

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

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended **June 30, 2017**

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: **000-54748**

ICAGEN, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

20-0982060

(I.R.S. employer
Identification No.)

4222 Emperor Blvd., Suite 350
Research Triangle Park, Durham, NC, 27703
(Address of principal executive offices) (Zip Code)

(919) 433-3205
(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
	(Do not check if a smaller reporting company)	Emerging growth company	<input checked="" type="checkbox"/>

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Number of shares of common stock outstanding as of August 11, 2017 was 6,393,107.

ICAGEN, INC.
NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). In particular, statements contained in this Quarterly Report on Form 10-Q, including but not limited to, statements regarding the sufficiency of our cash, our ability to finance our operations and business initiatives and obtain funding for such activities; our future results of operations and financial position, business strategy and plan prospects, or costs and objectives of management for future acquisitions, are forward looking statements. These forward-looking statements relate to our future plans, objectives, expectations and intentions and may be identified by words such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “intends,” “targets,” “projects,” “contemplates,” “believes,” “seeks,” “goals,” “estimates,” “predicts,” “potential” and “continue” or similar words. Readers are cautioned that these forward-looking statements are based on our current beliefs, expectations and assumptions and are subject to risks, uncertainties, and assumptions that are difficult to predict, including those identified below, under Part II, Item 1A. “Risk Factors” and elsewhere in this Quarterly Report on Form 10-Q, and those identified under Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on April 17, 2017. Therefore, actual results may differ materially and adversely from those expressed, projected or implied in any forward-looking statements. We undertake no obligation to revise or update any forward-looking statements for any reason.

NOTE REGARDING COMPANY REFERENCES

Throughout this Quarterly Report on Form 10-Q, “Icagen,” the “Company,” “we,” “us” and “our” refer to Icagen, Inc.

FORM 10-Q

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

ICAGEN INC.
CONDENSED CONSOLIDATED BALANCE SHEETS

	<u>June 30,</u> <u>2017</u>	<u>December</u> <u>31,</u> <u>2016</u>
	<u>(Unaudited)</u>	
Assets		
Current Assets		
Cash	\$ 5,796,786	\$ 4,938,948
Accounts receivable, net	2,023,107	1,317,568
Prepaid expenses and other current assets	277,353	467,807
Assets held for resale	6,619	27,000
Total Current Assets	<u>8,103,865</u>	<u>6,751,323</u>
Non-Current Assets		
Intangibles, net	7,539,562	7,498,890
Plant and equipment, net	2,389,954	2,677,734
Deposits	238,987	238,987
Total Non-Current Assets	<u>10,168,503</u>	<u>10,415,611</u>
Total Assets	<u>\$ 18,272,368</u>	<u>\$ 17,166,934</u>
Liabilities and Stockholders' Deficit		
Current Liabilities		
Accounts payable	\$ 1,422,803	\$ 1,712,181
Other payables and accrued expenses	1,803,140	1,633,801
Legal settlement accrual	1,160,000	1,426,667
Loans payable	253,751	442,109
Deferred revenue	196,880	614,471
Deferred subsidy	800,000	5,600,000
Deferred purchase consideration	201,049	1,332,800
Total Current Liabilities	<u>5,837,623</u>	<u>12,762,029</u>
Non-Current Liabilities		
Deferred purchase consideration, net	8,316,929	7,454,511
Convertible loans payable	5,286,651	-
Legal settlement accrual	-	483,333
Derivative liability	4,440,559	-
Total Non-Current Liabilities	<u>18,044,139</u>	<u>7,937,844</u>
Total Liabilities	<u>23,881,762</u>	<u>20,699,873</u>
Commitment and contingencies	-	-
Stockholders' Deficit		
Preferred stock, \$0.001 par value, 10,000,000 authorized, 400,000 shares designated as Series A Preferred Stock and unissued, 3,000,000 shares designated as Series B Preferred stock and unissued, 6,600,000 undesignated and unissued	-	-
Common stock, \$0.001 par value; 50,000,000 shares authorized, 6,720,107 shares issued and 6,393,107 outstanding as of June 30, 2017 and December 31, 2016.	6,392	6,392
Additional paid-in-capital	24,753,688	24,108,143
Treasury stock, at cost (327,000 shares of common stock at June 30, 2017 and December 31, 2016.	(237)	(237)
Accumulated deficit	(30,369,237)	(27,647,237)
Total Stockholder's Deficit	<u>(5,609,394)</u>	<u>(3,532,939)</u>
Total Liabilities and Stockholders' Deficit	<u>\$ 18,272,368</u>	<u>\$ 17,166,934</u>

See notes to the unaudited condensed consolidated financial statements

ICAGEN, INC.
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

	Three months ended June 30, 2017	Three months ended June 30, 2016	Six months ended June 30, 2017	Six months ended June 30, 2016
Sales	\$ 5,774,547	\$ 1,157,458	\$ 11,594,497	\$ 2,058,324
Cost of sales	<u>3,084,736</u>	<u>840,995</u>	<u>6,021,346</u>	<u>1,535,845</u>
Gross profit	2,689,811	316,463	5,573,151	522,479
Operating expenses:				
Selling, general and administrative expenses	3,814,546	1,178,467	6,912,820	2,190,238
Depreciation	458,174	112,304	842,905	213,881
Amortization	56,246	56,246	112,492	112,492
Total Operating expenses	<u>4,328,966</u>	<u>1,347,017</u>	<u>7,868,217</u>	<u>2,516,611</u>
Operating loss	<u>(1,639,155)</u>	<u>(1,030,554)</u>	<u>(2,295,066)</u>	<u>(1,994,132)</u>
Other income (expense)				
Other income	500,000	-	500,226	-
Interest income	-	46	-	335
Interest expense	(854,838)	(150,928)	(1,004,879)	(297,166)
Gain on change in the fair value of derivative liability	77,719	-	77,719	-
Total other expense	<u>(277,119)</u>	<u>(150,882)</u>	<u>(426,934)</u>	<u>(296,831)</u>
Net loss before income tax	(1,916,274)	(1,181,436)	(2,722,000)	(2,290,963)
Income tax	-	-	-	-
Net loss	<u>(1,916,274)</u>	<u>(1,181,436)</u>	<u>(2,722,000)</u>	<u>(2,290,963)</u>
Net Loss Per Share - Basic and Diluted	<u>\$ (0.30)</u>	<u>\$ (0.18)</u>	<u>\$ (0.43)</u>	<u>\$ (0.35)</u>
Weighted Average Number of Shares Outstanding - Basic and Diluted	<u>6,393,107</u>	<u>6,481,857</u>	<u>6,393,107</u>	<u>6,481,857</u>

See notes to the unaudited condensed consolidated financial statements

ICAGEN, INC.
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Six months ended June 30, 2017	Six months ended June 30, 2016
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (2,722,000)	\$ (2,290,963)
Adjustment to reconcile net loss to net cash used in operating activities:		
Depreciation expense	842,905	213,881
Amortization expense	112,492	112,492
Stock based compensation charge	315,192	228,849
Amortization of debt discount	535,282	-
Gain on change in the fair value of derivative liability	(77,719)	-
Deferred purchase consideration unearned by vendor	(500,000)	-
Imputed interest on acquisition of Icagen assets	292,517	294,986
Movement in bad debt provision	-	(19,084)
Changes in operating assets and liabilities		
Accounts receivable	(705,538)	103,235
Prepaid expenses and other current assets	190,454	(5,602)
Accounts payable	(289,379)	(11,072)
Deferred subsidy	(4,800,000)	-
Deferred revenues	(417,591)	-
Other payables and accrued expenses	(579,612)	(723,983)
NET CASH USED IN OPERATING ACTIVITIES	(7,802,997)	(2,097,261)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Payment of deferred purchase consideration	(50,000)	(125,000)
Purchase of plant and equipment	(555,125)	(539,632)
Purchase of intangibles	(153,164)	-
Proceeds on assets held for resale	20,381	-
NET CASH USED IN INVESTING ACTIVITIES	(737,908)	(664,632)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from convertible loan	9,600,000	-
Proceeds from bridge notes	1,500,000	1,045,000
Repayment of bridge notes	(1,500,000)	-
Repayment of Los Alamos County loan	-	(142,311)
Repayment of software loan	-	(15,206)
Proceeds from equipment loan	-	533,290
Repayment of equipment loan	(201,257)	-
NET CASH PROVIDED BY FINANCING ACTIVITIES	9,398,743	1,420,773
NET INCREASE (DECREASE) IN CASH	857,838	(1,341,120)
Cash at the beginning of the period	4,938,948	2,266,788
CAST AT END OF PERIOD	\$ 5,796,786	\$ 925,668
CASH PAID FOR INTEREST AND TAXES:		
Cash paid for income taxes	\$ -	\$ -
Cash paid for interest	\$ 172,253	\$ 3,435
NON-CASH INVESTING AND FINANCING ACTIVITIES		
Value of Series A Stock redeemed and offset against stockholders' equity	\$ -	\$ (50,400)
Value of warrants issued concurrent with bridge notes	\$ 330,353	\$ 203,214
Discount on convertible debt and warrants issued concurrent with debt	\$ 4,518,278	\$ -

See notes to the unaudited condensed consolidated financial statements

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. GENERAL INFORMATION

Icagen, Inc. (“the Company”, “we”, “us”, “our”) is a Delaware corporation. The principal office is in Durham, North Carolina. The Company was incorporated in November 2003.

2. ACCOUNTING POLICIES AND ESTIMATES

General

The (a) consolidated balance sheets as of June 30, 2017, which have been derived from the unaudited condensed consolidated financial statements, and as of December 31, 2016, which have been derived from audited consolidated financial statements, and (b) the unaudited interim statements of operations and cash flows of the Company, have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) for interim financial information and the instructions to Form 10-Q and Rule 8-03 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the three and six months ended June 30, 2017 are not necessarily indicative of results that may be expected for the year ending December 31, 2017. These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in the Company’s Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission (“SEC”) on April 17, 2017.

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“US GAAP”).

In the opinion of management, all adjustments necessary to fairly present the results for the interim periods presented have been made. All adjustments made are of a normal and recurring nature and no non-recurring adjustments have been made in the presentation of these interim financial statements.

All amounts referred to in the notes to the unaudited condensed consolidated financial statements are in United States Dollars (\$) unless stated otherwise.

Consolidation

The unaudited condensed consolidated financial statements include the financial statements of the Company and its subsidiaries in which it has a majority voting interest. Investments in affiliates are accounted for under the cost method of accounting, where appropriate. All significant inter-company accounts and transactions have been eliminated in the condensed consolidated financial statements. The entities included in these condensed consolidated financial statements are as follows:

Icagen, Inc. - Parent Company

Icagen Corp - Wholly owned subsidiary

Icagen-T Inc. - Wholly owned subsidiary (formed on June 16, 2016)

Caldera Discovery, Inc. - Wholly owned subsidiary (formed on March 27, 2015)

XRPro Sciences, Inc. - Wholly owned subsidiary (formed on December 10, 2015)

The preparation of these consolidated financial statements in accordance with US GAAP requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We continually evaluate our estimates, including those related to bad debts and recovery of long-lived assets. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Any future changes to these estimates and assumptions could cause a material change to our reported amounts of revenues, expenses, assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of the financial statements. Significant estimates include the allowance for doubtful accounts, the useful life of plant and equipment and intangible assets, the valuation of certain assets and intangibles acquired from Icagen, and assumptions used in assessing impairment of long-term assets and the assumptions used in determining percentage of completion on our long-term contracts.

Concentrations of credit risk

The Company maintains cash with major financial institutions. The Federal Deposit Insurance Corporation (“FDIC”) provides insurance coverage for deposits of corporations, the current limit of coverage is \$250,000. As a result of this coverage the Company has cash balances of \$5,284,032 that are not covered by the FDIC as of June 30, 2017.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

2. ACCOUNTING POLICIES AND ESTIMATES (continued)

Concentration of major customers

The Company derives its revenues from commercial pharmaceutical and biotechnology companies as well as from Government research contracts and Government grants.

The Company derived 71.3% of its services revenue from three major customers during the six months ended June 30, 2017. During the six months ended June 30, 2016, the Company derived 68.8% of its revenue from two major customers. The Company continues to diversify its customer base.

Total revenues are as follows:

	<u>Three months ended</u>		<u>Six months ended</u>	
	<u>June 30,</u> <u>2017</u>	<u>June 30,</u> <u>2016</u>	<u>June 30,</u> <u>2017</u>	<u>June 30,</u> <u>2016</u>
Services revenue	\$ 3,179,958	\$ 1,006,055	\$ 6,473,753	\$ 1,792,055
Subsidy revenue	2,400,000	-	4,800,000	-
Government grants	<u>194,589</u>	<u>151,403</u>	<u>320,744</u>	<u>266,269</u>
	<u>\$ 5,774,547</u>	<u>\$ 1,157,458</u>	<u>\$11,594,497</u>	<u>\$ 2,058,324</u>

Accounts receivable and other receivables

The company has a policy of reserving for uncollectible accounts based on its best estimate of the amount of probable credit losses in its existing accounts receivable. As a basis for accurately estimating the likelihood of collection of its accounts receivable, the Company considers a number of factors when determining reserves for uncollectable accounts. The Company believes that it uses a reasonably reliable methodology to estimate the collectability of its accounts receivable. The Company reviews its allowances for doubtful accounts on a regular basis. The Company also considers whether the historical economic conditions are comparable to current economic conditions. If the financial condition of its customers or other parties that it has business relations with were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

The balance of the receivables provision as at June 30, 2017 and December 31, 2016 was \$0 and \$0, respectively. The amount charged to bad debt provision for the three and six months ended June 30, 2017 and 2016 was \$0 and \$0, respectively.

Revenue recognition

Revenue sources consist of commercial contracts, deferred subsidy revenue and government grants and contracts.

The Company enters into fixed fee commercial development contracts that are not associated with the delivery of feasible research on drug candidates and the development of drug candidates. Revenue under such contracts is generally recognized upon delivery or as the development is performed.

The Company received and will receive certain deferred subsidy revenue which is utilized to support its operations, maintain the facilities that it operates in and continue the employment of certain employees to provide, if needed, resources to certain of its customers. This deferred subsidy revenue is amortized over a straight-line basis to match the expected expenses to be incurred over the period July 15, 2016 to December 31, 2017.

The Company received and will receive certain revenue in advance of services delivered. This revenue is deferred and only recognized when services have been performed in terms of Master Services Agreements entered into with customers, together with their associated Statements of Work.

The Company accounts for its long-term Firm Fixed Price Government contracts and grants associated with the delivery of research on drug candidates and the development of drug candidates using the percentage-of-completion accounting method. Under this method, revenue is recognized based on the extent of progress towards completion of the long-term contract.

The Company generally uses the cost-to-cost measure of progress for all its long-term contracts, unless it believes another measure will produce a more reliable result. The Company believes that the cost-to-cost measure is the best and most reliable performance indicator of progress on our long-term contracts as all its contract estimates are based on costs that it expects to incur in performing its long term contracts and it has not experienced any significant variations on estimated to actual costs to date. Under the cost-to-cost measure of progress, the extent of progress towards completion is based on the ratio of costs incurred-to-date to the total estimated costs at the completion of the long-term contract. Revenues, including estimated fees or profits are recorded as costs are incurred.

When estimates of total costs to be incurred on a contract exceed total estimates of revenue to be earned, a provision for the entire loss on the contract is recorded in the period the loss is determined.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

2. ACCOUNTING POLICIES AND ESTIMATES (continued)

Research and Development

The remuneration of the Company's research and development staff, materials used in internal research and development activities, and payments made to third parties in connection with collaborative research and development arrangements, are all expensed as incurred. Where the Company makes a payment to a third party to acquire the right to use a product formula which has received regulatory approval, the payment is accounted for as the acquisition of a license or patent and is capitalized as an intangible asset and amortized over the shorter of the license period or the patent life.

The amount expensed for unrecovered research costs, included in Selling, general and administrative expenses during the three months and six months ended June 30, 2017 was \$791,732 and \$1,486,620 and for the three months and six months ended June 30, 2016 was \$0 and \$0, respectively.

Related parties

Parties are considered to be related to the Company if the parties that, directly or indirectly, through one or more intermediaries, control, are controlled by, or are under common control with the Company. Related parties also include principal owners of the Company, its management, members of the immediate families of principal owners of the Company and its management and other parties with which the Company may deal if one party controls or can significantly influence the management or operating policies of the other to an extent that one of the transacting parties might be prevented from fully pursuing its own separate interests. The Company discloses all related party transactions. All transactions are recorded at fair value of the goods or services exchanged.

Recent accounting pronouncements

In May 2017, the FASB issued Accounting Standards Update No. ("ASU") 2017-09, Compensation – Stock Compensation, an amendment to Topic 718. The amendments in this Update provide guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. 2. An entity should account for the effects of a modification unless all the following are met:

1. The fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the modified award is the same as the fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the original award immediately before the original award is modified. If the modification does not affect any of the inputs to the valuation technique that the entity uses to value the award, the entity is not required to estimate the value immediately before and after the modification.
2. The vesting conditions of the modified award are the same as the vesting conditions of the original award immediately before the original award is modified.
3. The classification of the modified award as an equity instrument or a liability instrument is the same as the classification of the original award immediately before the original award is modified.

The current disclosure requirements in Topic 718 apply regardless of whether an entity is required to apply modification accounting under the amendments in this Update. The amendments in this Update are effective for all entities for annual periods beginning after December 15, 2017. Early adoption is permitted and should be applied prospectively to an award modified on or after the adoption date. The amendments proposed in this ASU are not expected to have a material impact on our consolidated financial statements.

In May 2017, the FASB issued ASU 2017-10, service concession arrangements, an amendment to Topic 853. Topic 853 provides guidance for operating entities when they enter into a service concession arrangement with a public-sector grantor who both:

1. Controls or has the ability to modify or approve the services that the operating entity must provide with the infrastructure, to whom it must provide them, and at what price
2. Controls, through ownership, beneficial entitlement, or otherwise, any residual interest in the infrastructure at the end of the term of the arrangement.

In a service concession arrangement within the scope of Topic 853, the operating entity should not account for the infrastructure as a lease or as property, plant, and equipment. An operating entity should refer to other Topics to account for various aspects of a service concession arrangement. For example, an operating entity should account for revenue relating to construction, upgrade, or operation services in accordance with Topic 605, Revenue Recognition, or Topic 606, Revenue from Contracts with Customers.

The amendments in this Update apply to the accounting by operating entities for service concession arrangements within the scope of Topic 853. These updates are effective when the Company adopts the updates to Topic 606. The amendments proposed in this ASU are not expected to have an impact on our consolidated financial statements.

Any new accounting standards, not disclosed above, that have been issued or proposed by FASB that do not require adoption until a future date are not expected to have a material impact on the financial statements upon adoption.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

3. GOING CONCERN

The accompanying unaudited condensed consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As shown in the accompanying unaudited condensed consolidated financial statements, the Company incurred a net loss of \$(2,722,000) for the six months ended June 30, 2017 and \$(5,504,412) for the year ended December 31, 2016. As of June 30, 2017, and December 31, 2016, the Company had accumulated deficits of \$30,369,237 and \$27,647,237, respectively. The Company's working capital improved to \$2,266,242 as of June 30, 2017, from a deficit of \$(6,010,706) as of December 31, 2016. The working capital included a deferred subsidy of \$800,000 and \$5,600,000 as of June 30, 2017 and December 31, 2016, respectively. These operating losses create an uncertainty about the Company's ability to continue as a going concern. The Company's plan, through the acquisition of the assets of Icagen and Icagen-T and the continued promotion of its services to existing and potential customers is to generate sufficient revenues to cover our anticipated expenses. Although no assurances can be given as to the Company's ability to deliver on its revenue plans, or that unforeseen expenses may arise, the management of the Company believes that the revenue to be generated from operations together with the recently concluded debt funding will provide the necessary funding for the Company to continue as a going concern. The unaudited condensed consolidated financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

4. PREPAID EXPENSES AND OTHER CURRENT ASSETS

	<u>June 30, 2017</u>	<u>December 31, 2016</u>
Other receivables - Sanofi	\$ -	\$ 305,867
Prepaid insurance	87,281	51,791
Prepaid maintenance	177,820	80,687
Prepaid rent	2,500	21,430
Prepaid subscriptions	9,752	7,243
Other	-	789
	<u>\$ 277,353</u>	<u>\$ 467,807</u>

5. ASSETS HELD FOR RESALE

The Company closed its Los Alamos and Cambridge sites during 2015 and consolidated its operations at the Icagen site in North Carolina. Excess laboratory equipment that was surplus to its requirements were consigned to a company that specializes in selling used laboratory equipment. The expected value the equipment is expected to realize was \$27,000, of which \$20,381 has been received to date, with some equipment remaining unsold.

6. INTANGIBLE ASSETS

Intangible assets consist of the following:

	<u>June 30, 2017</u>		<u>December 31, 2016</u>	
	<u>Cost</u>	<u>Amortization and Impairment</u>	<u>Net book value</u>	<u>Net book value</u>
Cell lines	\$ 5,153,664	\$ -	\$ 5,153,664	\$ 5,000,500
Discovery platform	1,450,500	(290,100)	1,160,400	1,232,925
Trade names and trademarks	637,500	-	637,500	637,500
Assembled workforce	282,500	(56,500)	226,000	240,125
Patents	972,000	(610,002)	361,998	387,840
	<u>\$ 8,496,164</u>	<u>\$ (956,602)</u>	<u>\$ 7,539,562</u>	<u>\$ 7,498,890</u>

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

6. INTANGIBLE ASSETS (continued)

The aggregate amortization expense charged to operations was \$56,246 for each of the three months ended June 30, 2017 and 2016, and \$112,492 for each of the six months ended June 30, 2017 and 2016.

Amortization expense for future periods is summarized as follows:

	<u>Amount</u>
2017	\$ 112,492
2018	224,984
2019	224,984
2020	224,984
2021 and thereafter	960,954
Total	<u>\$ 1,748,398</u>

7. PLANT AND EQUIPMENT

Plant and equipment consists of the following:

	<u>June 30, 2017</u>		<u>December 31, 2016</u>	
	<u>Cost</u>	<u>Amortization and Impairment</u>	<u>Net book value</u>	<u>Net book value</u>
Laboratory equipment	\$ 2,357,945	\$ (895,323)	\$ 1,462,622	\$ 1,613,987
Computer software	1,686,968	(848,244)	838,724	1,022,340
Computer equipment	80,645	(24,871)	55,774	38,768
Leasehold improvements	38,974	(6,140)	32,834	2,639
	<u>\$ 4,164,532</u>	<u>\$ (1,774,578)</u>	<u>\$ 2,389,954</u>	<u>\$ 2,677,734</u>

The aggregate depreciation charge to operations was \$458,174 and \$112,304 for the three months ended June 30, 2017 and 2016, respectively, and \$842,905 and \$213,881 for the six months ended June 30, 2017 and 2016, respectively.

8. OTHER PAYABLE AND ACCRUED EXPENSES

Other payables and accrued expenses consist of the following:

	<u>June 30, 2017</u>	<u>December 31, 2016</u>
Bonus and vacation accrual	\$ 1,173,961	\$ 1,125,119
Payroll liabilities	84,633	32,312
Sanofi transitional services expense	268,189	268,189
Credit card liability	31,368	35,862
Other	244,989	172,319
	<u>\$ 1,803,140</u>	<u>\$ 1,633,801</u>

The Company accrues for vacation pay and bonus accruals in anticipation of making payments based on the achievement of predetermined goals.

In terms of a Transitional Service Agreement entered into with Sanofi US Services, Inc ("Sanofi"), Sanofi allowed the Company to use its Purchase order platform for the period July 15, 2016 to October 15, 2016. The Company purchases consisted primarily of laboratory supplies and consumables.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

9. LEGAL SETTLEMENT LIABILITIES

The legal settlement liabilities consists of the following:

	June 30, 2017	December 31, 2016
Settlement liability accruals		
Dentons dispute	\$ 900,000	\$ 1,400,000
Eisenschenk matter	250,000	500,000
Other	10,000	10,000
	1,160,000	1,910,000
Judgement liability	-	-
	1,160,000	1,910,000
Disclosed as follows:		
Short-term portion	1,160,000	1,426,667
Long-term portion	-	483,333
	\$ 1,160,000	\$ 1,910,000

In terms of a Mutual Release and Assignment Agreement entered into between American Milling, LP and the Company, American Milling is a claimant in the Estate of Sigmund Eisenschenk matter. American Milling agreed to assign all its claims, both past and future against the Estate of Sigmund Eisenschenk to the Company for \$800,000, of which \$550,000 has been paid to date, the remaining \$250,000 will be paid in quarterly installments of \$83,333 on September 30, 2017, December 31, 2017 and March 31, 2018.

The Company has reached a Settlement and Release Agreement with Dentons and has agreed to pay Dentons the sum of \$1,400,000 over a fourteen month period of which \$500,000 was paid on May 15, 2017.

10. DEFERRED REVENUE

Deferred revenue represents payments received in advance from Sanofi in terms of the MSA agreement entered into with them on July 15, 2016. Revenue is recognized on a monthly basis upon agreed rates for the number of employees assigned to certain Sanofi projects and is offset against the payments received from Sanofi in terms of the agreed upon payment schedule, the remaining excess payments received is deferred revenue and is expected to be realized within a 12 month period.

11. DEFERRED SUBSIDY REVENUE

Deferred subsidy revenue represents a prepayment received from Sanofi to support the Company's operations, maintain the facilities that it operates in and continue the employment of certain employees to provide, if needed, resources to Sanofi. This deferred subsidy revenue is amortized over a straight-line basis to match the expected expenses to be incurred over the period commencing on July 15, 2016 and terminating on December 31, 2017.

12. DEFERRED PURCHASE CONSIDERATION

In terms of the Icagen asset purchase agreement entered into on July 1, 2015, with a subsidiary of Pfizer, Inc, now known as Pfizer Research (NC), Inc., the Company has the following deferred purchase price obligations:

- commencing May 30, 2017, the Company is obligated to pay additional purchase price consideration calculated ("Earn Out Payment") at the greater of (i) 10% (ten percent) of gross revenues per quarter (exclusive of revenue paid by Sanofi to Icagen-T) and (ii) \$250,000 per quarter up to an aggregate maximum of \$10,000,000 (the Maximum Earn Out Payment"), subject to the next paragraph. These earn out payments are payable quarterly, 60 days after the completion of each calendar quarter. There are no indications that the Company will not meet the maximum earn out payment.

The Company amended its agreement with Pfizer Research (NC), Inc. (the Second Amendment"), whereby the Company, at its option, may defer payment of any amount exceeding \$50,000 of the minimum additional purchase price consideration of \$250,000 per quarter until March 31, 2019 such that the Company is only required to pay \$50,000 per quarter for the quarters ending May 2017 to December 2018. Deferred purchase consideration bears interest at a rate of 12.5% per annum, which interest is payable quarterly. The deferred purchase consideration in terms of this agreement is payable, together with the deferred purchase consideration for the quarter ended March 31, 2019, as one lump sum. The Second Amendment also provides that if there is an Insolvency Event (as such term is defined in the Second Amendment) prior to the time that Pfizer Research (NC), Inc. has received the Maximum Earn Out Payment, then upon such Insolvency Event, the full amount of any Earn Out Shortfall (the Maximum Earn Out Payment and the amount of all Earn Out Payments paid to date) shall be due and payable without further notice, demand or presentment for payment. The minimum deferred purchase consideration of \$50,000 for the quarter ended March 31, 2017 was paid in June 2017.

- The \$500,000 deferred purchase consideration due on July 1, 2017, was not earned by Pfizer due to Pfizer not meeting its \$4,000,000 revenue target. This liability of \$500,000 was reversed as other income during the three and six months ended June 30, 2017.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

12. DEFERRED PURCHASE CONSIDERATION (continued)

Deferred purchase consideration is disclosed as follows:

	<u>June 30, 2017</u>	<u>December 31, 2016</u>
Deferred purchase consideration		
Opening balance	\$10,500,000	\$10,625,000
Reversal of unearned purchase consideration	(500,000)	-
Interest due on deferred purchase consideration	1,049	-
Repayment	(50,000)	(125,000)
Closing balance	<u>9,951,049</u>	<u>10,500,000</u>
Present value discount on future payments		
Opening balance	(1,712,689)	(2,186,510)
Imputed interest expense	284,776	576,180
Fair value adjustments	(5,158)	(102,359)
Closing balance	<u>(1,433,071)</u>	<u>(1,712,689)</u>
Deferred purchase consideration, net	<u>8,517,978</u>	<u>8,787,311</u>
Disclosed as follows:		
Short-term portion	201,049	1,332,800
Long-term portion	8,316,929	7,454,511
Deferred purchase consideration, net	<u>\$ 8,517,978</u>	<u>\$ 8,787,311</u>

13. LOANS PAYABLE

Loans payable consist of the following:

	<u>June 30, 2017</u>	<u>December 31, 2016</u>
Asset leasing arrangement	\$ 253,751	\$ 442,109
	<u>253,751</u>	<u>442,109</u>
Disclosed as follows:		
Short-term portion	253,751	442,109
Long-term portion	-	-
	<u>\$ 253,751</u>	<u>\$ 442,109</u>

Future principal payments under loans payable are as follows:

	<u>Amount</u>
Within 1 year	<u>\$ 253,751</u>

Asset leasing arrangement

The Company acquired laboratory equipment from Nanion Technologies on April 21, 2016 pursuant to the terms of a lease agreement. The lease consists of twelve equal monthly instalments of \$28,751 each with a remaining balance due of \$225,000 at the end of the twelve-month period. In terms of US GAAP, the total purchase consideration was discounted back to present value at the Company's estimated weighted average cost of capital of 6.7%, resulting in an estimated present value of future payments of \$533,290. The discount of \$36,722 was expensed as an additional interest expense over the period in which the payments were made.

Subsequent to June 30, 2017, the Company agreed to purchase the equipment from Nanion for a purchase consideration of \$225,000 for a total of 8 installments of \$28,751 each, totaling \$231,008, the installments bearing interest at an effective interest rate of 5.9% per annum.

The Company owed \$253,751 as of June 30, 2017.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

14. BRIDGE NOTES

On April 12, 2017, the Company sold in a private placement offering (the “Bridge Note Offering”) to three investors, which included two members of the Board of Directors, pursuant to a securities purchase agreement entered into with each investor (the “Purchase Agreements”), 150 units at a price of \$10,000 per unit (the “Units”) consisting of a note (the “Note”) in the principal amount of \$10,000 and a five year warrant (the “Bridge Warrants”) to acquire 1,500 shares of the Company’s common stock, par value, \$0.001 per share (“Common Stock”), at an exercise price of \$3.50 per share. The aggregate gross cash proceeds to the Company from the sale of the 150 Units was \$1,500,000.

The Notes bore interest at a rate of 8% per annum and matured on the earlier of (i) the date that is thirty (30) days after the date of issuance or (ii) the closing of the Company’s next debt financing. Pursuant to a Security and Pledge Agreement the Notes are secured by a lien on all of the current assets of the Company (excluding the equity of and assets of the Company’s wholly owned subsidiary, Icagen-T, Inc.). Amounts overdue bore interest at a rate of 1% per month. The notes were repaid during May 2017 upon the closing of the convertible debt funding.

The Bridge Warrants have an initial exercise price of \$3.50 per share and are exercisable for a period of five years from the date of issuance. Each Warrant is exercisable for one share of Common Stock, which resulted in the issuance of Bridge Warrants exercisable to purchase an aggregate of 225,000 shares of Common Stock. In addition, the Company also issued 25,000 warrants to the Placement Agent as compensation for the Bridge Note Offering.

The movement on bridge notes is as follows:

	June 30, 2017	December 31, 2016
Bridge note liability		
Opening balance	\$ -	\$ -
Bridge notes raised	1,500,000	1,045,000
Accrued interest	9,753	11,081
Repayment	(1,509,753)	(1,056,081)
Closing balance	-	-
Discount on bridge notes		
Opening balance		-
Fair value of warrants issued	330,353	244,463
Amortization of bridge note discount	(330,353)	(244,463)
Closing balance	-	-
Bridge notes, net	\$ -	\$ -

15. CONVERTIBLE DEBT

On May 15, 2017, the Company, and its wholly owned subsidiary, Icagen-T, Inc. (“**Icagen-T**”), entered into a Securities Purchase Agreement (“Securities Purchase Agreement”) with an institutional investor (the “**Purchaser**”), pursuant to which (i) the Company issued to the Purchaser a three year Senior Secured Convertible Note (“Company Note”), maturing on May 15, 2020, bearing interest at the rate of 13% per annum (which interest rate increases to 18% per annum upon the occurrence of an event of default, as defined in the Company Note), in the aggregate principal amount of \$2,000,000 for cash proceeds of \$1,920,000 after an original issue discount of 4% or \$80,000, before deal related expenses; and (ii) Icagen-T issued to the Purchaser a three year Senior Secured Convertible Note (“Icagen-T Note”), maturing on May 15, 2020, bearing interest at the rate of 13% per annum, in the aggregate principal amount of \$8,000,000 for cash proceeds of \$7,680,000 after an original issue discount of 4% or \$320,000, before transaction related expenses. The Company Note and the Icagen-T Note (collectively, the “Convertible Notes”) are each convertible into shares of common stock at a conversion price of \$3.50 per share.

The Purchaser may elect to have the Company and/or Icagen-T redeem the Convertible Notes upon the occurrence of certain events, including upon a certain Events of Default (as defined in the Notes). The Convertible Notes contain customary Events of Default.

In addition, any time after issuance, so long as no Event of Default has occurred and/or is continuing, the Company and Icagen-T, has the right to redeem all or part of each Convertible Note then outstanding, with a minimum prepayment amount of \$500,000, at any time upon five (5) business days’ notice to the Purchaser by paying an amount in cash equal to: a range between 101% and 103% of the Conversion Amount being redeemed if paid in full and if an Event of Default has occurred and is continuing the Purchaser has the right to require the Company to redeem the Conversion Amount for an amount of cash equal to a range between 116% and 118% of the Conversion Amount being redeemed. The “Conversion Amount” is defined as the sum of (a) the portion of the principal to be converted, redeemed or otherwise with respect to which this determination is being made, (b) all accrued and unpaid Interest with respect to such portion of such principal, (c) all accrued and unpaid late charges with respect to such portion of such principal and such Interest, if any, and (d) all other amounts due hereunder.

The Notes contain certain covenants, such as restrictions on the incurrence of indebtedness, the existence of liens, the payment of

restricted payments, redemptions, the payment of cash dividends and the transfer of assets. If the Company fails to timely deliver the shares underlying the Notes, it will be subject to certain buy-in provisions.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

15. CONVERTIBLE DEBT (continued)

In addition, pursuant to the Securities Purchase Agreement, the Company and Icagen-T have agreed to provide certain registration rights with respect to the Conversion Shares underlying the Icagen-T Note and, if Rule 144 under the Securities Act, is unavailable, for the Warrant Shares and Conversion Shares underlying the Company Note.

In addition, pursuant to the Convertible Notes, neither the Company nor Icagen-T shall enter into or be party to a Fundamental Transaction (as defined in the Convertible Notes) unless (i) the Successor Entity (as defined in the Convertible Notes) assumes in writing all of the obligations of the Company, Icagen-T and each Subsidiary under the Convertible Notes and the other Transaction Documents (as defined in the Securities Purchase Agreement) pursuant to written agreements in form and substance reasonably satisfactory to the Purchaser and approved by the Purchaser prior to such Fundamental Transaction, including agreements to deliver to the Purchaser in exchange for the Convertible Note and securities of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Notes, including, without limitation, having principal amounts, interest rates and late charges equal to the payment rights and amounts, principal amounts then outstanding, the interest rates and late charges in the Notes as well as having the conversion rights, redemption rights, rankings, Events of Default the same as in the Notes and satisfactory to the Purchaser, and (ii) the Successor Entity is a trading issuer whose common stock is registered under Section 12 of the Securities Exchange Act of 1934, as amended, and is quoted and/or listed for trading on a Qualifying Market.

The Convertible Notes also contain certain anti-dilution provisions that apply in connection with any stock split, stock dividend, stock combination, recapitalization and, sales of securities below the conversion price of the Notes.

In addition, subject to limited exceptions, a holder of the Company Note and Icagen-T Note will not have the right to convert any portion of such note if such holder, together with its affiliates, would beneficially own in excess of the Beneficial Ownership Limitation. A holder of the Company Note and Icagen-T Note may adjust the Beneficial Ownership Limitation upon not less than 61 days' prior notice to the Parent, provided that such Beneficial Ownership Limitation in no event shall exceed 9.99%.

The Company used the proceeds from the Company Note to repay the \$1,500,000 aggregate principal amount of the 8% bridge notes issued in April 2017 and all accrued but unpaid interest thereon and to pay an amount of \$500,000 owed by the Company pursuant to the terms of the Dentons settlement agreement, Icagen-T has been using the net proceeds from the purchase price paid to Icagen-T for its general corporate and working capital purposes; provided, however, neither the Company nor Icagen-T may use any of their respective net proceeds for (a) the repayment of any indebtedness other than Permitted Indebtedness (as defined in the Convertible Notes), (b) the redemption or repurchase of any securities of the Company, Icagen-T or their Subsidiaries, or (c) except for the payments pursuant to the Settlement Agreement, the settlement of any outstanding litigation; provided, further, Icagen-T will not use any of such proceeds in violation of its arrangements with Sanofi.

In connection with the Convertible Notes, the Company issued a warrant (the "Purchaser Warrant") to purchase initially up to 857,143 shares of Common Stock at an initial exercise price of \$3.50 per share, subject to applicable adjustments. The Purchaser Warrant expires on May 15, 2022.

In addition, subject to limited exceptions, a holder of the Purchaser Warrant will not have the right to exercise any portion of the Purchaser Warrant if such holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of the Common Stock outstanding immediately after giving effect to its conversion (the "**Beneficial Ownership Limitation**"). A holder of the Purchaser Warrant may adjust the Beneficial Ownership Limitation upon not less than 61 days' prior notice to the Company, provided that such Beneficial Ownership Limitation in no event shall exceed 9.99%.

The Purchaser Warrant also contain certain anti-dilution provisions that apply in connection with any stock split, stock dividend, stock combination, recapitalization and, issuances of securities at prices below the conversion price or similar transactions.

If, at the time a holder exercises the Purchaser Warrant, there is no effective registration statement registering available for an issuance of the shares underlying the Purchaser Warrant to the holder, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of our Common Stock determined according to a formula set forth in the Purchaser Warrant. If the Company fails to timely deliver the shares underlying the Purchaser Warrants, it will be subject to certain buy-in provisions.

The Purchaser Warrant also provides that the Company will not enter into or be party to a Fundamental Transaction (as defined in the Purchaser Warrant) unless (i) the Successor Entity (as defined in the Purchaser Warrant) assumes in writing all of the obligations of the Company under the Purchaser Warrant and the other Transaction Documents (as defined in the Securities Purchase Agreement) pursuant to written agreements in form and substance satisfactory to the Purchaser, including agreements to deliver to the Purchaser in exchange for the Purchaser Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Purchaser Warrant; (ii) the Parent or the Successor Entity (as the case may be) agrees at the election of the Company or the Successor Entity (as the case may be) to purchase the Purchaser Warrant from the Purchaser by paying to the Purchaser cash in an amount equal to the Black Scholes Value (as defined in the Purchaser Warrant); or (iii) the Purchaser, at its election, requires the Company or the Successor Entity (as the case may be) to purchase the Purchaser Warrant from the Purchaser by paying to the Purchaser cash in an amount equal to the Black Scholes Value.

The Company Note is secured by a security interest in all of the existing and future assets of the Company and the domestic subsidiaries, other than Icagen-T, including a pledge of all of the capital stock of each of the Domestic Subsidiaries, other than

Icagen-T, subject to existing security interests, for the benefit of the Purchaser, to secure the Company obligations under the Company Note, as evidenced by (i) a security and pledge agreement, and (ii) a guaranty executed by each Domestic Subsidiary, other than Icagen-T, pursuant to which the domestic subsidiaries, other than Icagen-T, guarantee all obligations of the Company under the Transaction Documents.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

15. CONVERTIBLE DEBT (continued)

The Icagen-T Note is secured by a security interest in all of the existing and future assets of the Company, Icagen-T and the other Domestic Subsidiaries, including a pledge of all of the capital stock of each of the Domestic Subsidiaries, other than Icagen-T, subject to existing security interests, for the benefit of the Purchaser, to secure Icagen-T's obligations under the Icagen-T Note, as evidenced by (i) a security and pledge agreement, and (ii) a guaranty executed by the Company and each Domestic Subsidiary, other than Icagen-T, pursuant to which the Parent and the Domestic Subsidiaries, other than Icagen-T, guarantees all of the obligations of Icagen-T under the Transaction Documents.

In addition, the Company and Icagen-T entered into a Subordinated Deed of Trust, Assignment of Rents, Fixture Filing and Security Agreement with the trustee named therein and the Purchaser as beneficiary, securing all of Icagen-T's obligations to the Purchaser by a senior priority security interest in the Property/Facilities, which is subordinated only to a Deed of Trust entered into with Sanofi.

Upon an Event of Default, the Purchaser may, among other things, collect or take possession of the Company Collateral or Icagen-T Collateral, as the case may be, proceed with the foreclosure of the security interest in the Collateral or sell, lease or dispose of the Collateral. Each of the Subsidiaries has also guaranteed all of the Company's obligations under the Company Note pursuant to the terms of the Company Guaranty and the Icagen-T Guaranty.

The transactions contemplated by the Securities Purchase Agreement closed and funded on May 15, 2017.

The movement on convertible debt is as follows:

	<u>June 30,</u> <u>2017</u>	<u>December 31,</u> <u>2016</u>
Convertible debt		
Opening balance	\$ -	\$ -
Convertible debt issued	10,000,000	-
Interest accrued	162,500	-
Payments	(162,500)	-
Closing balance	<u>10,000,000</u>	<u>-</u>
Debt discount		
Opening balance	-	-
Original issue discount	(400,000)	-
Fair value of warrants and beneficial conversion feature of notes	(4,518,278)	-
Amortization of debt discount	204,929	-
Closing balance	<u>(4,713,349)</u>	<u>-</u>
Convertible debt, net	<u>5,286,651</u>	<u>-</u>
Disclosed as follows:		
Short-term portion	-	-
Long-term portion	5,286,651	-
Convertible debt, net	<u>\$ 5,286,651</u>	<u>\$ -</u>

16. DERIVATIVE LIABILITY

The Convertible Notes, together with the Purchaser Warrants issued to the note holders, disclosed in note 15 above, have variable priced conversion rights which may adjust whenever new securities are issued at prices lower than the current conversion and exercise price of the Convertible Notes and Purchaser Warrants issued to note holders. This gives rise to a derivative financial liability, which was initially valued upon the issue of the Convertible Notes and Purchaser Warrants using a Black-Scholes valuation model. The Beneficial conversion feature of the Convertible Notes was valued at \$3,069,649 and the Purchaser Warrants issued in connection with the Convertible Notes were valued at \$1,448,629.

The value of the derivative liability will be re-assessed periodically and a mark-to-market adjustment, if applicable will be recorded in the statement of operations. The value of the derivative liability was re-assessed on June 30, 2017 and a mark-to-market gain of \$77,719 was credited to the statement of operations.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

16. DERIVATIVE LIABILITY (continued)

The following assumptions were used in the Black-Scholes valuation model.

	Six months ended June 30, 2017
Calculated stock price	\$ 3.50
Risk free interest rate	1.49 to 1.89%
Expected life of warrants (years)	2.88 to 5 years
expected volatility of underlying stock	43.1 to 54.5%
Expected dividend rate	0%

The movement in derivative liability is as follows:

	June 30, 2017	December 31, 2016
Opening balance	\$ -	\$ -
Derivative liability on beneficial conversion feature of convertible debt and warrants issued to note holders	4,518,278	-
Mark-to-market adjustment	(77,719)	-
Closing balance	\$ 4,440,559	\$ -

17. COMMON STOCK

Common stock consists of 50,000,000 authorized shares of \$0.001 each, 6,720,107 shares issued and 6,393,107 shares outstanding as of June 30, 2017 and December 31, 2016.

In terms of the Joint Stipulation to Vacate and Dismiss of the Estate of Sigmund Eisenschenk, dated December 5, 2016, the Estate returned 88,750 Common Shares valued at \$310,625 to the Company. These shares were subsequently cancelled.

18. WARRANTS

In terms of the Bridge Note Offering described in note 14 above, the Company sold in a private placement offering to 3 investors pursuant to a securities purchase agreement entered into with each investor, 150 Units at a per unit price of \$10,000, each Unit consisting of a Note in the principal amount of \$10,000 and a five-year Warrant to acquire 1,500 shares of the Company's common stock, par value, \$0.001 per share, at an exercise price of \$3.50 per share for gross proceeds of \$1,500,000.

The Bridge Warrants have an initial exercise price of \$3.50 per share and are exercisable for a period of five years from the date of issuance. Each Bridge Warrant is exercisable for one share of Common Stock, which resulted in the issuance of Bridge Warrants exercisable to purchase an aggregate of 225,000 shares of Common Stock. In addition to this, the Company also issued warrants exercisable for 25,000 shares of common stock to the Placement Agent as compensation for the Bridge note funding discussed in note 14 above. The Bridge Warrants may be exchanged for warrants that are issued on any subsequent debt funding and are subject to adjustment in the event of stock splits and other similar transactions.

The Bridge Warrants were valued using a Black-Scholes valuation model and the proceeds received were allocated based on the percentage of the Bridge Warrants to the total value of the securities in this offering, resulting in a debt discount of \$330,353.

In terms of the Convertible Notes described in note 15 above, the Company issued a Purchaser Warrant to purchase initially up to 857,143 shares of Common Stock at an initial exercise price of \$3.50 per share, subject to applicable adjustments. The Purchaser Warrant expires on May 15, 2022.

In addition, subject to limited exceptions, a holder of the Purchaser Warrant will not have the right to exercise any portion of the Purchaser Warrant if such holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of the Common Stock outstanding immediately after giving effect to its conversion. A holder of the Purchaser Warrant may adjust the Beneficial Ownership Limitation upon not less than 61 days' prior notice to the Company, provided that such Beneficial Ownership Limitation in no event shall exceed 9.99%.

The Purchaser Warrant also contain certain anti-dilution provisions that apply in connection with any stock split, stock dividend, stock combination, recapitalization and, issuances of securities at prices below the conversion price or similar transactions.

If, at the time a holder exercises the Purchaser Warrant, there is no effective registration statement available for an issuance of the shares underlying the Purchaser Warrant to the holder, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of our Common Stock determined according to a formula set forth in the Purchaser Warrant. If the Company fails to timely deliver the shares underlying the Purchaser Warrants, it will be subject to certain buy-in provisions.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

18. WARRANTS (continued)

The Purchaser Warrant also provides that the Company will not enter into or be party to a Fundamental Transaction unless (i) the Successor Entity (as defined in the Warrant) assumes in writing all of the obligations of the Company under the Purchaser Warrant and the other Transaction Documents (as defined in the Securities Purchase Agreement) pursuant to written agreements in form and substance satisfactory to the Purchaser, including agreements to deliver to the Purchaser in exchange for the Purchaser Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Purchaser Warrant; (ii) the Parent or the Successor Entity (as the case may be) agrees at the election of the Company or the Successor Entity (as the case may be) to purchase the Purchaser Warrant from the Purchaser by paying to the Purchaser cash in an amount equal to the Black Scholes Value (as defined in the Purchaser Warrant); or (iii) the Purchaser, at its election, requires the Company or the Successor Entity (as the case may be) to purchase the Purchaser Warrant from the Purchaser by paying to the Purchaser cash in an amount equal to the Black Scholes Value.

The Purchaser Warrants were valued using a Black-Scholes valuation model and the proceeds received were allocated based on the percentage of the Purchaser Warrants to the total value of the securities in this offering, resulting in a debt discount of \$1,448,629.

The following assumptions were used in the Black-Scholes valuation model.

	Year ended December 31, 2016
Calculated stock price	\$ 3.50
Risk free interest rate	1.86%
Expected life of warrants (years)	5 years
expected volatility of underlying stock	54.5%
Expected dividend rate	0%

A summary of the Company's warrant activity during the period January 1, 2016 to June 30, 2017 is as follows:

	No. of shares	Exercise price per share	Weighted average exercise price
Outstanding January 1, 2016	2,146,970	\$3.50 to \$11.40	\$ 4.28
Granted	200,375	3.50	3.50
Forfeited/cancelled	(199,704)	4.00 to 11.40	(11.12)
Exercised	-	-	-
Outstanding December 31, 2016	2,147,641	\$3.50 to \$4.20	3.57
Granted	1,107,143	3.50	3.50
Forfeited/cancelled	-	-	-
Exercised	-	-	-
Outstanding June 30, 2017	3,254,784	\$3.50 to \$4.20	\$ 3.55

The following table summarizes warrants outstanding and exercisable as of June 30, 2017:

	Warrants outstanding			Warrants exercisable	
	Exercise price	No. of shares	Weighted average remaining years	Weighted average exercise price	No. of shares
\$ 3.50	2,961,383	3.56		2,961,383	
\$ 3.85	143,401	3.00		143,401	
\$ 4.20	150,000	0.61		150,000	
	3,254,784	3.40	\$ 3.55	3,254,784	\$ 3.55

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

19. STOCK OPTIONS

On March 15, 2017, the Company granted ten-year options to purchase 50,000 shares of common stock at an exercise price of \$3.50 per share to the non-employee directors of the Company and granted ten-year options to purchase 20,000 shares of common stock at an exercise price of \$3.50 per share to Richard Cunningham, the CEO of the Company. A further 50,000 options were reserved for issuance to employees.

The fair value of options issued were valued using the Black-Scholes pricing model and the following weighted average assumptions were used:

	Six months ended June 30, 2017
Calculated stock price	\$ 3.50
Risk free interest rate	2.51%
Expected life of warrants (years)	10
expected volatility of underlying stock	70.9%
Expected dividend rate	0%

The volatility of the common stock is estimated using historical data of companies similar in size and in the same industry as the Company. The risk-free interest rate used in the Black-Scholes pricing model is determined by reference to historical U.S. Treasury constant maturity rates with maturities approximate to the life of the options granted. An expected dividend yield of zero is used in the valuation model, because the Company does not expect to pay any cash dividends in the foreseeable future. As of June 30, 2017, the Company does not anticipate any awards will be forfeited in the valuation of the options.

A summary of all of our option activity during the period January 1, 2016 to June 30, 2017 is as follows:

	No. of shares	Exercise price per share	Weighted average exercise price
Outstanding January 1, 2016	908,270	\$0.40 to \$11.42	\$ 3.60
Granted	602,500	\$3.50	3.50
Forfeited/cancelled	(177,479)	\$4.00 to \$11.40	(3.70)
Exercised	-	-	-
Outstanding December 31, 2016	1,333,291	\$0.40 to \$11.42	3.59
Granted	120,000	\$3.50	3.50
Forfeited/cancelled	-	-	-
Exercised	-	-	-
Outstanding June 30, 2017	1,453,291	\$0.40 to \$11.42	\$ 3.58

The following tables summarize information about stock options outstanding as of June 30, 2017:

Exercise price	Options outstanding			Options exercisable	
	No. of shares	Weighted average remaining years	Weighted average exercise price	No. of shares	Weighted average exercise price
\$ 0.40	15,000	4.84		15,000	
\$ 3.00	312,500	5.71		312,500	
\$ 3.50	972,500	8.69		302,488	
\$ 4.00	8,791	2.53		8,791	
\$ 5.00	128,500	3.49		128,500	
\$ 11.42	16,000	4.18		16,000	
	<u>1,453,291</u>	<u>7.46</u>	<u>\$ 3.58</u>	<u>783,279</u>	<u>\$ 3.65</u>

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

19. STOCK OPTIONS (continued)

The weighted-average grant-date fair values of options granted during the six months ended June 30, 2017 was \$323,161 (\$2.69 per share) and for the year ended December 31, 2016 was \$1,389,483 (\$2.31 per share). As of June 30, 2017, there were unvested options to purchase 670,012 shares of common stock. Total expected unrecognized compensation cost related to such unvested options is \$1,570,735, which is expected to be recognized over a period of 45 months.

Stock option based compensation expense totaled \$165,282 and \$133,549 for the three months ended June 30, 2017 and 2016, respectively, and \$315,192 and \$228,849 for the six months ended June 30, 2017 and 2016, respectively.

Stock options outstanding as of June 30, 2017 as disclosed in the above table, have an intrinsic value of \$202,750.

20. INTEREST EXPENSE

Interest expense consists of the following:

	Three months ended June 30, 2017	Three months ended June 30, 2016	Six months ended June 30, 2017	Six months ended June 30, 2016
Imputed interest	\$ (143,205)	\$ (144,045)	\$ (292,517)	\$ (294,986)
Debt discount	(535,282)		(535,282)	
Interest expense	(174,928)	-	(175,267)	-
Other	(1,423)	(2,193)	(1,813)	(2,180)
	<u>\$ (854,838)</u>	<u>\$ (146,238)</u>	<u>\$ (1,004,879)</u>	<u>\$ (297,166)</u>

21. NET LOSS PER COMMON SHARE

For the three and six months ended June 30, 2017 and 2016, respectively, the following options and warrants were excluded from the computation of diluted net loss per shares as the result of the computation was anti-dilutive:

	Three months ended June 30, 2017	Three months ended June 30, 2016	Six months ended June 30, 2017	Six months ended June 30, 2016
Stock options	1,453,291	1,100,770	1,453,291	1,100,770
Warrants	3,254,784	2,172,346	3,254,784	2,172,346
	<u>4,708,075</u>	<u>3,273,116</u>	<u>4,708,075</u>	<u>3,273,116</u>

22. RELATED PARTY TRANSACTIONS

Timothy Tyson

On March 15, 2017, the Company issued Mr. Tyson ten year options exercisable for 10,000 shares of common stock at an exercise price of \$3.50 per share. These options vest equally over a 36 month period.

On April 13, 2017, the Company entered into a Securities Purchase Agreement and issued a secured 8% Bridge Note for \$500,000 to Mr. Tyson in consideration of \$500,000. The Bridge Note matured 30 days from the date of issuance and were redeemed, together with accrued interest thereon during May 2017.

In connection with the Bridge Note, Mr. Tyson was issued five year Bridge Warrants to acquire 75,000 shares of common stock exercisable at \$3.50 per share. The Bridge Warrants are also exchangeable, at the option of the holder, for a like number of warrants issued to any lender in the Company's next debt financing.

Richard Cunningham

On March 15, 2017, the Company issued Mr. Cunningham ten year options exercisable for 20,000 shares of common stock at an exercise price of \$3.50 per share. These options vest equally over a 36 month period.

Clive Kabatznik

On March 15, 2017, the Company issued Mr. Kabatznik ten year options exercisable for 10,000 shares of common stock at an exercise price of \$3.50 per share. These options vest equally over a 36 month period.

Edward Roffman

On March 15, 2017, the Company issued Mr. Roffman ten year options exercisable for 10,000 shares of common stock at an exercise price of \$3.50 per share. These options vest equally over a 36 month period.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

22. RELATED PARTY TRANSACTIONS (continued)

Michael Taglich

On March 15, 2017, the Company issued Mr. Taglich ten year options exercisable for 10,000 shares of common stock at an exercise price of \$3.50 per share. These options vest equally over a 36 month period.

On April 12, 2017, the Company entered into a Securities Purchase Agreement and issued a secured 8% Bridge Note for \$500,000 to Mr. Taglich in consideration of \$500,000. The Bridge Note matured 30 days from the date of issuance and were redeemed, together with accrued interest thereon during May 2017.

In connection with the Bridge Note, Mr. Taglich was issued five year Bridge Warrants to acquire 75,000 shares of common stock exercisable at \$3.50 per share. The Bridge Warrants are also exchangeable, at the option of the holder, for a like number of warrants issued to any lender in the Company's next debt financing.

The Company retained Taglich Brothers, Inc. as the exclusive placement agent for the Offering. In connection therewith, the Company agreed to pay the placement agent a six percent (6%) commission from the gross proceeds of the Offering (excluding \$500,000 invested by the Company's Chairman of the Board of Directors, Timothy Tyson) for a total commission of \$60,000. The Company also issued the Placement Agent the same warrant that the investors received exercisable for an aggregate amount of 25,000 shares of Common Stock at an exercise price of \$3.50 per share (2,500 shares of Common Stock for each \$100,000 in principal amount of Notes sold, excluding Notes sold to the Chairman) (the "2017 Placement Agent Warrants"). The Placement Agent has the right to exchange the Placement Agent Warrants for a like number of warrants to be issued to the lender in the Company's next debt financing. As an employee and Principal of Taglich Brothers Inc. Mr. Taglich was issued 2017 Placement Agent Warrants to purchase 7,500 shares of Common stock.

Vincent Palmieri

On March 15, 2017, the Company issued Mr. Palmieri ten year options exercisable for 10,000 shares of common stock at an exercise price of \$3.50 per share. These options vest equally over a 36 month period.

As an employee of Taglich Brothers Inc., Mr. Palmieri was issued 2017 Placement Agent Warrants to purchase 6,000 shares of Common stock.

First South Africa Management

The Company incurred an expense of \$90,000 for services provided by First South Africa Management for provision of CFO services by Mr. Korb for the six months ended June 30, 2017 and \$37,500 for bookkeeping services for the six months ended June 30, 2017. As of June 30, 2017, the Company owed First South Africa Management \$38,500.

Robert Taglich

On April 12, 2017, the Company entered into a Securities Purchase Agreement and issued a secured 8% Bridge Note for \$500,000 to Mr. Robert Taglich in consideration of \$500,000. The Bridge Note matured 30 days from the date of issuance and were redeemed, together with accrued interest thereon during May 2017.

In connection with the Bridge Note, Mr. Robert Taglich was issued five year Bridge Warrants to acquire 75,000 shares of common stock exercisable at \$3.50 per share. The Bridge Warrants are also exchangeable, at the option of the holder, for a like number of warrants issued to any lender in the Company's next debt financing.

As an employee and Principal of Taglich Brothers Inc. Mr. Robert Taglich was issued 2017 Placement Agent Warrants to purchase 7,500 shares of Common stock.

23. OPERATING LEASES

The Company entered into an asset purchase agreement with Icagen, Inc., a subsidiary of Pfizer, Inc., whereby certain assets were acquired from Icagen, Inc., the agreement included the sub-letting of premises located at Research Triangle Park, Durham, North Carolina. The lease terminates on April 30, 2019. The rental expense for the six months ended June 30, 2017 amounted to \$100,537.

The Company also reimburses certain employees for rental expenses incurred in carrying out their functions. The rental expense for the six months ended June 30, 2017 amounted to \$1,600.

Future annual minimum payments required under operating lease obligations as of June 30, 2017, are as follows:

	<u>Amount</u>
2017	\$ 87,906
2018	181,966

2019	62,778
Total	<u>\$ 332,650</u>

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

24. COMMITMENTS AND CONTINGENCIES

As a result of the agreement that the Company entered into with the subsidiary of Pfizer, it agreed to; (i) make additional payments in terms of the Asset Purchase and Collaboration Agreement that the Company entered into on June 26, 2015 with a subsidiary of Pfizer Inc. include (a) a cash payment of \$500,000 on the second anniversary of the closing provided that prior to such date the service agreement it entered into has generated at least \$4,000,000 in revenue, this milestone was not achieved and the \$500,000 is no longer payable; and (b) beginning in 2017, a quarterly earn out payment (the "Earn Out Payment") of 10% of revenue earned during the quarter, with a minimum payment of \$250,000 per quarter, to a maximum aggregate payment of \$10,000,000. In August 2017, the Second Amendment was entered into to provide that any amount exceeding \$50,000 of the minimum additional purchase price consideration of \$250,000 per quarter may, at the option of the Company, be deferred such that only \$50,000 per quarter for the quarters ending May 2017 to December 2018 shall be payable on the quarterly payment due date, with any deferred portion due and payable on March 31, 2019. The deferred portion bears interest at 12.5% per annum, which interest is payable quarterly. The deferred purchase consideration in terms of this agreement is payable, together with the deferred purchase consideration for the quarter ended March 31, 2019, as one lump sum. The Second Amendment also provides that if there is an Insolvency Event prior to the time that the subsidiary of Pfizer has received the Maximum Earn Out Payment, then upon such Insolvency Event, the full amount of any Earn Out Shortfall (the Maximum Earn Out Payment and the amount of all Earn Out Payments paid to date) shall be due and payable without further notice, demand or presentment for payment. We are also required to make minimum lease payments in terms of a sub-lease agreement entered into with Pfizer for the period January 1, 2016 to April 30, 2019 with annual escalations of 3.5%, estimated to be approximately \$332,650.

As a result of the agreement we entered into with Sanofi the Company agreed to retain 46 employees until July 15, 2018 at an aggregate estimated cost to Icagen-T of \$9,597,000.

In terms of a Mutual Release and Assignment Agreement entered into between American Milling LP and the Company, the Company agreed to pay American Milling \$800,000 of which \$250,000 remains to be paid at June 30, 2017.

The Company has reached a Settlement and Release Agreement with Dentons and has agreed to pay Dentons the sum of \$1,400,000 over a period of fourteen months of which \$500,000 was paid on May 15, 2017.

On May 15, 2017, the Company, and its wholly owned subsidiary, Icagen-T, entered into a Securities Purchase Agreement with an institutional investor (the "**Purchaser**"), pursuant to which (i) the Company issued to the Purchaser a three year Senior Secured Convertible Note ("Company Note"), maturing on May 15, 2020, bearing interest at the rate of 13% per annum (which interest rate increases to 18% per annum upon the occurrence of an event of default, as defined in the Note), in the aggregate principal amount of \$2,000,000 for cash proceeds of \$1,920,000 after an original issue discount of 4% or \$80,000, before deal related expenses; and (ii) Icagen-T issued to the Purchaser a three year Senior Secured Convertible Note ("Icagen-T Note"), maturing on May 15, 2020, bearing interest at the rate of 13% per annum, in the aggregate principal amount of \$8,000,000 for cash proceeds of \$7,680,000 after an original issue discount of 4% or \$320,000, before deal related expenses. The Company Note and the Icagen-T Note are each convertible into shares of common stock at a conversion price of \$3.50 per share.

On June 19, 2017, Icagen, Inc. (the "Company") entered into a four-year employment agreement with Douglas Krafte, Ph.D., pursuant to which Dr. Krafte is entitled to an annual base salary of \$285,000 and will be eligible for annual discretionary performance bonus payments of up to 35% of his base salary payable in cash, which bonus, if any, will be awarded in the sole and absolute discretion of the Company's board of directors and the compensation committee of the board of directors. Dr. Krafte will continue to be engaged as the Company's Chief Scientific Officer

25. SUBSEQUENT EVENTS

On July 7, 2017, the Employment Agreement between Dr. Benjamin Warner and the Company, dated March 15, 2013, as amended (the "Employment Agreement") was terminated. In addition, on July 7, 2017, Dr. Benjamin Warner resigned from the Board of Directors of the Company and from all other positions with the Company. In connection with his resignation, the Company executed certain release agreements (the "Release Agreements") with Dr. Warner. Pursuant to the Release Agreements, Dr. Warner's Employment Agreement was terminated by mutual agreement, Dr. Warner and the Company exchanged mutual releases and the Company agreed to continue the payments currently due to Dr. Warner under the Employment Agreement, through the end of its stated term notwithstanding its termination.

The Company has evaluated subsequent events through the date the unaudited condensed consolidated financial statements were available to be issued, and has concluded that, other than disclosed above, no such events or transactions took place that would require disclosure herein.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis is intended as a review of significant factors affecting our financial condition and results of operations for the periods indicated. The discussion should be read in conjunction with our consolidated financial statements and the notes presented herein and the consolidated financial statements and the other information set forth in our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the Securities and Exchange Commission on April 17, 2017. In addition to historical information, the following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements that involve risks and uncertainties. Our actual results could differ significantly from those anticipated in these forward-looking statements as a result of certain factors discussed herein and any other periodic reports filed and to be filed with the Securities and Exchange Commission.

Overview and Financial Condition

Icagen currently operates as a partner research organization providing integrated drug discovery services with unique expertise in the field of ion channel, transporter, neuroscience, muscle biology and rare disease targets while also covering many other classes of drug discovery targets and therapeutic areas. Our customers are pharmaceutical and biotechnology companies to whom we offer our industry-leading scientific expertise and technologies to aid in their determination of which molecules to advance into late stage preclinical studies and ultimately clinical trials. The core of our offering is the discovery of Pre-Clinical Drug Candidates (PDC's), which are lead molecules (Leads) that are selected to enter into in-vivo studies during the Pre-Clinical Phase of drug discovery. We offer a full complement of pre-clinical drug discovery services which include; assay development technologies (including high throughput fluorescence, manual and automated electrophysiology and radiotracer flux assays), cell line generation, high-throughput and ultra-high-throughput screening, medicinal chemistry, computational chemistry and custom assay services to our customers. Our capabilities also include molecular biology and the use of complex functional assays, electrophysiology, bioanalytics and pharmacology. We believe that this integrated set of capabilities enhances our ability to help our customers identify drug candidates.

We utilize a target class approach to drug discovery where we leverage our deep expertise in specific areas to more rapidly move drug discovery projects forward. Whereas traditional drug discovery tends to take a more linear approach to compound advancement, our depth of both technical assets and area experts allows us to use more parallel approaches to aid in eliminating problematic molecules early and identifying high quality leads in the drug discovery process. This saves time, money and increases the probability of success in human clinical studies. We believe that our deep understanding of the ion channel genome, neuroscience, muscle biology, and rare disease targets, in particular, and our ability to apply this knowledge in a target class approach to drug discovery facilitates our identification of small molecule drug candidates with novel mechanisms of action and enhanced selectivity and specificity profiles. Moreover, because our drug discovery and development process screens for potential side effects at an earlier stage than some alternative approaches, we believe that this process enables us to identify small molecule drug candidates that may have a reduced risk of clinical failure and may shorten clinical development timelines.

We currently operate out of two sites, one in Durham, North Carolina and the other in Tucson, Arizona. The teams in both North Carolina and Arizona have extensive experience over the last 20 plus years performing early drug discovery within Pfizer and Sanofi delivering Leads from the pre-clinical stage to the clinical stage of drug discovery. We are now leveraging these capabilities to the broader market in the form of services, partnerships and collaborations with large pharmaceutical companies, biotech companies and foundations. At the North Carolina site, which we began to operate in July 2015, we have a leading biology expertise focused on ion channels which are important targets in Neuroscience. The North Carolina site also houses the XRPro® technology, our legacy technology, which has unique capabilities in the transporter target class. More specifically, our capabilities in North Carolina include a focus on ion channels & transporters, HTS and lead optimization, ion channel profiling, assay development and x-ray fluorescence-based assays. At the Arizona site, which we acquired in July 2016, we have leading biology expertise and platform capabilities in rare diseases, muscle biology and integrated drug discovery. The Arizona site provides capacity in cell models, human biomarkers, muscle biology expertise and stem cells based assays. In addition, the Arizona site provides compound management services, HTS and Hit identification, in vitro pharmacology, medicinal chemistry, computational chemistry and ADME. The Arizona facility also features high volume biology with a flexible robotic infrastructure capable of performing high throughput screening in ultra high 1536 format, enhancing our depth of expertise as a specialized pharmaceutical services company. This enables us to offer a broad range of integrated drug discovery services in a growing market.

The extensive integrated drug discovery platform and technologies at the Arizona site enable us to utilize our biology expertise in both the North Carolina and Arizona sites to accelerate the drug discovery and identify quality leads faster.

Since inception, we have financed our operations primarily through private sales of our securities, settlement of legal matters and prior to our acquisition of certain assets of Pfizer and Sanofi, substantially all of our revenue was derived from government grants. Subsequent to our acquisition of certain assets from Pfizer and Sanofi, a substantial portion of our revenue has been derived from three commercial customers. We expect to continue to seek to obtain our required capital through the private sale of securities and revenue derived for the services we provide. For the six months ended June 30, 2017, 55.8% of our revenue was derived from services sales, 41.4% was derived from deferred subsidy revenue and 2.8% was generated from Government revenue. For the year ended December 31, 2016, 59.5% (2015 - 84%) of our revenue was derived from services sales; 36.7% was derived from subsidies (2015 - 0%) and the remaining 3.8% was generated from Government revenues (2015 - 16%). Despite generating funds from commercial customers and government grants, we continue to experience losses. We believe that our existing cash generated from operations alone will not be sufficient to meet our anticipated cash needs for the next nine months. These factors raised substantial doubt about our ability to continue as a going concern. As a result, our independent registered public accounting firm included an explanatory paragraph in its report on our consolidated financial statements as of and for the year ended December 31, 2016 with respect to this uncertainty. To meet our financing needs, we and our subsidiary have recently issued an aggregate \$10,000,000 of debt which we believe, together with our cash generated from operations should provide us with sufficient capital to fully implement our business plan and expand our operations. If we should require additional capital in the future we will consider multiple alternatives, including, but not limited to, additional equity financings, debt financings and/or funding from partnerships or collaborations. There can be no assurance that we will be able to complete any such transactions on acceptable terms or otherwise. Despite the recent debt financing, we will need to generate additional revenue from operations and/or obtain additional financing to pursue our business strategy, to make payments under our outstanding obligations, respond to new competitive pressures or to take advantage of opportunities that may arise.

Prior to our acquisition of the Icagen assets, substantially all of our revenue was derived from government grants related to the use of our XRPro technology. To date, we have been granted twenty-one grants and contracts from United States governmental agencies; of which nine were granted from the Department of Defense and twelve were granted from the National Institutes of Health. Of such contracts, all have been completed and we received payment in full for all completed contracts. The NIH invited us to submit a Phase II SBIR application for the completed contract of which we are awaiting the outcome. All the contracts contained standard terms, including termination provisions which allow for the government to terminate the contract, in whole or in part, at any time for convenience. In that event, the government agency concerned would notify us of their intention to terminate, and all costs incurred in our performance of the work terminated will be recoverable and we will have no refund obligations for our research conducted to the date of termination. The contracts also contain Bayh-Dole and related provisions for disposition of intellectual property. The Bayh-Dole Act allows small businesses, such as ours, to retain title to federally funded inventions if we follow certain procedures, including filing for patent protection and actively pursuing commercialization of the invention, and the U.S. government retains a non-exclusive, non transferable, paid up irrevocable license, throughout the world, with respect to the invention. In addition, the U.S. government also retains a "march in" right that allows it to license the invention to third parties, without our consent, if it determines that the invention is not being made available to the public on a reasonable basis.

As a result of the agreements that we entered into with a subsidiary of Pfizer and Sanofi, we agreed; (i) to continue to retain certain employees at our Icagen-T facility until July 15, 2018, which we estimate will require additional compensation of \$9,597,000 at our Icagen-T facility; (ii) make additional payments in terms of the Asset Purchase and Collaboration Agreement that we entered into on June 26, 2015 with Pfizer including (a) a cash payment of \$500,000 on the second anniversary of the closing provided that prior to such date the service agreement we entered into has generated at least \$4,000,000 in revenue, this milestone was not achieved and the \$500,000 is no longer payable; and (b) beginning in 2017, a quarterly earn out payment (the "Earn Out Payment") of 10% of revenue earned during the quarter, with a minimum payment of \$250,000 per quarter, up to a maximum aggregate payment of \$10,000,000 (the "Maximum Earnout Payment"). In August 2017, the agreement was amended (the "Second Amendment") to provide that any amount exceeding \$50,000 of the minimum additional purchase price consideration of \$250,000 per quarter, may at our option, be deferred such that only \$50,000 shall be payable on the quarterly payment due date, with any deferred portion due and payable on March 31, 2019. The deferred portion bears interest at 12.5% per annum, which interest is payable quarterly. The deferred purchase consideration in terms of this agreement is payable, together with the deferred purchase consideration for the quarter ended March 31, 2019, as one lump sum. The Second Amendment also provides that if there is an Insolvency Event (as such term is defined in the Second Amendment) prior to the time that the subsidiary of Pfizer has received the Maximum Earn Out Payment, then upon such Insolvency Event, the full amount of any Earn Out Shortfall (the Maximum Earn Out Payment and the amount of all Earn Out Payments paid to date) shall be due and payable without further notice, demand or presentment for payment. We are also required to make minimum lease payments in terms of a sub-lease agreement entered into with Pfizer for the period July 1, 2015 to April 30, 2019 with annual escalations of 3.5%, estimated to be \$332,650.

In addition, we are required to make monthly interest payments of \$108,333 under the terms of the Convertible Notes issued in May 2017.

In terms of a Mutual Release and Assignment Agreement that we entered into with American Milling LP, we agreed to pay American Milling \$800,000 of which \$550,000 has been paid to date and the remaining instalments are payable in quarterly instalments ending on March 31, 2018. In addition, in terms of our settlement agreement with Dentons USA LLP, we agreed to pay Dentons \$1,400,000, over a fourteen-month period, of which \$500,000 has been paid to date.

To date, we have not generated sufficient revenue to pay all of these commitments. If we do not increase our revenue, we may be required to raise additional capital to meet our obligations which could result in dilution to stockholders.

Discussions with respect to our operations included herein include the operations of our operating subsidiary, Icagen Corp. and Icagen-T, Inc. We formed Icagen-T, Inc. on June 16, 2016. We formed Icagen Corp. on July 9, 2010. We have another two subsidiary companies, Caldera Discovery Inc. and XRPro Sciences, Inc., which have always been dormant.

Recent Developments

April 2017 Bridge Financing

On April 12, 2017, we sold in a private placement offering (the "Bridge Offering") to three (3) investors, which included two members of the Board of Directors, pursuant to a securities purchase agreement entered into with each investor (the "Purchase Agreements"), 150 units at a price of \$10,000 per unit (the "Units") consisting of a note (the "Bridge Note") in the principal amount of \$10,000 and a five year warrant (the "Bridge Warrants") to acquire 1,500 shares of our common stock, par value, \$0.001 per share ("Common Stock"), at an exercise price of \$3.50 per share. The aggregate gross cash proceeds to us from the sale of the 150 Units was \$1,500,000.

The Bridge Notes bore interest at a rate of 8% per annum and matured on the earlier of (i) the date that is thirty (30) days after the date of issuance or (ii) the closing of our next debt financing. Pursuant to a Security and Pledge Agreement the Bridge Notes were secured by a lien on all of our current assets (excluding the equity of and assets of our wholly owned subsidiary, Icagen-T, Inc.). Amounts overdue bear interest at a rate of 1% per month. On conclusion of the May 2017 debt funding, the notes were repaid in full.

The Bridge Warrants have an initial exercise price of \$3.50 per share and are exercisable for a period of five years from the date of issuance. Each Warrant is exercisable for one share of Common Stock, which resulted in the issuance of Bridge Warrants exercisable to purchase an aggregate of 225,000 shares of Common Stock. The Bridge Warrants are subject to adjustment in the event of stock splits and other similar transactions. The investors have the right to exchange the Bridge Warrants for a like number of warrants to be issued in our next debt financing.

We retained Taglich Brothers, Inc. as the exclusive placement agent for the Offering (the "Placement Agent"). In connection therewith, we agreed to pay the placement agent a six percent (6%) commission from the gross proceeds of the Offering (excluding \$500,000 invested by our Chairman of the Board of Directors, Timothy Tyson) for a total commission of \$60,000. We also issued the Placement Agent the same warrant that the investors received exercisable for an aggregate amount of 25,000 shares of Common Stock at an exercise price of \$3.50 per share (2,500 shares of Common Stock for each \$100,000 in principal amount of Bridge Notes sold, excluding Notes sold to the Chairman) (the "Placement Agent Warrants"). The Placement Agent has the right to exchange the Placement Agent Warrants for a like number of warrants to be issued to the lender in our next debt financing.

May 2017 Debt Financing

On May 15, 2017, we, and our wholly owned subsidiary, Icagen-T, Inc. ("**Icagen-T**"), entered into a Securities Purchase Agreement with an institutional investor (the "**Purchaser**"), pursuant to which (i) we issued to the Purchaser a three year Senior Secured Convertible Note ("Company Note"), maturing on May 15, 2020, bearing interest at the rate of 13% per annum (which interest rate increases to 18% per annum upon the occurrence of an event of default, as defined in the Company Note), in the aggregate principal amount of \$2,000,000 for cash proceeds of \$1,920,000 after an original issue discount of 4% or \$80,000, before deal related expenses; and (ii) Icagen-T issued to the Purchaser a three year Senior Secured Convertible Note ("Icagen-T Note"), maturing on May 15, 2020, bearing interest at the rate of 13% per annum, in the aggregate principal amount of \$8,000,000 for cash proceeds of \$7,680,000 after an original issue discount of 4% or \$320,000, before deal related expenses. The Company Note and the Icagen-T Note (collectively, the "Convertible Notes") are convertible into shares of common stock at a conversion price of \$3.50 per share.

The Convertible Notes also contain certain anti-dilution provisions that apply in connection with any stock split, stock dividend, stock combination, recapitalization and, sales of securities below the conversion price of the Convertible Notes.

The use of proceeds from the Company Note were used to repay the \$1,500,000 aggregate principal amount of the 8% bridge notes issued in April 2017 and all accrued but unpaid interest thereon, the amount of \$500,000 owed by us pursuant to the terms of the Dentons settlement agreement, and Icagen-T intends to use the net proceeds from the purchase price paid to Icagen-T for general corporate and working capital purposes of Icagen-T.

In connection with the Convertible Notes, we issued a warrant (the "Purchaser Warrant") to purchase initially up to 857,143 shares of Common Stock at an initial exercise price of \$3.50 per share, subject to applicable adjustments. The Purchaser Warrant expires on May 15, 2022.

The Purchaser Warrant also contain certain anti-dilution provisions that apply in connection with any stock split, stock dividend, stock combination, recapitalization and, issuances of securities at prices below the conversion price or similar transactions.

The Icagen-T Note is secured by a security interest in all of our existing and future assets, Icagen-T and the other domestic subsidiaries, including a pledge of all of the capital stock of each of the domestic subsidiaries, other than Icagen-T, subject to existing security interests, for the benefit of the Purchaser, to secure Icagen-T's obligations under the Icagen-T Note, as evidenced by (i) a security and pledge agreement, and (ii) a guaranty executed by us and each Domestic Subsidiary, other than Icagen-T, pursuant to which we and the domestic subsidiaries, other than Icagen-T, guarantees all of the obligations of Icagen-T under the various transaction documents executed in connection with the financing (the "Transaction Documents").

In addition, we and Icagen-T entered into a Subordinated Deed of Trust, Assignment of Rents, Fixture Filing and Security Agreement with the trustee named therein and the Purchaser as beneficiary, securing all of Icagen-T's obligations to the Purchaser by a senior priority security interest in the Property/Facilities, which is subordinated only to a Deed of Trust entered into with Sanofi.

The Company Note is secured by a security interest in all of our existing and future assets and the domestic subsidiaries, other than Icagen-T, including a pledge of all of the capital stock of each of the domestic subsidiaries, other than Icagen-T, subject to existing security interests, for the benefit of the Purchaser, to secure our obligations under the Company Note, as evidenced by (i) a security and pledge agreement, and (ii) a guaranty executed by each domestic subsidiary, other than Icagen-T, pursuant to which the domestic subsidiaries, other than Icagen-T, guarantees all obligations of us under the Transaction Documents.

The Icagen-T Note is secured by a security interest in all of our existing and future assets, Icagen-T and the other Domestic Subsidiaries, including a pledge of all of the capital stock of each of the domestic subsidiaries, other than Icagen-T, subject to existing security interests, for the benefit of the Purchaser, to secure Icagen-T's obligations under the Icagen-T Note, as evidenced by (i) a security and pledge agreement, and (ii) a guaranty executed by us and each domestic subsidiary, other than Icagen-T, pursuant to which we and the domestic subsidiaries, other than Icagen-T, guarantees all of the obligations of Icagen-T under the Transaction Documents.

In addition, we and Icagen-T entered into a Subordinated Deed of Trust, Assignment of Rents, Fixture Filing and Security Agreement with the trustee named therein and the Purchaser as beneficiary, securing all of Icagen-T's obligations to the Purchaser by a senior priority security interest in the Property/Facilities, which is subordinated only to a Deed of Trust entered into with Sanofi.

The transactions contemplated by the Securities Purchase Agreement closed and funded on May 15, 2017.

Results of Operations for the three months ended June 30, 2017 and the three months ended June 30, 2016.

Revenues

We had revenues totaling \$5,774,547 and \$1,157,458 for the three months ended June 30, 2017 and 2016, respectively, an increase of \$4,617,089 or 398.9%. Revenue includes services revenue of \$3,179,958 (representing 55.1% of our revenue); deferred subsidy revenue of \$2,400,000 (representing 41.5% of our revenue) and Government revenue of \$194,589 (representing 3.4% of our revenue). In the prior period, for the three months ended June 30, 2016, services revenues generated from our North Carolina site were \$1,006,055 (representing 86.9% of our revenue) and Government revenue was \$151,403 (representing 13.1% of our revenue). The increase in revenue over the prior is primarily attributable to the following; i) work performed for Sanofi under the MSA agreement that we entered into with them upon the acquisition of certain assets and personnel at the Tucson Facility, amounting to \$1,813,000; ii) deferred subsidy revenue from Sanofi of \$2,400,000 recognized during the current period to support our operations and maintain the facility and employees. The Government contract revenue is derived from one government contract which has been fully invoiced. At August 15, 2017, we had an order backlog of approximately \$2,740,000 on commercial contracts, as well as outstanding contracted MSA work with Sanofi of \$11,500,000.

We continue to market our services to several pharmaceutical and biotechnology companies. We believe that we now have a comprehensive product offering and substantial credibility to offer a full range of products including the advantages and value propositions of the XRPro® technology. While we are optimistic about our prospects, there can be no assurance about whether or when our products will generate sufficient revenues with adequate margins in order for us to be profitable.

Cost of sales

Cost of sales totaled \$3,084,736 and \$840,995 for the three months ended June 30, 2017 and 2016, respectively, an increase of \$2,243,741 or 266.8%. Cost of sales is primarily comprised of direct expenses related to providing our services to our customers. These direct expenses include salary expenses directly related to our statements of work and research contracts including those of our scientific personnel expenses, recoverable expenses incurred on contracts, the cost of outside consultants, and direct materials used on our contracts.

- The salary expense included in cost of sales for the three months ended June 30, 2017 and 2016 respectively was \$1,917,018 and \$595,838, an increase of \$1,321,180 or 221.7%. This is primarily due to an increase in the number of scientists from a headcount of 15 to 59 due to the acquisition of the Tucson site from Sanofi on July 15, 2016. For additional information regarding salary expense reference is made to the discussion of total salary expense in selling, general and administrative expenses below.
- The laboratory supplies and direct materials included in cost of sales for the three months ended June 30, 2017 and 2016, amounted to \$799,697 and \$204,309, an increase of \$595,388 or 291.4%, the increase is primarily due to the level of activity generated by our recent acquisition of the Tucson facility.
- Outside contractors' cost included in cost of sales for the three months ended June 30, 2017 and 2016, respectively, amounted to \$347,819 and \$53,802, an increase of \$294,017 or 546.5% is due primarily to third party laboratory equipment maintenance contracts for the Tucson Facility and ii) costs of outside research laboratories conducting animal studies for us in terms of government contract work.

Gross profit

Gross profit amounted to \$2,689,811 and \$316,463 for the three months ended June 30, 2017 and 2016, respectively, an increase in gross profit of \$2,373,348 or 750.0%. The increase in gross profit is primarily due to the services revenue and deferred subsidy revenue generated by the Tucson facility.

Selling, general and administrative expenses

Selling, general and administrative expenses totaled \$3,814,546 and \$1,178,467 for the three months ended June 30, 2017 and 2016, respectively, an increase of \$2,636,079 or 223.7%.

The major expenses making up selling, general and administrative expenses included the following:

	Three months ended June		Increase/ (decrease)	Percentage change
	2017	2016		
Marketing and selling expenses	\$ 85,690	\$ 37,128	\$ 48,562	130.8%
Payroll expense	1,111,933	427,274	684,659	160.2%
Research and development salaries	791,732	-	791,732	100.0%
Directors fees	55,000	55,000	-	-%
Stock option compensation charge	165,282	133,549	31,733	23.8%
Legal fees	423,100	231,753	191,347	82.6%
Consulting fees	120,248	82,034	38,214	46.6%
Facilities expense	669,663	82,936	586,727	707.4%
Travel expenditure	80,413	44,054	36,359	82.5%
Capital raising fee	60,000	-	60,000	100.0%
Other	251,485	84,739	166,746	196.8%
	<u>\$ 3,814,546</u>	<u>\$ 1,178,467</u>	<u>\$ 2,636,079</u>	<u>223.7%</u>

The increase in marketing expenditure over the prior period is primarily due the establishment of a formal marketing program and communications strategy with a marketing firm employed to assist in communicating our business and strategy to the pharma industry. We have increased our sales head count from one person to four people during the current period.

Total payroll expenses are allocated to the various expense categories detailed below:

	<u>Three months ended June 30,</u>		<u>Increase/</u>	<u>Percentage</u>
	<u>2017</u>	<u>2016</u>	<u>(decrease)</u>	<u>change</u>
Cost of sales	\$ 1,917,016	\$ 595,838	1,321,178	221.7%
Selling, general and administrative expenses	1,111,933	427,274	684,659	160.2%
Research and development salaries	791,732	-	791,732	100.0%
	<u>\$ 3,820,681</u>	<u>\$ 1,023,112</u>	<u>\$ 2,797,569</u>	<u>273.4%</u>

The increase in total payroll expenditure is primarily due to the acquisition of the Tucson facility and the 46 employees who came with the facility on July 15, 2016. We also employed a VP of Business Development on March 1, 2016 a Chief Commercial Officer on August 22, 2016 and an additional two sales people during March 2017 and April 2017, these sales positions we believe are required to drive services sales to the broader pharmaceutical and biotech industries.

The total payroll expense included in cost of sales increased by \$1,321,178, primarily due to the additional 43 laboratory employees at the Tucson facility, of the 43 people, 26 are directly involved in commercial projects.

The payroll expense charged to Selling, general and administrative expenses increased by \$684,659, This increase is primarily due to the retention of 8 administrative employees located at the Tucson facility, including 5 IT personnel, the employment of a VP of business development on March 1, 2016, a Chief Commercial Officer on August 22, 2016, and 2 sales people during March 2017 and April 2017.

The payroll expense charged to research and development during the current period was \$791,732 due to an average of 17 employees working on internal research projects at our Tucson facility.

Directors fees remained the same as the prior period, there was no increase in fee or directors' headcount.

The stock option compensation charge increased by \$31,733. The charge for each period is dependent upon the number of options issued, any new options issued, the value of the options and the vesting schedule of these options. During the prior period in July and August 2016, options were issued to management of our North Carolina and Tucson facilities and in March 2017, options were issued to our directors and certain members of management. These option grants all have vesting periods ranging from 36 to 48 months and are expensed over the vesting period.

Legal fees increased by \$191,347. The nature of our legal fees has changed over the prior period. In the prior period, we incurred legal expenditure on litigation matters of \$50,047 as compared to \$6,540 during the current period. The general corporate legal expense increased from \$147,444 in the prior period to \$345,808 in the current period, primarily due to work performed on the debt funding in the current period. Legal expenditure on patents increased from \$34,263 in the prior period to \$70,752 in the current period, primarily due to work done on registering and maintaining our XRPro patents in overseas markets.

Consulting expenses increased by \$38,214 over the prior period, primarily due to consultants used in both the North Carolina and Tucson facilities to support our sales effort with Government agencies and for technical consulting.

Facilities expense increased by \$586,727 over the prior period, the increase is primarily due to expenditure incurred at the Tucson facility for janitorial services, security services, facilities maintenance contracts, utility expenditure and general repairs on the facility.

Travel expenditure increased by \$36,359 due to increased travel expenditure resulting from the acquisition of the Tucson facility and the establishment of a sales function, with additional travel incurred for sales and scientific staff to attend conferences.

Capital raising fee was incurred on the bridge note funding and was paid to the Placement Agent.

Other expenses consist of various small expenses which are individually insignificant, the increase is primarily due to the administrative expenses related to the acquisition of the Tucson facility and the increase in the activity of the sales activity over the prior period.

Depreciation and Amortization

We recognized depreciation expenses of \$458,174 and \$112,304 for the three months ended June 30, 2017 and 2016 respectively, an increase of \$345,870 or 308.0%, the increase is primarily due to the amortization of annual software licenses acquired at the Tucson Facility and additional software acquired for the North Carolina site.

Amortization expense was \$56,246 and \$56,246 for the three months ended June 30, 2017 and 2016, respectively.

Other income

Other income is made up of the reversal of deferred purchase consideration initially due on the acquisition of the North Carolina facility, due to our customer not meeting certain revenue milestones.

Interest expense

Interest expense totaled \$854,838 and \$150,928 for the three months ended June 30, 2017 and 2016, respectively. The interest expense consists of the following:

- Imputed interest on deferred purchase consideration on the acquisition of the North Carolina facility and equipment purchases of \$143,205 and \$144,045 for the three months ended June 30, 2017 and 2016, respectively.
- The amortization of debt discount of \$535,282 and \$0 for the three months ended June 30, 2017 and 2016, respectively. Debt discount arose on the Bridge Warrants issued in terms of the Bridge Notes issued in April 2017, the amortization of Bridge Note discount totaled \$330,353 for the period. The beneficial conversion feature and the Purchaser Warrants issued in terms of the May 2017 Convertible Debt Offering amounted to \$4,518,278 and is being amortized over the 36 month term of the Convertible Debt, the amortization for the period amounted to \$204,929.
- Interest expense of \$174,928 and \$0 for the three months ended June 30, 2017 and 2016, respectively, primarily due to interest incurred on the Convertible Debt and interest on the Bridge Notes.
- Other of \$1,423 and \$2,193 for the three months ended June 30, 2017 and 2016, respectively.

Derivative liability movement

Derivative liability movement was \$77,719 and \$0 for the three months ended June 30, 2017, respectively. The credit during the current period represents the mark to market of the derivative liability raised on the warrants issued and the beneficial conversion feature of the convertible debt, with variable pricing options.

Net loss

Net loss totaled \$1,916,274 and \$1,181,436 for the three months ended June 30, 2017 and 2016, respectively, an increase of \$734,838 or 62.2%. The increase in net loss is primarily due the increase in operating expenditure, the increase in interest expense, offset by the improvement in gross profit and the other income of \$500,000, as discussed above.

Results of Operations for the six months ended June 30, 2017 and the six months ended June 30, 2016.

Revenues

We had revenues totaling \$11,594,497 and \$2,058,324 for the six months ended June 30, 2017 and 2016, respectively, an increase of \$9,536,173 or 463.3%. Revenue includes services revenue of \$6,473,753 (representing 55.8% of our revenue); deferred subsidy revenue of \$4,800,000 (representing 41.4% of our revenue) and Government revenue of \$320,744 (representing 2.8% of our revenue). In the prior period, services revenues generated from our North Carolina site were \$1,792,055 (representing 87.1% of our revenue) and Government revenue was \$266,269 (representing 12.9% of our revenue). The increase in revenue over the prior period is primarily attributable to the following: i) work performed for Sanofi under the MSA agreement that we entered into with them upon the acquisition of certain assets and personnel at the Tucson Facility, amounting to \$3,711,718; ii) deferred subsidy revenue from Sanofi of \$4,800,000 recognized during the current period to support our operations and maintain the facility and employees; and iii) an increase in services revenues generated from our North Carolina site of \$334,194. The Government contract revenue is derived from one government contract which has been fully invoiced. At August 15, 2017, we had an order backlog of approximately \$2,740,000 on commercial contracts, as well as outstanding contracted MSA work with Sanofi of \$11,500,000.

We continue to market our services to several pharmaceutical and biotechnology companies. We believe that we now have a comprehensive product offering and substantial credibility to offer a full range of products including the advantages and value propositions of the XRPro® technology. While we are optimistic about our prospects, there can be no assurance about whether or when our products will generate sufficient revenues with adequate margins in order for us to be profitable.

Cost of sales

Cost of sales totaled \$6,021,346 and \$1,535,845 for the six months ended June 30, 2017 and 2016, respectively, an increase of \$4,485,501 or 292.1%. Cost of sales is primarily comprised of direct expenses related to providing our services to our customers. These direct expenses include salary expenses directly related to our statements of work and research contracts including those of our scientific personnel expenses, recoverable expenses incurred on contracts, the cost of outside consultants, and direct materials used on our contracts.

- The salary expense included in cost of sales for the six months ended June 30, 2017 and 2016 respectively was \$3,877,101 and \$1,186,696, an increase of \$2,690,405 or 226.7%. This is primarily due to an increase in the number of scientists from a headcount of 15 to 59 due to the acquisition of the Tucson site from Sanofi on July 15, 2016. For additional information regarding salary expense reference is made to the discussion of total salary expense in selling, general and administrative expenses below.

- The laboratory supplies and direct materials included in cost of sales for the six months ended June 30, 2017 and 2016, amounted to \$1,442,997 and \$301,621, an increase of \$1,141,376 or 378.4%, the increase is primarily due to the level of activity generated by our recent acquisition of the Tucson.
- Outside contractors' cost included in cost of sales for six months ended June 30, 2017 and 2016, respectively, amounted to \$647,190 and \$58,773, an increase of \$588,417 or 1,001.2% is due primarily to third party laboratory equipment maintenance contracts for the Tucson Facility and ii) costs of outside research laboratories conducting animal studies for us in terms of government contract work.

Gross profit

Gross profit amounted to \$5,573,151 and \$522,479 for the six months ended June 30, 2017 and 2016, respectively, an increase in gross profit of \$5,050,672 or 966.7%. The increase in gross profit is primarily due to the services revenue and deferred subsidy revenue generated by the Tucson facility.

Selling, general and administrative expenses

Selling, general and administrative expenses totaled \$6,912,820 and \$2,190,238 for the six months ended June 30, 2017 and 2016, respectively, an increase of \$4,722,582 or 215.6%.

The major expenses making up selling, general and administrative expenses included the following:

	<u>Six months ended June 30,</u>		<u>Increase/</u>	<u>Percentage</u>
	<u>2017</u>	<u>2016</u>	<u>(decrease)</u>	<u>change</u>
Marketing and selling expenses	\$ 210,780	\$ 47,700	\$ 163,080	341.9%
Payroll expense	2,059,890	837,352	1,222,538	146.0%
Research and development salaries	1,486,620	-	1,486,620	100.0%
Directors fees	110,000	110,000	-	-%
Stock option compensation charge	315,192	228,849	86,343	37.7%
Legal fees	533,344	336,547	196,797	58.5%
Consulting fees	281,939	148,981	132,958	89.2%
Facilities expense	1,249,208	225,562	1,023,646	453.8%
Travel expenditure	163,609	73,060	90,549	123.9%
Capital raising fee	76,000	-	76,000	100.0%
Other	426,238	182,187	244,051	134.0%
	<u>\$ 6,912,820</u>	<u>\$ 2,190,238</u>	<u>\$ 4,722,582</u>	<u>215.6%</u>

The increase in marketing expenditure over the prior period is primarily due the establishment of a formal marketing program and communications strategy with a marketing firm employed to assist in communicating our business and strategy to the pharma industry. We have increased our sales head count from one person to four people during the current year.

Total payroll expenses are allocated to the various expense categories detailed below:

	<u>Six months ended June 30,</u>		<u>Increase/</u>	<u>Percentage</u>
	<u>2017</u>	<u>2016</u>	<u>(decrease)</u>	<u>change</u>
Cost of sales	\$ 3,877,101	\$ 1,186,696	2,690,405	226.7%
Selling, general and administrative expenses	2,059,890	837,352	1,222,538	146.0%
Research and development salaries	1,486,620	-	1,486,620	100.0%
	<u>\$ 7,423,611</u>	<u>\$ 2,024,048</u>	<u>\$ 5,399,563</u>	<u>266.8%</u>

The increase in total payroll expenditure is primarily due to the acquisition of the Tucson facility and the 46 employees who came with the facility on July 15, 2016. We also employed a VP of Business Development on March 1, 2016 a Chief Commercial Officer on August 22, 2016 and an additional two sales people during March 2017 and April 2017, these sales positions we believe are required to drive services sales to the broader pharmaceutical and biotech industries.

The total payroll expense included in cost of sales increased by \$2,690,405 primarily due to the additional 43 laboratory employees at the Tucson facility, of the 43 people, 26 are directly involved in commercial projects.

The payroll expense charged to Selling, general and administrative expenses increased by \$1,222,538, This increase is primarily due to the retention of 8 administrative employees located at the Tucson facility, including 5 IT personnel, the employment of a VP of business development on March 1, 2016, a Chief Commercial Officer on August 22, 2016, and 2 sales people during March 2017 and April 2017.

The payroll expense charged to research and development during the current period was \$1,486,620 due to an average of 17 employees working on internal research projects at our Tucson facility.

Directors fees remained the same as the prior period, there was no increase in fee or directors' headcount.

The stock option compensation charge increased by \$86,343. The charge for each period is dependent upon the number of options issued, any new options issued, the value of the options and the vesting schedule of these options. During the prior period in July and August 2016, options were issued to management of our North Carolina and Tucson facilities and in March 2017, options were issued to our directors and certain members of management. These option grants all have vesting periods ranging from 36 to 48 months and are expensed over the vesting period.

Legal fees increased by \$196,797. The nature of our legal fees has changed over the prior period. In the prior period, we incurred legal expenditure on litigation matters of \$82,304 in the prior period as compared to \$9,461 during the current period. The general corporate legal expense increased from \$190,826 in the prior period to \$419,719 in the current period, primarily due to work performed on the debt funding in the current period. Legal expenditure on patents increased from \$63,417 in the prior period to \$104,164 in the current period, primarily due to work done on registering and maintaining our XRPro patents in overseas markets.

Consulting expenses increased by \$132,958 over the prior period, primarily due to consultants used in both the North Carolina and Tucson facilities to support our sales effort with Government agencies and for technical consulting.

Facilities expense increased by \$1,023,646 over the prior period, the increase is primarily due to expenditure incurred at the Tucson facility for janitorial services, security services, facilities maintenance contracts, utility expenditure and general repairs on the facility.

Travel expenditure increased by \$90,549 due to increased travel expenditure resulting from the acquisition of the Tucson facility and the establishment of a sales function, with additional travel incurred for sales and scientific staff to attend conferences.

Capital raising fee of \$60,000 was incurred on the bridge note funding and was paid to the Placement Agent and a further \$16,000 was incurred on the initial convertible debt funding due diligence.

Other expenses consist of various small expenses which are individually insignificant, the increase is primarily due to the administrative expenses related to the acquisition of the Tucson facility and the increase in the activity of the sales activity over the prior period.

Depreciation and Amortization

We recognized depreciation expenses of \$842,905 and \$213,881 for the six months ended June 30, 2017 and 2016 respectively, an increase of \$629,024 or 294.1%, the increase is primarily due to the amortization of annual software licenses acquired at the Tucson Facility and additional software acquired for the North Carolina site.

Amortization expense was \$112,492 and \$112,492 for the six months ended June 30, 2017 and 2016, respectively.

Other income

Other income is primarily made up of the reversal of deferred purchase consideration initially due on the acquisition of the North Carolina facility, due to our customer not meeting certain revenue milestones.

Interest expense

Interest expense totaled \$1,004,879 and \$297,166 for the six months ended June 30, 2017 and 2016, respectively. The interest expense consists of the following:

- Imputed interest on deferred purchase consideration on the acquisition of the North Carolina facility and on equipment purchases of \$292,517 and \$294,986 for the six months ended June 30, 2017 and 2016, respectively.
- The amortization of debt discount of \$535,282 and \$0 for the six months ended June 30, 2017 and 2016, respectively. Debt discount arose on the Bridge Warrants issued in terms of the Bridge Notes issued in April 2017, the amortization of Bridge Note discount totaled \$330,353 for the period. The beneficial conversion feature and the Purchaser Warrants issued in terms of the May 2017 Convertible Debt Offering amounted to \$4,518,278 and is being amortized over the 36 month term of the Convertible Debt, the amortization for the period amounted to \$204,929.

- Interest expense of \$175,267 and \$0 for the six months ended June 30, 2017 and 2016, respectively, primarily due to interest incurred on the Convertible Debt and interest on the Bridge Notes.
- Other of \$1,813 and \$2,180 for the six months ended June 30, 2017 and 2016, respectively.

Derivative liability movement

Derivative liability movement was \$77,719 and \$0 for the six months ended June 30, 2017 and 2016, respectively. The credit during the current period represents the mark to market of the derivative liability raised on the warrants issued and the beneficial conversion feature of the Convertible Debt, with variable pricing options.

Net loss

Net loss totaled \$2,722,000 and \$2,290,963 for the six months ended June 30, 2017 and 2016, respectively, an increase of \$431,037 or 18.8%. The increase in net loss is primarily due the increase in operating expenditure, the increase in interest expense, offset by the improvement in gross profit and the other income of \$500,226, as discussed above.

Liquidity and Capital Resources

We have a history of annual losses from operations since inception and we have primarily funded our operations through sales of our unregistered equity securities and cash flows generated from government contracts and grants, settlement of lawsuits and more recently from bridge note funding and debt funding, commercial customers and subsidy income. Although, we are generating funds from commercial customers and government grants, we continue to experience losses and may need to raise additional funds in the future to meet our working capital requirements. To date, we have never generated sufficient cash from operations to pay our operating expenses. We have received \$16.5 million from Sanofi and despite the \$15.5 million we expect to derive from Icagen-T for services provided to and operating expense contributions to be paid by Sanofi over the next four years, we expect our expenses to increase as our operations expand and our expenses may continue to exceed such revenue. As of December 31, 2016, we had not generated sufficient additional revenue from operations to pursue our business strategy, to respond to new competitive pressures or to take advantage of opportunities that may arise. These factors raised substantial doubt about our ability to continue as a going concern. As a result, our independent registered public accounting firm included an explanatory paragraph in its report on our consolidated financial statements as of and for the year ended December 31, 2016 with respect to this uncertainty. We anticipate that our current cash and cash equivalents, including cash derived from the 2017 debt financing will be sufficient to meet our operating needs for at least the next nine months. However, if we should require additional capital, we may consider multiple alternatives, including, but not limited to, additional equity financings, debt financings and/or funding from partnerships or collaborations. There can be no assurance that we will be able to complete any such transactions on acceptable terms or otherwise.

As of June 30, 2017, we had cash totaling \$5,796,786, other current assets totaling \$2,307,079 and total assets of \$18,272,368. We had total current liabilities of \$5,837,623 and a net working capital of \$2,266,242, which includes deferred subsidy and deferred revenue received from Sanofi of \$996,880, which will have no impact on cash flow. After eliminating these items, the working capital is \$3,263,122. Total liabilities were \$23,881,762, including deferred purchase consideration of \$8,517,978. The deferred purchase consideration includes a net present value discount of \$1,433,071 (made up of a gross present value discount of \$2,468,700 less imputed interest movements of \$1,035,629), the gross amount still due in terms of the acquisition agreement is \$9,950,000 after the payment of \$50,000 in June 2017 based on a potential earn out charge of the greater of (i)10% of gross revenues commencing in January 2017 per quarter and (ii) \$250,000 per quarter, up to a maximum of \$10,000,000 of which amounts in excess of \$50,000 can be deferred and \$200,000 was deferred for the quarter ended June 30, 2017. The deferred amount bears interest at a rate of 12.5% per annum. Our stockholders' deficit amounted to \$5,609,394.

On April 12, 2017, we sold in the April 2017 Bridge Financing to three (3) investors, which included two members of our Board of Directors, pursuant to the 2017 Purchase Agreement, 150 Units at a price of \$10,000 per unit consisting of a 2017 note in the principal amount of \$10,000 and a 2017 Bridge Warrant to acquire 1,500 shares of our common stock, par value, \$0.001 per share ("Common Stock"), at an exercise price of \$3.50 per share. The aggregate gross cash proceeds to us from the sale of the 150 Units was \$1,500,000, these notes were repaid during May 2017, together with interest thereon.

On May 15, 2017, we and Icagen-T entered into a Securities Purchase Agreement with an institutional investor, pursuant to which (i) we issued to the Purchaser the Company Note for cash proceeds of \$1,920,000 after an original issue discount of 4% or \$80,000, before deal related expenses; and (ii) Icagen-T issued to the Purchaser the Icagen-T Note for cash proceeds of \$7,680,000 after an original issue discount of 4% or \$320,000, before deal related expenses. The Company Note and the Icagen-T Note are convertible into shares of common stock at a conversion price of \$3.50 per share.

We used the proceeds from the Company Note to repay the \$1,500,000 aggregate principal amount of the 8% bridge notes issued in April 2017 and all accrued but unpaid interest thereon and the \$500,000 owed by us pursuant to the terms of the Dentons' settlement agreement, and Icagen-T has used and intends to use the net proceeds from the purchase price paid to Icagen-T for general corporate and working capital purposes of Icagen-T, provided, however, proceeds are not to be used for (a) the repayment of any Indebtedness other than Permitted Indebtedness, (b) the redemption or repurchase of any securities of ours, Icagen-T and our Subsidiaries, or (c) except for the payments pursuant to the Settlement Agreement, the settlement of any outstanding litigation; provided, further, Icagen-T will not use any of such proceeds in violation of its arrangements with Sanofi US Services, Inc.

Should we not achieve our forecasted operating results or should strategic opportunities present themselves such that additional financial resources would present attractive investing opportunities for us, we may decide in the future to issue debt or sell our equity securities in order to raise additional cash. We cannot provide any assurances as to whether we will be able to secure any additional financing, or the

terms of any such financing transaction if one were to occur.

An analysis of our cash flows from operating, investing and financing activities for the six months ended June 30, 2017 and 2016 is provided below:

	<u>Six months ended June 30,</u>		<u>Increase/ (decrease)</u>	<u>Percentage change</u>
	<u>2017</u>	<u>2016</u>		
Net cash used in operating activities	\$ (7,802,997)	\$ (2,097,261)	\$ (5,705,736)	272.1%
Net cash used in investing activities	(737,908)	(664,632)	(73,276)	11.0%
Net cash provided by financing activities	9,398,743	1,420,773	7,977,970	561.5%
Net increase/(decrease) in cash and cash equivalents	\$ 857,838	\$ (1,341,120)	\$ 2,198,958	(164.0)%

Net cash used in operating activities was \$7,802,997 and \$2,097,261 for the six months ended June 30, 2017 and 2016, respectively. The increase in cash used in operating activities was primarily due to the following:

	<u>Six months ended June 30,</u>		<u>Increase/ (decrease)</u>	<u>Percentage change</u>
	<u>2017</u>	<u>2016</u>		
Net loss	\$ (2,722,000)	\$ (2,290,963)	\$ (431,037)	18.8%
Adjustments for non-cash items	1,520,669	831,124	689,545	83.0%
Changes in operating assets and liabilities	(6,601,666)	(637,422)	(5,964,244)	935.7%
Net cash provided by (used in) operating activities	\$ (7,802,997)	\$ (2,097,261)	\$ (5,705,736)	272.1%

The decrease in net loss is discussed under net loss in the results of operations for the six months ended June 30, 2017 and 2016, respectively.

The change in adjustments for non-cash items amounting to \$689,545 is primarily due to; i) the increase in non-cash flow depreciation expense of \$629,024; ii) the amortization of debt discount of \$535,282 offset by; iii) the reversal of the unearned deferred purchase consideration of \$500,000 due to the vendor failing to meet revenue milestones.

The change in operating assets and liabilities of \$5,964,244 consisted primarily of i) amortization of \$4,800,000 of the deferred subsidy revenue; ii) the recognition of \$417,591 of deferred revenue during the current period; iii) the increase in accounts receivable movement of \$808,773 over the prior period due to increased revenues.

Net cash used in investing activities increased by \$73,276, primarily due to; i) the purchase of cell lines for the Tucson facility during the current year; ii) the reduction in payments to Pfizer of \$75,000 over the prior period due to the re-negotiation of the minimum deferred earnout payment; and iii) offset by the proceeds realized on assets held for resale.

Net cash used in financing activities increased by \$7,977,970, primarily due to; i) the proceeds realized on the convertible debt issuance of \$9,600,000; ii) the net movement on bridge notes repaid over the prior period of \$1,045,000; and iii) the net movement in other loans of \$577,030 over the prior period.

Capital Expenditures

Our current plan is to purchase equipment and software to ensure that our recent acquisition of the Tucson Facility and North Carolina Facility functions efficiently and that we are able to support the commercialization efforts of the Company. We anticipate that we would need to spend an additional \$1,600,000 on software licensing towards the end of the fiscal year.

As a result of the agreements that we entered into with Pfizer and Sanofi, we agreed; (i) to continue to retain certain employees at our Icagen-T facility until July 15, 2018, which we estimate will require additional compensation of \$9,597,000 at our Icagen-T facility; (ii) make additional payments in terms of the Asset Purchase and Collaboration Agreement that we entered into on June 26, 2015 with Pfizer including (a) a cash payment of \$500,000 on the second anniversary of the closing provided that prior to such date the service agreement we entered into has generated at least \$4,000,000 in revenue, this milestone was not achieved and the \$500,000 is no longer payable; and (b) beginning in 2017, a quarterly earn out payment (the "Earn Out Payment") of 10% of revenue earned during the quarter, with a minimum payment of \$250,000 per quarter, up to a maximum aggregate payment of \$10,000,000, the Company has negotiated an agreement whereby the minimum additional purchase price consideration of \$250,000 per quarter is amended to \$50,000 per quarter for the quarters ending May 2017 to December 2018. The difference between the minimum purchase consideration and the actual calculation of deferred purchase consideration at 10% of gross revenue per quarter is deferred, bears interest at 12.5% per annum, which interest is payable quarterly. The deferred purchase consideration in terms of this agreement is payable, together with the deferred purchase consideration for the quarter ended March 31, 2019, as one lump sum; (iii) make minimum lease payments in terms of a sub-lease agreement entered into with Pfizer for the period July 1, 2015 to April 30, 2019 with annual escalations of 3.5%, estimated to be \$332,650.

In addition, we are required to make monthly interest payments of \$108,333 under the terms of the notes issued in May 2017.

In terms of a Mutual Release and Assignment Agreement entered into between American Milling LP and the Company, The Company agreed to pay American Milling \$800,000 of which \$250,000 remains to be paid at June 30, 2017. In terms of a Settlement and Release Agreement entered into between Dentons and us, we agreed to pay Dentons \$1,400,000, of which \$900,000 remains to be paid as of June 30, 2017.

Future annual minimum payments required under operating lease obligations as of June 30, 2017, are as follows:

	<u>Amount</u>
2017	\$ 87,906
2018	181,966
2019	62,778
Total	<u>\$ 332,650</u>

Our discussion and analysis of our financial condition and results of operations are based on our unaudited condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses. We evaluate our estimates and judgments on an ongoing basis. We base our estimates on historical experience and on assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

Please refer Note 2 Significant Accounting Policies in the notes to unaudited condensed consolidated financial statements.

Recently Issued Accounting Pronouncements

The recent Accounting Pronouncements are fully disclosed in note 2 to our unaudited condensed consolidated financial statements.

Management does not believe that any other recently issued but not yet effective accounting pronouncements, if adopted, would have an effect on the accompanying unaudited condensed consolidated financial statements.

We do not maintain off-balance sheet arrangements nor do we participate in non-exchange traded contracts requiring fair value accounting treatment.

Inflation

The effect of inflation on our revenue and operating results was not significant.

Climate Change

We believe that neither climate change, nor governmental regulations related to climate change, have had, or are expected to have, any material effect on our operations.

Item 3. Quantitative and Qualitative Disclosures about Market Risk.

Not applicable.

Item 4. Controls and Procedures.

Disclosure Controls and Procedures

The Company has adopted and maintains disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed in the reports filed under the Exchange Act, such as this Quarterly Report on Form 10-Q, is collected, recorded, processed, summarized and reported within the time periods specified in the rules of the Securities and Exchange Commission. The Company's disclosure controls and procedures are also designed to ensure that such information is accumulated and communicated to management to allow timely decisions regarding required disclosure. As required under Exchange Act Rule 13a-15, the Company's management, including the Principal Executive Officer and the Principal Financial Officer, has conducted an evaluation of the effectiveness of disclosure controls and procedures as of the end of the period covered by this report. Based upon that evaluation, the Company's CEO and CFO concluded that due to a lack of segregation of duties the Company's disclosure controls and procedures are not effective to ensure that information required to be disclosed by the Company in the reports that the Company files or submits under the Exchange Act, is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to the Company's management, including the Company's CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure. Subject to receipt of additional financing or revenue generated from operations, the Company intends to retain additional individuals to remedy the ineffective controls.

Changes in Internal Control

There has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) that occurred during our fiscal quarter ended June 30, 2017 that has materially affected, or is reasonably likely to materially affect, our

internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

There have been no material litigation developments since the filing of our Quarterly Report on form 10-Q for the three months ended March 31, 2017.

Item 1A. Risk Factors.

The following information updates, and should be read in conjunction with, the information disclosed in Part 1, Item IA, "Risk Factors," contained in our Annual Report on Form 10-K for the year ended December 31, 2016, which was filed with the SEC on April 17, 2017. Except as disclosed below, there have been no material changes from the risk factors disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016.

Risks Related to the Company

We have a history of losses and there can be no assurance that we will generate or sustain positive earnings.

For the six months ended June 30, 2017, we had a net loss of \$(2,722,000) and for the year ended December 31, 2016 we had a net loss of \$(5,504,412). The only year that we had net income was the year ended December 31, 2014 when we received proceeds from the settlement of the LANS matter. We cannot be certain that our business strategy will ever be successful. Future revenues and profits, if any, will depend upon various factors, including the success, if any, of our expansion plans and our services to biotechnical and pharmaceutical customers, marketability of our instruments and services, our ability to maintain favorable relations with manufacturers and customers, and general economic conditions. There is no assurance that we can operate profitably or that we will successfully implement our plans. There can be no assurance that we will ever generate positive earnings.

A significant portion of our net revenue has been generated from services provided to three customers.

The termination of our relationship with Pfizer and Sanofi would adversely affect our business. For the six months ended June 30, 2017 we derived 55.8% of our revenue from commercial contracts (of which 71.3% of our services revenue was for services provided to three large pharmaceutical customers); 41.4% of our revenue was from subsidy revenue and the remaining 2.8% was derived from Government contracts. For the year ended December 31, 2016, we derived 59.5% of our revenues from commercial contracts of which 79.4% of our revenue was for services provided to three large pharmaceutical customers; 36.7% of our revenue was from subsidy revenue and the remaining 3.8% was derived from Government contracts. Prior to the acquisition of certain of the assets of Icagen we derived substantially all of our revenue from services we performed for two governmental agencies. Our business model which now concentrates on commercial customers is relatively new and there can be no assurance that we will be able to increase the revenue derived from commercial customers to a significant amount. As of the date hereof we have two existing contracts with the National Institutes of Health ("NIH") pursuant to which we are continuing to perform services. Our Sanofi MSA provided that Sanofi make payments to Icagen-T of \$15.5 million over the next four years in consideration of Icagen-T providing services to Sanofi, so long as Icagen-T complies with the covenants set forth in the Sanofi MSA. Our MSA with Pfizer which terminated in July 2017 guaranteed \$1,000,000 of revenue to us for the twelve month period ending June 30, 2017. Our MSA with Sanofi guaranteed \$32 million over a five year period of which: (i) \$16.5 million has been received; ii) a further \$9.5 million is expected to be paid in year 2; (iii) \$3 million is expected to be paid in year 3; (iv) \$2 million is expected to be paid in year 4; and (v) \$1 million is expected to be paid in year 5, all subject to us meeting certain terms and conditions. There can be no assurance that we will attract a sufficient number of other pharmaceutical companies to provide our services to or that Pfizer will continue to use our services or that Sanofi will increase the scope of the services required. We do not have enough information regarding our new business model to assess its success.

Our consolidated financial statements have been prepared assuming that we will continue as a going concern.

Although we have generated revenue, our operating losses, negative cash flows from operations and limited alternative sources of revenue raise substantial doubt about our ability to continue as a going concern. During the six months ended June 30, 2017 and the years ended December 31, 2016, and 2015 we did not generate enough revenue from operations to sustain our operations. We will be required to increase our revenue from customers and/or obtain additional financing in order to pay existing contractual obligations (which include the guaranteed payments to employees and amounts required to maintain the facility in Tucson and the amounts owed under the Convertible Notes) and to continue to cover operating losses and working capital needs. We cannot assure you that our revenue generated from operations or any future funds we raise will be sufficient to support our continued operations.

The audit report of RBSM LLP for the fiscal year ended December 31, 2016 contained a paragraph that emphasizes the substantial doubt as to our continuance as a going concern. If we cannot raise adequate capital on acceptable terms we will need to revise our business plans.

We have claims and lawsuits against us that may result in material adverse outcomes.

On April 22, 2014, Dentons' US LLP (Dentons) filed a complaint against us seeking to confess a judgment in the amount of \$3,050,000.00 based upon a settlement agreement we entered into with Dentons, dated July 5, 2013. We recently entered into a settlement agreement with Dentons that requires that we pay Dentons an aggregate of \$1,400,000 over a fourteen month period of which \$500,000 has been paid to date. In addition, to secure its obligations under the agreement, we executed and delivered to Dentons a Confession of Judgment Affidavit in Support of Confession of Judgment in the amount of \$3,891,549.32, representing the amount of the Judgment had obtained plus the costs of suit and interest accrued through May 15, 2017. The Confession of Judgment is not to be filed unless the Company defaults on its obligations under the Agreement and it will be returned to us upon payment in full under the Agreement. If the confession of judgment were to be enforced against Icagen, Inc. by Dentons it could result, among other things, our cash balances being depleted and/or extinguished, or the seizure of assets, which would have material adverse effect on us and our ability to continue to operate our business. We are also subject to various other claims and lawsuits in which adverse outcomes could result in significant monetary damages.

If we cannot establish profitable operations, we will need to raise additional capital to fully implement our business plan, which may not be available on commercially reasonable terms, or at all, and which may dilute your investment.

We incurred a net loss of \$(2,722,000) for the six months ended June 30, 2017, a net loss of \$(5,504,412) for the year ended December 31, 2016 and a net loss of \$(8,676,037) for the year ended December 31, 2015. Achieving and sustaining profitability will require us to increase our revenues and manage our product, operating and administrative expenses. We cannot guarantee that we will be successful in achieving profitability. Pursuant to the terms of the Pfizer APA, as amended July 15, 2016, we are required to pay Pfizer, commencing May 2017, minimum quarterly payments of \$50,000 each for the period May 2017 to March 31, 2019, including interest on the difference between the unpaid deferred purchase consideration and the \$50,000, a lump sum of unpaid deferred purchase consideration due for the period January 1, 2017 to December 31, 2018, the deferred portion of the quarterly payments from May 2017 until December 31, 2018 on March 31, 2019 and thereafter a minimum payment of \$250,000 each quarter up to a maximum of \$10,000,000. Pursuant to the terms of the Sanofi APA, Icagen-T agreed to retain 46 employees at an estimated remaining cost to Icagen-T of \$9,597,000 and to maintain and pay the maintenance costs of the Sanofi chemical libraries that remain at the Tucson Facility. We are also required to make significant payments under the terms of the Convertible Notes. If we are unable to generate sufficient revenues to pay our expenses and our existing sources of cash and cash flows are otherwise insufficient to fund our activities, we will need to raise additional funds to continue our operations at their current level and in order to fully implement our business plan. We do not have any commitments in place for additional funds. If needed, additional funds may not be available on favorable terms, or at all. As of the date hereof, we expect that our current cash and revenues generated from services, our private placement financings will provide us with enough funds to continue our operations at our current level for the next nine months. Unless we raise additional funds or increase revenues we will be forced to curtail our operations and limit our marketing expenditures. Furthermore, if we issue equity or debt securities to raise additional funds, our existing stockholders may experience dilution, and the new equity or debt securities, such as senior secured notes, may have rights, preferences and privileges senior to those of our existing stockholders. If we are unsuccessful in achieving profitability and we cannot obtain additional funds on commercially reasonable terms or at all, we may be required to curtail significantly or cease our operations significantly, it could result in the loss of all of your investment in our stock.

Our management will have broad discretion over the use of proceeds from the May 2017 Debt Financing and may not use the proceeds effectively.

The Icagen-T management will have broad discretion over the use of proceeds from the May 2017 debt financing. We have used and intend to use the net proceeds from the May 2017 debt financing for general corporate purposes, including, but not limited to, reducing debt and paying part of a legal settlement as well as continuing to support and advance our business and for working capital purposes. The Icagen-T management will have considerable discretion in the application of the net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. The net proceeds, if any, may be used for corporate purposes that do not improve our operating results or enhance the value of our common stock. The failure of management to use these funds effectively could have a material adverse effect on our business, cause the market price of our common stock to decline as. Pending their use, Icagen-T may invest the net proceeds from the May 2017 debt financing in short-term, investment-grade, interest-bearing instruments and U.S. government securities. These investments may not yield a favorable return to our stockholders.

The failure to comply with the terms of our notes could result in a default under the terms of the notes and, if uncured, it could potentially result in action against our pledged assets.

In the May 2017 debt financing, a Convertible Note in the aggregate principal amount of \$2,000,000 was issued by us, we issued a Purchase Warrant to purchase initially up to 857,143 shares of our common stock, and a Convertible Note in the aggregate principal amount of \$8,000,000 was issued by Icagen-T to the lender, which Convertible Notes are secured by a security interest in all of our existing and future assets, subject to existing security interests and exceptions. The Convertible Notes require us and Icagen-T, respectively, among other things, to maintain the security interest, make monthly installment payments, and meet various negative and affirmative covenants. If we or Icagen-T fails to comply with the terms of the Convertible Notes and/or the related agreements, the senior note holder could declare a note default and if the default were to remain uncured, the secured creditor would have the right to proceed against any or all of the collateral securing their Convertible Note, subject to the first priority of our secured creditors. Any action by our secured or unsecured creditors to proceed against our assets would likely have a serious disruptive effect on our business operations.

Servicing our debt will require a significant amount of cash. Our ability to generate sufficient cash to service our debt depends on many factors beyond our control

Our ability to make payments on and to refinance our debt, to fund planned capital expenditures and to maintain sufficient working capital will depend on our ability to generate cash in the future. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. We cannot assure you that our business will generate sufficient cash flow from operations or from other sources in an amount sufficient to enable us to service our debt or to fund our other liquidity needs. If our cash flow and capital resources are insufficient to allow us to make scheduled payments on our debt, we may need seek additional capital or restructure or refinance all or a portion of our debt on or before the maturity thereof, any of which could have a material adverse effect on our business, financial condition or results of operations. We cannot assure you that we will be able to refinance any of our debt on commercially reasonable terms or at all, or that the terms of that debt will allow any of the above alternative measures or that these measures would satisfy our scheduled debt service obligations. If we are unable to generate sufficient cash flow to repay or refinance our debt on favorable terms, it could significantly adversely affect our financial condition and the value of our outstanding debt. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. There can be no assurance that we will be able to obtain any financing when needed.



Our substantial leverage may impair our financial condition and prevent us from fulfilling our obligations under the notes.

We have a substantial amount of indebtedness. As of June 30, 2017, our total debt was \$20.2 million. Our substantial leverage could have important consequences to investors, including:

- making it more difficult for us to satisfy our obligations with respect to the Convertible Notes;
- increasing our vulnerability to general adverse economic and industry conditions by making it more difficult for us to react quickly to changing conditions;
- limiting our ability to obtain additional financing to fund future working capital, capital expenditures, acquisitions and other general corporate requirements;
- requiring a substantial portion of our cash flow from operations for the payment of interest on our indebtedness and reducing our ability to use our cash flow to fund working capital, capital expenditures, acquisitions and general corporate requirements;
- limiting our flexibility in planning for, or reacting to, changes in our business, and the industry in which we operate; and
- placing us at a competitive disadvantage compared with our competitors that have less indebtedness.

Covenant restrictions under our indebtedness may limit our ability to operate our business.

The Convertible Notes issued in May 2017 contain, and our future indebtedness agreements may contain covenants that may restrict our ability to finance future operations or capital needs or to engage in other business activities. The Convertible Notes restrict our ability and the ability of our restricted subsidiaries to:

- incur, assume or guarantee additional Indebtedness (as defined in the Convertible Notes);
- repurchase capital stock;
- make other restricted payments including, without limitation, paying dividends and making investments;
- create liens;
- sell or otherwise dispose of assets, including capital stock of subsidiaries;
- enter into agreements that restrict dividends from subsidiaries;
- enter into mergers or consolidations; and
- enter into transactions with affiliates

A breach of any of these covenants would result in a default under our Convertible Notes. If an event of default under our Convertible Notes occurs, the lenders could elect to declare all amounts outstanding thereunder, together with accrued interest, to be immediately due and payable. If we were unable to pay such amounts, the lenders could proceed against the collateral pledged to them. We have pledged our inventory, accounts receivable, cash, securities, other general intangibles and the capital stock of certain subsidiaries to the lenders. In such an event, we cannot assure you that we would have sufficient assets to pay amounts due on the Convertible Notes.

It may be difficult to realize the value of the collateral securing the Convertible Notes.

The collateral securing the Convertible Notes is subject to any and all exceptions, defects, encumbrances, liens and other imperfections as may be accepted by the collateral agent for the notes and any other creditors that also have the benefit of liens on the collateral securing the Convertible Notes from time to time, whether on or after the date the Convertible Notes are issued. The existence of any such exceptions, defects, encumbrances, liens or other imperfections could adversely affect the value of the collateral securing the notes as well as the ability of the collateral agent to realize or foreclose on such collateral.

No appraisals of any collateral have been prepared in connection with the Convertible Notes issued in May 2017 debt offering and appraisals relied upon were not currently obtained. The value of the collateral at any time will depend on market and other economic conditions, including the availability of suitable buyers. By their nature, some or all of the pledged assets may be illiquid and may have no readily ascertainable market value. Although we believe that the fair market value of the collateral exceeds the principal amount of the indebtedness secured thereby and the prior lien thereon, we cannot assure you that the fair market value of the collateral exceeds the principal amount of the indebtedness secured thereby and the prior lien thereon. The value of the assets pledged as collateral for the notes could be impaired in the future as a result of changing economic conditions, our failure to implement our business strategy, competition or other future trends.

It is difficult for us to determine the number of shares of Common Stock that we will be required to issue upon conversion of the Convertible Notes

Since the conversion price of our Convertible Notes and exercise price of the Purchaser warrants issued in the May 2017 debt financing is subject to reduction if we issue certain future securities at prices that are lower than the conversion price of the Convertible Notes or

exercise price of the Purchaser warrant, we cannot at this time determine the number of shares of Common Stock that we will be required to issue upon conversion of the Convertible Notes or exercise of the Purchaser warrants.

We may not be able to make the redemption payments required by the Convertible Notes.

Upon a Fundamental Transaction (as defined in the Convertible Notes issued in May 2017) or an Event of Default, we are required to offer to repurchase all outstanding Convertible Notes at various prices. The source of funds for that purchase of Convertible Notes will be our available cash or cash generated from our subsidiaries' operations or other potential sources, including borrowings, sales of assets or sales of equity. We cannot assure you that sufficient funds from such sources will be available at the time of any Fundamental Transaction or Event of Default to make required repurchases of Convertible Notes tendered. If the holders of the Convertible Notes exercise their right to require us to repurchase all of the notes upon a Fundamental Transaction, the financial effect of this repurchase could cause a default under our other indebtedness, even if the Fundamental Transaction itself would not cause a default. Accordingly, it is possible that we will not have sufficient funds at the time of a Fundamental Transaction or Event of Default to make the required repurchase of the Convertible Notes.

Conversion of our outstanding Convertible Notes and exercise of the outstanding Purchaser warrants will dilute the ownership interest of existing stockholders.

Any issuance by us of our common stock upon conversion of the outstanding Convertible notes or exercise of the outstanding Purchaser Warrants will dilute the equity ownership interest of existing stockholders, including holders who have received shares of our common stock upon prior conversion of Convertible Notes or exercise of Purchaser Warrants. Additionally, the Convertible Notes and Purchaser warrants include anti-dilution and "make whole" premium provisions that, if triggered, would result in an increase in the number of shares of our common stock issuable upon conversion of the Convertible notes or exercise of the Purchaser Warrants. Conversion of Convertible Notes or exercise of Purchaser Warrants in circumstances where these provisions have operated could have a significantly greater dilutive effect.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

None that have not been previously reported.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits

Exhibit	Description
4.1	Form of Note Issued to Investors (incorporated by reference as Exhibit 4.1 in the Registrant's Current Report on Form 8-K filed with the SEC on April 14, 2017(File No. 000-54748))
4.2	Form of Warrant Issued to Investors (incorporated by reference as Exhibit 4.2 in the Registrant's Current Report on Form 8-K filed with the SEC on April 14, 2017 (File No. 000-54748))
4.3	Senior Secured Convertible Note, dated May 15, 2017, issued by Icagen, Inc. (incorporated by reference as Exhibit 4.1 in the Registrant's Current Report on Form 8-K filed with the SEC on May 17, 2017(File No. 000-54748))
4.4	Senior Secured Convertible Note, dated May 15, 2017, issued by Icagen-T, Inc. (incorporated by reference as Exhibit 4.2 in the Registrant's Current Report on Form 8-K filed with the SEC on May 17, 2017 (File No. 000-54748))
10.1	Securities Purchase Agreement, dated May 15, 2017, by and among Icagen, Inc., Icagen-T, Inc., and GPB Debt Holdings II, LLC (incorporated by reference as Exhibit 10.1 in the Registrant's Current Report on Form 8-K filed with the SEC on May 17, 2017 (File No. 000-54748))
10.2	Parent Security and Pledge Agreement, dated May 15, 2017, by and among Icagen, Inc., each of the Parent's Subsidiaries named therein and GPB Debt Holdings II, LLC (in its capacity as collateral agent) (incorporated by reference as Exhibit 10.2 in the Registrant's Current Report on Form 8-K filed with the SEC on May 17, 2017(File No. 000-54748))
10.3	Icagen-T Security and Pledge Agreement, dated May 15, 2017, by and among Icagen, Inc., Icagen-T, Inc., each of their Subsidiaries named therein and GPB Debt Holdings II, LLC (in its capacity as collateral agent) (incorporated by reference as Exhibit 10.3 in the Registrant's Current Report on Form 8-K filed with the SEC on May 17, 2017(File No. 000-54748))
10.4	Guaranty of Obligations of Parent, dated May 15, 2017, by and among each of Icagen, Inc.'s Subsidiaries named therein and GPB Debt Holdings II, LLC (in its capacity as collateral agent) (incorporated by reference as Exhibit 10.4 in the Registrant's Current Report on Form 8-K filed with the SEC on May 17, 2017(File No. 000-54748))
10.5	Guaranty of Obligations of Icagen-T, dated May 15, 2017, by and among Icagen, Inc., each of Icagen-T, Inc.'s Subsidiaries named therein and GPB Debt Holdings II, LLC (in its capacity as collateral agent) (incorporated by reference as Exhibit 10.5 in the Registrant's Current Report on Form 8-K filed with the SEC on May 17, 2017(File No. 000-54748))
10.6	Warrant, dated May 15, 2017, issued by Icagen, Inc. (incorporated by reference as Exhibit 10.6 in the Registrant's Current Report on Form 8-K filed with the SEC on May 17, 2017(File No. 000-54748))
10.7	Subordinated Deed of Trust, Assignment of Rents, Fixture Filing and Security Agreement, dated May 15, 2017, by and among Icagen-T, Inc., GPB Debt Holdings II, LLC and the Trustee named therein (incorporated by reference as Exhibit 10.7 in the Registrant's Current Report on Form 8-K filed with the SEC on May 17, 2017(File No. 000-54748))
10.8	Confession of Judgment Affidavit in Support of Confession of Judgment (incorporated by reference as Exhibit 10.8 in the Registrant's Current Report on Form 8-K filed with the SEC on May 17, 2017(File No. 000-54748))
10.9	Settlement and Release Agreement, dated May 11, 2017, by and between the Company and Dentons US LLP (incorporated by reference as Exhibit 10.9 in the Registrant's Current Report on Form 8-K filed with the SEC on May 17, 2017(File No. 000-54748))
10.10	Settlement and Age Discrimination in Employment Act Release Agreement dated July 7, 2017, by and between Icagen, Inc. and Dr. Benjamin Warner (incorporated by reference to exhibit 10.1 in the Registrant's Current Report on Form 8-K filed with the SEC on July 11, 2017(File No. 000-54748))
10.11	Employment Agreement dated June 19, 2017 by and between Douglas Krafte (incorporated by reference to exhibit 10.2 in the Registrant's Current Report on Form 8-K filed with the SEC on June 21, 2017(File No. 000-54748))
10.12	Second Amendment to Asset Purchase and Collaboration Agreement by and between Pfizer Research Inc. and Icagen Inc.*
31.1	Certification of the Principal Executive Officer, Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
31.2	Certification of the Principal Financial Officer, Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.*
32.2	Certification of the Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act.*
32.2	Certification of the Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act.*
101.INS	XBRL Instance*
101.XSD	XBRL Schema*
101.PRE	XBRL Presentation*
101.CAL	XBRL Calculation*
101.DEF	XBRL Definition*
IOI.LAB	XBRL Label *

* Filed herewith.

SIGNATURES

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

ICAGEN, INC.

Date: August 16, 2017

By: /s/ Richard Cunningham
Richard Cunningham
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 16, 2017

By: /s/ Mark Korb
Chief Financial Officer
(Principal Financial Officer)

SECOND AMENDMENT TO ASSET PURCHASE AND COLLABORATION AGREEMENT

This Second Amendment (this “**Amendment**”), dated as of August 14, 2017 and effective as of May 31, 2017 (the “**Effective Date**”), to the Asset Purchase and Collaboration Agreement, dated as of June 26, 2015 and amended on July 13, 2016 (the “**Original Agreement**”), by and between Pfizer Research (NC), Inc. (f/k/a Icagen, Inc.), a Delaware corporation (“**Pfizer**” or the “**Seller**”), and Icagen Inc. (f/k/a XRpro Sciences, Inc.), a Delaware corporation (“**Icagen**” or the “**Buyer**”).

WHEREAS, Pfizer and Icagen desire to amend the Original Agreement in accordance with Section 11.2 thereof to defer a portion of the Earn Out Payments (as defined therein) until March 31, 2019;

NOW, THEREFORE, in consideration of the foregoing, and the mutual covenants contained herein, Buyer and Seller hereby agree as follows:

1. Amendments to the Original Agreement.

1.1. The last sentence of the definition of “Liquidity Event” included in Section 1.1 of the Original Agreement is hereby deleted. The definition of “Winding-Up Event” included in Section 1.1 of the Original Agreement is hereby deleted in its entirety.

1.2. Section 2.6(c) of the Original Agreement is hereby deleted in its entirety and replaced with the following:

“(c) In addition to the Upfront Purchase Price and the Research Revenue Milestone, beginning in calendar year 2017, Buyer shall pay to Seller quarterly earn out payments (“**Earn Out Payments**”, and together with the Upfront Purchase Price, the “**Purchase Price**”) equal to the greater of (i) 10% of Aggregate Revenue for the relevant quarter or (ii) \$250,000.00, up to an aggregate maximum of \$10 million in Earn Out Payments (the “**Maximum Earn Out Payment**”). Subject to Section 2.6(d), Earn Out Payments shall be payable within 60 days following the end of the applicable quarter (the “**Earn Out Due Date**”).”

1.2 Section 2.6 of the Original Agreement is hereby amended by adding the following clauses 2.6(d), 2.6(e) and 2.6(f):

“(d) With respect to each quarter ending on or before December 31, 2018, the Buyer may elect to defer payment of up to \$200,000 of the applicable Earn Out Payment until March 31, 2019 (a “**Deferred Payment**”). On or before March 31, 2019, the Buyer will pay Seller all Deferred Payments, together with accrued and unpaid interest. Interest will accrue daily on the amount of each Deferred Payment from the applicable Earn Out Due Date until such Deferred Payment is paid in full at a per annum interest rate equal to 12.5%. Interest shall be calculated based upon the actual number of days elapsed over a year of 360 days. Accrued interest on all Deferred Payments shall be paid quarterly in arrears on each Earn Out Due Date. Buyer may at any time prior to March 31, 2019 prepay in full the amount of all Deferred Payments, together with accrued and unpaid interest thereon, without premium or penalty. On March 31, 2019, the Deferred Payments and accrued and unpaid interest thereon will be immediately due and payable without further notice, demand or presentment for payment. To the extent Buyer fails to pay Seller any amounts when due, Buyer will reimburse Seller for all reasonable and actually incurred costs of enforcement and collection.

(e) Interest on any amount payable to Seller under this Section 2.6 that is not paid when due will bear interest at a default interest rate of 15% per annum, compounded monthly.

(e) Buyer's obligation to pay the Deferred Payments and accrued interest thereon to Seller in accordance with this Section 2.6 is absolute and unconditional. Buyer hereby waives any and all right of set-off or similar defenses or counterclaims with respect to the payment of amounts due to Seller under this Section 2.6 that Buyer may now or hereinafter have against the Seller or any other person or entity, including any right to set-off any indemnifiable Loss under Section 9.1 against such amounts."

1.3 Section 2.8 of the Original Agreement is hereby amended and restated as follows:

"Section 2.8 Acceleration of Earn Out Payments.

(a) If there is a Liquidity Event prior to the time that the Seller has received the Maximum Earn Out Payment, then upon the consummation of such Liquidity Event, Buyer (or its successor) shall pay the Seller an amount in cash equal to the lesser of: (i) 10% of the aggregate consideration payable to Buyer or its shareholders upon such Liquidity Event and (ii) the Earn Out Shortfall. If after giving effect to such payment, Seller has not received the Maximum Earn Out Payment, any successor of the Buyer shall, as a condition to the consummation of such Liquidity Event, unconditionally assume the Buyer's obligation to make additional Earn Out Payments with respect to such successor's revenue until Seller has been paid the Maximum Earn Out Payment.

(b) In the event that there is a Liquidity Event and the consideration paid in such Liquidity Event or the assets available for Distribution to Buyer's shareholders include any assets or consideration other than cash, then the value of such non-cash consideration or assets shall be the fair market value thereof as reasonably agreed by the Seller and the Board of Directors of the Buyer, in each case, acting in good faith; provided, however, that any securities traded on a national stock exchange or the Nasdaq Stock Market shall be valued at the average closing prices of the securities over the ten trading day period ending three trading days prior to the date such Liquidity Event is consummated. If the Seller and the Board of Directors of the Buyer are unable to reach an agreement, then the fair market value of such non-cash assets or consideration shall be determined by independent appraisal by an investment bank selected by the Buyer's Board of Directors and reasonably acceptable to the Seller. All costs of such appraisal shall be borne equally by the Seller and the Buyer. For the avoidance of doubt, any consideration or asset that is placed into escrow or is otherwise payable to Buyer or its shareholders subject to contingencies, shall be considered for purposes of the calculation of the amount payable to Seller pursuant to Section 2.8(a) when such consideration is actually paid or released to Buyer or its shareholders.

(c) If there is an Insolvency Event prior to the time that Seller has received the Maximum Earn Out Payment, then upon such Insolvency Event, the full amount of any Earn Out Shortfall will be immediately due and payable without further notice, demand or presentment for payment.

For purposes of this Section 2.8:

“**Earn Out Shortfall**” means the difference, if any, between the Maximum Earn Out Payment and the amount of all Earn Out Payments actually paid to Seller.

“**Insolvency Event**” means: (i) the Buyer or any of its Affiliates fails to pay when due any obligation of more than \$500,000 in favor of any person and such default is not waived by such creditor in writing within thirty (30) days of the occurrence of such default and such default permits the creditor thereto to declare a default or otherwise accelerate amounts due thereunder; (ii) the Buyer suspends, in any material respect, operations of its business; (iii) the institution of any bankruptcy, receivership, insolvency, reorganization or other similar proceedings by or against the Buyer or any of its Affiliates under any bankruptcy, insolvency, or other similar law now or hereinafter in effect, including any section or chapter of the United States Bankruptcy Code, as amended or under any similar laws or statutes of the United States or any state thereof (the “**Bankruptcy Code**”), where in the case of involuntary proceedings such proceedings have not been dismissed or discharged within sixty (60) days after they are instituted, (iv) the insolvency or making of an assignment for the benefit of creditors or the admittance by the Buyer or any of its Affiliates of any inability to pay debts as they mature, (v) the institution of any reorganization, arrangement or other readjustment of debt plan of Buyer or any of its Affiliates with its creditors generally not involving the Bankruptcy Code such that without such action the Buyer would likely file for bankruptcy protection, (d) appointment of a receiver for all or substantially all of the assets of Buyer or any of its Affiliates, or (e) any corporate action taken by the board of directors of Buyer or any of its Affiliates in furtherance of any of the foregoing actions.”

2. Miscellaneous.

2.1 Defined Terms. Capitalized terms used in this Amendment that are not otherwise defined herein shall have the meanings such terms are given in the Original Agreement.

2.2 Full Force and Effect. This Amendment shall be effective as of the Effective Date and the Original Agreement will be deemed to have been amended as of such date. The provisions of the Original Agreement, as amended by this Amendment, shall remain in full force and effect. Where the Original Agreement is not expressly amended, the terms of the Original Agreement will remain in force.

2.3 Entire Agreement. The Original Agreement as amended by this Amended constitutes the entire agreement, both written and oral, between the parties with respect to the subject matter hereof, and any and all prior agreements with respect to the subject matter hereof, either written or oral, expressed or implied, are superseded hereby, merged and canceled, and are null and void and of no effect.

2.4 Counterparts. This Amendment may be executed in one or more counterparts, each of which will be an original and all of which together will constitute one instrument.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties have executed or caused this Amendment to be executed as of August 14, 2017.

PFIZER RESEARCH (NC), INC.

By: /s/ Andrew J. Muratore
Name: Andrew J. Muratore
Title: Vice President and Secretary

ICAGEN, INC.

By: /s/ Richard Cunningham
Name: Richard Cunningham
Title: President and CEO

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
AND PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Richard Cunningham, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Icagen, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13-a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financing reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 16, 2017

By: /s/ Richard Cunningham
Richard Cunningham
President and Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION OF CHIEF FINANCIAL OFFICER
AND PRINCIPAL FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 302 OF
THE SARBANES-OXLEY ACT OF 2002**

I, Mark Korb, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Icagen, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13-a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financing reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 16, 2017

By: /s/ Mark Korb
Chief Financial Officer
(Principal Financial Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Icagen, Inc. (the "Registrant") on Form 10-Q for the period ending June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard Cunningham, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section. 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: August 16, 2017

By: /s/ Richard Cunningham
Richard Cunningham
President and Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Icagen, Inc. (the "Registrant") on Form 10-Q for the period ending June 30, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Mark Korb, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section. 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: August 16, 2017

By: /s/ Mark Korb
Chief Financial Officer
(Principal Financial Officer)