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

OMB APPROVAL

OMB Number: 3235-0076
Estimated average burden
hours per response: 4.00

Notice of Exempt Offering of Securities

1. Issuer's Identity

CIK (Filer ID Number)	Previous Names <input type="checkbox"/> None	Entity Type
0000894158	ADEONA PHARMACEUTICALS, INC.	<input checked="" type="checkbox"/> Corporation
Name of Issuer	PIPEX PHARMACEUTICALS, INC.	<input type="checkbox"/> Limited Partnership
Synthetic Biologics, Inc.	SHEFFIELD PHARMACEUTICALS INC	<input type="checkbox"/> Limited Liability Company
Jurisdiction of Incorporation/Organization	Adeona Pharmaceuticals, Inc.	<input type="checkbox"/> General Partnership
NEVADA		<input type="checkbox"/> Business Trust
Year of Incorporation/Organization		<input type="checkbox"/> Other (Specify)
<input checked="" type="checkbox"/> Over Five Years Ago		
<input type="checkbox"/> Within Last Five Years (Specify Year)		
<input type="checkbox"/> Yet to Be Formed		

2. Principal Place of Business and Contact Information

Name of Issuer			
Synthetic Biologics, Inc.			
Street Address 1		Street Address 2	
617 DETROIT STREET,		SUITE 100	
City	State/Province/Country	ZIP/PostalCode	Phone Number of Issuer
ANN ARBOR	MICHIGAN	48104	(734) 332-7800

3. Related Persons

Last Name	First Name	Middle Name
Riley	Jeffrey	
Street Address 1	Street Address 2	
c/o Synthetic Biologics	617 Detroit Avenue, Suite 100	
City	State/Province/Country	ZIP/PostalCode
Ann Arbor	MICHIGAN	48104
Relationship: <input checked="" type="checkbox"/> Executive Officer <input checked="" type="checkbox"/> Director <input type="checkbox"/> Promoter		

Clarification of Response (if Necessary):

Last Name	First Name	Middle Name
Ballantyne	C.	Evan
Street Address 1	Street Address 2	
c/o Synthetic Biologics	617 Detroit Avenue, Suite 100	
City	State/Province/Country	ZIP/PostalCode
Ann Arbor	MICHIGAN	48104
Relationship: <input checked="" type="checkbox"/> Executive Officer <input type="checkbox"/> Director <input type="checkbox"/> Promoter		

Clarification of Response (if Necessary):

Last Name	First Name	Middle Name
Kraws	Jeffrey	J.
Street Address 1	Street Address 2	
c/o Synthetic Biologics	617 Detroit Avenue, Suite 100	
City	State/Province/Country	ZIP/PostalCode
Ann Arbor	MICHIGAN	48104
Relationship: <input type="checkbox"/> Executive Officer <input checked="" type="checkbox"/> Director <input type="checkbox"/> Promoter		

Clarification of Response (if Necessary):

Last Name	First Name	Middle Name
Wolf	Jeffrey	
Street Address 1	Street Address 2	
c/o Synthetic Biologics	617 Detroit Avenue, Suite 100	
City	State/Province/Country	ZIP/PostalCode
Ann Arbor	MICHIGAN	48104
Relationship: <input type="checkbox"/> Executive Officer <input checked="" type="checkbox"/> Director <input type="checkbox"/> Promoter		

Clarification of Response (if Necessary):

Last Name	First Name	Middle Name
Kanzer	Steve	H.
Street Address 1	Street Address 2	
c/o Synthetic Biologics	617 Detroit Avenue, Suite 100	
City	State/Province/Country	ZIP/PostalCode
Ann Arbor	MICHIGAN	48104
Relationship: <input type="checkbox"/> Executive Officer <input checked="" type="checkbox"/> Director <input type="checkbox"/> Promoter		

Clarification of Response (if Necessary):

Last Name	First Name	Middle Name
Tarriff	Scott	L.
Street Address 1	Street Address 2	
c/o Synthetic Biologics	617 Detroit Avenue, Suite 100	
City	State/Province/Country	ZIP/PostalCode
Ann Arbor	MICHIGAN	48104
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		

Relationship: ☐ Executive Officer ☒ Director ☐ Promoter

Clarification of Response (if Necessary):

4. Industry Group

<input type="checkbox"/> Agriculture	Health Care	<input type="checkbox"/> Retailing
<input type="checkbox"/> Banking & Financial Services	<input checked="" type="checkbox"/> Biotechnology	<input type="checkbox"/> Restaurants
<input type="checkbox"/> Commercial Banking	<input type="checkbox"/> Health Insurance	<input type="checkbox"/> Technology
<input type="checkbox"/> Insurance	<input type="checkbox"/> Hospitals & Physicians	<input type="checkbox"/> Computers
<input type="checkbox"/> Investing	<input type="checkbox"/> Pharmaceuticals	<input type="checkbox"/> Telecommunications
<input type="checkbox"/> Investment Banking	<input type="checkbox"/> Other Health Care	<input type="checkbox"/> Other Technology
<input type="checkbox"/> Pooled Investment Fund	<input type="checkbox"/> Manufacturing	Travel
Is the issuer registered as an investment company under the Investment Company Act of 1940?	Real Estate	<input type="checkbox"/> Airlines & Airports
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Commercial	<input type="checkbox"/> Lodging & Conventions
<input type="checkbox"/> Other Banking & Financial Services	<input type="checkbox"/> Construction	<input type="checkbox"/> Tourism & Travel Services
<input type="checkbox"/> Business Services	<input type="checkbox"/> REITS & Finance	<input type="checkbox"/> Other Travel
Energy	<input type="checkbox"/> Residential	<input type="checkbox"/> Other
<input type="checkbox"/> Coal Mining	<input type="checkbox"/> Other Real Estate	
<input type="checkbox"/> Electric Utilities		
<input type="checkbox"/> Energy Conservation		
<input type="checkbox"/> Environmental Services		
<input type="checkbox"/> Oil & Gas		
<input type="checkbox"/> Other Energy		

5. Issuer Size

Revenue Range	OR	Aggregate Net Asset Value Range
<input type="checkbox"/> No Revenues		<input type="checkbox"/> No Aggregate Net Asset Value
<input type="checkbox"/> \$1 - \$1,000,000		<input type="checkbox"/> \$1 - \$5,000,000
<input type="checkbox"/> \$1,000,001 - \$5,000,000		<input type="checkbox"/> \$5,000,001 - \$25,000,000
<input type="checkbox"/> \$5,000,001 - \$25,000,000		<input type="checkbox"/> \$25,000,001 - \$50,000,000
<input type="checkbox"/> \$25,000,001 - \$100,000,000		<input type="checkbox"/> \$50,000,001 - \$100,000,000
<input type="checkbox"/> Over \$100,000,000		<input type="checkbox"/> Over \$100,000,000
<input checked="" type="checkbox"/> Decline to Disclose		<input type="checkbox"/> Decline to Disclose

☐ Not Applicable

☐ Not Applicable

6. Federal Exemption(s) and Exclusion(s) Claimed (select all that apply)

☐ Rule 504(b)(1) (not (i), (ii) or (iii))

☐ Rule 504 (b)(1)(i)

☐ Rule 504 (b)(1)(ii)

☐ Rule 504 (b)(1)(iii)

☐ Rule 505

☒ Rule 506

☐ Securities Act Section 4(5)

☐ Investment Company Act Section 3(c)

☐ Section 3(c)(1)

☐ Section 3(c)(9)

☐ Section 3(c)(2)

☐ Section 3(c)(10)

☐ Section 3(c)(3)

☐ Section 3(c)(11)

☐ Section 3(c)(4)

☐ Section 3(c)(12)

☐ Section 3(c)(5)

☐ Section 3(c)(13)

☐ Section 3(c)(6)

☐ Section 3(c)(14)

☐ Section 3(c)(7)

7. Type of Filing

☒ New Notice Date of First Sale [2012-10-16](#) ☐ First Sale Yet to Occur

☐ Amendment

8. Duration of Offering

Does the Issuer intend this offering to last more than one year? ☐ Yes ☒ No

9. Type(s) of Securities Offered (select all that apply)

☒ Equity

☐ Debt

☐ Option, Warrant or Other Right to Acquire Another Security

☐ Security to be Acquired Upon Exercise of Option, Warrant or Other Right to Acquire Security

☐ Pooled Investment Fund Interests

☐ Tenant-in-Common Securities

☐ Mineral Property Securities

☐ Other (describe)

10. Business Combination Transaction

Is this offering being made in connection with a business combination transaction, such as a merger, acquisition or exchange offer?

☐ Yes ☒ No

Clarification of Response (if Necessary):

11. Minimum Investment

Minimum investment accepted from any outside investor \$[0](#) USD

12. Sales Compensation

Recipient

Recipient CRD Number ☒ None

(Associated) Broker or Dealer ☒ None

(Associated) Broker or Dealer CRD Number ☒ None

Street Address 1

Street Address 2

City

State/Province/Country

ZIP/Postal Code

State(s) of Solicitation (select all that apply)

Check "All States" or check individual States

☐ All States

☐ Foreign/non-US

13. Offering and Sales Amounts

Total Offering Amount \$7,637,252 USD or ☐ Indefinite

Total Amount Sold \$7,637,252 USD

Total Remaining to be Sold \$0 USD or ☐ Indefinite

Clarification of Response (if Necessary):

The Company issued 3,552,210 shares of common stock to Intrexon Corp. pursuant to an Exclusive Channel Collaboration Agreement. No cash was received. The amount entered is based solely on the closing price of the Company's stock of \$2.15 on 10/16/12.

14. Investors

☐ Select if securities in the offering have been or may be sold to persons who do not qualify as accredited investors, and enter the number of such non-accredited investors who already have invested in the offering.

Regardless of whether securities in the offering have been or may be sold to persons who do not qualify as accredited investors, enter the total number of investors who already have invested in the offering:

15. Sales Commissions & Finder's Fees Expenses

Provide separately the amounts of sales commissions and finders fees expenses, if any. If the amount of an expenditure is not known, provide an estimate and check the box next to the amount.

Sales Commissions \$0 USD ☐ Estimate

Finders' Fees \$0 USD ☐ Estimate

Clarification of Response (if Necessary):

16. Use of Proceeds

Provide the amount of the gross proceeds of the offering that has been or is proposed to be used for payments to any of the persons required to be named as executive officers, directors or promoters in response to Item 3 above. If the amount is unknown, provide an estimate and check the box next to the amount.

\$0 USD ☐ Estimate

Clarification of Response (if Necessary):

Signature and Submission

Please verify the information you have entered and review the Terms of Submission below before signing and clicking SUBMIT below to file this notice.

Terms of Submission

In submitting this notice, each issuer named above is:

- Notifying the SEC and/or each State in which this notice is filed of the offering of securities described and undertaking to furnish them, upon written request, in the accordance with applicable law, the information furnished to offerees.*
- Irrevocably appointing each of the Secretary of the SEC and, the Securities Administrator or other legally designated officer of the State in which the issuer maintains its principal place of business and any State in which this notice is filed, as its agents for service of process, and agreeing that these persons may accept service on its behalf, of any notice, process or pleading, and further agreeing that such service may be made by registered or certified mail, in any Federal or state action, administrative proceeding, or arbitration brought against the issuer in any place subject to the jurisdiction of the United States, if the action, proceeding or arbitration (a) arises out of any activity in connection with the offering of securities that is the subject of this notice, and (b) is founded, directly or indirectly, upon the provisions of: (i) the Securities Act of 1933, the Securities Exchange Act of 1934, the Trust Indenture Act of 1939, the Investment Company Act of 1940, or the Investment Advisers Act of 1940, or any rule or regulation under any of these statutes, or (ii) the laws of the State in which the issuer maintains its principal place of business or any State in which this notice is filed.
- Certifying that, if the issuer is claiming a Rule 505 exemption, the issuer is not disqualified from relying on Rule 505 for one of the reasons stated in Rule 505(b)(2)(iii).

Each Issuer identified above has read this notice, knows the contents to be true, and has duly caused this notice to be signed on its behalf by the undersigned duly authorized person.

For signature, type in the signer's name or other letters or characters adopted or authorized as the signer's signature.

Issuer	Signature	Name of Signer	Title	Date
Synthetic Biologics, Inc.	/s/ Jeffrey Riley	Jeffrey Riley	President and Chief Executive Officer	2012-10-22

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.

* This undertaking does not affect any limits Section 102(a) of the National Securities Markets Improvement Act of 1996 ("NSMIA") [Pub. L. No. 104-290, 110 Stat. 3416 (Oct. 11, 1996)] imposes on the ability of States to require information. As a result, if the securities that are the subject of this Form D are "covered securities" for purposes of NSMIA, whether in all instances or due to the nature of the offering that is the subject of this Form D, States cannot routinely require offering materials under this undertaking or otherwise and can require offering materials only to the extent NSMIA permits them to do so under NSMIA's preservation of their anti-fraud authority.