

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 **September 30, 2018**

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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit 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

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging growth company

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

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 November 16, 2018 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, 2017 filed with the SEC on April 17, 2018. 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.

ICAGEN, INC.

FORM 10-Q

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PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

ICAGEN, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS

	September 30, 2018 (unaudited)	December 31, 2017
Assets		
Current Assets		
Cash	\$ 2,954,230	\$ 2,763,596
Accounts receivable, net	1,898,113	1,739,895
Inventory	47,216	73,885
Prepaid expenses and other current assets	216,084	213,367
Total Current Assets	5,115,643	4,790,743
Non-Current Assets		
Intangibles, net	7,258,333	7,427,071
Plant and equipment, net	1,706,777	2,181,753
Deposits	238,987	238,987
Total Non-Current Assets	9,204,097	9,847,811
Total Assets	\$ 14,319,740	\$ 14,638,554
Liabilities and Stockholders' Deficit		
Current Liabilities		
Accounts payable	\$ 2,076,091	\$ 1,471,645
Other payables and accrued expenses	1,923,827	2,440,442
Legal settlement accrual	10,000	493,333
Deferred revenue	130,244	219,828
Deferred purchase consideration	2,200,000	206,458
Bridge notes payable, net	398,833	-
Loans payable	56,436	139,394
Dividends payable	140,165	-
Total Current Liabilities	6,935,596	4,971,100
Non-Current Liabilities		
Deferred purchase consideration, net	6,306,971	8,232,664
Loans payable	26,740	71,296
Term loan payable, net	12,593,700	-
Convertible loan payable, net	-	5,861,794
Derivative liability	5,229,068	4,168,964
Total Non-Current Liabilities	24,156,479	18,334,718
Total Liabilities	31,092,075	23,305,818
Commitment and contingencies	-	-
Stockholders' Deficit		
Preferred stock, \$0.001 par value, 10,000,000 shares authorized, 400,000 shares designated as Series A Preferred Stock and unissued, 3,000,000 shares designated as Series B Preferred stock and unissued, 1,142,856 shares designated as Series C Preferred stock and 5,457,144 undesignated and unissued Series C Preferred Stock, \$0.001 par value, 1,142,856 shares authorized, 799,988 and 0 shares issued and outstanding as of September 30, 2018 and December 31, 2017 (Liquidation preference \$4,199,937)	800	-
Common stock, \$0.001 par value; 50,000,000 shares authorized, 6,720,107 shares issued and 6,393,107 outstanding as of September 30, 2018 and December 31, 2017	6,392	6,392
Additional paid-in-capital	26,598,605	25,084,252
Treasury stock, at cost (327,000 shares of common stock as of September 30, 2018 and December 31, 2017)	(237)	(237)
Accumulated deficit	(43,377,895)	(33,757,671)
Total Stockholder's Deficit	(16,772,335)	(8,667,264)
Total Liabilities and Stockholders' Deficit	\$ 14,319,740	\$ 14,638,554

See notes to the unaudited condensed consolidated financial statements

ICAGEN, INC.

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

	Three months ended September 30, 2018	Three months ended September 30, 2017	Nine months ended September 30, 2018	Nine months ended September 30, 2017
Sales	\$ 3,007,928	\$ 5,421,965	\$ 10,465,046	\$ 17,016,462
Cost of sales	<u>1,377,571</u>	<u>2,751,087</u>	<u>6,898,815</u>	<u>8,772,433</u>
Gross profit	1,630,357	2,670,878	3,566,231	8,244,029
Operating expenses:				
Selling, general and administrative expenses	2,382,648	3,448,053	8,023,292	10,360,873
Depreciation	364,712	368,217	1,190,442	1,211,122
Amortization	56,246	56,246	168,738	168,738
Total Operating expenses	<u>2,803,606</u>	<u>3,872,516</u>	<u>9,382,472</u>	<u>11,740,733</u>
Operating loss	<u>(1,173,249)</u>	<u>(1,201,638)</u>	<u>(5,816,241)</u>	<u>(3,496,704)</u>
Other income (expense)				
Other income	118,834	473	125,218	500,699
Gain on extinguishment of debt	495,783	-	495,783	-
Other expense	(572,524)	-	(572,524)	-
Interest expense	(815,238)	(730,677)	(2,366,170)	(1,735,556)
Derivative liability movement	(300,665)	201,459	(1,346,202)	279,178
Total other expense	<u>(1,073,810)</u>	<u>(528,745)</u>	<u>(3,663,895)</u>	<u>(955,679)</u>
Net loss before income tax	(2,247,059)	(1,730,383)	(9,480,136)	(4,452,383)
Income tax	-	-	-	-
Net loss	<u>(2,247,059)</u>	<u>(1,730,383)</u>	<u>(9,480,136)</u>	<u>(4,452,383)</u>
Preferred stock dividend	(80,548)	-	(140,088)	-
Net loss available to common stock holders	\$ (2,327,607)	\$ (1,730,383)	\$ (9,620,224)	\$ (4,452,383)
Net Loss Per Share - Basic and Diluted	<u>\$ (0.36)</u>	<u>\$ (0.27)</u>	<u>\$ (1.50)</u>	<u>\$ (0.70)</u>
Weighted Average Number of Shares Outstanding - Basic and Diluted	<u>6,393,107</u>	<u>6,393,107</u>	<u>6,393,107</u>	<u>6,393,107</u>

See notes to the unaudited condensed consolidated financial statements

ICAGEN, INC.

UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

	Nine months ended September 30, 2018	Nine months ended September 30, 2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (9,480,136)	\$ (4,452,383)
Adjustment to reconcile net loss to net cash used in operating activities:		
Depreciation expense	1,190,442	1,211,122
Amortization expense	168,738	168,738
Stock based compensation expense	457,333	480,474
Amortization of debt discount	1,017,408	786,339
Gain on extinguishment of debt	(495,783)	-
Derivative liability movements	1,346,202	(279,178)
Deferred purchase consideration unearned by vendor	-	(500,000)
Imputed interest on acquisition of Icagen assets	224,307	432,326
Changes in operating assets and liabilities		
Accounts receivable	(158,218)	(570,066)
Inventory	26,669	(96,063)
Prepaid expenses and other current assets	(2,717)	(60,883)
Accounts payable	604,446	(517,908)
Deferred subsidy	-	(3,200,000)
Deferred revenues	(89,584)	(343,725)
Other payables and accrued expenses	(1,006,331)	(397,095)
CASH USED IN OPERATING ACTIVITIES	(6,197,224)	(7,338,302)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Payment of deferred purchase consideration	(150,000)	(100,000)
Purchase of plant and equipment	(715,466)	(791,156)
Purchase of intangibles	-	(153,164)
Proceeds on assets held for resale	-	20,381
NET CASH USED IN INVESTING ACTIVITIES	(865,466)	(1,023,939)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from term loan	15,250,000	-
Proceeds from convertible loan	-	9,600,000
Repayment of convertible loan	(10,000,000)	-
Proceeds from bridge notes	500,000	1,500,000
Repayment of bridge notes	-	(1,500,000)
Capital raising fee	(962,162)	-
Fees paid on extinguishment of debt	(207,000)	-
Proceeds from sale of Series C Preferred stock	2,800,000	-
Proceeds from asset financing	-	157,766
Repayment of Asset financing	(127,514)	(309,210)
NET CASH PROVIDED BY FINANCING ACTIVITIES	7,253,324	9,448,556
NET INCREASE IN CASH	190,634	1,086,315
CASH AT BEGINNING OF PERIOD	2,763,596	4,938,948
CAST AT END OF PERIOD	\$ 2,954,230	\$ 6,025,263
CASH PAID FOR INTEREST AND TAXES:		
Cash paid for income taxes	\$ -	\$ -
Cash paid for interest	\$ 1,055,426	\$ 400,877
NON-CASH INVESTING AND FINANCING ACTIVITIES		
Value of warrants issued concurrent with Series C Preferred shares	\$ 1,858,663	\$ -
Value of warrants issued concurrent with bridge notes	\$ 116,485	\$ 330,353
Value of warrants issued on term debt	\$ 1,746,065	\$ -
Extinguishment of derivative liability and unamortized debt discount on convertible note	\$ 3,890,826	\$ -
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 of the Company is in Durham, North Carolina. The Company was incorporated in November 2003.

2. ACCOUNTING POLICIES AND ESTIMATES

General

The (a) unaudited condensed consolidated balance sheets as of September 30, 2018, which have been derived from the unaudited condensed consolidated financial statements, and as of December 31, 2017, which have been derived from audited consolidated financial statements, and (b) the unaudited interim condensed consolidated 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 months and nine months ended September 30, 2018 are not necessarily indicative of results that may be expected for the year ending December 31, 2018. 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, 2017, filed with the Securities and Exchange Commission (“SEC”) on April 17, 2018.

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 intercompany 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
Caldera Discovery, Inc. - Wholly owned subsidiary
XRPro Sciences, Inc. - Wholly owned subsidiary

The preparation of these unaudited condensed consolidated financial statements in accordance with US GAAP requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. The Company continually evaluates its estimates, including those related to bad debts and recovery of long-lived assets. The Company bases its estimates on historical experience and on various other assumptions that it believes 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 the Company’s reported amounts of revenues, expenses, assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions. The Company believes the following critical accounting policies affect its 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 a subsidiary of Pfizer, Inc., Icagen, and assumptions used in assessing impairment of long-term assets, the assumptions used in determining percentage of completion on its long-term contracts, and the assumptions used to calculate fair value of warrants and options granted, in addition to assumptions used to calculate the value of the derivative liability.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

2. ACCOUNTING POLICIES AND ESTIMATES (continued)

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 \$2,290,537 that are not covered by the FDIC as of September 30, 2018.

Concentration of major customers

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

The Company derived 71.0% of its services revenue from four major customers during the nine months ended September 30, 2018. During the nine months ended September 30, 2017, the Company derived 77.5% of its revenue from three major customers. The Company continues to expand its customer base of major customers and partners.

	<u>Three months ended</u>		<u>Nine months ended</u>	
	<u>September 30,</u> <u>2018</u>	<u>September 30,</u> <u>2017</u>	<u>September 30,</u> <u>2018</u>	<u>September 30,</u> <u>2017</u>
Services revenue	\$ 3,007,928	\$ 3,021,965	\$ 10,465,046	\$ 9,495,718
Subsidy revenue	-	2,400,000	-	7,200,000
Government grants	-	-	-	320,744
	<u>\$ 3,007,928</u>	<u>\$ 5,421,965</u>	<u>\$ 10,465,046</u>	<u>\$ 17,016,462</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 uncollectible 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 September 30, 2018 and December 31, 2017 was \$0 and \$0, respectively. The amount charged to bad debt provision for the three and nine months ended September 30, 2018 and 2017 was \$0 and \$0, respectively.

Inventory

Inventory consists of laboratory consumables.

The Company values inventory at the lower of cost or net realizable value applied on a first-in, first-out basis. The Company identifies and writes down its excess and obsolete inventory to net realizable value based on usage forecasts, order volume and inventory aging.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

2. ACCOUNTING POLICIES AND ESTIMATES (continued)

Revenue recognition

The Company's revenue recognition policy is consistent with the requirements of Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) 606, Revenue.

The Company has analyzed its revenue transactions pursuant to ASC 606, Revenue, and it has no material impact as a result of the transition from ASC 605 to 606. The Company's revenues are recognized when control of the promised services are transferred to a customer, in an amount that reflects the consideration that the Company expects to receive in exchange for those services. The Company derives its revenues from the sale of its services, as defined below. The Company applies the following five steps in order to determine the appropriate amount of revenue to be recognized as it fulfills its obligations under each of its revenue transactions:

- i. identify the contract with a customer;
- ii. identify the performance obligations in the contract;
- iii. determine the transaction price;
- iv. allocate the transaction price to performance obligations in the contract; and
- v. recognize revenue as the performance obligation is satisfied.

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 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.

In the prior year, the Company had received certain deferred subsidy revenue which was 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 was 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 its 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)

Net income (loss) per Share

Basic net income (loss) per share is computed on the basis of the weighted average number of common stock outstanding during the period.

Diluted net income (loss) per share is computed on the basis of the weighted average number of common stock and common stock equivalents outstanding. Dilutive securities having an anti-dilutive effect on diluted net income (loss) per share are excluded from the calculation.

Dilution is computed by applying the treasury stock method for options and warrants. Under this method, “in-the money” options and warrants are assumed to be exercised at the beginning of the period (or at the time of issuance, if later), and as if funds obtained thereby were used to purchase common stock at the average market price during the period. Dilution is computed by applying the if-converted method for convertible preferred stocks. Under this method, convertible preferred stock is assumed to be converted at the beginning of the period (or at the time of issuance, if later), and preferred dividends (if any) will be added back to determine income applicable to common stock. The shares issuable upon conversion will be added to the weighted average number of common stock outstanding. Conversion will be assumed only if it reduces earnings per share (or increases loss per share).

Fair value of financial instruments

The Company adopted the guidance of Accounting Standards Codification (“ASC”) 820 for fair value measurements which clarifies the definition of fair value, prescribes methods for measuring fair value, and establishes a fair value hierarchy to classify the inputs used in measuring fair value as follows:

Level 1-Inputs are unadjusted quoted prices in active markets for identical assets or liabilities available at the measurement date.

Level 2-Inputs are unadjusted quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, inputs other than quoted prices that are observable, and inputs derived from or corroborated by observable market data.

Level 3-Inputs are unobservable inputs which reflect the reporting entity’s own assumptions on what assumptions the market participants would use in pricing the asset or liability based on the best available information.

The carrying amounts reported in the balance sheets for cash, accounts receivable, other current assets, other assets, accounts payable, accrued liabilities, and notes payable, approximate fair value due to the relatively short period to maturity for these instruments. The Company identified derivative liabilities relating to convertible debt instruments and certain variably priced warrants which are required to be presented on the balance sheets at fair value in accordance with the accounting guidance.

ASC 825-10 “*Financial Instruments*” allows entities to voluntarily choose to measure certain financial assets and liabilities at fair value (fair value option). The fair value option may be elected on an instrument-by-instrument basis and is irrevocable, unless a new election date occurs. If the fair value option is elected for an instrument, unrealized gains and losses for that instrument should be reported in earnings at each subsequent reporting date. The Company elected to apply the fair value option to derivative liabilities arising on convertible debt instruments and certain variably priced warrants.

Beneficial conversion feature of convertible notes payable

The Company accounts for convertible notes payable in accordance with guidelines established by the FASB ASC Topic 470-20, “Debt with Conversion and Other Options”. The beneficial conversion feature of a convertible note is normally characterized as the convertible portion or feature of certain notes payable that provide a rate of conversion that is below market value or in-the-money when issued. The Company records a beneficial conversion feature related to the issuance of a convertible note when issued and also records the estimated fair value of any warrants issued with those convertible notes. The beneficial conversion features that are contingent upon the occurrence of a future event are recorded when the contingency is resolved.

The beneficial conversion feature of a convertible note is measured by first allocating a portion of the note’s proceeds to any warrants, if applicable, as a discount on the carrying amount of the convertible on a relative fair value basis. The discounted face value is then used to measure the effective conversion price of the note. The effective conversion price and the market price of the Company’s common stock are used to calculate the intrinsic value of the conversion feature. The intrinsic value is recorded in the financial statements as a debt discount from the face amount of the note and such discount is amortized over the expected term of the convertible note (or to the conversion date of the note, if sooner) and is charged to amortization of debt discount on the Company’s consolidated statement of operations. The Company also records, when necessary, deemed dividends for the intrinsic value of conversion options embedded in preferred shares based upon the differences between the fair value of the underlying common stock at the commitment date of the preferred shares transaction and the effective conversion price embedded in the preferred shares.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

2. ACCOUNTING POLICIES AND ESTIMATES (continued)

Derivative Liabilities

The Company has derivative financial instruments as of September 30, 2018 and December 31, 2017.

ASC 815 generally provides three criteria that, if met, require companies to bifurcate conversion options from their host instruments and account for them as free standing derivative financial instruments. These three criteria include circumstances in which (a) the economic characteristics and risks of the embedded derivative instrument are not clearly and closely related to the economic characteristics and risks of the host contract, (b) the hybrid instrument that embodies both the embedded derivative instrument and the host contract is not re-measured at fair value under otherwise applicable generally accepted accounting principles with changes in fair value reported in earnings as they occur and (c) a separate instrument with the same terms as the embedded derivative instrument would be considered a derivative instrument subject to the requirements of ASC 815. ASC 815 also provides an exception to this rule when the host instrument is deemed to be conventional, as described.

The accounting treatment of derivative financial instruments requires that the Company record the embedded conversion option and warrants at their fair values as of the inception date of the agreement and at fair value as of each subsequent balance sheet date. Any change in fair value is recorded as non-operating, non-cash income or expense for each reporting period at each balance sheet date. The Company reassesses the classification of its derivative instruments at each balance sheet date. If the classification changes as a result of events during the period, the contract is reclassified as of the date of the event that caused the reclassification.

The Black-Scholes option valuation model was used to estimate the fair value of the conversion options. The model includes subjective input assumptions that can materially affect the fair value estimates. The expected volatility is estimated based on the most recent historical period of time, of other comparative securities, equal to the weighted average life of the options.

Conversion options related to debt instruments are recorded as debt discount and are amortized as interest expense over the life of the underlying debt instrument using effective interest method.

Conversion options related to equity instruments are recorded as a deemed dividend at the grant date of the equity instrument.

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 and development salaries, included in Selling, general and administrative expenses during the three and nine months ended September 30, 2018 was \$696,823 and \$2,232,601 and for the three and nine months ended September 30, 2017 was \$925,533 and \$2,412,153 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, its board members and members of the immediate families of principal owners of the Company. Parties are also considered related parties 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.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

2. ACCOUNTING POLICIES AND ESTIMATES (continued)

Recent accounting pronouncements

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820) Changes to the Disclosure Requirements for Fair Value Measurement.

The amendments in this Update modify the disclosure requirements on fair value measurements in Topic 820, Fair Value Measurement.

Removals

The following disclosure requirements were removed from Topic 820:

1. The amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy
2. The policy for timing of transfers between levels
3. The valuation processes for Level 3 fair value measurements
4. For nonpublic entities, the changes in unrealized gains and losses for the period included in earnings for recurring Level 3 fair value measurements held at the end of the reporting period.

Modifications

The following disclosure requirements were modified in Topic 820:

1. In lieu of a rollforward for Level 3 fair value measurements, a nonpublic entity is required to disclose transfers into and out of Level 3 of the fair value hierarchy and purchases and issues of Level 3 assets and liabilities.
2. For investments in certain entities that calculate net asset value, an entity is required to disclose the timing of liquidation of an investee's assets and the date when restrictions from redemption might lapse *only* if the investee has communicated the timing to the entity or announced the timing publicly.
3. The amendments clarify that the measurement uncertainty disclosure is to communicate information about the uncertainty in measurement as of the reporting date.

Additions

The following disclosure requirements were added to Topic 820; however, the disclosures are not required for nonpublic entities:

1. The changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period
2. The range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. For certain unobservable inputs, an entity may disclose other quantitative information (such as the median or arithmetic average) in lieu of the weighted average if the entity determines that other quantitative information would be a more reasonable and rational method to reflect the distribution of unobservable inputs used to develop Level 3 fair value measurements.

In addition, the amendments eliminate *at a minimum* from the phrase *an entity shall disclose at a minimum* to promote the appropriate exercise of discretion by entities when considering fair value measurement disclosures and to clarify that materiality is an appropriate consideration of entities and their auditors when evaluating disclosure requirements.

The amendments in this Update are effective for all entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. All other amendments should be applied retrospectively to all periods presented upon their effective date. Early adoption is permitted upon issuance of this Update. An entity is permitted to early adopt any removed or modified disclosures upon issuance of this Update and delay adoption of the additional disclosures until their effective date.

The impact of this ASU on the Company's consolidated financial statements is not expected to be material.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

2. ACCOUNTING POLICIES AND ESTIMATES (continued)

Recent accounting pronouncements (continued)

In August 2018, the FASB issued ASU 2018-15, Intangibles – Goodwill and Other Internal – Use Software (Subtopic 350-40).

The amendments in this Update align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by the amendments in this Update.

The amendments in this Update require an entity (customer) in a hosting arrangement that is a service contract to follow the guidance in Subtopic 350-40 to determine which implementation costs to capitalize as an asset related to the service contract and which costs to expense. Costs to develop or obtain internal-use software that cannot be capitalized under Subtopic 350-40, such as training costs and certain data conversion costs, also cannot be capitalized for a hosting arrangement that is a service contract. Therefore, an entity (customer) in a hosting arrangement that is a service contract determines which project stage (that is, preliminary project stage, application development stage, or post-implementation stage) an implementation activity relates to. Costs for implementation activities in the application development stage are capitalized depending on the nature of the costs, while costs incurred during the preliminary project and post-implementation stages are expensed as the activities are performed.

The amendments in this Update also require the entity (customer) to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement. The term of the hosting arrangement includes the non-cancellable period of the arrangement plus periods covered by (1) an option to extend the arrangement if the customer is reasonably certain to exercise that option, (2) an option to terminate the arrangement if the customer is reasonably certain not to exercise the termination option, and (3) an option to extend (or not to terminate) the arrangement in which exercise of the option is in the control of the vendor. The entity also is required to apply the existing impairment guidance in Subtopic 350-40 to the capitalized implementation costs as if the costs were long-lived assets. The amendments in this Update clarify that the capitalized implementation costs related to each module or component of a hosting arrangement that is a service contract are also subject to the guidance in Subtopic 360-10 on abandonment.

The amendments in this Update also require the entity to present the expense related to the capitalized implementation costs in the same line item in the statement of income as the fees associated with the hosting element (service) of the arrangement and classify payments for capitalized implementation costs in the statement of cash flows in the same manner as payments made for fees associated with the hosting element. The entity is also required to present the capitalized implementation costs in the statement of financial position in the same line item that a prepayment for the fees of the associated hosting arrangement would be presented.

The amendments in this Update are effective for public business entities for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. For all other entities, the amendments in this Update are effective for annual reporting periods beginning after December 15, 2020, and interim periods within annual periods beginning after December 15, 2021. Early adoption of the amendments in this Update is permitted, including adoption in any interim period, for all entities.

The amendments in this Update should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption.

The impact of this ASU on the Company's consolidated financial statements is not expected to be material.

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 consolidated financial statements upon adoption.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

3. GOING CONCERN

As shown in the accompanying unaudited condensed consolidated financial statements, the Company incurred a net loss of \$(9,480,136) for the nine months ended September 30, 2018 and \$(4,452,383) for the nine months ended September 30, 2017, respectively. As of the nine months ended September 30, 2018, and the year ended December 31, 2017 the Company had accumulated deficits of \$43,377,895 and \$33,757,671, respectively. The Company's working capital deficit increased from \$(180,357) as of December 31, 2017 to \$(1,819,953) as of September 30, 2018. The Company's working capital is insufficient to meet its short-term cash requirements and fund any future operating losses. 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 Sanofi U.S. Services, Inc. ("Sanofi") and an indirect subsidiary of Pfizer, Inc. and the continued promotion of its services to existing and potential customers is to generate sufficient revenues to cover its anticipated expenses. The Company closed 4 tranches of a preferred stock equity raise from April 2018 through August 2018, raising an aggregate of \$2,800,000. On August 13, 2018, the Company closed the first tranche of its best efforts offering of fifty units, each unit consisting of a note in the principal amount of \$10,000 and a warrant to purchase 1,500 shares of common stock at an exercise price of \$3.50 per share, raising an additional \$500,000. On August 31, 2018, the Company and its wholly owned subsidiary, Icagen-T, Inc., each entered into a Credit Agreement with Perceptive Credit Holdings II, LP whereby aggregate gross proceeds of \$15,250,000 were advanced to the Company. The proceeds were used for general working capital purposes and to repay the convertible notes in the aggregate principal amount of \$10,000,000 advanced to the Company and Icagen-T on May 15, 2017. The factors mentioned above raise substantial doubt about our ability to continue as a going concern for the next twelve month period from November 19, 2018, 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 additional issuances of equity or other potential financing 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. The Company is economically dependent upon future capital or financing to fund ongoing operations.

4. INVENTORY

Inventory represents the value of certain consumables utilized in the Company's biological screening processes. These consumables are purchased in bulk and expensed as they are utilized.

5. PREPAID EXPENSES AND OTHER CURRENT ASSETS

	<u>September 30, 2018</u>	<u>December 31, 2017</u>
Prepaid insurance	\$ 60,061	\$ 75,774
Prepaid maintenance	90,036	129,260
Prepaid property tax	62,237	-
Prepaid rent	-	2,500
Prepaid subscriptions	3,750	5,833
	<u>\$ 216,084</u>	<u>\$ 213,367</u>

6. INTANGIBLE ASSETS

Intangible assets consist of the following:

	<u>September 30, 2018</u>		<u>December 31, 2017</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	\$ 5,153,664
Discovery platform	1,450,500	(471,412)	979,088	1,087,875
Trade names and trademarks	637,500	-	637,500	637,500
Assembled workforce	282,500	(91,812)	190,688	211,875
Patents	972,000	(674,607)	297,393	336,157
	<u>\$ 8,496,164</u>	<u>\$ (1,237,831)</u>	<u>\$ 7,258,333</u>	<u>\$ 7,427,071</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 September 30, 2018 and 2017, and \$168,738 for each of the nine months ended September 30, 2018 and 2017, respectively.

Amortization expense for future periods is summarized as follows:

	Amount
2018	\$ 56,246
2019	224,984
2020	224,984
2021	224,984
2022 and thereafter	735,971
Total	\$ 1,467,169

7. PLANT AND EQUIPMENT

Plant and equipment consists of the following:

	September 30, 2018		December 31, 2017	
	Cost	Amortization and Impairment	Net book value	Net book value
Laboratory equipment	\$ 2,612,194	\$ (1,296,841)	\$ 1,315,353	\$ 1,396,617
Computer software	1,860,305	(1,518,489)	341,816	716,860
Computer equipment	96,673	(58,965)	37,708	43,816
Leasehold improvements	38,974	(27,074)	11,900	24,460
	\$ 4,608,146	\$ (2,901,369)	\$ 1,706,777	\$ 2,181,753

Depreciation expense for the three months ended September 30, 2018 and 2017 was \$364,712 and \$368,217, respectively, and \$1,190,442 and \$1,211,122 for the nine months ended September 30, 2018 and 2017, respectively.

8. OTHER PAYABLE AND ACCRUED EXPENSES

Other payables and accrued expenses consist of the following:

	September 30, 2018	December 31, 2017
Bonus and vacation accrual	\$ 910,471	\$ 1,871,488
Payroll liabilities	42,159	44,858
Severance cost accrual	417,208	262,966
Interest accrual	176,823	108,333
Other	377,166	152,797
	\$ 1,923,827	\$ 2,440,442

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

During the quarter ended September 30, 2018, the Company restructured its management team and streamlined operations at its Tucson site, thereby reducing head count by a total of nine people. The Company provided severance packages to these employees based on written agreements entered into. The severance costs will be incurred over the next four months.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

9. LEGAL SETTLEMENT LIABILITIES

The legal settlement liabilities consists of the following:

	September 30, 2018	December 31, 2017
Settlement liability accruals		
Dentons dispute	\$ -	\$ 400,000
Eisenschenk matter	-	83,333
Other	10,000	10,000
	10,000	493,333
Disclosed as follows:		
Short-term portion	10,000	493,333
	\$ 10,000	\$ 493,333

The Company has settled all outstanding legal matters with the remaining \$10,000 representing a contingency accrual.

10. DEFERRED REVENUE

Deferred revenue represents payments received in advance from customers in terms of master service agreements entered into with them. Revenue is recognized as and when the work is performed.

11. 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 March 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 difference between 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 \$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 year ended December 31, 2017.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

11. DEFERRED PURCHASE CONSIDERATION (continued)

Deferred purchase consideration is disclosed as follows:

	<u>September 30,</u> <u>2018</u>	<u>December 31,</u> <u>2017</u>
Deferred purchase consideration		
Opening balance	\$ 9,856,458	\$ 10,500,000
Reversal of unearned purchase consideration	-	(500,000)
Interest due on deferred purchase consideration	85,005	25,578
Repayment	(228,963)	(169,120)
Closing balance	<u>9,712,500</u>	<u>9,856,458</u>
Present value discount on future payments		
Opening balance	(1,417,336)	(1,712,689)
Imputed interest expense	224,307	300,511
Fair value adjustments	-	(5,158)
Closing balance	<u>(1,193,029)</u>	<u>(1,417,336)</u>
Deferred purchase consideration, net	<u>8,519,471</u>	<u>8,439,122</u>
Disclosed as follows:		
Short-term portion	2,200,000	206,458
Interest disclosed under other payables	12,500	-
Long-term portion	6,306,971	8,232,664
Deferred purchase consideration, net	<u>\$ 8,519,471</u>	<u>\$ 8,439,122</u>

12. BRIDGE NOTES

On August 13, 2018, the Company closed the first tranche of its note and warrant offering of a maximum of one hundred fifty (150) units and entered into a Securities Purchase Agreement (the "Purchase Agreement") with four accredited investors, which included a trust of which one member of the Company's Board of Directors is the trustee and two other members of the Board of Directors (the "Purchasers"), pursuant to which the Company issued to the Purchasers an aggregate of fifty (50) units, at a purchase price of \$10,000 per unit, each unit consisting of: (i) the Company's 10% Subordinated Promissory Note in the principal amount of \$10,000 due on the earlier of: (x) the date that is twelve (12) months after its issue date or (y) the Company's receipt of the proceeds of funding from its next collaboration/partnership (the "Note") and (ii) a five year warrant to purchase 1,500 shares of common stock of the Company for each \$10,000 Note investment of the Company at an exercise price of \$3.50 per share (the "Warrant"). An aggregate of \$500,000 in principal amount of Notes and Warrants to purchase an aggregate of 75,000 shares of common stock were sold at the closing. The gross cash proceeds to the Company from the sale of the fifty (50) units was \$500,000.

The Warrants also contains certain anti-dilution provisions that apply in connection with any stock split, stock dividend, stock combination, recapitalization or similar transaction.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

12. BRIDGE NOTES (continued)

The movement on bridge notes is as follows:

	<u>September 30, 2018</u>	<u>December 31, 2017</u>
Bridge note liability		
Bridge notes raised	\$ 500,000	\$ 1,500,000
Repayment	-	(1,500,000)
Closing balance	<u>500,000</u>	<u>-</u>
Discount on bridge notes		
Fair value of warrants issued	(116,485)	(330,353)
Amortization of bridge note discount	15,318	330,353
Closing balance	<u>(101,167)</u>	<u>-</u>
Bridge notes, net	<u>\$ 398,833</u>	<u>\$ -</u>
Disclosed as follows:		
Short-term portion	<u>\$ 398,833</u>	<u>\$ -</u>

13. LOANS PAYABLE

Loans payable consist of the following:

	<u>September 30, 2018</u>	<u>December 31, 2017</u>
Asset purchase arrangements	<u>\$ 83,176</u>	<u>\$ 210,690</u>
Disclosed as follows:		
Short-term portion	56,436	139,394
Long-term portion	26,740	71,296
	<u>\$ 83,176</u>	<u>\$ 210,690</u>

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

13. LOANS PAYABLE (continued)

Future principal payments under loans payable are as follows:

	<u>Amount</u>
Within 1 year	\$ 56,436
Within 1 - 2 years	26,740
	<u>\$ 83,176</u>

Asset Purchase arrangements

The Company acquired laboratory equipment on August 11, 2017 for a purchase consideration of \$59,320 in terms of a deferred purchase arrangement whereby a deposit of \$5,932 was paid and twenty-four monthly installments of \$2,472 will be paid commencing on September 11, 2017. The installments bear interest at an effective rate of 10.33% per annum. The Company owed \$26,103 as of September 30, 2018.

The Company acquired laboratory software during September 2017 for a purchase consideration of \$98,446 in terms of a deferred purchase arrangement whereby a deposit of \$10,546 was paid and the balance payable in thirty-five monthly installments of \$2,750 each, which commenced on September 30, 2017. The installments bear interest at an effective rate of 6.15% per annum. The Company owed \$57,073 as of September 30, 2018.

14. 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.

In addition, any time after issuance, so long as no Event of Default has occurred and/or is continuing, each of the Company and Icagen-T, had 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 thereunder.

On August 31, 2018 the Company raised an aggregate of \$15,250,000 in principal amount of term loans from a third party institutional investor (note 16 below) and exercised its right to redeem the convertible notes in the principal amount of \$10,000,000 that had been issued in May 2017 by the payment of the aggregate principal outstanding amount of \$10,000,000, plus accrued interest thereon of \$108,333 and an early redemption cash payment of \$200,000. The Company recorded a net gain on extinguishment of \$495,783 of convertible debt, related accrued interest, derivative liability, unamortized discount and early redemption cash payment during the three and nine months ended September 30, 2018.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

14. CONVERTIBLE DEBT (continued)

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

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 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 the Company's 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 was 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, guaranteed all obligations of the Company under the Transaction Documents.

The Icagen-T Note was 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 Company and the Domestic Subsidiaries, other than Icagen-T, guaranteed 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 could 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 had 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.

All security interests granted to the holders of the Convertible notes above were released on August 31, 2018 upon the repayment of the convertible notes by the Company.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

14. CONVERTIBLE DEBT (continued)

The movement on convertible debt is as follows:

	<u>September 30, 2018</u>	<u>December 31, 2017</u>
Convertible debt		
Opening balance	\$ 10,000,000	\$ -
Convertible debt issued	-	10,000,000
Repayment	<u>(10,000,000)</u>	<u>-</u>
Closing balance	<u>-</u>	<u>10,000,000</u>
Debt discount		
Opening balance	(4,138,206)	-
Original issue discount	-	(400,000)
Fair value of warrants and beneficial conversion feature of notes	-	(4,518,277)
Amortization of debt discount	950,163	780,071
Extinguishment of debt discount	<u>3,188,043</u>	<u>-</u>
Closing balance	<u>-</u>	<u>(4,138,206)</u>
Convertible debt, net	<u>\$ -</u>	<u>\$ 5,861,794</u>
Disclosed as follows:		
Long-term portion	<u>\$ -</u>	<u>\$ 5,861,794</u>

15. DERIVATIVE LIABILITY

The Convertible Notes, together with the Purchaser Warrants issued to the note holders, disclosed in note 14 above, had 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 gave 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.

Between April 2018 and August 2018 the Company closed four tranches of the Series C Preferred units, discussed in note 17 below. Each Preferred Series C unit includes warrants exercisable over 28,571 shares of common stock at an initial exercise price of \$3.50 per share subject to anti-dilution pricing adjustments. The anti-dilution pricing adjustments give rise to a derivative financial liability which was initially valued using a Black Scholes valuation model at \$1,858,663.

On August 31, 2018, in connection with the entry into the Credit Agreements described in note 16 below, the Company issued to Perceptive, or its registered assigns, a warrant to purchase 723,550 shares of the Company's common stock, par value \$0.001 per share. The warrant is exercisable for a period of seven years from August 31, 2018 and the per-share exercise price is \$3.50, subject to certain adjustments as specified in the warrant (the "Exercise Price"). Upon any exercise of the Warrant, the Exercise Price is payable in cash or, at the holder's option, by withholding a number of shares of Common Stock then issuable upon exercise of the Warrant with an aggregate fair market value equal to the aggregate Exercise Price. The Warrant also contains customary anti-dilution adjustments and price protection. The pricing adjustments stipulated in the warrant give rise to a derivative liability which was initially valued using a Black Scholes valuation model at \$1,746,065.

The value of the derivative liability is 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 September 30, 2018 and a mark-to-market adjustment of \$1,346,202 was debited to the statement of operations for the nine months ended September 30, 2018.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

15. DERIVATIVE LIABILITY (continued)

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

	Nine months ended September 30, 2018
Calculated stock price	\$ 3.50
Risk free interest rate	2.39 to 3.01%
Valuation period	1.7 to 7 years
expected volatility of underlying stock	44.6 to 74.9%
Expected dividend rate	0%

The movements in the derivative financial liability is as follows:

	September 30, 2018	December 31, 2017
Opening balance	\$ 4,168,964	\$ -
Derivative liability on conversion option of convertible debt and warrants issued to note holders	-	4,518,277
Derivative liability on warrants issued to term loan note holders and series C preferred stock holders	3,604,728	-
Extinguishment of derivative liability on convertible debt	(3,890,826)	-
Mark-to-market adjustment	1,346,202	(349,313)
Closing balance	\$ 5,229,068	\$ 4,168,964

16. TERM LOAN

On August 31, 2018, the Company, and its wholly owned subsidiaries, Icagen Corp., Caldera Discovery, Inc., and XRPro Sciences, Inc., (collectively, the “Subsidiaries”) entered into a Credit Agreement and Guaranty (the “Icagen Credit Agreement”) with the banks and other financial institutions from time to time party thereto, as lenders (collectively, the “Icagen Lenders”) and Perceptive Credit Holdings II, LP, a Delaware limited partnership (“Perceptive”), as administrative agent for the Icagen Lenders (in such capacity, the “Administrative Agent”).

In addition, on August 31, 2018, Icagen-T, Inc., a Delaware corporation, as borrower (“Icagen-T”), the Company, Icagen Corp., Caldera Discovery, and XRPro Sciences entered into a Credit Agreement and Guaranty (the “Icagen-T Credit Agreement” and together with the Icagen Credit Agreement, the “Credit Agreements”) with the banks and other financial institutions from time to time party thereto, as lenders, and Perceptive, as administrative agent for the lenders (in such capacity, the “Icagen-T Administrative Agent”).

The Icagen Credit Agreement provides for a \$7,250,000 term loan (the “Icagen Term Loan”), which was drawn in full on August 31, 2018 (the “Closing Date”). The Icagen-T Credit Agreement provides for an \$8,000,000 term loan (the “Icagen-T Term Loan” and together with the Icagen Term Loan, the “Term Loans”), which was drawn in full on the Closing Date.

The Company and Icagen-T used the proceeds from the respective Term Loans (i) for general working capital purposes, including, without limitation, business development and licensing purposes, (ii) and repaid the convertible debt disclosed in note 14 above; and (iii) to pay fees, costs and expenses incurred in connection with the transactions contemplated by the Credit Agreements.

Commencing on the last day of each month after August 31, 2020, the Term Loans amortize in an amount equal to 1.0% of the aggregate principal amount of the Term Loans borrowed on the Closing Date.

The Term Loans mature on August 31, 2022 (the “Maturity Date”) unless accelerated pursuant to an event of default, as described below. All amounts outstanding under the Term Loans will be due and payable upon the earlier of the Maturity Date or the acceleration of the loans and commitments upon an event of default.

Amounts borrowed under the Credit Agreements bear interest at a rate per annum equal to the sum of the greater of: (i) the London Interbank Offered Rate (LIBOR) for one month periods and (ii) two and one-quarter percent (2.25%), plus an applicable margin rate of 9.75% per annum (the “Interest Rate”). Furthermore, interest is payable on a monthly basis.

On August 31, 2018, the Company and Icagen-T each paid a non-refundable closing fee of 2% of the Term Loans (or a total of \$305,000) pursuant to the terms of the respective Credit Agreements.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

16. TERM LOAN (continued)

Prepayments of the Term Loans (other than certain mandatory prepayments) prior to the Maturity Date are subject to the following prepayment premium based on the aggregate principal amount of the Term Loans as of the date of any such prepayment: (i) on or prior to the first anniversary of the Closing Date, 12% of the aggregate outstanding principal amount of the Term Loan being prepaid, (ii) following the first anniversary of the Closing Date, but on or prior to the second anniversary of the Closing Date, 8% of the aggregate outstanding principal amount of the Term Loan being prepaid, and (iii) at any time after the second anniversary of the Closing Date and on or prior to the third anniversary of the Closing Date, 3% of the aggregate outstanding principal amount of the Term Loan being prepaid.

The repayment of the Term Loans and the Company's and Icagen-T's other obligations under the Icagen Credit Agreement or Icagen-T Credit Agreement, as applicable, are guaranteed by each of the Company's subsidiaries (excluding Icagen-T with respect to the Icagen Credit Agreement).

Pursuant to the terms and conditions of the Security Agreement, dated August 31, 2018, among the Company, the Subsidiaries and Perceptive (the "Icagen Security Agreement"), the Company's and the Subsidiaries' obligations under the Icagen Credit Agreement are secured by (i) a first priority lien on all of the existing and after acquired tangible and intangible assets, including intellectual property, of the Company and the Subsidiaries, and (ii) a pledge of 100% of the Company's equity interests in the Subsidiaries. In addition, pursuant to the terms and conditions of the Security Agreement, dated August 31, 2018, among Icagen-T, the Company, the Subsidiaries and Perceptive (the "Icagen-T Security Agreement"), Icagen-T's, the Company's and the Subsidiaries' obligations under the Icagen-T Credit Agreement are secured by (i) a first priority lien on all of the existing and after acquired tangible and intangible assets, including intellectual property, of the Company and the Subsidiaries other than real estate for which they have a second priority lien, and (ii) a pledge of 100% of the Company's equity interests in the Subsidiaries.

The Credit Agreements contain customary representations, warranties and covenants, including covenants by each of the Company and Icagen-T limiting additional indebtedness, liens, guaranties, mergers and consolidations, substantial asset sales, investments and loans, sale and leasebacks, transactions with affiliates and fundamental changes and acquisitions. The Credit Agreements also contain covenants requiring that the Company and its subsidiaries maintain cash and cash equivalents held in one or more accounts subject to the first priority perfected security interests of the lenders under the Credit Agreements of not less than (a) \$1,000,000 following the Closing Date until March 31, 2019, and (b) \$1,500,000 at all times thereafter. In addition, the Credit Agreements provide for specified quarterly minimum consolidated net revenue covenants of the Company and its subsidiaries for the trailing twelve month period ended on each such calculation date during the term of the Credit Agreements.

The Credit Agreements provide for events of default customary for credit facilities of this type, including but not limited to non-payment of principal and interest, defaults on other debt, misrepresentations, breach of covenants, representations and warranties, change of control, insolvency, bankruptcy and the occurrence of a material adverse effect on the Company and its subsidiaries. After the occurrence of an event of default and for so long as it continues, all outstanding obligations under the Credit Agreements shall accrue interest at the Interest Rate plus 4% per annum. Upon an event of default relating to insolvency, bankruptcy or receivership, the amounts outstanding under the Credit Agreements will become immediately due and payable. Upon the occurrence and continuation of any other event of default, lenders holding a majority of the outstanding loans and commitments may accelerate payment of all obligations and terminate the Lenders' commitments under the Credit Agreements.

On May 15, 2017, the Company and Icagen-T entered into a Securities Purchase Agreement with GPB Debt Holdings II, LLC ("GPB"), pursuant to which (i) the Company issued to GPB a three year Senior Secured Convertible Note maturing on May 15, 2020, bearing interest at the rate of 13% per annum in the aggregate principal amount of \$2,000,000; and (ii) Icagen-T issued to GPB a three year Senior Secured Convertible Note maturing on May 15, 2020, bearing interest at the rate of 13% per annum, in the aggregate principal amount of \$8,000,000. The Company and Icagen-T, respectively, used a portion of the proceeds from their Term Loans to repay all amounts due (principal, accrued and unpaid interest and other charges) as of the Closing Date under the GPB Senior Secured Convertible Notes. The Company and Icagen-T paid a total of \$10,308,333, which satisfied all outstanding amounts due to GPB, terminated the loan facility with GPB and terminated all commitments of GPB to extend credit under the notes and the other transaction documents.

In addition, on August 31, 2018, the Company issued to GPB a second amended and restated warrant to purchase 857,143 shares of Common Stock (the "GPB Warrant"), pursuant to which, among other things, GPB was granted piggyback registration rights upon the same terms as the Warrant issued to Perceptive (described below).

In connection with the entry of the Credit Agreements, on August 31, 2018, the Company issued to Perceptive, or its registered assigns, a warrant (the "Warrant") to purchase 723,550 shares of the Company's common stock, par value \$0.001 per share (the "Common Stock"). The Warrant is exercisable for a period of seven years from the Closing Date and the per-share exercise price is \$3.50, subject to certain adjustments as specified in the Warrant (the "Exercise Price"). Upon any exercise of the Warrant, the Exercise Price is payable in cash or, at Perspective's option, by withholding a number of shares of Common Stock then issuable upon exercise of the Warrant with an aggregate fair market value equal to the aggregate Exercise Price. The Warrant also contains customary anti-dilution adjustments and price protection.



ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

16. TERM LOAN (continued)

The Company also granted Perceptive customary demand and piggy-back registration rights with respect to the shares of Common Stock issuable upon exercise of the Warrant. At any time commencing nine months following the closing of a Qualifying PO (as defined in the Warrant) if the Company is not qualified to register securities under the Securities Act of 1933, as amended (the "Securities Act"), pursuant to a registration statement on Form S-3 (or any successor form), then upon the request of the holder(s) of at least 51% of the Warrants and/or shares of Common Stock issuable thereunder (the "Majority Holders"), the Company is obligated, among other things, to (i) file a registration statement on Form S-1 with the U.S. Securities and Exchange Commission (the "SEC") within 90 days following the date on which the request is given for purposes of registering the shares of Common Stock issuable upon exercise of the Warrants, (ii) use its commercially reasonable efforts to have the registration statement declared effective by the SEC as soon as practicable after filing, subject to any cut backs requested by the SEC, and (iii) maintain the registration until all registerable securities may be sold pursuant to Rule 144 under the Securities Act, without restriction as to volume. In addition, at all times after a Qualifying PO, the Company shall use its commercially reasonable efforts to qualify and remain qualified to register securities under the Securities Act pursuant to a registration statement on Form S-3 or any successor form thereto. At any time commencing nine (9) months after such time as the Company shall have qualified for the use of a registration statement on Form S-3, the Majority Holder(s) shall have the right to request registration on Form S-3 or any similar short-form registration. Further, whenever the Company proposes to register any shares of its Common Stock under the Securities Act (with certain exceptions), the Company shall also include in such registration statement Perceptive's shares of Common Stock issuable upon exercise of the Warrant, provided that cut backs may apply in certain situations.

In connection with the entry into of the Credit Agreements, on August 31, 2018, each of the holders of the Company's 10% Subordinated Promissory Note, entered into an Amended and Restated 10% Subordinated Promissory Notes, to clarify that the subordination provisions of the Notes that were applicable to the note holder of the May 2017 notes were applicable to the lenders under the Credit Agreements and Perceptive.

In connection with the entry into of the Credit Agreements, effective August 31, 2018 (i) each holder of the Company's Series C Convertible Redeemable Preferred Stock entered into a Subordination Agreement with the lenders under the Credit Agreement and Perceptive prohibiting declaration of and payment of accrued dividends on the Company's Series C Convertible Redeemable Preferred Stock until payment in full of all amounts owing under the Credit Agreements and (ii) holders of a majority of the Company's Series C Convertible Redeemable Preferred Stock effected an amendment to the Securities Purchase Agreements executed by the holders of the Company's Series C Convertible Redeemable Preferred Stock that clarified that references in the Securities Purchase Agreements to the prior lender now included Perceptive and that the registration rights of such holders was subject to approval of each of the prior lender and Perceptive until the shares underlying the warrants to each had been sold or registered on a registration statement that had been declared effective by the Securities and Exchange Commission.

The movement on the term loans is as follows:

	<u>September 30, 2018</u>
Term Loan	
Term loan issued	\$ 15,250,000
Closing balance	<u>15,250,000</u>
Debt discount	
Debt issuance costs	(962,162)
Fair value of warrants	(1,746,065)
Amortization of debt discount	51,927
Closing balance	<u>(2,656,300)</u>
Term Loan, net	<u>12,593,700</u>
Disclosed as follows:	
Long-term portion	<u>\$ 12,593,700</u>

17. SERIES C PREFERRED STOCK

Series C Preferred Stock consists of 1,142,856 authorized shares of \$0.001 each, of which 799,988 and 0 shares are issued and outstanding as of September 30, 2018 and December 31, 2017, respectively.

On April 3, 2018, the Company filed the Certificate of Designation with the Secretary of State of the State of Delaware establishing the Series C Convertible Preferred Stock which entitles each holder of Series C Preferred Stock to a cumulative dividend at the rate of 12.0% per annum, payable quarterly in arrears.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

17. SERIES C PREFERRED STOCK (continued)

The Company has offered on a best efforts basis up to a maximum of forty (40) units and a minimum of ten (10) units, at a purchase price of \$100,000 per unit, each unit consisting of 28,571 shares of Series C Convertible Preferred Stock, par value \$0.001 per share (the "Series C Preferred Stock") and a seven year Warrant to acquire 28,571 shares of the Company's common stock, par value, \$0.001 per share, at an exercise price of \$3.50 per share.

On April 4, 2018, the Company closed on its first tranche of 20 Series C Preferred units for gross proceeds of \$2,000,000 with a trust of which a member of its Board of Directors is a trustee.

On May 30, 2018, the Company closed on its second tranche of 1 Series C Preferred unit for gross proceeds of \$100,000 with a member of its Board of Directors.

On July 13, 2018, the Company closed on its third tranche of 4 Series C Preferred stock units for gross proceeds of \$400,000 with a trust of which a member of its Board of Directors is a trustee.

On August 27, 2018, the Company closed on its fourth tranche of 3 Series C Preferred unit for gross proceeds of \$300,000 with a member of its Board of Directors and a related party.

The Series C Preferred Stock ranks senior to the shares of the Company's common stock, and any other class or series of stock issued by us with respect to dividend rights, redemption rights and rights on the distribution of assets on any voluntary or involuntary liquidation, dissolution or winding up of its affairs. Holders of Series C Preferred Stock are entitled to a cumulative dividend at the rate of 12.0% per annum, as set forth in the Certificate of Designation of Series C Convertible Preferred Stock. The Series C Preferred Stock is convertible at the option of the holders at any time into such number of shares of common stock as shall be equal to the \$3.50 plus any accrued and unpaid dividends on such share of Series C Preferred Stock (the "Accreted Value") divided by the conversion price, which initially is \$3.50 per share, subject to certain customary anti-dilution adjustments. In addition, the Series C Preferred Stock automatically converts into shares of the Company's common stock based upon the then effective conversion price upon the (i) closing of a sale of shares of common stock to the public in a Qualifying Public Offering (as defined below) or a reverse merger into a publicly reporting company that has its common stock listed or quoted and traded on a Trading Market (as such term is defined in the Certificate of Designation) or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least seventy-five percent (75%) of the outstanding shares of Series C Preferred Stock (the "Requisite Holders") (the time of such closing or the date and time specified of the event specified in such vote or written consent is referred to herein as the "Mandatory Conversion Date"). A "Qualifying Public Offering" is defined as the first firm commitment underwritten public offering by the Company on or following the initial issuance date of the Series C Preferred in which shares of common stock are sold for its account solely for cash to the public resulting in proceeds to it and/or its subsidiary, Icagen-T, Inc. of no less than \$8,000,000 (after deduction only of underwriter discounts and commissions) and where the shares of common stock registered under the Securities Act of 1933, as amended, and sold in such public offering are simultaneously listed and commence trading on a Trading Market (as such term is defined in the Certificate of Designation)

In the event of any liquidation, dissolution or winding-up of the Company, holders of the Series C Preferred Stock shall be entitled to a preference on liquidation equal to \$5.25 per share of Series C Preferred Stock plus all accrued and unpaid dividends.

Each holder of Series C Preferred Stock shall have the right to cast the number of votes equal to three times the number of shares into which the Series C Preferred Stock is convertible and the Series C holders as a group, shall have the right to elect one director on the Company's Board of Directors. The Company cannot take the following actions without the approval of the Requisite Holders and the consent of its Board of Directors, including the Series C Preferred Stock director: (i) liquidate, dissolve or wind up its business, (ii) amend its Certificate of Incorporation or Bylaws, (iii) create any new class of stock unless it ranks junior to the Series C Preferred Stock with respect to dividends and liquidation, (iv) amend or alter any class of stock pari passu with the Series C Preferred Stock to make it senior with respect to dividends and liquidation, (v) purchase or redeem any other shares of its stock, or (vi) increase the size of its Board of Directors.

Upon the occurrence of a Cash Liquidity Event, the holders of the Series C Preferred Stock can require the Company to redeem their shares for Series C Preferred Stock for a price per share equal to \$5.25 subject to adjustments. In addition, the Company has the right to redeem the shares at any time for a price per share equal to \$5.25 subject to adjustments. A "Cash Liquidity Event" is defined as the closing of any sale, lease or licensing transaction relating to a single asset or multiple assets other than in the ordinary course of the Company's business, including, but not limited to a sale of a building, sale of biological assets or other upfront payments, resulting in aggregate gross proceeds received by us at closing or closings in a transaction or transactions during any twelve (12) month period in excess of \$40,000,000.

During the three and nine months ended September 30, 2018, the Company has accrued dividends of \$80,548 and \$140,088, respectively on Series C Preferred Stock.

18. 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 September 30, 2018 and December 31, 2017.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

19. WARRANTS

As part of the Series C Preferred Units, the Company issued Warrants to the Purchaser at an initial exercise price of \$3.50 per share (subject to applicable adjustments) (the “**Exercise Price**”), each unit consisting of 28,571 shares of Series C Preferred Stock and warrants exercisable over 28,571 shares of common stock. The Warrant expires seven years after the issuance date.

In addition, subject to limited exceptions, a holder of the Warrant will not have the right to exercise any portion of the Warrant if such holder, together with its affiliates, would beneficially own in excess of 9.99% of the shares of common stock outstanding immediately after giving effect to such exercise. A holder of the Warrant may adjust this limitation upon not less than 61 days’ prior notice to the Company, provided that such limitation in no event shall exceed 9.99%.

The Warrants 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 its Warrant, there is no effective registration statement available for an issuance of the shares underlying the Warrant to the holder, then in lieu of making the cash payment otherwise contemplated to be made to the Company 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 common stock determined according to a formula set forth in the Warrant. If the Company fails to timely deliver the shares underlying the Warrant, it will be subject to certain buy-in provisions.

The 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 Parent under the 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 Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to the Warrant; (ii) the Company 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 Warrant from the Purchaser by paying to the Purchaser cash in an amount equal to the Black Scholes Value (as defined in the Warrant); or (iii) the Purchaser, at its election, requires the Company or the Successor Entity (as the case may be) to purchase the Warrant from the Purchaser by paying to the Purchaser cash in an amount equal to the Black Scholes Value.

Between April 2018 and August 2018, the Company closed on four tranches of 28 Series C Preferred units for gross proceeds of \$2,800,000, resulting in warrants exercisable over 799,989 shares of common stock at an initial exercise price of \$3.50 per share.

In terms of the Company’s bridge note offering on August 13, 2018, the Company closed the first tranche of its note and warrant offering of an aggregate of fifty (50) units, at a purchase price of \$10,000 per unit, each unit including a five year warrant to purchase 1,500 shares of common stock of the Company at an exercise price of \$3.50 per share, resulting in warrants exercisable over 75,000 shares of common stock being issued. The Warrants also contains certain anti-dilution provisions that apply in connection with any stock split, stock dividend, stock combination, recapitalization or similar transaction.

In connection with the entry of the Credit Agreements, on August 31, 2018, the Company issued a warrant to purchase 723,550 shares of the Company’s common stock. The warrant is exercisable for a period of seven years at an exercise price of \$3.50 per share, subject to certain adjustments as specified in the Warrant. Upon any exercise of the Warrant, the Exercise Price is payable in cash or, at the warrant holders option, by withholding a number of shares of Common Stock then issuable upon exercise of the Warrant with an aggregate fair market value equal to the aggregate Exercise Price. The Warrant also contains customary anti-dilution adjustments and price protection.

A summary of the Company’s warrant activity during the period January 1, 2017 to September 30, 2018 is as follows:

	<u>No. of shares</u>	<u>Exercise price per share</u>	<u>Weighted average exercise price</u>
Outstanding January 1, 2017	2,147,641	\$3.50 to \$11.40	\$ 3.57
Granted	1,107,143	3.50	3.50
Forfeited/cancelled	(75,000)	4.20	4.20
Exercised	-	-	-
Outstanding December 31, 2017	3,179,784	\$ 3.50 to \$4.20	3.50
Granted	1,598,539	3.50	3.50
Forfeited/cancelled	(75,000)	4.20	4.20
Exercised	-	-	-
Outstanding September 30, 2018	<u>4,703,323</u>	<u>\$ 3.50 to \$3.85</u>	<u>\$ 3.51</u>

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

19. WARRANTS (continued)

The following table summarizes warrants outstanding and exercisable as of September 30, 2018:

Exercise price	Warrants outstanding			Warrants exercisable	
	No. of shares	Weighted average remaining years	Weighted average exercise price	No. of shares	Weighted average exercise price
\$ 3.50	4,559,922	3.83		4,559,922	
\$ 3.85	143,401	1.75		143,401	
	<u>4,703,323</u>	<u>3.77</u>	\$ 3.51	<u>4,703,323</u>	\$ 3.51

20. STOCK OPTIONS

A summary of all of the option activity during the period January 1, 2017 to September 30, 2018 is as follows:

	No. of shares	Exercise price per share	Weighted average exercise price
Outstanding January 1, 2017	1,333,291	\$0.40 to \$11.42	\$ 3.59
Granted	120,000	3.50	3.50
Forfeited/cancelled	(50,346)	3.50	3.50
Exercised	-	-	-
Outstanding December 31, 2017	1,402,945	\$0.40 to \$11.42	3.59
Granted	-	-	-
Forfeited/cancelled	(80,264)	3.50	3.50
Exercised	-	-	-
Outstanding September 30, 2018	<u>1,322,681</u>	<u>\$0.40 to \$11.42</u>	<u>\$ 3.59</u>

The following tables summarize information about stock options outstanding as of September 30, 2018:

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	3.58		15,000	
\$ 3.00	312,500	4.45		312,500	
\$ 3.50	841,890	7.12		576,704	
\$ 4.00	8,791	1.28		8,791	
\$ 5.00	128,500	2.24		128,500	
\$ 11.42	16,000	2.92		16,000	
	<u>1,322,681</u>	<u>5.89</u>	\$ 3.59	<u>1,057,495</u>	\$ 3.61

No options were granted during the nine months ended September 30, 2018. As of September 30, 2018, there were unvested options to purchase 265,186 shares of common stock. Total expected unrecognized compensation cost related to such unvested options is \$511,716 which is expected to be recognized over a period of 33 months.

Stock option based compensation expense totaled \$151,713 and \$165,282 for the three months ended September 30, 2018 and 2017, respectively, and \$457,333 and \$366,900 for the nine months ended September 30, 2018 and 2017 respectively.

Stock options outstanding as of September 30, 2018 as disclosed in the above table, have an intrinsic value of \$202,750.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

21. GAIN ON EXTINGUISHMENT OF DEBT

	Three months ended September 30, 2018	Three months ended September 30, 2017	Nine months ended September 30, 2018	Nine months ended September 30, 2017
Unamortized debt discount on convertible debt	\$ (3,188,043)	\$ -	\$ (3,188,043)	\$ -
Expenses directly related to debt extinguishment	(207,000)	-	(207,000)	-
Derivative liability related to convertible debt on extinguishment date	3,890,826	-	3,890,826	-
	<u>\$ 495,783</u>	<u>\$ -</u>	<u>\$ 495,783</u>	<u>\$ -</u>

The gain on extinguishment included the unamortized debt discount, the fair value of derivative liabilities related to the convertible debt and expenses directly related to the extinguishment of the convertible note.

22. OTHER EXPENSE

Other expense is made up as follows:

	Three months ended September 30, 2018	Three months ended September 30, 2017	Nine months ended September 30, 2018	Nine months ended September 30, 2017
Severance costs	\$ (572,524)	-	\$ (572,524)	-

The Company has restructured its management team and streamlined operations at its Tucson site, thereby reducing head count by a total of 9 people. The Company provided severance packages to these employees based on written agreements entered into. The severance costs will be incurred over the next four months.

23. INTEREST EXPENSE

Interest expense consists of the following:

	Three months ended September 30, 2018	Three months ended September 30, 2017	Nine months ended September 30, 2018	Nine months ended September 30, 2017
Imputed interest	\$ (74,769)	\$ (139,809)	\$ (224,307)	\$ (432,326)
Amortization of debt discount	(323,398)	(251,057)	(1,017,408)	(786,339)
Interest expense	(417,071)	(339,811)	(1,123,916)	(515,078)
Other	-	-	(539)	(1,813)
	<u>\$ (815,238)</u>	<u>\$ (730,677)</u>	<u>\$ (2,366,170)</u>	<u>\$ (1,735,556)</u>

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

24. NET LOSS PER COMMON SHARE

For the three and nine months ended September 30, 2018 and 2017, respectively, the following convertible securities, 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 and nine months ended September 30, 2018	Three months and nine months ended September 30, 2017
Stock options	1,322,681	1,453,291
Warrants	4,703,323	3,254,784
Convertible securities	799,988	-
	6,825,992	4,708,075

25. RELATED PARTY TRANSACTIONS

Timothy Tyson

On April 4, 2018 and July 13, 2018, the Company entered into a Securities Purchase Agreement whereby a trust of which Mr. Tyson is a trustee, acquired a total of twenty four (24) Series C Preferred Stock units for \$100,000 each, each unit consisting of 28,571 Series C Preferred shares and a seven year warrant exercisable over 28,571 shares of common stock, at an exercise price of \$3.50 per share. Mr. Tyson acquired a total of 685,704 Series C Preferred shares and warrants exercisable over 685,704 shares of common stock.

On August 13, 2018, the Company entered into a Securities Purchase Agreement whereby Mr. Tyson acquired thirty (30) bridge note units of \$10,000 each for gross proceeds of \$300,000, each unit consisting of a 10% Subordinated Promissory Note in the principal amount of \$10,000 due on the earlier of: (x) the date that is twelve (12) months after its issue date or (y) the Company's receipt of the proceeds of funding from its next collaboration/partnership (the "Note") and (ii) a five year warrant to purchase 45,000 shares of common stock of the Company at an exercise price of \$3.50 per share.

Clive Kabatznik

On May 30, 2018, the Company entered into a Securities Purchase Agreement whereby Mr. Kabatznik acquired one (1) Series C Preferred Stock unit for \$100,000 each, each unit consisting of 28,571 Series C Preferred shares and a seven year warrant exercisable over 28,571 shares of common stock, at an exercise price of \$3.50 per share. Mr. Kabatznik acquired a total of 28,571 Series C Preferred shares and warrants exercisable over 28,571 shares of common stock.

On August 13, 2018, the Company entered into a Securities Purchase Agreement whereby Mr. Kabatznik acquired fifteen (15) bridge note units of \$10,000 each for gross proceeds of \$150,000, each unit consisting of a 10% Subordinated Promissory Note in the principal amount of \$10,000 due on the earlier of: (x) the date that is twelve (12) months after its issue date or (y) the Company's receipt of the proceeds of funding from its next collaboration/partnership (the "Note") and (ii) a five year warrant to purchase 22,500 shares of common stock of the Company at an exercise price of \$3.50 per share.

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

25. RELATED PARTY TRANSACTIONS (continued)

Michael Taglich

On August 13, 2018, the Company entered into a Securities Purchase Agreement whereby Mr. Taglich acquired two and a half (2.5) bridge note units of \$10,000 each for gross proceeds of \$25,000, each unit consisting of a 10% Subordinated Promissory Note in the principal amount of \$10,000 due on the earlier of: (x) the date that is twelve (12) months after its issue date or (y) the Company's receipt of the proceeds of funding from its next collaboration/partnership (the "Note") and (ii) a five year warrant to purchase 3,750 shares of common stock of the Company at an exercise price of \$3.50 per share.

On August 27, 2018, the Company entered into a Securities Purchase Agreement whereby Mr. Taglich acquired one and a half (1.5) Series C Preferred Stock unit for \$100,000 each, for gross proceeds of \$150,000, each unit consisting of 28,571 Series C Preferred shares and a seven year warrant exercisable over 28,571 shares of common stock, at an exercise price of \$3.50 per share. Mr. Taglich acquired a total of 42,857 Series C Preferred shares and warrants exercisable over 42,857 shares of common stock.

Robert Taglich

On August 13, 2018, the Company entered into a Securities Purchase Agreement whereby Mr. Taglich acquired two and a half (2.5) bridge note units of \$10,000 each for gross proceeds of \$25,000, each unit consisting of a 10% Subordinated Promissory Note in the principal amount of \$10,000 due on the earlier of: (x) the date that is twelve (12) months after its issue date or (y) the Company's receipt of the proceeds of funding from its next collaboration/partnership (the "Note") and (ii) a five year warrant to purchase 3,750 shares of common stock of the Company at an exercise price of \$3.50 per share.

On August 27, 2018, the Company entered into a Securities Purchase Agreement whereby Mr. Taglich acquired one and a half (1.5) Series C Preferred Stock unit for \$100,000 each, for gross proceeds of \$150,000, each unit consisting of 28,571 Series C Preferred shares and a seven year warrant exercisable over 28,571 shares of common stock, at an exercise price of \$3.50 per share. Mr. Taglich acquired a total of 42,857 Series C Preferred shares and warrants exercisable over 42,857 shares of common stock.

26. 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 three months ended September 30, 2018 and 2017 was \$55,329 and \$48,341, respectively and for the nine months ended September 30, 2018 was \$154,244 and \$150,479, respectively.

Future annual minimum payments required under operating lease obligations as of September 30, 2018, are as follows:

	<u>Amount</u>
2018	\$ 48,326
2019	<u>66,949</u>
Total	<u>\$ 115,275</u>

ICAGEN, INC.

NOTES TO THE UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

27. COMMITMENTS AND CONTINGENCIES

As a result of the agreements that the Company entered into with Pfizer and Sanofi, the Company is obligated to; (i) make additional payments in terms of the Asset Purchase and Collaboration Agreement that it entered into on June 26, 2015 with Pfizer including 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, such minimum being reduced to \$50,000 for the quarters ending March 2017 to December 2018 and the difference between \$250,000 or the quarterly amount paid and the actual calculation of deferred purchase consideration at 10% of gross revenue per quarter is being deferred and paid as one lump sum with the payment being made the quarter ended March 31, 2019, bearing interest at 12.5% per annum, which interest is payable quarterly; (ii) 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 \$115,275.

On June 19, 2017, 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 continues to be engaged as the Company's Chief Scientific Officer.

On August 31, 2018, the Company, and its wholly owned subsidiary, Icagen-T, entered into a Credit Agreement an institutional investor (the "Purchaser"), pursuant to which the purchaser advanced to the Company and Icagen-T, Inc., the aggregate principal sum of \$15,250,000 pursuant to four year senior secured term loans, maturing on August 31, 2022, bearing interest at the rate of one month Libor plus 9.75%, with a minimum rate of 12% per annum (the "Term Loans"). The Term Loans amortize at commencing on the last day of each month after August 31, 2020, the Term Loans amortize in an amount equal to 1.0% of the aggregate principal amount of the Term Loans borrowed on the Closing Date.

28. SUBSEQUENT EVENTS

On November 14, 2018, the Board of Directors of the Company approved an amendment to the Company's employment agreement with Richard Cunningham, increasing Mr. Cunningham's salary to Three Hundred Seventy Five Thousand Dollars (\$375,000) per year. Mr. Cunningham serves as the Chief Executive Officer of the Company.

On November 14, 2018, the Board approved an amendment to the Company's employment agreement with Douglas Krafte, Ph.D., increasing Dr. Krafte's salary to Two Hundred Ninety Five Thousand Dollars (\$295,000) per year and increased Dr. Krafte's target bonus to up to 50% of his base salary. Dr. Krafte serves as the Chief Scientific Officer of the Company.

On November 14, 2018, the Board granted under the Company's 2015 Stock Incentive Plan the following: (i) options to each of the Company's five non-executive members of the Board to purchase 25,000 shares of common stock, par value \$0.001 per share of the Company, of which 12,500 options vest immediately and 12,500 options vest on the one year anniversary of the date of grant; (ii) an additional option to the Company's Chairman of the Board to purchase 100,000 shares of Common Stock, which vests immediately; (iii) an option to the Company's Chief Executive Officer to purchase 535,000 shares of Common Stock, which vests pro rata on a monthly basis over a three year period; (iv) an option to the Company's Chief Scientific Officer to purchase 120,000 shares of Common Stock, which vests pro rata on a monthly basis over a three year period; and (v) an option to the Company's Chief Financial Officer to purchase 100,000 shares of Common Stock, which vests immediately. All of the stock options granted have an exercise price of \$3.50 per share and, subject to early expiration, expire ten years after their date of grant.

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

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, 2017 filed with the Securities and Exchange Commission on April 17, 2018. 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 is a biotech company with expertise in drug discovery. Our team is derived from two key acquisitions of drug discovery experts in Neuroscience (Pfizer acquisition) and Rare Disease (Sanofi acquisition). Our business model is focused on research collaborations and partnerships with large pharmaceutical and biotechnology companies and foundations who we partner with to support the discovery and development of pharmaceuticals.

Our current business is divided into three sources of revenue: research funding provided to Icagen from collaborations with third parties for research provided as well as future milestone and royalty payments; potential licensing fees and other related fees paid for the licensing of our technology; and our integrated drug discovery services that we have been providing to third parties since our inception.

For the past two years, a significant portion of our revenue has been derived from our operations 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 partners 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 capabilities 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 development to our partners. 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 identify drug candidates.

Subsequent to our acquisition of certain assets from Pfizer and Sanofi, a substantial portion of our revenue has been derived from our operations as a partner research organization from two commercial customers. As anticipated and in accordance with the terms of our MSA with Sanofi, the revenue derived from Sanofi has decreased during the first half of 2018 and the revenue derived from Sanofi comprised a smaller percentage of our overall revenue during such quarter.

More recently, we have begun to focus on partnership and collaboration opportunities with third parties, to provide us with an opportunity to fund research programs with the objective of discovering product candidates. This research funding is expected to derive revenue not only from our standard fees for integrated early discovery services but also from future milestone and royalty revenue from product candidates that may be developed and commercialized with our aid. We have developed in house a portfolio of assets targeting different indications that we believe would be ideal candidates for partnership opportunities.

Recent Developments

Since inception, we have financed our operations primarily through private sales of our securities and settlement of legal matters. During the third quarter of 2018, we closed our third and fourth tranche of our best efforts offering of Series C Convertible Redeemable Preferred Stock and warrants (“Series C Preferred Stock”) and entered into a Securities Purchase Agreement with each of a trust of which one member of our Board of Directors is the trustee, another Board member and a related party, and sold an aggregate of seven (7) units, at a purchase price of \$100,000 per unit. An aggregate of 199,998 shares of Series C Preferred Stock and a warrant to purchase an aggregate of 199,998 shares of common stock were sold. The gross cash proceeds to us from the sale of the seven (7) units was \$700,000. As of September 30, 2018, we sold an aggregate of twenty eight (28) units of Series C Preferred stock, at a purchase price of \$100,000 per unit. An aggregate of 799,988 shares of Series C Preferred Stock and warrants to purchase an aggregate of 799,988 shares of common stock were sold. The gross cash proceeds to us from the sale of the Series C Preferred Stock was \$2,800,000. In connection with the entry into of the Credit Agreements, effective August 31, 2018 (i) each holder of the Company’s Series C Convertible Redeemable Preferred Stock entered into a Subordination Agreement with the lenders under the Credit Agreement and Perceptive prohibiting declaration of and payment of accrued dividends on the Company’s Series C Convertible Redeemable Preferred Stock until payment in full of all amounts owing under the Credit Agreements and (ii) holders of a majority of the Company’s Series C Convertible Redeemable Preferred Stock effected an amendment to the Securities Purchase Agreements executed by the holders of the Company’s Series C Convertible Redeemable Preferred Stock that clarified that references in the Securities Purchase Agreements to the prior lender now included Perceptive and that the registration rights of such holders was subject to approval of each of the prior lender and Perceptive until the shares underlying the warrants to each had been sold or registered on a registration statement that had been declared effective by the Securities and Exchange Commission.

On August 13, 2018 we closed the first tranche of our bridge note and warrant offering on a best efforts basis of up to a maximum of one hundred fifty (150) units and entered into a Securities Purchase Agreement (the "Purchase Agreement") with each of four accredited investors, which included a trust of which one member of the our Board of Directors is the trustee and two other members of the Board of Directors, pursuant to which we issued to the Purchasers an aggregate of fifty (50) units, at a purchase price of \$10,000 per unit, each unit consisting of: (i) our 10% Subordinated Promissory Note in the principal amount of \$10,000 due on the earlier of: (x) the date that is twelve (12) months after its issue date or (y) our receipt of the proceeds of funding from its next collaboration/partnership (the "Note") and (ii) a five year warrant to purchase 1,500 shares of our common stock for each \$10,000 investment at an exercise price of \$3.50 per share (the "Bridge Warrant"). An aggregate of \$500,000 in principal amount of Notes and Warrants to purchase an aggregate of 75,000 shares of common stock were sold at the closing. The gross cash proceeds to us from the sale of the fifty (50) units was \$500,000. The Notes were subsequently amended and restated on August 31, 2018 in connection with the August 31, 2018 loans described below, to clarify that the subordination provisions of the Notes that were applicable to the note holder of the May 2017 notes were applicable to the lenders under the Credit Agreements and Perceptive.

On August 31, 2018, we entered into a Credit Agreement with the banks and other financial institutions from time to time party thereto, as lenders and Perceptive Credit Holdings II, LP, whereby Terms Loans in the aggregate of \$15,250,000 were advanced to us. Amounts borrowed under the Credit Agreements bear interest at a rate per annum equal to the sum of the greater of: (i) the London Interbank Offered Rate (LIBOR) for one month periods and (ii) two and one-quarter percent (2.25%), plus an applicable margin rate of 9.75% per annum (the "Interest Rate"). Furthermore, interest is payable on a monthly basis. Commencing on the last day of each month after August 31, 2020, the Term Loans amortizes at an amount equal to 1.0% of the aggregate principal amount of the Term Loans borrowed on the closing date of the transaction, the term loan matures on August 31, 2022.

In connection with the entry into the Credit Agreements, on August 31, 2018, we issued to Perceptive, or its registered assigns, a warrant to purchase 723,550 shares of our common stock. The Warrant is exercisable for a period of seven years from the closing date of the transaction and the per-share exercise price is \$3.50, subject to certain adjustments as specified in the Warrant.

On August 31, 2018, utilizing a portion of the proceeds raised from the Credit Agreements, we exercised our right to redeem the convertible notes outstanding in the principal amount of \$10,000,000 issued in May 2017 by the payment of the aggregate principal outstanding of \$10,000,000, plus accrued interest thereon of \$108,333 and an early redemption cash payment of \$200,000.

Discussions with respect to our operations included herein include the operations of our operating subsidiaries, Icagen Corp and Icagen-T, Inc. We have another two subsidiary companies, Caldera Discovery Inc. and XRpro Sciences Inc., which have always been dormant.

Results of Operations for the three months ended September 30, 2018 and the three months ended September 30, 2017.

Sales

We had sales of \$3,007,928 and \$5,421,965 for the three months ended September 30, 2018 and 2017, respectively, a decrease of \$2,414,037 or 44.5%. Included in the prior year sales was a subsidy of \$2,400,000 (44.3% of sales) which was utilized to cover operating expenses of the Tucson site, in accordance with the terms of our Master Service Agreement ("MSA") with Sanofi U.S. Services ("Sanofi"), which subsidy expired in 2017 in accordance with the terms of the MSA. After eliminating the subsidy revenue in the prior period, the service revenue amounted to \$3,021,965. Revenue is in line with the prior period with a shift away from traditional services business to collaboration business.

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 our proprietary 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 was \$1,377,571 and \$2,751,087 for the three months ended September 30, 2018 and 2017, respectively, a decrease of \$1,373,516 or 49.9%. 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 with respect to our contracts. Included in cost of sales for the nine months ended September 30, 2018 is certain material costs and labor costs for work performed on our Cystic Fibrosis project for which we had no revenues due the prolonged contract negotiations, which has recently closed.

- The salary expense included in cost of sales for the three months ended September 30, 2018 and 2017 respectively was \$358,365 and \$1,662,244 a decrease of \$1,303,879 or 78.4%. The decrease is primarily due to the reversal of bonus accruals raised in the prior period and the number of personnel located at our Tucson site working on internal research projects. 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 September 30, 2018 and 2017, amounted to \$871,381 and \$878,368 a decrease of \$6,987 or 0.8%, the decrease is primarily due to a slightly lower utilization of consumables.
- Outside contractors' cost included in cost of sales for the three months ended September 30, 2018 and 2017, respectively, amounted to \$147,825 and \$149,961 a decrease of \$2,136 or 1.4%, the decrease is due to slight savings in third party laboratory maintenance contracts for the Tucson Facility.

Gross profit

Gross profit was \$1,630,357 and \$2,670,878 for the three months ended September 30, 2018 and 2017, respectively, a decrease in gross profit of \$1,040,521 or 39.0%. The decrease in gross profit is primarily due to the decrease in deferred subsidy revenue of \$2,400,000, offset by the reversal of bonus accruals in the current period and an improvement in overall margins on work performed.

Selling, general and administrative expenses

Selling, general and administrative expenses totaled \$2,382,647 and \$3,448,053 for the three months ended September 30, 2018 and 2017, respectively, a decrease of \$1,065,406 or 30.9%.

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

	Three months ended		Increase/ (decrease)	Percentage change
	September 30,			
	2018	2017		
Marketing and selling expenses	\$ 9,183	\$ 92,518	\$ (83,335)	(90.1)%
Payroll expense	399,792	1,096,044	(696,252)	(63.5)%
Research and development salaries	696,823	925,533	(228,710)	(24.7)%
Directors fees	55,000	55,000	-	-%
Stock option compensation expense	151,713	165,282	(13,569)	(8.2)%
Legal fees	28,976	135,983	(107,007)	(78.7)%
Consulting fees	118,633	127,458	(8,825)	(6.9)%
Facilities expense	607,342	668,498	(61,156)	(9.1)%
Travel expenditure	57,982	60,032	(2,050)	(3.4)%
Other expenses	<u>257,203</u>	<u>121,705</u>	<u>135,498</u>	<u>111.3%</u>
	<u>\$ 2,382,647</u>	<u>\$ 3,448,053</u>	<u>\$ (1,065,406)</u>	<u>(30.9)%</u>

The decrease in marketing expenditure over the prior period is primarily due a change in strategy with less reliance placed on developing a comprehensive Contract Research Organization (“CRO”) business model, therefore less marketing effort was required during the current period.

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

	Three months ended		Increase/ (decrease)	Percentage change
	September 30,			
	2018	2017		
Cost of sales	\$ 358,365	\$ 1,662,244	\$ (1,303,879)	(78.4)%
Selling, general and administrative expenses	399,792	1,096,044	(696,252)	(63.5)%
Research and development salaries	<u>696,823</u>	<u>925,533</u>	<u>(228,710)</u>	<u>(24.7)%</u>
	<u>\$ 1,454,980</u>	<u>\$ 3,683,821</u>	<u>\$ (2,228,841)</u>	<u>(60.5)%</u>

The decrease in total payroll expenditure is primarily due to the restructure of our operations with the termination of our business development team due to the change in our market focus from CRO to early stage drug discovery, a restructure of our management team and the streamlining of our business at our Tucson site and a reduction in the bonus accrual due to anticipated lower bonus payouts.

The total payroll expense included in cost of sales decreased by \$1,303,879. The decrease is primarily due to the reversal of bonus accruals raised in the prior period and the number of personnel located at our Tucson site working on internal research projects.

The payroll expense charged to selling, general and administrative expenses decreased by \$696,252 primarily due to the restructure of the organization and the release of the business development team and lower bonus accruals during the current period.



The payroll expense charged to research and development decreased by \$228,710. The decrease is due to the reduction of bonus accruals that we do not expect to pay to our employees.

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

The stock option compensation expense decreased by \$13,569. The charge for each period is dependent upon the number of options issued, any new options issued, value of the options and the vesting schedule of these options. 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 decreased by \$107,007. Certain legal fees were reversed during the current period upon the settlement of the Dentons fee dispute and lower corporate activity during the current period.

Consulting expenses decreased by \$8,825, the decrease is in line with expectations as less technical consulting was employed during the period.

Facilities expense decreased by \$61,156 over the prior period, primarily due to a reduction in outside services due to a restructuring of the contract with our third party vendor at our Tucson site.

Travel expenditure decreased by \$2,050 due to the release of our business development team and the travel associated with their sales efforts.

Other expenses consist of various small expenses which are individually insignificant.

Depreciation and Amortization

We recognized depreciation expenses of \$364,712 and \$368,217 for the three months September 30, 2018 and 2017 respectively, a decrease of \$3,505 or 1.0%, primarily due to a reduction in the amount of software acquired to run our research sites, eliminating software licensing arrangements which were not necessary to our current operations.

Amortization expense was \$56,246 and \$56,246 for the three months ended September 30, 2018 and 2017, respectively.

Other income

Other income was \$118,834 and \$473 for the three months ended September 30, 2018 and 2017, respectively, an increase of \$118,361. Other income in the current period represents income derived from customers for non-revenue pass through costs incurred on their behalf.

Gain on debt extinguishment

Gain on debt extinguishment was \$495,783 and \$0 for the three months ended September 30, 2018 and 2017, respectively. The gain arose on the extinguishment of the GPB convertible debt on August 31, 2018 and represents the unamortized debt discount, the derivative liability related to the convertible debt conversion feature and expenses directly related to the debt extinguishment.

Other Expense

Other expense was \$572,524 and \$0 for the three months ended September 30, 2018 and 2017, respectively. Other expense consists of severance accruals raised on the management restructure and streamlining of operations at our Tucson facility.

Interest expense

Interest expense totaled \$815,238 and \$730,677 for the three months ended September 30, 2018 and 2017, 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 \$74,769 and \$139,809 for the three months ended September 30, 2018 and 2017, respectively, a decrease of \$65,040 or 46.5%, due to a revaluation exercise undertaken in the prior year whereby the expected payment schedule was revised to reflect current expectations, resulting in a longer repayment schedule and a reduction in imputed interest expense.
- The amortization of debt discount of \$323,981 and \$251,057 for the three months ended September 30, 2018 and 2017, respectively. Debt discount arose due to the beneficial conversion feature and the warrants issued to the lenders of our debt and bridge note funding's during the current and prior year. The value of the debt discount and the period to maturity of the related debt funding's affect the amortization amount.
- Interest expense of \$417,071 and \$339,811 for the three months ended September 30, 2018 and 2017, an increase of \$77,260 or 22.7%. The increase is due to the increase in total debt advanced to the Company in terms of bridge notes and term loans of \$15,750,000 in August 2018 compared to a total convertible debt outstanding of \$10,000,000 in the prior period, slightly offset by lower interest rates during the current period.



Derivative liability movement

Derivative liability movement was \$(300,665) and \$201,459 for the three months ended September 30, 2018 and 2017, respectively. The movement during the current period represents the mark to market of the derivative liability raised on the various warrants issued during the current and prior periods.

Net loss

Net loss was \$2,247,059 and \$1,730,383 for the three months ended September 30, 2018 and 2017, respectively, an increase of \$516,676 or 29.9%. The increase is primarily due to a reduction in subsidy revenue of \$2,400,000, offset by a reduction in selling, general and administrative expenses of \$1,065,406, the gain realized on extinguishment of debt of \$495,783 offset by the severance accrual of \$572,524 included in other expenses and the net movement in mark-to-market derivative liability adjustments of \$502,124.

Preferred stock dividends

Preferred stock dividends was \$80,548 and \$0 for the three months ended September 30, 2018 and 2017, respectively. The Series C Preferred stock issued in the current period earns dividends at the rate of 12% per annum.

Net loss available to common stock holders

The net loss available to common stock holders was \$2,327,607 and \$1,730,383 for the three months ended September 30, 2018 and 2017, respectively, an increase of \$597,224 or 33.5%. This is due to the reasons discussed above.

Results of Operations for the nine months ended September 30, 2018 and the nine months ended September 30, 2017.

Sales

We had sales of \$10,465,046 and \$17,016,462 for the nine months ended September 30, 2018 and 2017, respectively, a decrease of \$6,551,416 or 38.5%. Sales includes services revenue of \$10,465,046 (representing 100% of total sales) and \$9,495,718 (representing 55.8% of total sales) for the nine months ended September 30, 2018 and 2017, respectively, an increase of \$969,328 or 10.2%. The increase in sales is primarily due to the Cystic Fibrosis Foundation ("CFF") collaboration agreement signed in May 2018. Deferred subsidy revenue was \$0 and \$7,200,000 (representing 44.3% of total sales) for the nine months ended September 30, 2018 and 2017, respectively. The subsidy provided to cover operating expenses expired in December 2017 in terms of our MSA with Sanofi. Government revenue was \$0 and \$320,744 (representing 1.9% of total sales) for the nine months ended September 30, 2018 and 2017, respectively. We do not have any government contracts at present.

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 our proprietary 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 \$6,898,815 and \$8,772,433 for the nine months ended September 30, 2018 and 2017, respectively, a decrease of \$1,873,618 or 21.4%. 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 nine months ended September 30, 2018 and 2017 respectively was \$3,661,117 and \$5,539,346 a decrease of \$1,878,229 or 33.9%. The decrease is primarily due to the reversal of bonuses accrued in the current period and previous periods and a reduction in laboratory head count during the current period with a larger allocation of payroll expenses to internal research projects in the current period (also impacted by the reduction in bonus accruals). 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 nine months ended September 30, 2018 and 2017, amounted to \$2,863,535 and \$2,321,365, an increase of \$542,170 or 23.4%, the increase is primarily due to the usage of expensive consumables on current business, these consumables expenses are generally passed through to our customers at low margins.
- Outside contractors' cost included in cost of sales for nine months ended September 30, 2018 and 2017, respectively, amounted to \$374,163 and \$836,806 a decrease of \$462,643 or 55.3% is due primarily to the reduction in third party laboratory equipment maintenance contracts for the Tucson Facility and the prior period costs incurred on outside research laboratories conducting animal studies for us in terms of government contract work, which we no longer have.

Gross profit

Gross profit amounted to \$3,566,231 and \$8,244,029 for the nine months ended September 30, 2018 and 2017, respectively, a decrease of \$4,677,798 or 56.7%. The decrease in gross profit is primarily due to the subsidy revenues of \$7,200,000 included in the prior period, offset by the increased revenues from the CFF Collaboration agreement entered into in May 2018.

Selling, general and administrative expenses

Selling, general and administrative expenses was \$8,023,292 and \$10,360,873 for the nine months ended September 30, 2018 and 2017, respectively, a decrease of \$2,337,581 or 22.6%.

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

	Nine months ended		Increase/ (decrease)	Percentage change
	September 30,			
	2018	2017		
Marketing and selling expenses	\$ 55,734	\$ 303,298	\$ (247,564)	(81.6)%
Payroll expense	1,773,439	3,111,069	(1,337,630)	(43.0)%
Research and development salaries	2,232,601	2,412,153	(179,552)	(7.4)%
Directors fees	165,000	165,000	-	-%
Stock option compensation expense	457,333	480,474	(23,141)	(4.8)%
Legal fees	260,175	669,327	(409,152)	(61.1)%
Consulting fees	382,942	409,397	(26,455)	(6.5)%
Facilities expense	1,874,330	1,917,703	(43,373)	(2.3)%
Travel expenditure	106,535	223,641	(117,106)	(52.4)%
Capital raising fee	-	76,000	(76,000)	100.0%
Other	715,203	592,811	122,392	20.6%
	<u>\$ 8,023,292</u>	<u>\$ 10,360,873</u>	<u>\$ (2,337,581)</u>	<u>(22.6)%</u>

The decrease in marketing expenditure over the prior period is primarily due a change in strategy with less reliance placed on developing a comprehensive CRO business model, therefore less marketing effort was required during the current period.

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

	Nine months ended		Increase/ (decrease)	Percentage change
	September 30,			
	2018	2017		
Cost of sales	\$ 3,661,117	\$ 5,539,346	\$ (1,878,229)	(33.9)%
Selling, general and administrative expenses	1,773,439	3,111,069	(1,337,630)	(43.0)%
Research and development salaries	2,232,601	2,412,153	(179,552)	(7.4)%
	<u>\$ 7,667,157</u>	<u>\$ 11,062,568</u>	<u>\$ (3,395,411)</u>	<u>(30.7)%</u>

The decrease in total payroll expenditure is primarily due to the restructure of our operations with the termination of our business development team, due to the change in our market focus from CRO to early stage drug discovery, a restructure of our management team and streamlining of our business at our Tucson site and a reduction in the bonus accrual due to anticipated lower bonus payouts.

The total payroll expense included in cost of sales decreased by \$1,878,229. The decrease is primarily due to the reversal of bonuses accrued in the current and prior period and a reduction in laboratory head count during the current period with a larger allocation of payroll expenses to internal research projects in the current period (also impacted by the reduction in bonus accruals).

The payroll expense charged to selling, general and administrative expenses decreased by \$1,337,630 primarily due to the restructure of the organization and the release of the business development team and lower bonus and vacation accruals during the current period.

The payroll expense charged to research and development decreased by \$179,552. The decrease is due to a reduction in bonus accruals offset by a larger allocation of personnel to internal research projects.

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

The stock option compensation expense decreased by \$23,141. The charge for each period is dependent upon the number of options issued, any new options issued, and the value of the options and the vesting schedule of these options. No options were issued during the period under review.

Legal fees decreased by \$409,152. The prior period included significant legal fees incurred in the GPB debt funding. The legal fees incurred in the current period consist of patent related activities and general legal counsel.

Consulting expenses decreased by \$26,455, the prior period included consulting expenses incurred to support our sales effort and certain technical consultants, these expenses were not incurred in the current period.

Facilities expenses decreased by \$43,373 over the prior period, we have implemented a cost restructuring exercise which should reduce this expenditure in future periods.

Travel expenditure decreased by \$117,106 due to the release of our business development team and the travel associated with their sales efforts.

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 \$1,190,442 and \$1,211,122 for the nine months ended September 30, 2018 and 2017 respectively, a decrease of \$20,680 or 1.7%, the decrease is due to non-renewal of certain non-essential licensing agreements for both of our research sites.

Amortization expense was \$168,738 and \$168,738 for the nine months ended September 30, 2018 and 2017, respectively.

Other income

Other income was \$125,218 and \$500,699 for the nine months ended September 30, 2018 and 2017, respectively, a decrease of \$375,481. Other income in the current period represents income derived from customers for non-revenue pass through costs incurred on their behalf. Other income in the prior period, 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.

Gain on debt extinguishment

Gain on debt extinguishment was \$495,783 and \$0 for the nine months ended September 30, 2018 and 2017, respectively. The gain arose on the extinguishment of the GPB convertible debt on August 31, 2018 and represents the unamortized debt discount, the derivative liability related to the convertible debt conversion feature and expenses directly related to the debt extinguishment.

Other Expense

Other expense was \$572,524 and \$0 for the nine months ended September 30, 2018 and 2017, respectively. Other expense consists of severance accruals raised on the management restructure and streamlining of operations at our Tucson facility.

Interest expense

Interest expense totaled \$2,366,170 and \$1,735,556 for the nine months ended September 30, 2018 and 2017, respectively.

The interest expense consists of the following:

- Imputed interest on deferred purchase consideration on the acquisition of the North Carolina facility of \$224,307 and \$432,326 for the nine months ended September 30, 2018 and 2017, a decrease of \$208,019 or 48.1%, respectively. This is due to a revaluation exercise undertaken in the prior year whereby the expected payment schedule was revised to reflect current expectations, resulting in a longer repayment schedule and a reduction in imputed interest expense.
- The amortization of debt discount of \$1,017,408 and \$786,339 for the nine months ended September 30, 2018 and 2017, respectively, an increase of \$231,069 or 29.4%. The increase is due the increase in total debt advanced to the Company in terms of bridge notes and term loans of \$15,750,000 in August 2018 compared to a total convertible debt outstanding of \$10,000,000 in the prior period, slightly offset by lower interest rates during the current period.
- Interest expense was \$1,123,916 and \$515,078 for the nine months ended September 30, 2018 and 2017, respectively, an increase of \$608,838 or 118.2%, primarily due to interest on the GPB debt which represented interest for four and a half months in the prior period and eight months in the current period. The increase is also due to the increase in total debt advanced to the Company in terms of bridge notes of \$500,000 and term loans of \$15,250,000, offset by the repayment of \$10,000,000 of convertible debt during August 2018.
- Other interest was \$539 and \$1,813 for the nine months ended September 30, 2018 and 2017, respectively.

Derivative liability movement

Derivative liability movement was \$(1,346,202) and \$279,178 for the nine months ended September 30, 2018 and 2017, respectively, an increase of \$1,625,380. The debit 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 and the Series C Preferred stock warrants, with variable pricing options.

Net loss

Net loss was \$9,480,136 and \$4,452,383 for the nine months ended September 30, 2018 and 2017, respectively, an increase of \$5,027,753 or 112.9%. The increase is primarily due to a reduction in subsidy revenue of \$7,200,000, offset by an increase in revenue related to the CFF collaboration agreement, an increase in mark-to-market derivative liabilities and an increase in interest expense of the GPB debt which was concluded and only incurred from May 15, 2017, offset by an overall reduction in selling, general and administrative expenses.

Preferred stock dividends

Preferred stock dividends was \$140,088 and \$0 for the nine months ended September 30, 2018 and 2017, respectively. The Series C Preferred stock issued in the current period earns dividends at the rate of 12% per annum.

Net loss available to common stock holders

The net loss available to common stock holders was \$9,620,224 and \$4,452,383 for the nine months ended September 30, 2018 and 2017, respectively, an increase of \$5,167,841 or 116.1%. This is due to the reasons discussed above.

Liquidity and Capital Resources

We have a history of operating losses and net losses 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 debt funding, commercial customers and subsidy income. Although, we are generating revenue from commercial customers, 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 \$26,000,000 from Sanofi and despite the \$5,250,000 we expect to derive from Icagen-T for services provided to and operating expense contributions to be paid by Sanofi over the next two and a quarter years, we expect our expenses to increase as our operations expand and our expenses may continue to exceed such revenue. During the nine month period, we raised an additional \$2,800,000 through the issuance of shares of our Series C Preferred stock, an additional \$500,000 through the issuance of Bridge Notes and a further \$15,250,000 in Term Loans of which \$10,200,000 was utilized to settle convertible notes outstanding. As of September 30, 2018, despite our fund raising efforts mentioned in the preceding sentence, 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, 2017 with respect to this uncertainty. We anticipate that our current cash and cash equivalents, including cash derived from the Series C Preferred Stock issued, the Term Loans and the Bridge Notes will not be sufficient to meet our operating needs for at least the next six months without additional revenue derived from operations or collaborations. 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 September 30, 2018, we had cash totaling \$2,954,230, other current assets totaling \$2,161,412 and total assets of \$14,319,740. We had total current liabilities of \$6,935,596 and a net working capital deficit of \$1,819,953. Total liabilities were \$31,092,075 including deferred purchase consideration of \$8,506,971. The deferred purchase consideration includes a net present value discount of \$1,193,029 (made up of a gross present value discount of \$2,468,700 less imputed interest movements of \$1,275,671), the gross amount still due in terms of the acquisition agreement with Pfizer, Inc., is \$9,700,000 after the payment of \$300,000 to date, 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 quarters ended June 30, 2017, September 30, 2017 and December 31, 2017. The deferred amount bears interest at a rate of 12.5% per annum. Our stockholders' deficit amounted to \$16,772,335.

During the third quarter of 2018, we closed our third and fourth tranche of our Series C Offering and entered into a Securities Purchase Agreement with a trust of which one member of our Board of Directors is the trustee, another Board member and a related party, an aggregate of seven (7) units, at a purchase price of \$100,000 per unit. An aggregate of 199,998 shares of Series C Preferred Stock and a warrant to purchase an aggregate of 199,998 shares of common stock were sold. The gross cash proceeds to us from the sale of the seven (7) units was \$700,000.

On August 13, 2018 we closed the first tranche of our bridge note and warrant offering of a maximum of one hundred fifty (150) units and entered into a Securities Purchase Agreement with four accredited investors, which included a trust of which one member of our Board of Directors is the trustee and two other members of the Board of Directors, pursuant to which we issued to the Purchasers an aggregate of fifty (50) units, at a purchase price of \$10,000 per unit. An aggregate of \$500,000 in principal amount of Notes and warrants to purchase an aggregate of 75,000 shares of common stock were sold at the closing. The gross cash proceeds to us from the sale of the fifty (50) units was \$500,000.

On August 31, 2018, we entered into a Credit Agreement and with the banks and other financial institutions from time to time party thereto, as lenders and Perceptive Credit Holdings II, LP, whereby terms loans in the aggregate of \$15,250,000 were advanced to us. Amounts borrowed under the Credit Agreements bear interest at a rate per annum equal to the sum of the greater of: (i) the London Interbank Offered Rate (LIBOR) for one month periods and (ii) two and one-quarter percent (2.25%), plus an applicable margin rate of 9.75% per annum. Furthermore, interest is payable on a monthly basis. Commencing on the last day of each month after August 31, 2020, the Term Loans amortizes at an amount equal to 1.0% of the aggregate principal amount of the Term Loans borrowed on the closing date, the term loan matures on August 31, 2022.

On August 31, 2018, utilizing a portion of the proceeds raised from the credit agreements, we exercised our right to redeem the convertible notes outstanding in the principal amount of \$10,000,000 that had been issued in May 2017 by the payment of the aggregate principal outstanding of \$10,000,000, plus accrued interest thereon of \$108,333 and an early redemption cash payment of \$200,000.

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 nine months ended September 30, 2018 and 2017 is provided below.

	Nine months ended		Increase/ (decrease)	Percentage change
	September 30, 2018	2017		
Net cash used in operating activities	\$ (6,197,224)	\$ (7,338,302)	\$ 1,141,078	(15.5)%
Net cash used in investing activities	(865,466)	(1,023,939)	158,473	(15.5)%
Net cash provided by financing activities	7,253,324	9,448,556	(2,195,232)	(23.2)%
Net increase in cash and cash equivalents	\$ 190,634	\$ 1,086,315	\$ (895,681)	(82.5)%

Net cash used in operating activities was \$6,197,224 and \$7,338,302 for the nine months ended September 30, 2018 and 2017, respectively. The decrease in the cash used in operating activities was primarily due to the following:

	Nine months ended		Increase/ (decrease)	Percentage change
	September 30,			
	2018	2017		
Net loss	\$ (9,480,136)	\$ (4,452,383)	\$ (5,027,753)	112.9%
Adjustments for non-cash items	3,908,647	2,299,821	1,608,826	70.0%
Changes in operating assets and liabilities	<u>(625,735)</u>	<u>(5,185,740)</u>	<u>4,560,005</u>	<u>(87.9)%</u>
Net cash used in operating activities	<u>\$ (6,197,224)</u>	<u>\$ (7,338,302)</u>	<u>\$ 1,141,078</u>	<u>(15.5)%</u>

The increase in net loss is discussed under net loss in results of operations for the nine months ended September 30, 2018 and 2017, respectively.

The change in adjustments for non-cash items of \$1,608,826 is primarily due to; i) the movement on the derivative liability of \$1,625,380; ii) the movement in the vendor unearned purchase consideration of \$500,000 and iii) offset by the movement in the gain on extinguishment of debt of \$495,783.

The changes in operating assets and liabilities of \$4,560,005 is primarily due to; i) the increase in the movement of deferred subsidy of \$3,200,000; ii) the increase in the movement of accounts payable of \$1,122,354; iii) the decrease in the movement of other payables and accrued expenses of \$609,236; and iv) the reduction in the movement in accounts receivable of \$411,848.

Net cash used in investing activities decreased by \$158,473 due primarily to the purchase of cell lines in the prior period.

The movement in net cash provided by financing activities decreased by \$2,195,232. In the prior period, we raised a net \$9,600,000 from the issuance of convertible notes in the principal amount of \$10,000,000 to fund working capital purposes. During the nine months ended September 30, 2018, we raised \$15,250,000 from Term Loans, repaid the \$10,000,000 convertible debt, in the principal amount of \$10,000,000, raised a further \$500,000 in Bridge Notes and a further \$2,800,000 in Series C Preferred Stock. We also incurred capital raising fees of \$962,162 and paid fees on extinguishing the convertible debt of \$207,000.

Capital Expenditures

Our current plan is to purchase equipment and software to ensure that the Tucson and North Carolina Facilities function efficiently and that we are able to support the commercialization efforts of the Company. We anticipate that we would need to spend an additional \$1,200,000 on necessary software and equipment over the next twelve months.

Other Commitments

As a result of the agreements that we entered into with Pfizer we are obligated; (i) make additional payments in terms of the Asset Purchase and Collaboration Agreement that we entered into on June 26, 2015 with Pfizer including 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, such minimum being reduced to \$50,000 for the quarters ending March 2017 to December 2018 and the difference between \$250,000 or the quarterly amount paid and the actual calculation of deferred purchase consideration at 10% of gross revenue per quarter is being deferred and paid as one lump sum with the payment being made the quarter ended March 31, 2019, bearing interest at 12.5% per annum, which interest is payable quarterly; (ii) 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 \$115,275, for the remainder of the lease period.

In addition, we are required to make monthly interest payments of approximately \$158,500 under the terms of the credit agreements entered into on August 31, 2018.

Future annual minimum payments required under operating lease obligations as of September 30, 2018, are as follows:

	Amount
2018	\$ 48,326
2019	66,949
Total	\$ 115,275

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.

Off-balance sheet arrangements

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 September 30, 2018 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.

None.

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, 2017, which was filed with the SEC on April 17, 2018. 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, 2017.

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 nine months ended September 30, 2018, we had a net loss of \$(9,480,136) and for the year ended December 31, 2017 we had a net loss of \$(6,110,434). 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 a limited number of our customers.

The termination of our relationship with Sanofi would adversely affect our business. For the nine months ended September 30, 2018 we derived 100% of our revenue from commercial contracts (of which 71.0% of our services revenue was for services provided to four large pharmaceutical customers and one biotech company. For the year ended December 31, 2017, we derived 56.2% of our revenues from commercial contracts of which 78.8% of our revenue was for services provided to five large pharmaceutical customers; 42.4% of our revenue was from subsidy revenue and the remaining 1.4% 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. Our MSA with Sanofi guaranteed \$32 million over a five-year period of which: (i) \$26,000,000 has been received; ii) a further \$2.25 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 nine months ended September 30, 2018 and the years ended December 31, 2017, and 2016 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 amounts required to maintain the facility in Tucson and the amounts owed under the Term Loans) 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, 2017 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.

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 \$(9,480,136) for the nine months ended September 30, 2018, a net loss of \$(6,110,434) for the year ended December 31, 2017 and a net loss of \$(5,504,412) for the year ended December 31, 2016. 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 March 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 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 Term Loans. 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 six 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 Chairman of the Board beneficially owns a substantial portion of our outstanding common stock and Series C Preferred Stock resulting in ownership by him of a significant percentage of our voting power, which may limit your ability and the ability of our other stockholders, whether acting alone or together, to propose or direct the management or overall direction of our company.

The concentration of ownership of our stock could discourage or prevent a potential takeover of our company that might otherwise result in an investor receiving a premium over the market price for his shares. Our Chairman of the Board owns 164,284 shares of our common stock, 685,704 shares of the Series C Preferred Stock, which shares have the right to 2,057,112 votes and exercisable options, representing beneficial ownership of 13.3% of our outstanding shares of common stock and 23.2% of our voting power. In addition, the holders of the Series C Preferred Stock have the right to elect one director to our Board of Directors and have certain consent rights. In addition, the directors as a group beneficially own 2,586,240 shares of our common stock, 757,132 shares of the Series C Preferred Stock, which shares have the right to 2,271,396 votes and exercisable warrants and options, representing beneficial ownership of 31.6% of our outstanding shares of common stock and 31% of our voting power. Accordingly, our Chairman of the Board and our Board members alone and together with our directors would have significant influence over the election of our directors and the approval of actions for which the approval of our stockholders is required. If you acquire shares of our securities, you may have no effective voice in the management of our company. Such significant influence over control of our company may adversely affect the price of our common stock. Our Chairman of the Board as well as our board of directors may be able to significantly influence matters requiring approval by our stockholders, including the election of directors, as well as mergers or other business combinations which require the vote of a majority of our outstanding shares. Such significant influence may also make it difficult for our stockholders to receive a premium for their shares of our common stock in the event we merge with a third party or enter into different transactions which require stockholder approval. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock.

RISKS RELATED TO OUR DEBT OBLIGATIONS

The failure to comply with the terms of the Term Loans and Credit Agreements 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 August 2018 debt financing, we received advances in the aggregate principal amount of \$7,250,000 pursuant to the Credit Agreement that we entered into and issued a warrant to purchase 723,550 shares of our common stock (the "Purchaser Warrants"), and Icagen-T received advances in the aggregate principal amount of \$8,000,000 pursuant to the Credit Agreement, which Term Loans are secured by a security interest in all of our existing and future assets, subject to existing security interests and exceptions. The Term Loans 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 Term Loans 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 Term Loans, 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 requires 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 depends 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 September 30, 2018, our total debt owed under outstanding notes was \$15.75 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 Term Loans and other debt;
- 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 Term Loans contain, and our future indebtedness agreements may contain covenants that restrict our ability to finance future operations or capital needs or to engage in other business activities. The Term Loans restrict our ability and the ability of our restricted subsidiaries to:

- incur, assume or guarantee additional Indebtedness (as defined in the Term Loans);
- 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

In addition, the Credit Agreements also contain covenants requiring that us and our subsidiaries to maintain cash and cash equivalents held in one or more accounts subject to the first priority perfected security interests of the lenders under the Credit Agreements of not less than (a) \$1,000,000 following the closing date until March 31, 2019, and (b) \$1,500,000 at all times thereafter. The Credit Agreements also provide for specified quarterly minimum consolidated net revenue covenants of us and our subsidiaries for the trailing twelve month period ended on each such calculation date during the term of the Credit Agreements. In addition, the Credit Agreement also provides that it is an event of default if certain key persons do not remain in certain positions with our company and we do not enter into a collaboration agreement with a pharmaceutical or biotechnology company that results in aggregate up- front fees of \$5,000,000 on or before March 31, 2019. A breach of any of these covenants would result in a default under our Term Loans. If an event of default under our Credit Agreements 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 addition, Icagen-T has pledged all of its assets, including the facility located in Tucson, subject to the Sanofi lien. In such an event, we cannot assure you that we would have sufficient assets to pay amounts due on the Term Loans.

It may be difficult to realize the value of the collateral securing the Term Loans.

The collateral securing the Term Loans 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 Term Loans from time to time, whether on or after the date the Term Loans 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 were prepared in connection with the Term Loans 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.

Our failure to fulfill all of our registration requirements may cause us to suffer liquidated damages, which may be very costly.

Pursuant to the terms of the registration rights agreement that we entered into in connection with the Term Loans as well as our prior convertible note financing, we are required to file a registration statement with respect to securities issued to them within a certain time period and maintain the effectiveness of such registration statement. The failure to do so could result in the payment of damages by us. There can be no assurance as to when this registration statement will be declared effective or that we will be able to maintain the effectiveness of any registration statement, and therefore there can be no assurance that we will not incur damages with respect to such agreements.

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

- 3.1 [Second Amended and Restated Certificate of Incorporation dated April 10, 2012 \(Incorporated by reference to the Registration Statement on Form S-1/A filed April 20, 2012, File No. 333-179508\)](#)
- 3.2 [Certificate of Amendment to the Second Amended and Restated Certificate of Incorporation \(Incorporated by reference to the Current Report on Form 8-K filed on December 5, 2014, File No. 000-54748\)](#)
- 3.3 [Amended and Restated Bylaws \(Incorporated by reference to the Current Report on Form 8-K filed on February 25, 2015, File No. 000-54748\)](#)
- 3.4 [Certificate of Amendment to Second Amended and Restated Certificate of Incorporation \(Incorporated by reference to the Current Report on Form 8-K filed March 26, 2015, File No. 000-54748\)](#)
- 3.5 [Certificate of Amendment to the Second Amended and Restated Certificate of Incorporation \(Incorporated by reference to the Current Report on Form 8-K \(File No. 000-54748\) filed with the Securities and Exchange Commission on August 31, 2015\)](#)
- 3.6 [Certificate of Designation of Powers, Preferences and Rights of Series C Convertible Preferred Stock \(incorporated by reference to the Registrant's Form 8-K \(File No. 000-54748\) filed with the Securities and Exchange Commission on April 9, 2018\)](#)
- 4.1 [Form of Warrant \(incorporated by reference to the Registrant's Form 8-K \(File No. 000-54748\) filed with the Securities and Exchange Commission on April 9, 2018\)](#)
- 4.2 [Form of 10% Subordinated Promissory Note \(incorporated by reference to the Registrant's Form 8-K \(File No. 000-54748\) filed with the Securities and Exchange Commission on August 15, 2018\)](#)
- 4.3 [Form of Warrant issued to holders of 10% Subordinated Promissory Note \(incorporated by reference to the Registrant's Form 8-K \(File No. 000-54748\) filed with the Securities and Exchange Commission on August 15, 2018\)](#)
- 4.4 [Warrant issued to Perceptive Credit Holdings II, LP \(incorporated by reference to the Registrant's Form 8-K \(File No. 000-54748\) filed with the Securities and Exchange Commission on September 6, 2018\)](#)
- 4.5 [Second Amended and Restated Warrant issued to GPB Debt Holdings II, LLC \(incorporated by reference to the Registrant's Form 8-K \(File No. 000-54748\) filed with the Securities and Exchange Commission on September 6, 2018\)](#)
- 4.6* [Amended and Restated Bridge Note](#)
- 10.1 [Form of Securities Purchase Agreement by and between Icagen, Inc. and the Purchaser named therein \(incorporated by reference to the Registrant's Form 8-K \(File No. 000-54748\) filed with the Securities and Exchange Commission on April 9, 2018\)](#)
- 10.2 [Form of Securities Purchase Agreement by and between Icagen, Inc. and the Purchaser named therein \(incorporated by reference to the Registrant's Form 8-K \(File No. 000-54748\) filed with the Securities and Exchange Commission on August 15, 2018\)](#)

10.3	<u>Credit Agreement and Guaranty (incorporated by reference to the Registrant's Form 8-K (File No. 000-54748) filed with the Securities and Exchange Commission on September 6, 2018)</u>
10.4	<u>Credit Agreement and Guaranty (Incorporated by reference to the Current Report on Form 8-K (File No. 000-54748) filed with the Securities and Exchange Commission on September 6, 2018)</u>
10.5	<u>Security Agreement (incorporated by reference to the Registrant's Form 8-K (File No. 000-54748) filed with the Securities and Exchange Commission on September 6, 2018)</u>
10.6	<u>Security Agreement (incorporated by reference to the Registrant's Form 8-K (File No. 000-54748) filed with the Securities and Exchange Commission on September 6, 2018)</u>
10.7*	<u>Amendment to Series C Preferred Stock Securities Purchase Agreement</u>
10.8*	<u>Series C Preferred Stock Subordination Agreement</u>
31.1*	<u>Certification of Principal Executive Officer pursuant to Rules 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
31.2*	<u>Certification of Principal Financial Officer pursuant to Rules 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
32.1*	<u>Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
32.2*	<u>Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* 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: November 19, 2018

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

Date: November 19, 2018

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

THIS PROMISSORY NOTE AMENDS, RESTATES AND REPLACES THE PROMISSORY NOTE ISSUED AUGUST 13, 2018, WHICH IS NULL AND VOID. THIS PROMISSORY NOTE HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS AND MAY NOT BE OFFERED FOR SALE, SOLD, PLEDGED, ASSIGNED OR OTHERWISE DISPOSED OF, AND NO TRANSFER OF THIS PROMISSORY NOTE WILL BE MADE BY THE COMPANY OR ITS TRANSFER AGENT IN THE ABSENCE OF SUCH REGISTRATION OR AN OPINION OF COUNSEL ACCEPTABLE TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED.

FORM OF AMENDED AND RESTATED 10% SUBORDINATED PROMISSORY NOTE

\$ _____

Durham, North Carolina
August , 2018 (the "Issue Date")

FOR VALUE RECEIVED, Icagen, Inc., a Delaware corporation (the "**Company**"), with its principal place of business at 4222 Emperor Boulevard, Suite 350, Research Triangle Park, Durham, North Carolina 27703, its successors and assigns (the "**Company**"), promises to pay to the order of _____ ("**Payee**"), having an address at _____, the principal sum of _____ Dollars (\$ _____) on the earlier of (i) the date that is twelve (12) months after the Issue Date or (ii) the Company's receipt of the proceeds of funding from its next collaboration/ partnership (the "**Maturity Date**"), together with interest on the principal amount hereof at the rate of 10% per annum, payable on the Maturity Date, commencing on the Issue Date. Payments on both principal and interest are to be made in lawful money of the United States of America unless Payee agrees to another form of payment.

1. This Note is one of a series of a maximum of One Million Five Hundred Thousand Dollars (\$1,500,000) of notes being issued by and among the Company and certain note investors (the "**Investors**") as part of a bridge financing. This Note and all obligations hereunder, and the other Notes issued as part of this series to the Investors and all obligations thereunder, respectively, shall rank **pari passu** with each other. NOTWITHSTANDING ANYTHING HEREIN TO THE CONTRARY, THIS NOTE SHALL BE SUBORDINATED IN RIGHT OF PAYMENT IN ALL RESPECTS TO (A) THAT CERTAIN CREDIT AGREEMENT AND GUARANTY, DATED AS OF AUGUST , 2018, AMONG THE COMPANY, AS BORROWER, THE GUARANTORS PARTY THERETO, THE LENDERS FROM TIME TO TIME PARTY THERETO AND PERCEPTIVE CREDIT HOLDINGS II, LP ("**PERCEPTIVE**"), AS ADMINISTRATIVE AGENT AND (B) THAT CERTAIN CREDIT AGREEMENT AND GUARANTY, DATED AS OF AUGUST , 2018, AMONG ICAGEN-T, INC., A DELAWARE CORPORATION, AS BORROWER, THE COMPANY, AS GUARANTOR, THE OTHER GUARANTORS PARTY THERETO, THE LENDERS FROM TIME TO TIME PARTY THERETO AND PERCEPTIVE, AS ADMINISTRATIVE AGENT (COLLECTIVELY, AS SUCH CREDIT AGREEMENTS MAY BE MODIFIED, AMENDED OR RESTATED IN THEIR ENTIRETY OR OTHERWISE FROM TIME TO TIME, THE "**CREDIT AGREEMENTS**"). IF ANY PAYMENT IN ANY FORM WITH RESPECT TO THIS NOTE IS COLLECTED OR RECEIVED BY ANY INVESTOR AFTER AN "EVENT OF DEFAULT" (AS DEFINED IN ANY CREDIT AGREEMENT) HAS OCCURRED AND IS CONTINUING, SUCH PAYMENT SHALL BE HELD BY SUCH INVESTOR IN TRUST FOR THE BENEFIT OF THE CREDITORS UNDER THE CREDIT AGREEMENTS AND SHALL FORTHWITH BE PAID OVER TO PERCEPTIVE, IN ITS CAPACITY AS ADMINISTRATIVE AGENT UNDER EACH CREDIT AGREEMENT, TO BE CREDITED AND APPLIED AGAINST THE OBLIGATIONS DUE TO THE CREDITORS UNDER SUCH CREDIT AGREEMENTS, BUT WITHOUT AFFECTING, IMPAIRING OR LIMITING IN ANY MANNER THE LIABILITY OF THE COMPANY UNDER ANY OTHER PROVISION OF THIS NOTE.

2. As used herein, a **“Default”** means a material default by the Company of this Note, the Note Purchase Agreement dated the date hereof between the Company and Payee, or the Pledge Agreement issued by the Company to Payee on the date hereof. Amounts not paid when due hereunder shall bear interest from the due date until such amounts are paid at the rate of one percent (1%) per month; provided, however, that in the event such interest rate would violate any applicable usury law, the default rate shall be the highest lawful interest rate permitted under such usury law. Upon the occurrence of a Default and receipt of written notice by the Company from Payee of such Default, the principal and interest due hereunder shall be immediately due and payable by the Company to Payee.

3. Presentment, demand, protest or notice of any kind are hereby waived by the Company. The Company may not set off against any amounts due to Payee hereunder any claims against Payee or other amounts owed by Payee to the Company.

4. All rights and remedies of Payee under this Note are cumulative and in addition to all other rights and remedies available at law or in equity, and all such rights and remedies may be exercised singly, successively and/or concurrently. Failure to exercise any right or remedy shall not be deemed a waiver of such right or remedy.

5. The Company agrees to pay all reasonable costs of collection, including attorneys' fees which may be incurred in the collection of this Note or any portion thereof and, in case an action is instituted for such purposes, the amount of all attorneys' fees shall be such amount as the court shall adjudge reasonable.

6. This Note is made and delivered in, and shall be governed, construed and enforced under the laws of the State of New York.

7. This Note shall be subject to prepayment, at the option of the Company, in whole or in part, at any time and from time to time, without premium or penalty.

8. This Note or any benefits or obligations hereunder may not be assigned or transferred by the Company.

ICAGEN, INC.

By: _____
Name: Richard Cunningham
Title: Chief Executive Officer

Acknowledged and Agreed:

By: _____
Name:
Title:

ICAGEN, INC.

FORM OF AMENDMENT TO SECURITIES PURCHASE AGREEMENT

This **AMENDMENT TO SECURITIES PURCHASE AGREEMENT** (this "**Agreement**") is made and entered into as of August 31, 2018, by and among Icagen, Inc., a Delaware corporation with its executive offices located at 4222 Emperor Blvd., Suite 350, Research Triangle Park, Durham, North Carolina 27703 (the "**Company**"), and the investors set forth on the signature pages affixed hereto (each, an "**Investor**" and, collectively, the "**Investors**"). Capitalized terms used herein without definition shall have the meaning ascribed to such terms in the Securities Purchase Agreement (the "**Agreement**") with the Company being amended hereby pursuant to which Investor acquired Units, each Unit consisting of shares of the Company's Series C Convertible Redeemable Preferred Stock (the "**Series C Preferred Shares**") and a seven year warrant (the "**Warrant**") to purchase 28,571 shares of the Company's common stock, par value \$0.001 per share (the "**Common Stock**").

WHEREAS, the Investor is party to the Agreement and for clarification purposes desires to amend the Agreement.

WHEREAS, Section 9.10 of the Agreement provides that it may be amended by (i) the Company and (ii) a majority-in-interest of the Investors (based on the number of Securities purchased under the Agreement).

WHEREAS, the Company and the Investors that represent a majority-in-interest of the Investors are each executing and delivering this amendment to the Agreement; and

AGREEMENT

NOW, THEREFORE, in consideration of the mutual terms, conditions and other agreements set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and intending to be legally bound hereby, the parties hereto hereby agree to the following amendment to the Agreement.

1. Section 5.1 shall be amended as follows:

(a) to add the words "and Perceptive Credit Holdings II, LP ("Perceptive")" after GPB, each time that GPB appears in Section 5.1 and (b) to add the following sentence to the end of Section 5.1 (a): "The consent right of each of GPB and Perceptive shall terminate as to each of GPB and Perceptive after the shares underlying the warrant issued to each have been sold or if all of the shares underlying all warrants issued to both GPB and Perceptive have been registered on a registration statement that has been declared effective by the SEC.

2. Section 5.2 (b) the first sentence of Section 5.2(a) shall be amended to read as follows:

"Each time after the date hereof that the Company proposes for any reason to register any of its Common Stock under the 1933 Act, either for its own account or for the account of a stockholder or stockholders exercising demand registration rights (other than under a registration statement on Form S-8 or S-4, the Company's initial public offering of securities under a registration statement on Form S-1 or S-3 or for the account of GPB or Perceptive) (a "**Proposed Registration**"), the Company shall promptly give written notice of such Proposed Registration to all of the holders of Registrable Securities (which notice shall be given not less than 30 days prior to the expected effective date of the Company's Registration Statement) and shall offer such holders, if permitted by GPB and Perceptive (such consent right of each of GPB and Perceptive shall terminate as to each of GPB and Perceptive after the shares underlying the warrant issued to each have been sold or if all of the shares underlying all warrants issued to both GPB and Perceptive have been registered on a registration statement that has been declared effective by the SEC), the right to request inclusion of any of such holder's securities in the Proposed Registration.

3. Clause (2) of Section 5.2 (c) is amended to read as follows and a new clause (3) is added:

“(2) second, to GPB and Perceptive until all of the shares of Common Stock underlying the warrants issued to each have been sold or have been registered on a registration statement that has been declared effective by the SEC) and (3) third to the others requesting registration of securities of the Company.”

4. The last sentence of Section 9.7 shall be amended to add the following clause (vi) as follows:

“the issuance of securities by the Company under agreements entered into with Perceptive and the revised amended and restated warrant issued to GPB.”

5. Applicable Law. This amendment to the Agreement shall be governed by and construed in accordance with the laws of the State of New York without giving effect to the conflict of law provisions thereof, and the parties hereto.

6. Arbitration. Each Investor and the Company agree that they shall resolve all disputes, controversies and differences which may arise between them, out of or in relation to or in connection with this amendment to the Agreement, after discussion in good faith attempting to reach an amicable solution. Provided that such disputes, controversies and differences remain unsettled after discussion between the parties, both parties agree that those unsettled matter(s) shall be finally settled by arbitration in New York, New York in accordance with the latest Rules of the American Arbitration Association. Such arbitration shall be conducted by three arbitrators appointed as follows: each party will appoint one arbitrator and the appointed arbitrators shall appoint a third arbitrator. If within thirty (30) days after confirmation of the last appointed arbitrator, such arbitrators have failed to agree upon a chairman, then the chairman will be appointed by the American Arbitration Association. The decision of the tribunal shall be final and may not be appealed. The arbitral tribunal may, in its discretion award fees and costs as part of its award. Judgment on the arbitral award may be entered by any court of competent jurisdiction, including any court that has jurisdiction over either party or any of their assets. At the request of any party, the arbitration proceeding shall be conducted in the utmost secrecy subject to a requirement of law to disclose. In such case, all documents, testimony and records shall be received, heard and maintained by the arbitrators in secrecy, available for inspection only by any party and by their attorneys and experts who shall agree, in advance and in writing, to receive all such information in secrecy.

7. Further Assurances. Each party hereto shall do and perform or cause to be done and performed all such further acts and shall execute and deliver all such other agreements, certificates, instruments and documents as any other party hereto reasonably may request in order to carry out the intent and accomplish the purposes of this amendment to the Agreement and the consummation of the transactions contemplated hereby.

8. Counterparts. This amendment to the Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which taken together shall constitute one and the same instrument. This Agreement may also be executed via facsimile, which shall be deemed an original.

[Signature page follows]

IN WITNESS WHEREOF, the undersigned Investors and the Company have caused this Amendment to the Agreement to be duly executed as of the date first above written.

ICAGEN, INC.

By: _____
Name: Richard Cunningham
Title: Chief Executive Officer

INVESTORS:

The Investors executing the Signature Page in the form attached hereto as Annex A and delivering the same to the Company or its agents shall be deemed to have executed this amendment to the Agreement and agreed to the terms hereof.

Annex A

**Amendment to Securities Purchase Agreement
Investor Counterpart Signature Page**

The undersigned, desiring to enter into this Amendment to Securities Purchase Agreement dated as of August 31, 2018 (the “**Agreement**”), with the undersigned, Icagen, Inc., a Delaware corporation (the “**Company**”), in or substantially in the form furnished to the undersigned.

All Investors:

Address: _____

Telephone No.: _____

Facsimile No.: _____

Email Address: _____

Name of Investor:

If an entity:

Print Name of Entity:

By:
Name:
Title:

If an individual:

Print Name: _____

Signature: _____

If joint individuals:

Print Name: _____

Signature: _____

Series C Preferred Subordination Agreement

This Subordination Agreement (the “*Agreement*”) is made as of August , 2018, by and between Perceptive Credit Holdings II, LP, a Delaware limited partnership, in its capacity as Administrative Agent (as hereinafter defined) for the Lenders (as hereinafter defined), Icagen, Inc., a Delaware corporation (“*Parent*”), and the other parties signatory hereto (each, a “*Holder*” and collectively the “*Holders*”).

Recitals

A. Reference is made to that certain Credit Agreement and Guaranty (such agreement as it may be amended from time to time, the “*Parent Credit Agreement*”), dated as of August , 2018, among Parent, as borrower, the subsidiaries of Parent from time to time party thereto (collectively with Parent, the “*Parent Loan Parties*”), the lenders from time to time party thereto (collectively, the “*Parent Agreement Lenders*”), and Perceptive Credit Holdings II, LP, in its capacity as administrative agent for the Parent Agreement Lenders (the “*Parent Agreement Administrative Agent*”);

B. Reference is further made to that certain Credit Agreement and Guaranty (such agreement as it may be amended from time to time, the “*Icagen-T Credit Agreement*” and collectively with the Parent Credit Agreement, the “*Credit Agreements*”), dated as of August , 2018, among Icagen-T, Inc., a Delaware corporation (“*Icagen-T*”), as borrower, Parent and the subsidiaries of Parent from time to time party thereto (collectively with Icagen-T, the “*Icagen-T Loan Parties*” and the Icagen-T Loan Parties collectively with the Parent Loan Parties, the “*Loan Parties*”), the lenders from time to time party thereto (collectively, the “*Icagen-T Agreement Lenders*”, and the Icagen-T Agreement Lenders collectively with the Parent Agreement Lenders, the “*Lenders*”), and Perceptive Credit Holdings II, LP, in its capacity as administrative agent for the Icagen-T Agreement Lenders (the “*Icagen-T Agreement Administrative Agent*”, and in its capacity as both Parent Agreement Administrative Agent and Icagen-T Agreement Administrative Agent, the “*Administrative Agent*”);

C. Parent, under the Parent Credit Agreement and Icagen-T, under the Icagen-T Credit Agreement have each requested and/or obtained certain loans or other credit accommodations from Lenders which are or may be from time to time secured by assets and property of the Loan Parties.

D. Holders have acquired from Parent shares of Parent’s Series C Convertible Redeemable Preferred Stock (“*Preferred Stock*”).

E. In order to induce Lenders to extend credit to Parent and Icagen-T and, at any time or from time to time, at Lenders’ option, to make such further loans, extensions of credit, or other accommodations to or for the account of Parent and/or Icagen-T, or to purchase or extend credit upon any instrument or writing in respect of which Parent and/or Icagen-T may be liable in any capacity, or to grant such renewals or extension of any such loan, extension of credit, purchase, or other accommodation as Lenders may deem advisable, each Holder is willing to subordinate all of its rights to cash payments of the Accruing Dividends (as such term is defined in that certain Certificate of Designation of Powers, Preferences and Rights of Series C Convertible Redeemable Preferred Stock, dated as of April 3, 2018) to all of Parent’s and Icagen-T’s indebtedness and obligations to the Administrative Agent and the Lenders.

Now, Therefore, The Parties Agree As Follows :

1. Each Holder hereby acknowledges and agrees that until such time as the Obligations (as such term is defined in each of the Credit Agreements, collectively) are indefeasibly paid in full (other than Warrant Obligations, as defined in each of the Credit Agreements), Parent is prohibited from paying to the Holders any Accruing Dividends.

2. Parent hereby acknowledges and agrees that until such time as the Obligations are indefeasibly paid in full (other than Warrant Obligations), it shall not declare, pay or set aside any dividends on shares of any class or series of capital stock of Parent, including, without limitation, on the Preferred Stock (other than dividends on shares of common stock payable solely in shares of common stock).

3. Until such time as the Obligations are indefeasibly paid in full (other than Warrant Obligations), each Holder shall hold in trust for the Administrative Agent and the Lenders and promptly deliver to the Administrative Agent in the form received (except for endorsement or assignment by such Holder where required by the Administrative Agent), for application to the Obligations, any payment, distribution, security or proceeds received by Holder with respect to the Accruing Dividends.

4. Parent shall not amend the terms of the Preferred Stock in any manner that is materially adverse to the Administrative Agent or the Lenders without the prior written consent of the Administrative Agent. To the extent that Parent issues any additional Preferred Stock to a holder who is not a Holder, then Parent shall cause such holder to agree to the terms of this Agreement by executing and delivering to the Administrative Agent a joinder to this Agreement.

5. This Agreement constitutes the legal, valid and binding obligation of Parent and each Holder, enforceable against Parent and such Holder in accordance with its terms.

6. This Agreement shall bind any successors or assignees of each Holder and shall benefit any successors or assigns of the Administrative Agent and the Lenders. This Agreement shall remain effective until terminated in writing by the Administrative Agent. This Agreement is solely for the benefit of Holders and the Administrative Agent and the Lenders and not for the benefit of Parent or any other party. Each Holder further agrees that if Parent and/or Icagen-T is in the process of refinancing any portion of the Credit Agreements with a new lender, and if the Administrative Agent makes a request of such Holder, such Holder shall agree to enter into a new subordination agreement with the new lender on substantially the terms and conditions of this Agreement.

7. Each Holder hereby agrees to execute such documents and/or take such further action as the Administrative Agent may at any time or times reasonably request in order to carry out the provisions and intent of this Agreement, including, without limitation, ratifications and confirmations of this Agreement from time to time hereafter, as and when requested by the Administrative Agent.

8. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, without giving effect to conflicts of laws principles. EACH HOLDER, PARENT AND THE ADMINISTRATIVE AGENT AGREE THAT ANY SUIT, ACTION OR PROCEEDING WITH RESPECT TO THIS AGREEMENT OR ANY JUDGMENT ENTERED BY ANY COURT IN RESPECT THEREOF SHALL BE BROUGHT IN THE SUPREME COURT OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY OR IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK AND IRREVOCABLY SUBMITS TO THE NONEXCLUSIVE JURISDICTION OF EACH SUCH COURT FOR THE PURPOSE OF ANY SUCH SUIT, ACTION, PROCEEDING OR JUDGMENT. **EACH HOLDER, PARENT AND ADMINISTRATIVE AGENT WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY OF THE TRANSACTIONS CONTEMPLATED HEREIN.**

9. This Agreement represents the entire agreement with respect to the subject matter hereof, and supersedes all prior negotiations, agreements and commitments. No Holder is relying on any representations by the Administrative Agent, the Lenders or Parent in entering into this Agreement, and each Holder has kept and will continue to keep itself fully apprised of the financial and other condition of Parent. This Agreement may be amended only by written instrument signed by the Holders, Parent and the Administrative Agent.

10. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

[The rest of this page is intentionally left blank]

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the date first above written.

Administrative Agent:

Perceptive Credit Holdings II, LP

By: Perceptive Credit Opportunities GP, LLC, its
general partner

By: _____

Name: _____

Title: _____

By: _____

Name: _____

Title: _____

[Signature Page to Series C Preferred Subordination Agreement]

Holder:

By: _____
Timothy Tyson

[Signature Page to Series C Preferred Subordination Agreement]

Holder:

By: _____
Clive Kabatznik

[Signature Page to Series C Preferred Subordination Agreement]

Parent:

Icagen, Inc.

By: _____

Name: _____

Title: _____

[Signature Page to Series C Preferred Subordination Agreement]

**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 financial 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: November 19, 2018

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 13a-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 financial 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: November 19, 2018

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 September 30, 2018 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: November 19, 2018

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 September 30, 2018 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: November 19, 2018

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