Fill in this information to identify the case:

Debtor 1 Achaogen, Inc

Debtor 2 (Spouse, if filing) _____

United States Bankruptcy Court for the: District of Delaware

Case number 19-10844

Official Form 410

Proof of Claim

04/19

Read the instructions before filling out this form. This form is for making a claim for payment in a bankruptcy case. Do not use this form to make a request for payment of an administrative expense. Make such a request according to 11 U.S.C. § 503.

Filers must leave out or redact information that is entitled to privacy on this form or on any attached documents. Attach redacted copies of any documents that support the claim, such as promissory notes, purchase orders, invoices, itemized statements of running accounts, contracts, judgments, mortgages, and security agreements. **Do not send original documents;** they may be destroyed after scanning. If the documents are not available, explain in an attachment.

A person who files a fraudulent claim could be fined up to $500,000, imprisoned for up to 5 years, or both. 18 U.S.C. §§ 152, 157, and 3571.

Fill in all the information about the claim as of the date the case was filed. That date is on the notice of bankruptcy (Form 309) **that you received.**

Part 1: Identify the Claim

1. **Who is the current creditor?**

BluePath Solutions
Name of the current creditor (the person or entity to be paid for this claim)

Other names the creditor used with the debtor _____

2. **Has this claim been acquired from someone else?**

☑ No
☐ Yes. From whom? _____

3. **Where should notices and payments to the creditor be sent?**
Federal Rule of Bankruptcy Procedure (FRBP) 2002(g)

Where should notices to the creditor be sent?

BluePath Solutions Attn: Matthew Gitlin
Name

10951 West Pico Blvd, Suite 120
Number Street

Los Angeles CA 90064
City State ZIP Code

Contact phone 310-774-0406 x301

Contact email mgitlin@bluepathsolutions.com

Where should payments to the creditor be sent? (if different)

Name

Number Street

City State ZIP Code

Contact phone _____

Contact email _____

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Uniform claim identifier for electronic payments in chapter 13 (if you use one):

_ _

4. **Does this claim amend one already filed?**

☑ No
☐ Yes. Claim number on court claims registry (if known) _____ Filed on _____ MM / DD / YYYY

5. **Do you know if anyone else has filed a proof of claim for this claim?**

☑ No
☐ Yes. Who made the earlier filing? _____

☑ Date Stamped Copy Returned
☐ No self addressed stamped envelope
☐ No copy to return

19108441905090000000000002

Part 2: Give Information About the Claim as of the Date the Case Was Filed

6. **Do you have any number you use to identify the debtor?**
   - ☑ No
   - ☐ Yes. Last 4 digits of the debtor's account or any number you use to identify the debtor: ____ ____ ____ ____

7. **How much is the claim?** $ 50,876.03 **Does this amount include interest or other charges?**
   - ☑ No
   - ☐ Yes. Attach statement itemizing interest, fees, expenses, or other charges required by Bankruptcy Rule 3001(c)(2)(A).

8. **What is the basis of the claim?**
   Examples: Goods sold, money loaned, lease, services performed, personal injury or wrongful death, or credit card.
   Attach redacted copies of any documents supporting the claim required by Bankruptcy Rule 3001(c).
   Limit disclosing information that is entitled to privacy, such as health care information.
   services performed and goods provided

9. **Is all or part of the claim secured?**
   - ☑ No
   - ☐ Yes. The claim is secured by a lien on property.

   Nature of property:
   - ☐ Real estate. If the claim is secured by the debtor's principal residence, file a *Mortgage Proof of Claim Attachment* (Official Form 410-A) with this *Proof of Claim.*
   - ☐ Motor vehicle
   - ☐ Other. Describe: _____

   Basis for perfection: _____
   Attach redacted copies of documents, if any, that show evidence of perfection of a security interest (for example, a mortgage, lien, certificate of title, financing statement, or other document that shows the lien has been filed or recorded.)

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   Value of property: $_____
   Amount of the claim that is secured: $_____
   Amount of the claim that is unsecured: $_____ (The sum of the secured and unsecured amounts should match the amount in line 7.)

   Amount necessary to cure any default as of the date of the petition: $_____

   Annual Interest Rate (when case was filed)_____%
   - ☐ Fixed
   - ☐ Variable

10. **Is this claim based on a lease?**
    - ☑ No
    - ☐ Yes. **Amount necessary to cure any default as of the date of the petition.** $_____

11. **Is this claim subject to a right of setoff?**
    - ☑ No
    - ☐ Yes. Identify the property: _____

12. **Is all or part of the claim entitled to priority under 11 U.S.C. § 507(a)?**

A claim may be partly priority and partly nonpriority. For example, in some categories, the law limits the amount entitled to priority.

☑ No

☐ Yes. *Check one:*

	Amount entitled to priority
☐ Domestic support obligations (including alimony and child support) under 11 U.S.C. § 507(a)(1)(A) or (a)(1)(B).	$_____
☐ Up to $3,025* of deposits toward purchase, lease, or rental of property or services for personal, family, or household use. 11 U.S.C. § 507(a)(7).	$_____
☐ Wages, salaries, or commissions (up to $13,650*) earned within 180 days before the bankruptcy petition is filed or the debtor's business ends, whichever is earlier. 11 U.S.C. § 507(a)(4).	$_____
☐ Taxes or penalties owed to governmental units. 11 U.S.C. § 507(a)(8).	$_____
☐ Contributions to an employee benefit plan. 11 U.S.C. § 507(a)(5).	$_____
☐ Other. Specify subsection of 11 U.S.C. § 507(a)(__) that applies.	$_____

* Amounts are subject to adjustment on 4/01/22 and every 3 years after that for cases begun on or after the date of adjustment.

Part 3: Sign Below

The person completing this proof of claim must sign and date it. FRBP 9011(b).

If you file this claim electronically, FRBP 5005(a)(2) authorizes courts to establish local rules specifying what a signature is.

A person who files a fraudulent claim could be fined up to $500,000, imprisoned for up to 5 years, or both. 18 U.S.C. §§ 152, 157, and 3571.

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Check the appropriate box:

☑ I am the creditor.

☐ I am the creditor's attorney or authorized agent.

☐ I am the trustee, or the debtor, or their authorized agent. Bankruptcy Rule 3004.

☐ I am a guarantor, surety, endorser, or other codebtor. Bankruptcy Rule 3005.

I understand that an authorized signature on this *Proof of Claim* serves as an acknowledgment that when calculating the amount of the claim, the creditor gave the debtor credit for any payments received toward the debt.

I have examined the information in this *Proof of Claim* and have a reasonable belief that the information is true and correct.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on date 04/22/2019
MM / DD / YYYY

Signature

Print the name of the person who is completing and signing this claim:

Name: Matthew David Gitlin
First name Middle name Last name

Title: Managing Director

Company: BluePath Solutions
Identify the corporate servicer as the company if the authorized agent is a servicer.

Address: 10951 West Pico Blvd, Suite 120
Number Street

Los Angeles CA 90064
City State ZIP Code

Contact phone: 310-774-0406, x301 Email: mgitlin@bluepathsolutions.com

10951 West Pico Blvd, Suite 120
Los Angeles, CA 90064 | USA
Phone: 310-774-0406

BluePath Solutions
Attn: Matthew David Gitlin, Pharm.D.
10951 West Pico Blvd, Suite 120
Los Angeles, CA 90064
Phone: 310-774-0406
Email: mgitlin@bluepathsolutions.com

Date: November 19, 2018
Invoice: #0448

To: Achaogen, Inc.
Attn: Accounts Payable
Contact: Rodney Brown, Senior Director, Market Access
1 Tower Place, Suite 300
South San Francisco, CA 94080
Email: accounting@achaogen.com

Purchase Order #: AGP105524

"Services performed pursuant to Exhibit A of the Consulting Agreement dated SEPTEMBER 28, 2018 and associated with the program code 490 Gen-1110-Project Management"

Deliverable	Costs
ZEMDRI Calculator – Approved for Reactive External Use	$25,000

Total:	$25,000

INVOICE

10951 West Pico Blvd, Suite 120
Los Angeles, CA 90064 | USA
Phone: 310-774-0406

BluePath Solutions
Attn: Matthew David Gitlin, Pharm.D.
10951 West Pico Blvd, Suite 120
Los Angeles, CA 90064
Phone: 310-774-0406
Email: mgitlin@bluepathsolutions.com

Date: December 12, 2018
Invoice: #0460

To: Achaogen, Inc.
Attn: Accounts Payable
Contact: Noah Strait, Medical Affairs Operations Manager
1 Tower Place, Suite 300
South San Francisco, CA 94080
Email: accounting@achaogen.com

Purchase Order #: POAGP100974

Services performed pursuant to Exhibit B of the Consulting Agreement dated JUNE 15, 2017 and associated with the program code 490- Gen 1810 Medical Affairs

Deliverable	Costs
Pass-through (ASPH Conference, Poster Printing and Shipping)	$876.03

Total:	$876.03

INVOICE



Registration Receipt

Mathew Gitlin ID#: 28409

Blue Path Solutions MCM18R9-ATT1

Total Due: ($560.00) **Total Paid:** ($560.00)

Payment(s):

MasterCard	2018/12/03	PAY	($560.00)
**********0602	Mathew Gitlin		

Customer Copy



Address:	1520 WESTWOOD BLVD LOS ANGELES CA 90024
Location:	SMOKK
Device ID:	-BTC03
Transaction:	920215668184

FedEx Ground

784201615286 2.4 lbs. (S) 11.48

Declared Value 0

Recipient Address:

Iris Tam
1 Tower Pl
STE 300
South San Francisco, CA 94080
0000000000

Scheduled Delivery Date is 2 business days

Pricing option:

STANDARD RATE

Package Information:

Your Packaging
48 x 4 x 4

FedEx Office

FedEx Office is your destination
for printing and shipping.

1520 Westwood Blvd
Los Angeles, CA 90024
Tel: (310) 475-0789

11/30/2018 7:55:39 AM PST
Team Member: DAVID S.
Customer: Courtney Coles

SALE
DUPLICATE RECEIPT

SHP_2018 NIS Poster	**Qty 1**	**89.88**
Matte Paper/SqFt	12 @	7.4900 T
001450 Reg. Price	7.49	
Price per piece	89.88	
Regular Total	89.88	
Discounts	0.00	
icin BSI CEA Poster	**Qty 1**	**89.88**
Matte Paper/SqFt	12 @	7.4900 T
001450 Reg. Price	7.49	
Price per piece	89.88	
Regular Total	89.88	
Discounts	0.00	
icin BSI CEA Poster	**Qty 1**	**89.88**
Matte Paper/SqFt	12 @	7.4900 T
001450 Reg. Price	7.49	
Price per piece	89.88	
Regular Total	89.88	
Discounts	0.00	
cin cUTI CEA Poster	**Qty 1**	**89.88**
Matte Paper/SqFt	12 @	7.4900 T
001450 Reg. Price	7.49	
Price per piece	89.88	
Regular Total	89.88	
Discounts	0.00	
Tube 4x48Mailing 1Ct	1 @	6.4900 T
009792 Reg. Price	6.49	
MM Caramel KS 2.83oz	1 @	2.1900 N
678774 Reg. Price	2.19	
Regular Total	8.68	
Discounts	0.00	
Total	**8.68**	

Sub-Total	278.32
Tax	26.23
Deposit	0.00
Total	**304.55**
Visa (S)	304.55
Account: 0601	
Auth: 095610 (A)	
Total Tender	304.55
Change Due	0.00
Total Discounts	**0.00**

592701422225
DUPLICATE RECEIPT

10951 West Pico Blvd, Suite 120
Los Angeles, CA 90064 | USA
Phone: 310-774-0406

BluePath Solutions
Attn: Matthew David Gitlin, Pharm.D.
10951 West Pico Blvd, Suite 120
Los Angeles, CA 90064
Phone: 310-774-0406
Email: mgitlin@bluepathsolutions.com

Date: January 30, 2019
Invoice: #0474

To: Achaogen, Inc.
Attn: Accounts Payable
Contact: Rodney Brown, Senior Director, Market Access
1 Tower Place, Suite 300
South San Francisco, CA 94080
Email: accounting@achaogen.com

Purchase Order #: AGP105524

"Services performed pursuant to Exhibit A of the Consulting Agreement dated SEPTEMBER 28, 2018 and associated with the program code 490 Gen-1110-Project Management"

Deliverable	Costs
ZEMDRI Value Deck	$25,000

Total:	$25,000

INVOICE

Purchase Order AGP105524

Supplier Details:

Company	Bluepath Solutions Inc.
Alternate Name	
Contact	
Address	10951 West Pico Blvd Suite 120 LOS ANGELES, CA 90064

Submit your response to:

Company	Achaogen, Inc.
Contact	Sharon Lee-Visanji
Address	1 Tower Place SOUTH SAN FRANCISCO, CA 94080
Phone	
Fax	
E-mail	slee-visanji@achaogen.com

This document has important legal consequences. The information contained in this document is proprietary of Achaogen, Inc.. It shall not be used, reproduced, or disclosed to others without the express and written consent of Achaogen, Inc..

This agreement between Achaogen, Inc. and Bluepath Solutions Inc. is authorized for binding commitment. The parties hereto have read and executed this agreement as of the _____day of _____, _____.

* Tax, shipping and transport paid upon invoice.

Purchase Order AGP105524

ACHAOGEN

Purchase Order	AGP105524
Order Date	12-NOV-2018
Supplier Confirmation No.	

Sold To
Achaogen, Inc.
1 Tower Place
SOUTH SAN FRANCISCO, CA 94080

Supplier
Bluepath Solutions Inc.
10951 West Pico Blvd
Suite 120
LOS ANGELES, CA 90064

Bill To
Achaogen, Inc.
1 Tower Place
Suite 300
SOUTH SANFRANCISCO, CA 94080
UNITED STATES
Ph:
accounting@achaogen.com
Notes USD = US Dollar

Ship To
Achaogen, Inc.
1 Tower Place
Suite 300
SOUTH SANFRANCISCO, CA 94080
UNITED STATES

1898	**Net 30**	**None**	**Destination**

Sharon Lee-Visanji
Email: **slee-visanji@achaogen.com**

Rodney Brown
E-mail: **rbrown@achaogen.com**

Line	Item	Price	Quantity	UOM	Ordered	Taxable *
1	Development of ZEMDRI Value Deck and Cost Calculator for Account Manager	50,000.00			50,000.00	

Promised
12/31/18
Requested
10/23/18

Requested and Promised Dates correspond to the date of arrival at the Ship-to Location.

Line Total **50,000.00**

50,000.00

Purchase Order AGP100454

Supplier Details:

Company	Bluepath Solutions Inc.
Contact	
Address	10951 West Pico Blvd Suite 120 LOS ANGELES, CA 90064

Submit your response to:

Company	Achaogen, Inc.
Contact	Stephen Hucko
Address	1 Tower Place SOUTH SAN FRANCISCO, CA 94080
Phone	
Fax	
E-mail	shucko@achaogen.com

This document has important legal consequences. The information contained in this document is proprietary of Achaogen, Inc.. It shall not be used, reproduced, or disclosed to others without he express and written consent of Achaogen, Inc..

This agreement between Achaogen, Inc. and Bluepath Solutions Inc. is authorized for binding commitment. The parties hereto have read and executed this agreement as of the _____day of _____, _____.

Purchase Order AGP100454

ACHAOGEN

Order	AGP100454
Order Date	22-JUN-2017
Revision	0
Ordered	4,500.00 USD

Sold To
Achaogen, Inc.
1 Tower Place
SOUTH SAN FRANCISCO, CA 94080

Supplier
Bluepath Solutions Inc.
10951 West Pico Blvd
Suite 120
LOS ANGELES, CA 90064

Bill To
Achaogen US BU
1 Tower Place
SOUTH SANFRANCISCO, CA 94080
UNITED STATES
accounting@achaogen.com
Notes USD = US Dollar

Ship To
1 Tower Place
SOUTH SANFRANCISCO, CA 94080
UNITED STATES

1898	Net 30	None	Destination

Stephen Hucko

Noah Strait
E-mail: **nstrait@achaogen.com**

Line	Item	Price	Quantity	UOM	Ordered	Taxable
1	HEOR Consultant	4,500.00				
		Promised 9/1/17 **Requested** 6/21/17			4,500.00	

Requested and Promised Dates correspond to the date of arrival at the Ship-to Location.

Line Total **4,500.00**

4,500.00

DocuSign Envelope ID: A5A97102-33A3-4AE2-825C-D048F5E5B37B

ACHAOGEN

CONSULTING AGREEMENT

This **Consulting Agreement** ("Agreement"), effective as of **June 15, 2017** ("Effective Date") is by and between **Achaogen, Inc.**, a Delaware corporation, having a place of business at 1 Tower Place, Suite 300, South San Francisco, California 94080, U.S.A. ("Achaogen"), and **BluePath Solutions, Inc.**, a company having a place of business at 10951 West Pico Boulevard, Suite 120, Los Angeles, California, 90064, U.S.A. ("Consultant"). Achaogen and Consultant may be referred to each as a "Party" or collectively as the "Parties" to this Agreement.

WHEREAS, Achaogen desires to retain Consultant as an independent contractor to perform consulting services for Achaogen and Consultant is willing to perform such services, on the terms set forth below.

WHEREAS, Consultant desires to perform such services as an independent contractor for Achaogen.

NOW, THEREFORE, Achaogen and Consultant hereby agree to the following terms and conditions:

1. SERVICES AND COMPENSATION

(a) Consulting Services. Consultant agrees to perform for Achaogen the services ("Services"), in one or more Exhibits. Each Exhibit shall be deemed incorporated into and made part of this Agreement. Consultant warrants that it has the skills, ability and training necessary to and that it will render the Services in a timely and professional manner consistent with industry standards in accordance with the terms of this Agreement, including Exhibits, attached hereto and incorporated herein by reference, and otherwise meeting the professional and/or services standards of Achaogen. Subject to the foregoing, the manner and means by which Consultant chooses to complete the Services are in Consultant's sole discretion and control.

(b) Compensation. Achaogen agrees to pay Consultant the compensation set forth in one or more exhibits for the performance of the Services.

(c) Public Disclosure of Payments. Consultant acknowledges and agrees that Achaogen is or may become obligated to disclose publicly certain expenditures and payments made to healthcare professionals and healthcare organizations. Such disclosure may include, but is not limited to, Consultant's and/or its employees names, titles, or credentials, Consultant's affiliated facility, amount(s) paid, date(s) paid, and the reason for payment.

2. CONFIDENTIALITY

(a) Definition. "Confidential Information" means any and all technical and non-technical information that Achaogen provides to Consultant, either directly or indirectly, whether in graphic, written, electronic or oral form, identified at the time of disclosure as confidential, or which by its context would reasonably be deemed to be confidential, including unpublished patent applications and other filings, trade secrets and other proprietary information, as well as any (i) information regarding physical or chemical or biological materials (such as, but not limited to, reagents, gene sequences, nucleic acids, cell lines, media, antibodies, compounds, c-DNAs, antisense nucleotides, proteins and vectors) and techniques for their handling and use; (ii) information regarding concepts, ideas, technology and processes (such as, but not limited to, assays, techniques, sketches, schematics, drawings, works of authorship, models, designs, inventions, improvements, discoveries, developments, know-how, technical documentation, equipment, algorithms, software programs, software source documents and formulas); (iii) information concerning or resulting from research, development and other projects (such as, but not limited to, preclinical, clinical and other data, design details and specifications, engineering information and works in process); (iv) business and financial information (such as, but not limited to, current, future, and proposed products and services, financial models, information relating to procurement requirements, purchasing, manufacturing, customer lists, product plans, product ideas, business strategies, marketing or business plans, financial or personnel matters, investors, employees, business and contractual relationships, business forecasts, sales and merchandising, and information regarding third parties, suppliers, customers or facilities); (v) any information created using the foregoing Confidential Information; and (vi) any other information which is designated by Achaogen as "Confidential" or "Proprietary" or with some similar designation. The Confidential Information includes the existence of this Agreement. The Confidential Information may also include information previously disclosed to Achaogen by a third party.

(b) Non-Use and Non-Disclosure. Consultant acknowledges that its association with Achaogen under this Agreement creates a relationship of confidence and trust between Consultant and Achaogen with respect to information disclosed to Consultant or known to Consultant as a result of its relationship with Achaogen, not generally known to the trade or industry in which Achaogen is engaged, and therefore Consultant agrees that it will not, during or subsequent to the term of this Agreement, use Achaogen's Confidential Information for any purpose whatsoever other than the performance of the Services on behalf of Achaogen or disclose, disseminate, lecture upon or publish Achaogen's Confidential Information to any third party unless Consultant first secures Achaogen's prior written consent. It is understood that all such Confidential Information shall remain the sole property of Achaogen. Consultant further agrees to take all reasonable precautions to prevent any unauthorized disclosure of such Confidential Information including, but not limited to, having each employee of Consultant, if any, with access to any Confidential Information, execute a nondisclosure agreement containing provisions in Achaogen's favor substantially identical to Sections 2, 3, 5, 12 and 17 of this Agreement. Confidential Information does not include information which (i) is rightfully known to Consultant at the time of disclosure to Consultant by Achaogen as evidenced by written records of Consultant, (ii) has become publicly known and made generally available through no

wrongful act of Consultant, or (iii) has been rightfully received by Consultant from a third party who is authorized to make such disclosure. Without Achaogen's prior written approval, Consultant will not directly or indirectly disclose to anyone the existence of this Agreement or the fact that Consultant has this arrangement with Achaogen.

(c) Other Employers' Confidential Information. Consultant agrees that Consultant will not, during the term of this Agreement, improperly use or disclose any confidential or proprietary information or trade secrets of any former or current employer or other person with which Consultant has an agreement or duty to keep in confidence information acquired by Consultant, if any, and that Consultant will not bring onto the premises of Achaogen any unpublished document or proprietary information belonging to such employer or person unless consented to in writing by such employer or person. Consultant will indemnify Achaogen and hold it harmless from and against all claims, liabilities, damages and expenses, including reasonable attorneys' fees and costs of suit ("Claims"), arising out of or in connection with any violation of the rights of (i) any former employer or any other employer for whom Consultant performs services during the term of this Agreement, or (ii) any person with which Consultant had, prior to the Effective Date of this Agreement, or has during the term of this Agreement, an agreement or duty to keep in confidence information acquired by Consultant, where such violation results in whole or in part from Achaogen's use of the work product of Consultant under this Agreement.

(d) Third Party Confidential Information. Consultant recognizes that Achaogen has received and in the future will receive from third parties their confidential or proprietary information subject to a duty on Achaogen's part to maintain the confidentiality of such information and to use it only for certain limited purposes. Consultant agrees that Consultant owes Achaogen and such third parties, during the term of this Agreement and thereafter, a duty to hold all such confidential or proprietary information in the strictest confidence and not to disclose it to any person or use it except as necessary in carrying out the Services for Achaogen consistent with Achaogen's agreements with such third parties. In addition, Consultant will indemnify Achaogen and hold it harmless from and against all Claims arising out of any violation by Consultant of any such third party's rights pursuant to this Subsection 2(d) with respect to their confidential or proprietary information.

(e) Return of Materials. On termination of this Agreement, or upon Achaogen's earlier request, Consultant will deliver to Achaogen all copies of Achaogen's property and Confidential Information and all analyses, notes and other documentation related thereto that are in Consultant's possession or control.

3. **OWNERSHIP**

(a) Assignment. Consultant agrees that all inventions, improvements, developments, discoveries, copyrightable material, trade secrets, innovations, processes, formulas, techniques, test data, concepts, ideas, notes, records, drawings and designs (collectively, "Inventions") conceived, made or discovered by Consultant, solely or in collaboration with others, in connection with or as a result of performance of Services are the

sole property of Achaogen. Consultant further agrees to assign (or cause to be assigned) and does hereby assign fully to Achaogen all Inventions, and all U.S. and foreign patents, patent applications, copyrights, copyright applications and mask work rights, and all other intellectual property rights relating thereto. Consultant will promptly disclose in writing to an authorized officer of Achaogen, or to any other person(s) designated by Achaogen, all Inventions. Consultant will not disclose any Invention to any person outside Achaogen unless Achaogen requests such disclosure in writing.

(b) Further Assurances. Consultant agrees to assist Achaogen, or its designee, at Achaogen's expense, in every proper way to secure Achaogen's rights in the Inventions and all patents, patent applications, copyrights, copyright applications and mask work rights, and all other intellectual property rights relating thereto in any and all countries, including by the disclosure to Achaogen of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, assignments and all other instruments which Achaogen shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to Achaogen, its successors, assigns and nominees the sole and exclusive right, title and interest in and to such Inventions, and any patents, patent applications, copyrights, copyright applications and mask work rights, and all other intellectual property rights relating thereto. Consultant further agrees that Consultant's obligation to execute or cause to be executed, when it is in Consultant's power to do so, any such instrument or papers shall continue after the termination of this Agreement.

(c) Attorney in Fact. Consultant agrees that if Achaogen is unable because of Consultant's unavailability, dissolution, mental or physical incapacity, or for any other reason, to secure Consultant's signature to apply for or to pursue any application for any United States or foreign patents or mask work or copyright registrations covering the Inventions assigned to Achaogen above, then Consultant hereby irrevocably designates and appoints Achaogen and its duly authorized officers and agents, and each of them, as Consultant's agent and attorney in fact, to act for and on Consultant's behalf and stead to execute and file any such applications and to do all other lawfully permitted acts to further the prosecution and issuance of patents, copyright and mask work registrations thereon with the same legal force and effect as if executed by Consultant.

4. REPORTS

Consultant agrees that Consultant will from time to time during the term of this Agreement or any extension hereof keep Achaogen advised as to Consultant's progress in performing the Services hereunder and that Consultant will, as reasonably requested by Achaogen, prepare written reports with respect thereto. It is understood that the time required in the preparation of such written reports shall be considered time devoted to the performance of the Services by Consultant. Such reports prepared by Consultant shall be the sole property of Achaogen.

5. CONFLICTING OBLIGATIONS

(a) Consultant certifies that Consultant has no outstanding agreement or obligation that would be breached by or is in conflict with any of the provisions of this Agreement, or that would preclude Consultant from complying with the provisions hereof, and covenants that Consultant will not enter into any such conflicting agreement during the term of this Agreement. Consultant has disclosed and, during the term of this Agreement, will promptly disclose to an authorized officer of Achaogen any conflicts between this Agreement and any other agreement(s) binding Consultant.

(b) The Services performed hereunder will not be conducted on time that is required to be devoted to any third party. Consultant shall not use the funding, resources or facilities of any third party, without the prior written consent of Achaogen, to perform Services hereunder and will not perform the Services hereunder in any manner that would give any third party rights or access to the product of such Services.

(c) In view of Consultant's access to Achaogen's trade secrets and proprietary know-how, Consultant further agrees that Consultant will not, without Achaogen's prior written consent, perform for any third party services the product of which is identical or substantially similar to the product of Services performed by Consultant during the term of this Agreement and for a period of twelve (12) months after the termination of this Agreement.

6. TERM AND TERMINATION

(a) Term. The term of this Agreement will commence on the Effective Date and will continue for a period of three (3) years.

(b) Termination. Either party hereto may terminate this Agreement upon two (2) weeks prior written notice thereof to the other party. Any such notice will be addressed to the other party at the address shown above or such other address as is previously provided in writing to the non-terminating party and will be deemed given upon delivery if personally delivered, or forty-eight (48) hours after deposited in the United States mail, postage prepaid, registered or certified mail, return receipt requested. Achaogen may terminate this Agreement immediately and without prior notice if Consultant refuses to or is unable to perform the Services and either party may terminate this Agreement if the other party is in breach of any material provision of this Agreement.

(c) Automatic Termination. This Agreement shall terminate automatically upon (i) the appointment of a receiver, liquidator or trustee for either party by decree of competent authority in connection with any adjudication or determination by such authority that such party is bankrupt or insolvent, (ii) the filing by either party of a petition in voluntary bankruptcy, the making of an assignment for the benefit of either party's creditors or the entering into of a composition with either party's creditors, or (iii) any resolution by the Board of Directors of either party to terminate either party's existence or otherwise cease operations or wind up either party's affairs.

(d) Survival. Upon such termination all rights and duties of the parties toward each other shall cease except:

(i) that Achaogen shall be obligated to pay, within thirty (30) days of receipt from Consultant of a final invoice for, all amounts owing to Consultant for Services completed and accepted by Achaogen as of or prior to the termination date and related expenses, if any, in accordance with the provisions of Section 1 (Services and Compensation) hereof; and

(ii) Sections 2 (Confidentiality), 3 (Ownership), 8 (Independent Contractor), 11 (Equitable Relief), 12 (Exclusive Services), 13 (Non-Solicitation) and 14 (Governing Law) and Subsection 5(c) hereof shall survive termination of this Agreement.

7. ASSIGNMENT

Neither this Agreement nor any right hereunder or interest herein may be assigned or transferred by Consultant without the express written consent of Achaogen.

8. INDEPENDENT CONTRACTOR

It is the express intention of the parties that Consultant is and will be an independent contractor. Nothing in this Agreement shall in any way be construed to constitute Consultant as an agent, employee or representative of Achaogen and Consultant shall perform the Services hereunder as an independent contractor. Consultant agrees to furnish (or reimburse Achaogen for) all tools and materials necessary to perform the Services and shall incur all expenses associated with performance, except as expressly provided in Exhibits. Consultant acknowledges and agrees that Consultant is obligated to report as income all compensation received by Consultant pursuant to this Agreement, and Consultant agrees to and acknowledges the obligation to pay all self-employment and other taxes thereon.

9. NO DEBARMENT

Consultant represents and warrants that neither Consultant nor any of Consultant's officers, directors, agents, affiliates, employees, independent contractors or subcontractors or any other person performing work on Consultant's behalf in rendering Services is or has been under investigation by the United States Food and Drug Administration for debarment action or is presently debarred pursuant to the 21 USC § 335. Consultant shall notify Achaogen immediately upon any inquiry or the commencement of any such investigation or proceeding.

10. BENEFITS

Consultant acknowledges and agrees and it is the intent of the parties hereto that Consultant receive no Achaogen-sponsored benefits from Achaogen either as a Consultant or employee. Such benefits include, but are not limited to, paid vacation, sick leave, medical insurance, and 401(k) participation. If Consultant is reclassified by a state or federal agency or court as an employee, Consultant will become a reclassified employee and will receive no

benefits except those mandated by state or federal law, even if by the terms of Achaogen's benefit plans in effect at the time of such reclassification Consultant would otherwise be eligible for such benefits.

11. EQUITABLE RELIEF

Achaogen and Consultant reaffirm, recognize and agree that the Services to be performed by Consultant hereunder are of a special, unique, extraordinary and intellectual character; that those Services are of particular value to Achaogen and that the breach of any or all obligations undertaken by Consultant hereunder, including, without limiting the generality of the foregoing, Consultant's obligation of noncompetition, could not be reasonably or adequately compensated by damages in an action at law, and that an appropriate remedy for Achaogen for any such breach or threat to commit a breach will be, without limitation, an injunction restraining Consultant from committing such breach and granting specific performance hereunder.

12. EXCLUSIVE SERVICES

Subject to written waiver(s) that may be provided by Achaogen upon request, Consultant agrees that during the term of this Agreement and for twelve (12) months thereafter, Consultant will not directly or indirectly (i) provide any services to any other person developing or commercializing drug product(s) for treatment of gram-negative bacterial infection(s) ("Field of Interest"); or (ii) otherwise participate in any project of any person in the Field of Interest.

13. NON-SOLICITATION

During the term of this Agreement and for a period of twelve (12) months thereafter Consultant will not directly or indirectly solicit, hire away, or induce to leave any employee or consultant of Achaogen.

14. GOVERNING LAW

This Agreement shall be governed by the internal substantive laws, but not the choice of law rules, of the State of California.

15. ENTIRE AGREEMENT

This Agreement, together with any Exhibits hereto, represents the entire understanding of the Parties and supersedes any prior or contemporaneous agreements or understandings between Consultant with Achaogen with respect to the subject matter hereof. Furthermore, no modification, supplement, or new agreement may be executed, prior to the expiration of this Agreement, between Consultant and Achaogen with respect to the subject matter hereof, without formal written amendment to this Agreement, signed by all Parties.

16. **SEVERABILITY**

If any one or more of the provisions contained in this Agreement shall be held invalid, illegal, or unenforceable for any reason or in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions hereof, and this Agreement shall be construed as if such provision had never been contained herein.

17. **NO INSIDER TRADING**

Consultant acknowledges that Achaogen is a publicly traded company and that, in the course of performance under this Agreement, Consultant may learn of material, non-public information regarding Achaogen. Consultant understands that federal and state securities laws prohibit Consultant from purchasing or selling Achaogen's securities while in possession of any such information and from disclosing such information to others.

18. **FORCE MAJEURE**

Neither party shall be responsible or liable for any delay or failure to perform or comply with the terms of this Agreement if such delay or failure is due to an act of God or other occurrence beyond the reasonable control of either party. Such occurrences include, but are not limited to, fire, explosion, labor strikes, acts of government, weather, civic unrest, judicial actions, or health reform legislation.

19. **COUNTERPARTS**

This Agreement may be signed in counterparts, each of which will be deemed an original but all of which together will constitute one and the same instrument. Any signature page delivered by facsimile or electronic image transmission shall be binding to the same extent as an original signature page. Any party that delivers a signature page by facsimile or electronic image transmission shall deliver an original counterpart to the other party upon request.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date(s) set forth below and it will be effective as of the day and year first above written.

BLUEPATH SOLUTIONS, INC.

By: DocuSigned by: M. Gitlin F09EF11C2F3C41F...

Name: Matthew Gitlin, PharmD

Title: Managing Director

Date: 6/15/2017

ACHAOGEN, INC.

By: DocuSigned by: Tobin Schilke 063B73AE5438471...

Name: Tobin Schilke

Title: CFO

Date: 6/15/2017

DocuSign Envelope ID: D5EC5465-E59D-4487-B4B6-7AB1F87EF44F

ACHAOGEN

EXHIBIT A

TO

CONSULTING AGREEMENT BETWEEN

ACHAOGEN, INC. AND BLUEPATH CONSULTING, INC.

DATED JUNE 15, 2017

This **Exhibit A** ("Exhibit") effective as of **June 15, 2017** ("Effective Date") is by and between **Achaogen, Inc.** ("Achaogen") and **BluePath Consulting, Inc.** ("Consultant"), and issued pursuant to the Consulting Agreement dated June 15, 2017 by and between Achaogen and Consultant ("Agreement"). Achaogen and Consultant may be referred to each as a "Party" or collectively as the "Parties" to this Agreement.

WHEREAS, Achaogen desires to retain Consultant as an independent contractor to perform consulting services for Achaogen; and

WHEREAS, Consultant desires to perform such services as an independent contractor for Achaogen.

NOW, THEREFORE, Achaogen and Consultant hereby agree to the following terms and conditions:

1. Contact. Consultant's principal contact at Achaogen will be:

   Name: Noah Strait

   Title: Medical Affairs Operations Manager

2. Services. Consultant will render to Achaogen the following services ("Services"): brief Services connected to **Plazomicin Health Economic & Outcomes Research (HEOR) Pre-Launch Planning Support** outlined in Company proposal dated June 14, 2017, attached hereto and incorporated herein as Appendix I.

3. Compensation.

   (a) In consideration of the Services to be performed hereunder, Achaogen will pay Consultant **$4,500**. The maximum compensation payable through **September 1, 2017** for Services described in this Exhibit will not exceed **$4,500**.

(b) Consultant will submit a monthly invoice for services and expenses to Achaogen by regular mail or by email as noted below:

By regular mail: Achaogen, Inc.
Attn: Accounts Payable
1 Tower Place, Suite 300
South San Francisco, CA 94080

By email: accounting@achaogen.com

(c) **Consultant will submit all statements for Services and expenses for Services conducted under this Exhibit separately from all other services conducted under the Agreement and any associated exhibit or amendment.** Achaogen will pay each invoice within 30 days of receipt in the absence of a good faith dispute, in which case the precise nature of the dispute will be provided to Consultant in writing within the 30-day payment period. In order to be eligible for payment by Achaogen, invoices must be submitted within six (6) months of the provision of services corresponding thereto. Invoices submitted by Consultant more than six (6) months after the provision of services listed in the invoice will not be considered by Achaogen for payment.

(d) Consultant will submit all statements in a form approved by Achaogen and such statements will be approved by the contact person listed above or other designated agent of Achaogen. The form will include the following:

i. A brief description of Services and date Services performed;

ii. Purchase Order Number: **tbd**; and

iii. The following statement: "Services performed pursuant to Exhibit A of the Consulting Agreement dated JUNE 15, 2017 and associated with the program code **490- Gen 1810**".

IN WITNESS WHEREOF, the Parties hereto have executed this Exhibit on the date(s) set forth below and it will be effective as of the day and year first above written.

BLUEPATH SOLUTIONS, INC.

By: DocuSigned by: M. Gitlin F09EF11C2F3C41F...

Name: Matthew Gitlin, PharmD

Title: Managing Director

Date: 6/15/2017

ACHAOGEN, INC.

By: DocuSigned by: Tobin Schilke 063B73AE5438471...

Name: Tobin Schilke

Title: CFO

Date: 6/15/2017

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Appendix I

June 14, 2017

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bluepath SOLUTIONS

Scope of Work

Plazomicin Health Economic & Outcomes Research (HEOR) Pre-Launch Planning Support

Date: June 14, 2017

Submitted to:
Daniel Kates, MD, MBA
Vice President & Head of Medical Affairs
dkates@achaogen.com

On Behalf of:
Matthew Gitlin, PharmD
Managing Director
mgitlin@bluepathsolutions.com

Proposal Sections

Situation 2
Project Objectives 2
Approach to the Project 2
Deliverables, Timeline and Budget 3

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Situation

Achaogen is preparing for regulatory approval of plazomicin to treat serious bacterial infections due to MDR Enterobacteriaceae, including carbapenem-resistant Enterobacteriaceae (CRE). The expected launch date is in Spring of 2018. The EPIC (Evaluating Plazomicin In cUTI; NCT02486627) registration trial is intended to serve as a single pivotal trial supporting a New Drug Application (NDA). In the EPIC trial, plazomicin successfully met the objective of non-inferiority compared to meropenem for the FDA-specified primary efficacy endpoints, and achieved superiority for the EMA-specified primary efficacy endpoints. The CARE (Combating Antibiotic Resistant Enterobacteriaceae; NCT01970371) trial is a Phase 3 clinical trial in patients with serious bacterial infections due to CRE. In the Phase 3 CARE trial, a lower rate of mortality or serious disease-related complications was observed for plazomicin compared to colistin therapy.

Achaogen is currently expediting planning efforts as it relates to HEOR evidence generation with a focus on prioritizing and executing on the key needs to achieve a successful launch and attain optimal reimbursement and access within hospital formularies. Achaogen, given the limited time and resources wishes to quickly assess what evidence needs are of greatest importance prior to executing any projects. Achaogen has requested BluePaths' Managing Director, Matthew Gitlin to conduct a brief review of the evidence and current positioning as well as provide insights into necessary evidence needs for a therapy primarily utilized within the inpatient setting to better align internal stakeholders on the most pivotal needs to ensure the company is ready for the US launch and to minimize any potential access hurdles that could have been avoided prior through evidence generation pre-launch versus post launch efforts.

Project Objectives

1. Review product positioning, internal evidence to date and scan the external evidence
2. Participate in on-site meeting with Achaogen to align on key pre-launch HEOR needs

Approach to the Project

BluePath, specifically Matthew Gitlin will review the following evidence from Achaogen:

- TPP and Current positioning
- Recent publications on EPIC and CARE trials (scientific publication recently presented at ASM)
- Other market research with providers, payers
- Secondary evidence such as literature reviews, burden of illness studies, etc...
- Any gap analyses or evidence gaps identified

- Current proposals for HEOR work

BluePath will also review external evidence on comparator products, disease space, clinical treatment guidelines, any hospital formulary positions currently in this space and additional HEOR landscape evidence on current prioritization of evidence for inpatient hospital therapies.

BluePath will then attend an onsite meeting to brainstorm and conduct a mini workshop to align on evidence needs for the near-term period only. This will include:

- A review of initial findings from BluePath
- Feedback from internal stakeholders on their perspectives and positions
- Alignment and prioritization of key needs internally measured against value externally

The goal of the onsite meeting is to ensure we leave the meeting with an aligned team that has clear direction for at least the top 2-3 key items needed pre-launch and additional items that may require further discussion on evaluation prior to a go/no go decision to move forward. This will ensure evidence generation begins for "must have" evidence, whether it be a budget impact calculator for account managers, an AMCP dossier for unsolicited P&T requests by hospitals, or additional evidence to support the clinical and economic value of improved treatment with plazomicin to ensure the unmet need is communicated and there remains room for improvement prior to demonstrating the value of plazomicin on the primary endpoints in the clinical trials supporting the regulatory label.

Deliverables, Timeline and Budget

Deliverable	Hours ($200 per hour)	Amount in USD
Background Reading (Achaogen evidence and BluePath external evidence review)	10	$2,000
On-site Meeting Agenda/Workshop Slides/Attendance and Participation/ Post Meeting Notes-Debrief	10	$2,000
Total		**$4,000**
Pass-through (travel)	**NA**	**$500**
Total with Pass-through		**$4,500**

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ACHAOGEN

AMENDMENT 1 TO EXHIBIT B

TO

CONSULTING AGREEMENT BETWEEN

ACHAOGEN, INC. AND BLUEPATH CONSULTING, INC.

DATED JUNE 15, 2017

This **Amendment 1 to Exhibit B** ("Exhibit") effective as of **August 5, 2017** ("Effective Date") and amends Exhibit B dated August 4, 2017 and is by and between **Achaogen, Inc.** ("Achaogen") and **BluePath Consulting, Inc.** ("Consultant"), and issued pursuant to the Consulting Agreement dated June 15, 2017 by and between Achaogen and Consultant ("Agreement"). Achaogen and Consultant may be referred to each as a "Party" or collectively as the "Parties" to this Agreement.

WHEREAS, the Parties wish to update and replace Appendix I; and

WHEREAS, the Parties agree to be bound to the terms of the Agreement and the Exhibit as amended.

NOW, THEREFORE, Achaogen and Consultant hereby agree to the following terms and conditions:

Exhibit B is deleted in its entirety and replaced with the following:

"1. Contact. Consultant's principal contact at Achaogen will be:

Name: Noah Strait

Title: Medical Affairs Operations Manager

2. Services. Consultant will render to Achaogen the following services ("Services"): brief Services connected to Scope of Work: "**HEOR LAUNCH SUPPORT FOR PLAZOMICIN IN THE TREATMENT OF COMPLICATED URINARY TRACT INFECTION (CUTI/AP) & CARBAPENEM-RESISTANT ENTEROBACTERIACEAE (CRE) INFECTIONS: DEVELOPMENT OF A BUDGET IMPACT AND COST-EFFECTIVENESS MODEL & AMCP DOSSIER FOR ALL INDICATIONS"** dated *July 26, 2017 version 2*, attached hereto and incorporated herein as Appendix I ("Appendix I").

3. Compensation.

(a) In consideration of the Services to be performed hereunder, Achaogen will pay Consultant **$282,714**. The maximum compensation payable through **June 30, 2018** for Services described in this Exhibit will not exceed **$282,714**.

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(b) Consultant will submit a monthly invoice for services and expenses to Achaogen by regular mail or by email as noted below:

By regular mail: Achaogen, Inc.
Attn: Accounts Payable
1 Tower Place, Suite 300
South San Francisco, CA 94080

By email: accounting@achaogen.com

(c) **Consultant will submit all statements for Services and expenses for Services conducted under this Exhibit separately from all other services conducted under the Agreement and any associated exhibit or amendment.** Achaogen will pay each invoice within 30 days of receipt in the absence of a good faith dispute, in which case the precise nature of the dispute will be provided to Consultant in writing within the 30-day payment period. In order to be eligible for payment by Achaogen, invoices must be submitted within six (6) months of the provision of services corresponding thereto. Invoices submitted by Consultant more than six (6) months after the provision of services listed in the invoice will not be considered by Achaogen for payment.

(d) Consultant will submit all statements in a form approved by Achaogen and such statements will be approved by the contact person listed above or other designated agent of Achaogen. The form will include the following:

i. A brief description of Services and date Services performed;

ii. Purchase Order Number: **tbd**; and

iii. The following statement: "Services performed pursuant to Exhibit B of the Consulting Agreement dated JUNE 15, 2017 and associated with the program code **490- Gen 1810 Medical Affairs**"."

Other than as amended herein Exhibit B remains in full force and effect.

IN WITNESS WHEREOF, the Parties hereto have executed this Exhibit on the date(s) set forth below and it will be effective as of the day and year first above written.

BLUEPATH SOLUTIONS, INC.

By: DocuSigned by: M. Gitlin F99EF11C2F3C41F...

Name: Matthew Gitlin, PharmD

Title: Managing Director

Date: 8/23/2017

ACHAOGEN, INC.

By: DocuSigned by: Tobin Schilke 063B73AE5438471...

Name: Tobin Schilke

Title: CFO

Date: 8/23/2017

DocuSign Envelope ID: 92B9C917-19C4-4276-8750-41B0B2A8694C

Appendix I

July 26, 2017

Version 2

DocuSign Envelope ID: 92B9C917-19C4-4276-8750-41B0B2A8694C

bluepath SOLUTIONS

Scope of Work

HEOR LAUNCH SUPPORT FOR PLAZOMICIN IN THE TREATMENT OF COMPLICATED URINARY TRACT INFECTION (CUTI/AP) & CARBAPENEM-RESISTANT ENTEROBACTERIACEAE (CRE) INFECTIONS: DEVELOPMENT OF A BUDGET IMPACT AND COST-EFFECTIVENESS MODEL & AMCP DOSSIER FOR ALL INDICATIONS

July 26, 2017 Version 2

Submitted to:
Daniel Kates, MD, MBA
Vice President & Head of Medical Affairs
dkates@achaogen.com

On Behalf of:
Matthew Gitlin, PharmD
Managing Director
mgitlin@bluepathsolutions.com

Proposal Sections

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Economic Model Approach 6
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Executive Summary

Achaogen is preparing for regulatory approval of plazomicin to treat serious bacterial infections due to carbapenem-resistant Enterobacteriaceae (CRE). The expected launch date is in Spring (April/May) of 2018. Two key registrational clinical trials were conducted including the EPIC (Evaluating Plazomicin In cUTI; NCT02486627) and CARE (Combating Antibiotic Resistant Enterobacteriaceae; NCT01970371) trial. The EPIC trial was a randomized, controlled, double-blind, head-to-head trial of plazomicin versus meropenem, which is intended to serve as a single pivotal trial supporting a New Drug Application (NDA) among adult patients with complicated urinary tract infections (cUTI) and acute pyelonephritis (AP) and the CARE (Combating Antibiotic Resistant Enterobacteriaceae; NCT01970371) trial, an open-label, phase 3 trial of plazomicin versus colistin in patients with serious bacterial infections due to CRE. In the EPIC trial, plazomicin successfully met the objective of non-inferiority compared to meropenem for the FDA-specified primary efficacy endpoints, and achieved superiority for the EMA-specified primary efficacy endpoints. In the Phase 3 CARE trial, a lower rate of mortality or serious disease-related complications was observed for plazomicin compared to colistin therapy.

Achaogen requires the development two types of economic models, specific to the cUTI and CRE population in preparation for their US launch that will be used in external materials including, but not limited to the AMCP dossier, peer reviewed publications, field tool calculators and visual aids for FDAMA 114 use. The first model, a cost-effectiveness model will estimate the value of plazomicin from both a hospital, payer and societal perspective like the recent modeling efforts by Bartsch et al 2017 (specific to CRE). While the budget impact model will evaluate the affordability from a hospital's perspective over varying time horizons relevant to the hospital including the hospitalization and up to 90 days post-discharge. Both models will address the EPIC and CARE trials, which represent the cUTI/AP and CRE populations. The delivery platform of these models is to be determined, but preliminary considerations suggestion two distinct cost-effectiveness models for EPIC and CARE and a single modularized budget impact model covering both indications. The cost-effectiveness of plazomicin will be assessed against clinical trial comparator (colistin), but also other standards of care to ensure real world assessment beyond the clinical trial is evaluated. The budget impact model (BIM) will be developed for inclusion in the AMCP Dossier and simplified for use in the field by account managers when discussing coverage and place in therapy when used as an inpatient treatment.

In addition, an AMCP dossier covering both the entire evidence package including both the CARE and EPIC trials. The dossier will be comprehensive including all relevant sections while the economic section will focus solely on the CRE population. The dossier development will include a collection of evidence to supplemenet any data gaps including focused literature reviews for burden of disease, clinical treatment

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guidelines, systematic reviews and meta-analyses on efficacy/safety and any evidnece reviews to inform andf support the design the economic evaluations.

Phase	Deliverable	Description	Format	Date	Amount
Phase One	**Initial AMCP Sections**	First draft of sections 2, 3, and 5 excluding BIM/CEA (Section 4) using materials developed by Achaogen, other supporting vendors, and supplemental reviews by BluePath.	Word Doc	**Oct 2017**	**$46,866.60**
	Early Draft BIM	Development of functioning basecase model for inclusion in dossier and in for use in the field by account team.	Excel Model	**Oct 2017**	$33,520.00
	Early Draft CEAs	Development of functioning basecase model for inclusion in dossier and future publication.	Excel Model	**Oct 2017**	**$54,947.50**
Phase Two	**Pre-Label Models**	Final models to inform VB pricing, positioning and support potential value of treatment dissemination efforts.	Excel Model	**Dec 2017**	$35,385.00
	Full AMCP Dossier	Full draft with all sections including BIM/CEA reports, appendices and executive summary.	Word Doc	**Dec 2017**	**$25,977.60**
Phase Three	**AMCP Dossier Finalization**	Incorporation of comments including up to 3 rounds of revisions including any updates after FDA label decision, price setting and changes in strategy.	Word Doc	**May 2018**	$12,969.00
	Final CEA Models	Finalize models based on final labels, strategic positioning and price.	Excel Model	**May 2018**	**$6,500.00**
	Final Interactive Field BIM	Incorporates field team feedback and locking of interactive field tool including training webinars, case studies and governance review.	Excel Model	**May 2018**	$26,547.50
Pubs	Up to 5 abstracts/posters (CEA/BIM): $2,000 per abstract and associated poster		Word Doc	**2018**	**$10,000.00**
	Up to 2 manuscripts including revisions and submission: $10,000 per manuscript including revisions and submission			2018	$20,000.00
	Total				**$272,713.20**
	Pass-through (travel as needed and literature review articles)				$10,000.00
	Total with Pass-through				**$282,713.20**

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The project will be structured in phases to allow holding patterns as data become available and accommodate final edits upon approval of the FDA label, price and package sizes and final product positioning efforts.

The key tangible deliverables are as follows:

1. AMCP dossier (word and PDF) using the AMCP Format for Formulary Submission, Version 4.0.
    a. Includes reference binder and annotations for governance review
2. Interactive Excel Budget Impact Model for Field Use including Technical Report and Slide Decks.
    a. Includes modules by population (EPIC and CARE) and combined summary.
    b. Two abstracts and posters/presentations
3. Excel Cost-Effectiveness Model including Technical Report and Slide Decks.
    a. Two mutually exclusive models focused on each population (EPIC and CARE).
    b. Two abstracts and posters/presentations
    c. Two manuscripts

The total budget for 2017 will be $196,696.70 and the total budget for 2018 will be $76,016.50. Total pass-through for potential travel, article purchases will be set at $10,000.

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Project Objectives

The project will include three distinct activities, including the two economic models and an AMCP dossier. However, to achieve the development of these distinct deliverables, several steps will be undertaken to ensure the deliverables are comprehensive and fair balanced.

- Economic Model (CEA/BIM) Development for cUTI/AP (EPIC Trial) and CRE (CARE Trial)
    - Conduct focused literature review for inclusion in AMCP dossier
        - Inform design of models with a focus on inputs, methods, and analyses.
        - Identify key model inputs from literature including, population, epidemiology, cost of disease, management and adverse events.
    - Design and Develop a Cost-effectiveness Model Using HTA Standards
        - Consider multiple perspectives including Hospital, Payer, and Society.
        - Design a model concept that is endorsed by Achaogen.
        - Develop an internal Excel based cost-effectiveness model.
        - Conduct deterministic and probabilistic sensitivity analyses.
        - Develop a summary technical report for inclusion in Dossier per AMCP format
    - Design and Develop a Hospital Perspective Budget Impact Model (for Dossier/Field Use)
        - Design a model concept that is endorsed by Achaogen.
        - Develop Excel based, user friendly, interactive BIM for field use.
        - Conduct analyses to inform scenarios and finalize base case of the model.
        - Develop a summary technical report for inclusion in Dossier per AMCP format.

- AMCP Dossier Development
    - Conduct focused evidence review for populating key sections of the dossier.
        - Key data points include burden of disease (clinical, economic, humanistic), clinical treatment guidelines, systematic review and meta-analyses of efficacy and safety of key comparators. Preliminary searches have identified a number of relevant peer reviewed publications of interest.
    - Develop dossier
        - Includes development of preliminary Section 2, 3, and 5.
        - Followed by completion of Section 4 (BIM/CEA) and Executive Summary.
        - Includes updates post label and price finalization.
        - Include governance support and revisions to obtain medical, legal and compliance approval for use in unsolicited medical information requests.

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Economic Model Approach

Background Evidence Synthesis

A model concept document will be developed proposing the "best case" design prior to ascertaining the appropriate data points from the existing evidence. To ensure the model design and concept are aligned with optimizing the product factors that differentiate plazomicin from other therapies as well as build upon existing health economic models, the model conceptualization and evidence synthesis will be broken into distinct steps.

Step 1: Review Existing CRE/MDR Enterobacteriaceae Economic Models

A focused review of the literature on economic models evaluating treatment of CRE or MDR Enterobacteriaceae. This will include evidence in the public domain and those submitted to payers (Ex US HTA Documents such as NICE assessments). The aim is to understand the current model designs, modeling approaches and limitations such that the plazomicin model can optimize the benefits building on existing model frameworks while incorporating distinct value attributes unique to plazomicin and the comparator(s). Preliminary searches have identified a few economic models such as the recent publication by Bartsch et al 2017, which developed a decision tree based cost of illness model for CRE from the hospital, payer and societal perspective. Such publications will serve to inform and establish a starting point of accepted evidence that can be utilized to developed the plazomicin CRE models.

Step 2: Synthesis of Evidence for use in BIM and CEA (for AMCP dossier as well)

A review of all evidence will be done to identify model inputs for both economic models. This will include a deep dive into any treatment guidelines, CSRs, target population data, and other observational research by Achaogen. BluePath will also conduct focused literature reviews on key inputs that will coincide with any needed reviews for the AMCP dossier, specifically on topics including cost of illness, adverse event rates, treatment patterns.

This step will overlap with the development steps of Section 2 and 5 of the AMCP dossier, which require evaluation and summarization of the literature. The reviews will be conducted as unique searches referred to as focused evidence reviews. This is different from a systematic review, which must be 100% reproducible requiring significantly more documentation. For the purposes of the model inputs and the AMCP sections, systematic reviews are not specifically required and a focused review will be sufficient.

NOTE: As the models are being conceptualized, the evidence to populate the economic models will be identified through focused literature reviews and from post hoc analyses of the pivotal clinical trials. If evidence gaps of key importance are identified, such data points will be raised to

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ensure decisions can be made as to whether to proactively generate the data (retrospective reviews of existing datasets) through one-off activities or assumptions can be made and tested via sensitivity analyses in the economic models.

Economic Model Concepts

A conceptual diagram will be designed to formulate the model design based on the product data, literature and value proposition of the product. In addition to a model concept, a key step will be undertaken to ensure that the model can test various hypotheses that may support specific aspirational value messages.

An economic value message exercise will be initiated to ensure that key messages are considered when designing the model. The slide deck will call out the key messages that Achaogen wishes to test such that the model design, inputs, analyses and outputs are aligned with maximizing the benefits of the economic models developed.

A slide deck visualizing the CEA model including the following factors:

- Diagram of model
- Structure: Decision Tree/Markov (long-term post discharge)
- Perspective: Hospital, Payer (Commercial, Medicare), Society
- Population: CRE
- Time horizon: hospitalization, 1 year, 5-year, lifetime
- Inputs: Clinical efficacy, AE rates and costs, disease related costs, HRQoL (EQ-5D)
- Outputs: ICER: cost per QALY, per death avoided, per AE avoided, per reduction in LOS day etc.

A slide deck visualizing the BIMs model including the following factors:

- Diagram of model
- Structure: Simple cross-sectional
- Perspective: Hospital, Payer (Commercial, Medicare)
- Population: Epidemiology approach, market research, user defined
- Market share and products of interest
- Time horizon: Quarterly and 1 year
- Inputs: Drug costs, AE rates and costs, disease related costs
- Outputs: Payer/Health System (PMPM; net PMPM) and Hospital (i.e. cost offsets, LOS reduction)

Excel Models and Supporting Analyses

A preliminary Excel model for both the BIM and CEA will be developed. The model will be used internally

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to finalize many factors including, but not limited to:

CEA:

- Robustness of evidence and ability to extrapolate trial findings long-term
- Results (Cost per death avoided, per QALY gained, per AE avoided, per consequence avoided, net health benefit)

BIM:

- Approach to population estimation (literature based, market research driven, user defined)
- Final list of comparators and market distribution
- Current market basket and prices
- Assumed plazomicin uptake by prior treatment, CRE population
- Time horizon and outputs (i.e cost offsets)

Final Models, Slide Decks, and Technical Reports

The CEA will be finalized and updated with any new data available upon completion of the FDA label, price and package sizes. The model will be QC'd and a technical report and slide deck developed following the AMCP format to gain efficiency. These materials will easily be adapted for manuscripts and field tools upon finalization of the trial and any other observational research.

The preliminary Excel model of the BIM will be finalized, including a summary slide deck and report that will be provided to Achaogen. The report will be in a format for easy adaptation into the dossier.

Interactive Field Tool

The final BIM will include user functionality, branding and a user guide for use by internal Achaogen stakeholders and account managers in the field using the model. This will include a clear and systematic flow. The model will include modules for each indication and combined view to allow for easy use by account managers and to minimize the number of documents needed. If it is deemed the tool should be broken into mutually exclusive files, this can also be done. The flow of the tool is proposed as follows and will be split by perspective given the difference in design required to model a hospital versus payer perspective:

1. Introduction Sheet
    a. A sheet will summarize the model structure, intent, instructions and navigation aids
2. Fair Balance Sheet
    a. A sheet summarizing product label and ISI for plazomicin
3. Model Inputs Sheet

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   a. A sheet with defaults and user defined inputs will be provided
   b. Sources and citations for all default data inputs or predefined scenarios
4. Model Outputs Sheet
   a. A simple output sheet assessing the pre-post scenario
5. Printing, Saving and Supporting Sheets
   a. A sheet to provide saving of scenarios, printing summary outputs

Additional model development efforts will be conducted last on functionality and look including colors, branding, user flexibility, and tool tips for users and the audience and will depend on what is available. BluePath will ensure there is opportunity for feedback before application of the functionality and interface.

BluePath will provide support during the approval process including revisions to the content during the legal, regulatory and medical review, as well as a reference binder for the model. The reference binder will include all PDF references (external and data on file) to the model content. A training deck and manual will also be provided.

AMCP Dossier Approach

The dossier consists of 5 core sections and a final section for references and source materials that will be populated from materials provided Achaogen, the economic modeling reports for cost-effectiveness and budget impact described above and details on the prescribing information specific to FDA. Other materials may be needed based on preliminary review of the materials to date and any new gaps will be addressed as they are identified.

Focused Literature Reviews

It is expected several literature reviews may be required to have confidence that the key sections that benefit from the literature are fair balanced and robust. Those sections include Section 2 and Section 4 and Section 5. Section 2 and 5 require a summary of the burden of the disease, a summary of systematic reviews, meta-analyses, clinical guidelines, and any evidence used to support the design and inputs of the economic models.



When needed and as mentioned in the prior section, a focused

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review of the literature including PRIMSA flowcharts, included articles and evidence tables will be generated to supplement data gaps in the dossier such that the document can be completed without further evidence generation projects or additional budget.

AMCP Dossier
The AMCP dossier format that will be followed and the content that will be populated as follows:

1. Executive Summary - Clinical and Economic Value of the Product
2. Product Information and Disease Description
3. Clinical Evidence (Trials and CSR info)
4. Economic Value and Modeling Report
5. Additional Supporting Evidence
6. Dossier Appendices

Approach:

To develop first draft of the AMCP dossier based on prior data sources including any literature reviews, clinical study reports, and observational research provided by Achaogen. The AMCP Format for submission will be followed per the guideline instructions, but can be adapted to meet one-off requests such as ignoring recommended page limits (minimums or maximums) and specific section exclusions such as a cost-effectiveness model, which may or may not be added the final AMCP dossier. For this project, the economic value section will be completed and populated in its entirety.

The dossier will be developed in Sections to allow interim reviews by minimizing significant changes, revisions and overhauls to content during the full draft review phase anticipated to begin in November/December 2017. The flow of sections will begin with development of Section 2, 3 and 5 followed by the completion of Section 1, 4 and Section 6. It assumed that all evidence to be used to develop the dossier will already be available, but limited literature searches and identification of new evidence will be performed given the awareness that such reviews have not been conducted by Achaogen.

The scope allows for collection of additional information given evidence provided may be dated and new evidence is likely to be of value. Based on preliminary searches, several systematic reviews on efficacy and safety of comparators therapies has recently been generated as well as new economic data. Many systematic reviews have been undertaken recently to help minimize the resource burden and time needed to conduct a separate systematic literature reviews such as publications by Falagas et al 2014 and Xu et al 2017. In addition, some cost literature has been identified and will be expanded upon to include in the AMCP dossier including some systematic characteristics including the development of PRISMA diagrams, evidence tables and summarization of the content in a fair balanced manner for inclusion in the dossier.

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Phase 1 will complete drafts of Section 2, 3, and 5 allowing for the project to be put on hold at the end of October 2017 if needed with completed drafts of key sections as well as a preliminary BIM/CEA. Phase 2 will be initiated in October 2017 and will aim to finalize remaining sections including the Economic Modeling Report for the BIM (Section 4), the Appendices (Section 6) and the Executive Summary (Section 1). The final Phase 3 will provide the final reviews, revisions and lock down for approval of the AMCP dossier and BIM upon receipt of the final FDA label. The dossier will be updated upon finalization of the FDA label and price and brief update the literature will be undertaken. This step will be needed given the draft document will be ready by Dec 2017, but potential changes in evidence, label, price and positioning may require updates just [prior to official launch in Spring 2018.

The Dossier Sections for the 4.0 version are as follows, but the guidance provided by AMCP will be used to inform the development of the plazomicin dossier.

Section 1.0 - Executive Summary - Clinical and Economic Value of the Product

- Clinical Benefits, Economic Benefits, Conclusions

Section 2.0 - Product Information and Disease Description

- Product Description
    - Product Comparison
- Place of the Product in Therapy
    - Disease Description
    - Approaches to Treatment

Section 3.0 - Supporting Clinical Evidence

- Summarizing Key Clinical Studies
    - Published and Unpublished Data and Clinical Studies Supporting Labeled Indications
    - Published and Unpublished Data and Clinical Studies Supporting Off-Label Indications
    - Clinical Evidence Table Spreadsheets of all Published and Unpublished Studies
    - Summary of Evidence from Secondary Sources

Section 4.0 - Economic Value and Modeling Report

- Modeling Overview
    - Utility of Modeling for Decision-Making
    - Types of Models
    - Other Considerations
- Modeling Approaches and Methods
    - Approach and Framework

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  - Data Sources
  - Analysis
- Modeling Report and Interactive Model
  - Transparency
  - Modeling Report Format
  - Interactive Model

Section 5.0 - Additional Supporting Evidence

Section 5.0 should consist of all other types of evidence and studies that do not fit in Section 3.0 that support the use and value of the product reported in a clear and concise format. Examples of evidence in this section includes clinical practice guidelines (CPGs), HTAs and systematic reviews (SRs), compendia, modeling and pharmacoeconomic studies.

- Clinical Practice Guidelines
- HTAs and SLRs
- Other Economic or Outcomes Evidence
  - Include published studies that result in economic evidence or other outcomes that do not fit in Section 3.0, for example, pharmacoeconomic, modeling, health care utilization, and productivity studies.
- Impact on Quality

Section 6.0 – Dossier Appendices

- References
- Actual economic models
- Prescribing Information
- Patient Information
- Material Safety Data Sheet

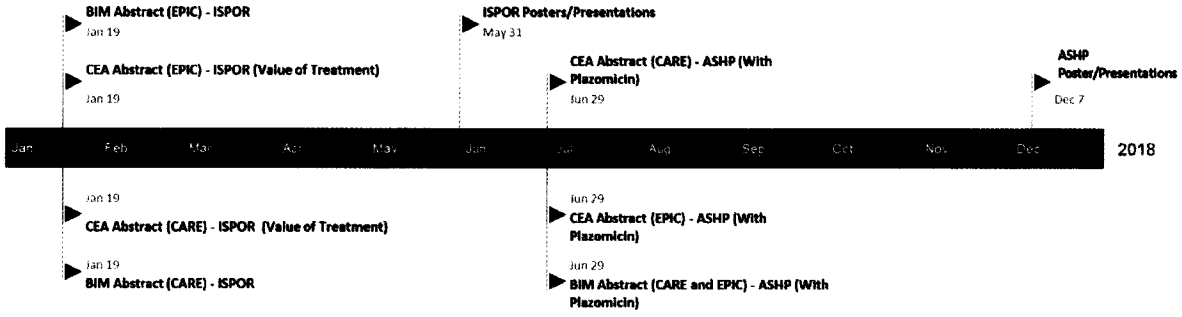
The AMCP Dossier will go through multiple revisions and BluePath Solutions will support up to 3 rounds of revisions to ensure the document meets all review levels from core to extended team members and other stakeholders including medical information. The current proposed timeline provides a great deal of buffer for each review and revision and can likely be expedited depending on the response and number of reviewers. BluePath Solutions upon finalization of the document will provide a reference binder and annotated document for Medical information review and approval before allowing the AMCP dossier to be locked and provided upon unsolicited requests. This will include hyperlinks un the dossier, an annotated dossier in PDF format that links evidence to source materials and a combined PDF binder of all references and source materials.

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HEOR Publication Support

As part of the effort to develop the economic models, a number of dissemination steps should be taken to ensure the evidence is shared with the scientific community and to ensure easier citations when used in external value communication tools. The following draft dissemination plan is proposed for the economic models. This is draft and can be revised and adapted as needed to support need, resources and timing. It is anticipated that multiple abstracts and posters will be generated at various time points. It is suggested that a value of treatment type publications be generated from the cost-effectiveness models prior to launch to setup the value of treatment such disease states with new innovation without requiring the inclusion of plazomicin data or price information. These can be submitted to value conferences like the International Society for Pharmacoeconomic and Outcomes Research (ISPOR). Upon approval and finalization of price, abstracts on the CEA and indication (cUTI/AP and CRE) that are product specific can be generated with conferences such as ASHP (American Society for Health-System Pharmacists). Oher congress can be selected as well as encore presentations depending the audience we wish to share with and the timing. Lastly, manuscripts will be finalized for the CEA models at the time of launch.



Communication and Project Management

Kickoff Meeting:

BluePath Solutions will be responsible for developing materials to facilitate a kick-off meeting, during which BluePath Solutions and Achaogen agree on the approach, timeline, and deliverables in detail to ensure expectations and metrics of success can be established and evaluated. A detailed review of all steps and methods will occur at kick-off removing any gaps not described within the proposal attached.

Project Management:

BluePath Solutions will schedule recurring meetings to update the product team on the progress of the project and the frequency of such meetings will be agreed to with the team. A project manager will be

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allocated to the project by BluePath Solutions to ensure communications, materials and discussions are clearly documented avoiding any loss of information or action items throughout the project.

Communication:

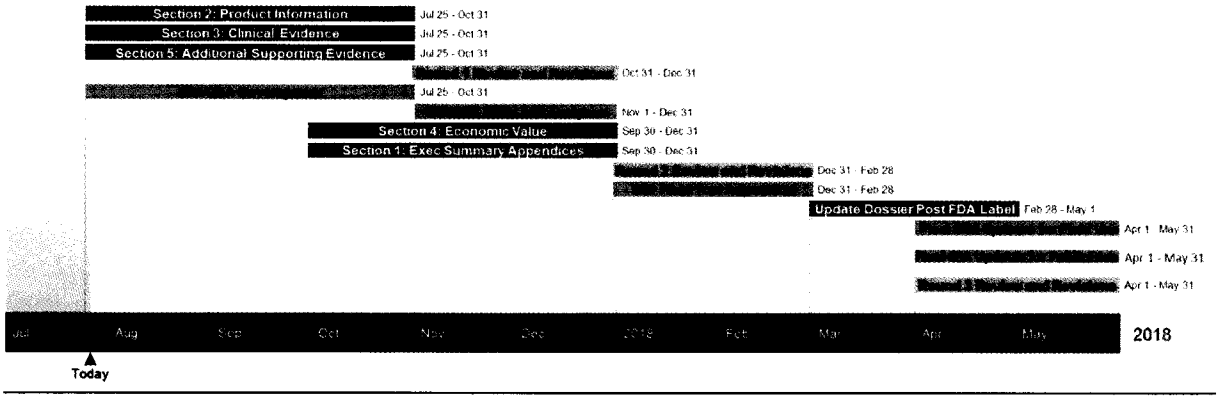
BluePath Solutions will provide weekly (or as needed per requests) updates to the team on project progress of all activities including status of ongoing activities, action items, as well as any items requiring discussion. BluePath Solutions will provide agendas prior to each meeting to ensure all parties time is utilized appropriately and efficiently. Agendas will be approved by the team and revised as needed.

Deliverables, Timeline and Budget

Timeline

Phase	Start Date	End Date	Description
Phase 1	07/25/2017	10/31/2017	Section 2: Product Information
	07/25/2017	10/31/2017	Section 3: Clinical Evidence
	07/25/2017	10/31/2017	Section 5: Additional Supporting Evidence
	07/25/2017	10/31/2017	BIM/CEA Development
Phase 2	09/30/2017	12/31/2017	BIM/CEA Edits and Analyses
	09/30/2017	12/31/2017	Section 4: Economic Value
	09/30/2017	12/31/2017	Section 1: Exec Summary & Section 6: Dossier Appendices
Phase 3	May 2018	May 2018	Dossier Updates Post FDA Label, Price Finalization
	May 2018	May 2018	CEA Model Updates for Publication
	May 2018	May 2018	Final BIM Updates for Field Use

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Budget

Budget by Task Chronologically

Phase	Deliverable	Description	Format	Date	Amount
Phase One	**Initial AMCP Sections**	First draft of sections 2, 3, and 5 excluding BIM/CEA (Section 4) using materials developed by Achaogen, other supporting vendors, and supplemental reviews by BluePath.	Word Doc	**Oct 2017**	$46,866.60
	Early Draft BIM	Development of functioning basecase model for inclusion in dossier and in for use in the field by account team.	Excel Model	**Oct 2017**	$33,520.00
	Early Draft CEAs	Development of functioning basecase model for inclusion in dossier and future publication.	Excel Model	**Oct 2017**	$54,947.50
Phase Two	**Pre-Label Models**	Final models to inform VB pricing, positioning and support potential value of treatment dissemination efforts.	Excel Model	**Dec 2017**	$35,385.00
	Full AMCP Dossier	Full draft with all sections including BIM/CEA reports, appendices and executive summary.	Word Doc	**Dec 2017**	$25,977.60
Phase Three	**AMCP Dossier Finalization**	Incorporation of comments including up to 3 rounds of revisions including any updates after FDA label decision, price setting and changes in strategy.	Word Doc	**May 2018**	$12,969.00
	Final CEA Models	Finalize models based on final labels, strategic positioning and price.	Excel Model	**May 2018**	$6,500.00
	Final Interactive Field BIM	Incorporates field team feedback and locking of interactive field tool including training webinars, case studies and governance review.	Excel Model	**May 2018**	$26,547.50
Pubs	Up to 5 abstracts/posters (CEA/BIM): $2,000 per abstract and associated poster		Word Doc	2018	$10,000.00
	Up to 2 manuscripts including revisions and submission: $10,000 per manuscript including revisions and submission			2018	$20,000.00
	Total				$272,713.20
	Pass-through (travel as needed and literature review articles)				$10,000.00
	Total with Pass-through				$282,713.20

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The projects have been reduced in budget due to the combination of all tasks with the final budget for each task as follows: 1) Plazomicin cUTI/AP and CRE AMCP Dossier = $85,813.20; 2) EPIC and CARE BIMs (Dossier Version, BIM and External Field Tool) = $77,760.00; 3) EPIC and CARE CEAs (hospital, payer and societal perspective) = $79,140.00; and publications (up to 5 abstracts/posters and 2 manuscripts) = $30,000.

Payment Plan

Activity/ Deliverable	Date of Invoice	Amount in USD
Project Execution (15% of 2017 work)	At Contract Signing	$29,504.00
Phase I	October 2017	$105,830.10
Phase 2	December 2017	$61,362.60
Phase 3	May 2018	$46,016.50
Publications	Variable and TBD	$30,000.00

Team

Person	Title	Role in Project
Matthew Gitlin, PharmD	Managing Director	Project Lead Model Developer
Lopamudra Das, PhD, MPH	Associate Director	Project Co-Lead Literature Review and Dossier Lead
Sophie Snyder, MPH, PhD (c)	Senior Manager	Model Lead Model Developer
Arrash Darban, PharmD, MS	Sr. Research Associate	Literature and Dossier Support Literature Review Support
Candace Masaquel, MPH	Research Associate	Literature and Dossier Support Medical Writer
Roy Arguello	Project Coordinator	Project Management Logistics Meeting Minutes

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ACHAOGEN

EXHIBIT D

TO

CONSULTING AGREEMENT BETWEEN

ACHAOGEN, INC. AND BLUEPATH SOLUTIONS

DATED JUNE 15, 2017

This **Exhibit D** ("Exhibit") effective as of September 28, 2018 ("Effective Date") is by and between **Achaogen, Inc.** ("Achaogen") and **BLUEPATH SOLUTIONS** ("Consultant"), and issued pursuant to the Consulting Agreement dated JUNE 15, 2017 by and between Achaogen and Consultant ("Agreement"). Achaogen and Consultant may be referred to each as a "Party" or collectively as the "Parties" to this Agreement.

WHEREAS, Achaogen desires to retain Consultant as an independent contractor to perform consulting services for Achaogen; and

WHEREAS, Consultant desires to perform such services as an independent contractor for Achaogen.

NOW, THEREFORE, Achaogen and Consultant hereby agree to the following terms and conditions:

1. Contact. Consultant's principal contact at Achaogen will be:

   Name: Rodney Brown

   Title: Senior Director, Market Access

2. Services. Consultant will develop for Achaogen a value deck and cost calculator, as outlined in the "Scope of Work: Development of a ZEMDRI™ Value Deck and Cost Calculator in the Treatment of cUTI/AP for Account Managers" attached hereto and incorporated herein as Appendix I ("Services").

3. Compensation.

   (a) The maximum compensation payable through **December 31, 2018** for Services described in this Exhibit will not exceed **$50,000**.

   (b) Consultant will submit a monthly invoice for services and expenses to Achaogen by regular mail or by email as noted below:

   By regular mail: Achaogen, Inc.
   Attn: Accounts Payable
   1 Tower Place, Suite 300

South San Francisco, CA 94080
By email: accounting@achaogen.com

(c) **Consultant will submit all statements for Services and expenses for Services conducted under this Exhibit separately from all other services conducted under the Agreement and any associated exhibit or amendment.** Achaogen will pay each invoice within 30 days of receipt in the absence of a good faith dispute, in which case the precise nature of the dispute will be provided to Consultant in writing within the 30-day payment period. In order to be eligible for payment by Achaogen, invoices must be submitted within six (6) months of the provision of services corresponding thereto. Invoices submitted by Consultant more than six (6) months after the provision of services listed in the invoice will not be considered by Achaogen for payment.

(d) Consultant will submit all statements in a form approved by Achaogen and such statements will be approved by the contact person listed above or other designated agent of Achaogen. The form will include the following:

i. A brief description of Services and date Services performed;

ii. Purchase Order Number: *tbd*; and

iii. The following statement: "Services performed pursuant to Exhibit A of the Consulting Agreement dated SEPTEMBER 28, 2018 and associated with the program code **490 Gen-1110-Project Management**".

IN WITNESS WHEREOF, the Parties hereto have executed this Exhibit on the date(s) set forth below and it will be effective as of the day and year first above written.

BLUEPATH SOLUTIONS

DocuSigned by:
By: Matthew Gitlin
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Name: Matthew Gitlin

Title: Managing Director

Date: 29-Oct-2018

ACHAOGEN, INC.

DocuSigned by:
By: Zeryn Sarpangal
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Name: Zeryn Sarpangal

Title: Chief Financial Officer

Date: 09-Nov-2018

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Appendix I

Scope of Work

Development of a ZEMDRI™ Value Deck and Cost Calculator in the Treatment of cUTI/AP for Account Managers

September 24, 2018

Submitted to
Rodney Brown
Director, Market Access, Achaogen
rbown@achaogen.com

On Behalf of
Matthew Gitlin
Managing Director
BluePath Solutions
mgitlin@bluepathsolutions.com

DocuSign Envelope ID: EABB37F6-47F7-4C5D-AB15-90611386D034

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Overview

Achaogen wishes to develop a core value deck for use in the field by market access team and health system account directors. This deck will be used in a proactive fashion in discussions with healthcare decision makers. The resulting tool is intended to include clinical, economic and value based information on ZEMDRI™ and Achaogen. BluePath will develop the tool in a modularized slide deck format, support the documentation of internal data on file materials and support the approval of the tool for external use.

Achaogen also wishes to adapt existing economic models to be used by health system account directors and regional business directors in the field to demonstrate the cost of treatment between ZEMDRI and key comparators including VABOMERE and AVYCAZ. BluePath will develop a simple calculator based on approved prescribing information and will focused purely on the cost of initial treatment with inclusion of drug acquisition and facility related costs.

Objectives

The study objectives will be delivered as part of the scope of work. These study objectives will be associated with the key goal of developing a comprehensive value deck for use by account managers with healthcare decision makers.

Value Deck:

1. Develop a story board and flow for the value deck to be used externally
2. Draft a full value tool in slide deck format
3. Develop supporting documentation and a reference binder
4. Annotate and support submission and approval through medical, legal and regulatory (MLR) review until the tool is approved for external use

Cost Calculator:

1. Develop a preliminary working version comparing to VABOMERE and AVYCAZ
2. Develop a PDF approved template for static print out versions of the tool
3. Develop front-end fair balance and support evidence for inclusion in the interactive tool
4. Develop supporting documentation and a reference binder
5. Annotate and support submission and approval through medical, legal and regulatory review until the tool is approved for external use

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Approach

Value Deck

BluePath will develop a value deck from existing materials, including the following topics:

- Disease State (epidemiology, burden of disease – clinical and economic)
- Clinical Data (EPIC Results)
- Health Economic Value (cost-effectiveness model)
- Affordability (budget impact or cost comparison analyses)
- Reimbursement and Value Add (NTAP, Codes, etc.)

The tool will be developed using the following steps:

1. Design a story board and agree on content
2. Develop out the full deck and supporting footnotes and text needed
3. Modularize the deck as needed to include supporting slides needed such as methods
4. Lock and finalize supporting materials and documentation into a reference binder
5. Annotate the file and support submission through approval process

BluePath will annotate the file per Achaogen SOPs and support the submission into MLR review. Value deck revisions, MLR comments, and calls will be supported. It is expected at 1-2 submissions to MLR will be needed in addition to the office hours and other iterations prior and post submission. BluePath will support revisions until the tool is fully approved by the MLR group. BluePath will support up to 2 iterations through the process.

Deliverable: Fully approved value deck tool for external use by account managers. In addition, supporting documentation (reference binder, data on file information for models) and annotated file will be provided as part of the process to achieve the deliverable of a completed value deck tool.

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Cost Calculator

BluePath will develop a cost calculator comparing ZEMDRI to VABOMERE and AVYCAZ. The calculator will be simplified version of the budget impact model focused solely on comparing the drug acquisition and facility costs.

The tool will be developed using the following steps:

1. Design layout, functionality and look of the tool
2. Incorporate patient and hospital -level with customer specific epidemiology inputs
3. Finalize inputs per US prescribing information
4. Develop front-end ISI and fair balance
5. Developed an approved PDF static template for outputs of the tool (customer-specific)
6. Lock and finalize supporting materials and documentation into a reference binder
7. Annotate the file and support submission through approval process

BluePath will also develop an approved template to allow account managers to produce a static version of the tool inputs and results specific to each customer and deliver this static PDF either as alternate method of presentation or as a leave-behind (via email trigger from interactive tool).

BluePath will annotate the file per Achaogen SOPs and support the submission into MLR review. Value deck revisions, MLR comments, and calls will be supported. It is expected at 1-2 submissions to MLR will be needed in addition to the office hours and other iterations prior and post submission. BluePath will support revisions until the tool is fully approved by the MLR group. BluePath will support up to 2 iterations through the process.

Deliverable: Fully approved cost tool for external use by account managers including a static version in PDF format. In addition, supporting documentation (reference binder, data on file information for models) and annotated file will be provided as part of the process to achieve the deliverable of a completed interactive and static cost calculator.

Timeline and Deliverables

The timeline and deliverables will guide the project.

Activity	Description	Date
Value Deck	• Draft Tool • Tool Ready for Submission • Approved Tool	• October 5, 2018 • October 19, 2018 • October 26, 2018
Cost Calculator	• Draft Tool • Tool Ready for Submission • Approved Tool	• October 19, 2018 • October 26, 2018 • November 9, 2018

Budget

Activity	Details	Budget
Core Tasks		
Value Deck	• Draft Tool • Tool Ready for Submission • Approved Tool	$25,000
Cost Calculator	• Draft Tool (interactive/Static) • Tool Ready for Submission • Approved Tool	$25,000
Total		**$50,000**

Payment Plan

The total core budget for the project will be $50,000.

Core Activities	Amount	Timing
Kickoff and Execution	35%	September 2018
Both Tools Approved	65%	November 2018

Team Members

Name	Title	Role
Matthew Gitlin, PharmD	Managing Director	Project Lead
Courtney Coles, MPH	Senior Manager	Co-lead
Jack Badaracco PharmD, MS	Manager	Study Protocol and Analysis
Mack Dacre, PharmD, MS	Research Associate	Study Management