreement, or any power, right, privilege or remedy under this Agreement, unless the waiver of such claim, power, right, privilege or remedy is expressly set forth in a written instrument duly executed and delivered on behalf of the Parent; and any such waiver shall not be applicable or have any effect except in the specific instance in which it is given. If the Merger Agreement is terminated, this Agreement shall thereupon terminate.

(i) Captions. The captions contained in this Agreement are for convenience of reference only, shall not be deemed to be a part of this Agreement and shall not be referred to in connection with the construction or interpretation of this Agreement.

(j) Further Assurances. The Restricted Holder hereby represents and warrants that the Restricted Holder has full power and authority to enter into this Agreement and that this

Agreement has been duly authorized (if the Restricted Holder is not a natural person), executed and delivered by the Restricted Holder and is a valid and binding agreement of the Restricted Holder.

(k) Entire Agreement. This Agreement sets forth the entire understanding of the Parent and the Restricted Holder relating to the subject matter hereof and supersedes all other prior agreements and understandings between the Parent and the Restricted Holder relating to the subject matter hereof.

(l) Non-Exclusivity. The rights and remedies of the Parent hereunder are not exclusive of or limited by any other rights or remedies which the Parent may have, whether at law, in equity, by contract or otherwise, all of which shall be cumulative (and not alternative).

(m) Amendments. This Agreement may not be amended, modified, altered or supplemented other than by means of a written instrument duly executed and delivered on behalf of the Parent and the Restricted Holder.

(n) Binding Nature. This Agreement and all authority herein conferred are irrevocable and shall survive the death or incapacity of the Restricted Holder (if a natural person) and shall be binding upon the heirs, personal representatives, successors and assigns of the Restricted Holder.

(o) Survival. Each of the representations, warranties, covenants and obligations contained in this Agreement shall survive the consummation of the Merger.

(p) Counterparts. This Agreement may be executed in separate counterparts, each of which shall be deemed an original and both of which shall constitute one and the same instrument.

*[SIGNATURE PAGE FOLLOWS]*

IN WITNESS WHEREOF, the undersigned has executed and delivered this Agreement as of the date first set forth above.

**AERPIO PHARMACEUTICALS, INC.**

By: /s/ Joseph H. Gardner

Name: Joseph H. Gardner

Title: President and CEO

[Signature Page to Lock-Up Agreement]