# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## **FORM 10-Q**

	(Mark One)		_			
	Ø	QUARTERLY REPORT PURSUA OF 1934	NT TO SECTION 13 OR 15(c	I) OF THE SECURITIES EXCHAN	GE ACT	
		For the	e quarterly period ended June	30, 2019		
			OR			
		TRANSITION REPORT PURSUA OF 1934	NT TO SECTION 13 OR 15(d	I) OF THE SECURITIES EXCHAN	GE ACT	
		For the transition p	period from	to		
		Co	ommission file number: 001-35	994		
			Heat Biologics, Inc			
		<b>Delaware</b> (State or Other Jurisdiction of Incorporation or Organization)		<b>26-2844103</b> (I.R.S. Employer Identification No.)		
		801 Capitola Drive Durham, NC (Address of Principal Executive Office	is)	<b>27713</b> (Zip Code)		
Securitie	es registered nu	(Registra	(919) 240-7133 ant's Telephone Number, including Ar	rea Code)		
		Title of each class	Trading Symbol(s)	Name of each exchange on which	h registered	i
		Common Stock	HTBX	Nasdaq Capital Mark	cet	ı
	ths (or for sucl	whether the registrant (1) has filed all n n shorter period that the registrant was r				
		whether the registrant has submitted el g the preceding 12 months (or for such s				Regulation S-T
		whether the registrant is a large accelerions of "large accelerated filer," "accelerated filer,"				
		ccelerated filer celerated filer		Accelerated filer Smaller reporting company Emerging growth company		
		company indicate by check mark if the rovided pursuant to Section 13(a) of the		the extended transition period for com	plying with any ne	w or revised
Indicate	by check mark	whether the registrant is a shell compa	ny (as defined in Rule 12b-2 of	the Exchange Act). Yes□ No ☑		

As of August 12, 2019, there were 34,066,652 shares of Common Stock, \$0.0002 par value per share, outstanding.

## HEAT BIOLOGICS, INC.

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#### 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"). All statements, other than statements of historical facts, contained in this Quarterly Report on Form 10-Q, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "would," "could," "should," "continue" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements are not guarantees of future performance and our actual results could differ materially from the results discussed in the forward-looking statements. Factors that could cause actual results to differ materially from those in the forward-looking statements include, but are not limited to, our ability to raise additional capital to support our clinical development program and other operations, our ability to develop products of commercial value and to identify, discover and obtain rights to additional potential product candidates, our ability to protect and maintain our intellectual property and the ability of our licensors to obtain and maintain patent protection for the technology or products that we license from them, the outcome of research and development activities, our reliance on third-parties, competitive developments, the effect of current and future legislation and regulation and regulatory actions, as well as other risks described more fully in this Quarterly Report on Form 10-Q and our other filings with the Securities and Exchange Commission (the "SEC"). Readers are cautioned that these forward-looking statements are only predictions 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 herein and those identified under Part I, Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2018 filed with the SEC on March 28, 2019 and Amendment No. 1 thereto filed with the SEC on April 24, 2019. Therefore, actual results may differ materially and adversely from those expressed in any forward-looking statements. We undertake no obligation to revise or update any forward-looking statements for any reason.

As a result of these and other factors, we may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

#### NOTE REGARDING COMPANY REFERENCES

Throughout this Quarterly Report on Form 10-Q, "Heat Biologics," "the Company," 'we" and "our" refer to Heat Biologics, Inc.

### PART I—FINANCIAL INFORMATION

### ITEM 1. FINANCIAL STATEMENTS

### HEAT BIOLOGICS, INC. Consolidated Balance Sheets

		June 30, 2019		December 31, 2018
		(unaudited)		
Current Assets Cook and each equivalents	e.	12 929 206	¢.	22 154 251
Cash and cash equivalents Short-term investments	\$	13,828,206 5,648,609	\$	22,154,251 5,570,027
Accounts receivable		77,382		28,538
		684,169		961,317
Prepaid expenses and other current assets	_	20,238,366	_	28,714,133
Total Current Assets		20,238,300		28,/14,133
Property and Equipment, net	_	566,593	_	643,146
Other Assets				
In-process R&D		5,866,000		5,866,000
Goodwill		2,189,338		2,189,338
Right-of-use asset		406,178		_
Deposits		436,283	_	351,220
Total Other Assets		8,897,799		8,406,558
Total Assets	\$	29,702,758	\$	37,763,837
Liabilities and Stockholders' Equity				
Current Liabilities				
Accounts payable	\$	1,979,090	\$	974,619
Deferred revenue		· · · · —		1,032,539
Contingent consideration, current portion		1,222,000		1,187,000
Operating lease liability, current portion		129,205		_
Accrued expenses and other liabilities		1,169,609		1,678,051
Total Current Liabilities		4,499,904		4,872,209
Long Term Liabilities				
Contingent consideration		2,109,515		1,918,225
Deferred tax liability		361,911		316,733
Deferred revenue, net of current portion		200,000		200,000
Operating lease liability, net of current portion		282,353		
Other long-term liabilities		293,582		213,724
Total Liabilities		7,747,265		7,520,891
Commitments and Contingencies				
Stockholders' Equity				
Common stock, \$.0002 par value; 100,000,000 shares authorized, 34,066,652 and 32,492,144 shares issued and outstanding at June 30,				
2019 (unaudited) and December 31, 2018, respectively		6,822		6,499
Additional paid-in capital		117,350,922		114,883,135
Accumulated deficit		(95,066,526)	)	(84,580,180
Accumulated other comprehensive loss		(11,481)		(19,904
Total Stockholders' Equity— Heat Biologics, Inc.		22,279,737		30,289,550
Non-Controlling Interest		(324,244)		(46,604
Total Stockholders' Equity		21,955,493		30,242,946
	_	20.702.77		25 5 5 5 5
Total Liabilities and Stockholders' Equity	\$	29,702,758	\$	37,763,837

# HEAT BIOLOGICS, INC. Consolidated Statements of Operations and Comprehensive Loss (Unaudited)

	Three Months Ended, June 30,				Six Months England 30,	nded,
		2019	2018		2019	2018
Revenue:						
Grant and licensing revenue	\$	342,487 \$	1,143,177	\$	1,043,549 \$	1,895,704
Operating expenses:						
Research and development		3,424,141	3,479,776		6,596,388	6,352,726
General and administrative		1,860,459	1,361,166		5,208,060	3,141,505
Change in fair value of contingent consideration		112,000	539,980	_	226,290	551,098
Total operating expenses	_	5,396,600	5,380,922	_	12,030,738	10,045,329
Loss from operations	_	(5,054,113)	(4,237,745)		(10,987,189)	(8,149,625)
Interest income		124,793	44,164		275,645	47,797
Other (expense) income, net		(15,585)	(53,224)		(7,264)	121,796
Total non-operating income (expenses), net		109,208	(9,060)		268,381	169,593
Net loss before income taxes		(4,944,905)	(4,246,805)		(10,718,808)	(7,980,032)
Income tax expense (benefit)			(235,000)		45,178	(440,000)
Net loss		(4,944,905)	(4,011,805)		(10,763,986)	(7,540,032)
Net loss – non-controlling interest		(174,035)	(196,734)		(277,640)	(403,195)
Net loss attributable to Heat Biologics, Inc.	\$	(4,770,870) \$	(3,815,071)	\$	(10,486,346) \$	(7,136,837)
Net loss per share attributable to Heat Biologics, Inc.—basic and diluted	\$	(0.14) \$	(0.26)	\$	(0.32) \$	(0.72)
Weighted-average number of common shares used in net loss per share attributable to Heat Biologics, Inc.—basic and diluted		33,255,724	14,727,682		33,240,529	9,894,367
Other comprehensive loss:						
Net loss	\$	(4,944,905) \$	(4,011,805)	\$	(10,763,986) \$	(7,540,032)
Unrealized gain on foreign currency translation	_	16,612	49,946		8,423	71,271
Total other comprehensive loss		(4,928,293)	(3,961,859)		(10,755,563)	(7,468,761)
Comprehensive loss attributable to non-controlling interest		(174,035)	(196,734)		(277,640)	(403,195)
Comprehensive loss	\$	(4,754,258) \$	(3,765,125)	\$	(10,477,923) \$	(7,065,566)

## HEAT BIOLOGICS INC. Consolidated Statements of Stockholders' Equity (Unaudited)

	Three months ended June 30, 2019											
					Accumulated Other							Total
		Common			Accumulated Comprehensive Non-Controlling			on-Controlling	S	tockholders'		
		Stock		APIC		Deficit Loss Interest			Interest	Equity		
Balance at March 31, 2019	\$	6,819	\$	116,943,119	\$	(90,295,656)	\$	(28,093)	\$	(150,209)	\$	26,475,980
Issuance of common stock, 16,300 shares		3		18,894		_		_		_		18,897
Exercise of stock options, 2,000 shares		_		2,122		_		_		_		2,122
Stock-based compensation		_		386,787		_		_		_		386,787
Other comprehensive loss		_		_		_		16,612		_		16,612
Net loss		_		_		(4,770,870)				(174,035)		(4,944,905)
Balance at June 30, 2019	\$	6,822	\$	117,350,922	\$	(95,066,526)	\$	(11,481)	\$	(324,244)	\$	21,955,493

	Six months ended June 30, 2019											
								Total				
	•	Common		APIC					on-Controlling	St	ockholders'	
D. I. O. 2010	Φ.	Stock	Φ.		Ф	Deficit	Ф	Loss	ф	Interest	Φ.	Equity
Balance at December 31, 2018	\$	6,499	\$	114,883,135	\$	(84,580,180)	\$	(19,904)	\$	(46,604)	\$	30,242,946
Issuance of common stock, 16,300 shares		3		18,894		_		_		_		18,897
Exercise of stock options, 2,000 shares		_		2,122		_		_		_		2,122
Stock-based compensation		320		2,446,771		_		_		_		2,447,091
Other comprehensive loss		_		_		_		8,423		_		8,423
Net loss		_		_		(10,486,346)		_		(277,640)		(10,763,986)
Balance at June 30, 2019	\$	6,822	\$	117,350,922	\$	(95,066,526)	\$	(11,481)	\$	(324,244)	\$	21,955,493

#### HEAT BIOLOGICS INC. Consolidated Statements of Stockholders' Equity (Unaudited)

Three months ended June 30, 2018 Accumulated Other Total Common Accumulated Comprehensive Non-Controlling Stockholders' APIC Stock Deficit Loss Interest Equity (1,796,303) \$ 6,045,754 Balance at March 31, 2018 1,133 80,153,716 \$ (72,168,092) \$ (144,700) \$ Public offering, 14,375,000 shares, net of underwriter's discount 2,875 20,697,122 20,699,997 Exercise of warrants, 3,054,667 shares 611 4,837,982 4,838,593 Stock issuance costs (1,875,570) (1,875,570)140,227 Stock-based compensation 140,227 Other comprehensive gain 49,946 49,946 (3,815,071) (196,734) (4,011,805) Net loss 25,887,142 4,619 \$ 103,953,477 **\$** (75,983,163) **\$** (94,754) (1,993,037) Balance at June 30, 2018

	Six months ended June 30, 2018											
							Ac	cumulated				
	C	ommon				Accumulated	Cor	Other nprehensive	N	on-Controlling	St	Total ockholders'
		Stock		APIC		Deficit	Loss		Interest			Equity
Balance at December 31, 2017	\$	840	\$	76,382,262	\$	(68,846,326)	\$	(166,025)	\$	(1,589,842)	\$	5,780,909
Public offering, 14,375,000 shares, net of underwriter's discount		2,875		20,697,122		_		_		_		20,699,997
Exercise of warrants, 3,054,667 shares		611		4,837,982		_		_		_		4,838,593
Issuance of common stock, 1,403,367 shares		281		3,573,099		_		_		_		3,573,380
Stock issuance costs		_		(2,049,096)	)	_		_		_		(2,049,096)
Stock-based compensation		12		512,108		_		_		_		512,120
Other comprehensive gain		_		_		_		71,271		_		71,271
Net loss					_	(7,136,837)				(403,195)		(7,540,032)
Balance at June 30, 2018	\$	4,619	\$	103,953,477	\$	(75,983,163)	\$	(94,754)	\$	(1,993,037)	\$	25,887,142

### HEAT BIOLOGICS, INC. Consolidated Statements of Cash Flows (Unaudited)

		Six months Ended June 30				
	2019		2018			
Cash Flows from Operating Activities						
Net loss	\$ (10,763,9)	86) \$	(7,540,032)			
Adjustments to reconcile net loss to net cash used in operating activities:	\$ (10,703,2)	30 <i>)</i>	(7,540,032)			
Depreciation	122,0	12	108,408			
Stock-based compensation	2,447,0		512,120			
Change in fair value of contingent consideration	226,2		551,098			
Unrealized gain on investments	(5.5)		- 331,076			
Increase (decrease) in cash arising from changes in assets and liabilities:	(3,3)	30 <i>j</i>				
Accounts receivable	(49,1)	86)	473			
Prepaid expenses and other current assets	276,9		(2,044,397)			
Deferred financing costs	,	<del>_</del>	30,000			
Accounts payable	1.004.8		(211,858)			
Deferred revenue	(1,032,5		(1,895,704)			
Deferred tax liability	45,1		(440,000)			
Accrued expenses and other liabilities	(503,4		(830,162)			
Other long-term liabilities	79,8:		(4,418)			
Deposits	(85,0		(9,422)			
*	(8,237,4		(11,773,894)			
Net Cash Used in Operating Activities	(8,237,4)	94)	(11,//3,894)			
Cash Flows from Investing Activities						
Purchase of property and equipment	(45,4:	59)	(467,251)			
Purchase of short-term investments, net	(72,99	93)				
Net Cash Used in Investing Activities	(118,4:	52)	(467,251)			
Cash Flows from Financing Activities						
Proceeds from public offering, net of underwriting discounts			20,699,997			
Proceeds from the issuance of common stock, net of commissions	18,89		3,573,380			
Proceeds from exercise of stock options	2,1					
Proceeds from exercise of warrants	2,1.		4.020.502			
Stock issuance costs			4,838,593 (2,049,096)			
Net Cash Provided by Financing Activities	21.0	10	27,062,874			
Net Cash Provided by Financing Activities		19	27,002,874			
Effect of exchange rate changes on cash, cash equivalents and restricted cash	8,8	82	74,815			
Net (Decrease) Increase in Cash, Cash Equivalents and Restricted Cash	(8,326,0	45)	14,896,544			
Cash, Cash Equivalents and Restricted Cash – Beginning of Period	22,154,23	51	9,765,359			
Cash, Cash Equivalents and Restricted Cash – End of Period	\$ 13,828,20	06 \$	24,661,903			

(Unaudited)

#### 1. Basis of Presentation and Significant Accounting Policies

#### Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") for interim financial reporting. Certain information or footnote disclosures normally included in the annual financial statements prepared in accordance with U.S. GAAP have been condensed, or omitted, pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC"). In the opinion of the Company's management, these financial statements include all normal and recurring adjustments necessary for the fair statement of the results for the interim periods presented. The results for the six months ended June 30, 2019 are not necessarily indicative of the results that may be expected for any other interim period or for the fiscal year ending December 31, 2019.

The consolidated financial statements as of and for the three and six months ended June 30, 2019 and 2018 are unaudited. The balance sheet as of December 31, 2018 is derived from the audited consolidated financial statements as of that date. These financial statements should be read in conjunction with the audited consolidated financial statements and related notes, together with Management's Discussion and Analysis of Financial Condition and Results of Operations, contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2018 filed with the SEC on March 28, 2019 and Amendment No. 1 thereto filed with the SEC on April 24, 2019 (the "2018 Annual Report").

The consolidated financial statements as of and for the three and six months ended June 30, 2019 and 2018 include the accounts of Heat Biologics, Inc. ("the Company"), and its subsidiaries, Pelican Therapeutics, Inc. ("Pelican"), Heat Biologics I, Inc. ("Heat II"), Heat Biologics III, Inc. ("Heat III"), Heat Biologics IV, Inc. ("Heat IV"), Heat Biologics GmbH, Heat Biologics Australia Pty Ltd., Zolovax, Inc., Delphi Therapeutics, Inc. and Scorpion Biosciences, Inc.. The functional currency of the entities located outside the United States of America (the foreign entities) is the applicable local currency of the foreign entities. Assets and liabilities of the foreign entities are translated at period-end exchange rates. Statement of operations accounts are translated at the average exchange rate during the period. The effects of foreign currency translation adjustments are included in other comprehensive loss, which is a component of accumulated other comprehensive loss in stockholders' equity. All significant intercompany accounts and transactions have been eliminated in consolidation. Heat accounts for its less than 100% interest in accordance with U.S. GAAP. Accordingly, the Company presents non-controlling interest as a component of stockholders' equity on its consolidated balance sheets and reports non-controlling interest net loss under the heading "net loss – non-controlling interest" on its consolidated statements of operations and comprehensive loss. At June 30, 2019 and December 31, 2018, Heat held an 85% controlling interest in Pelican and a 100% interest in Heat I. During the six months ended June 30, 2018, Heat held an 80% controlling interest in Pelican and a 92.5% controlling interest for Heat I and \$241,201 in net loss non-controlling interest for Heat I and \$241,201 in net loss non-controlling interests relate to Pelican.

All share numbers in the consolidated financial statements and footnotes below have been adjusted for the Company's one-for-ten reverse stock split effective January 19, 2018

#### Error Correction

As discussed in the Company's report on Form 10-Q for the quarterly period ended September 30, 2018, during the nine months ended September 30, 2018, the Company determined that an income tax benefit was required for the quarters ended March 31, 2018 and June 30, 2018. Specifically, net operating losses in those periods gave rise to an indefinite-lived deferred tax asset which provided sufficient support to offset up to 80% of the Company's indefinite-lived deferred tax liability. As revised, the Company has income tax benefits for the three and six months ended June 30, 2018 of \$235,000 and \$440,000, respectively. The Company evaluated the effect of this error and concluded it was not material to any of its previously issued consolidated financial statements.

(Unaudited)

#### Liquidity and Capital Resources

The Company has an accumulated deficit of approximately \$95.1 million as of June 30, 2019 and a net loss of approximately \$4.9 million for the three months ended June 30, 2019 and has not generated significant revenue or positive cash flows from operations. The Company expects to incur significant expenses and continued losses from operations for the foreseeable future. The Company expects its expenses to increase in connection with its ongoing activities, particularly as the Company continues its research and development and advances its clinical trials of, and seek marketing approval for, its product candidates and as the Company continues to fund the Pelican matching funds required in order to access the grant provided by the Cancer Prevention and Research Institute of Texas or CPRIT. In addition, if the Company obtains marketing approval for any of its product candidates, the Company expects to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Accordingly, the Company will need to obtain substantial additional funding in connection with its continuing operations. Adequate additional financing may not be available to the Company on acceptable terms, or at all. If the Company is unable to raise capital when needed or on attractive terms, it would be forced to delay, reduce or eliminate its research and development programs or any future commercialization efforts. To meet its capital needs, the Company intends to continue to consider multiple alternatives, including, but not limited to, additional equity financings such as sales of its common stock under the B. Riley FBR, Inc. At Market Issuance Sales Agreement, if available, debt financings, partnerships, collaborations and other funding transactions. This is based on the Company's current estimates, and the Company could use its available capital resources sooner than it currently expects. The Company continually evaluates various cost-saving measures considering its cash requirements in order to focus resources on its product candidates and ranks its development programs based upon progress in clinical development, among other things. These rankings could result in a reduction, delay, or elimination of certain of its research and development programs and are subject to change based upon future events. The Company will need to generate significant revenues to achieve profitability, and it may never do so. As of June 30, 2019, the Company had approximately \$19.5 million in cash, cash equivalents and short-term investments, which it believes is sufficient to fund its operations for one year from date of this filing.

#### Cash Equivalents and Restricted Cash

The Company considers all cash and other highly liquid investments with initial maturities from the date of purchase of three months or less to be cash and cash equivalents.

#### Short-term Investments

The Company's short-term investments are equity securities and are carried at their fair value based on quoted market prices. Realized and unrealized gains and losses on equity securities are included in net earnings in the period earned or incurred.

#### Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Estimates are used for, but not limited to, useful lives of fixed assets, contingent consideration, income taxes and stock-based compensation. Actual results may differ from those estimates.

#### Segments

The Company has one reportable segment - the development of immunotherapies designed to activate and expand a patient's T-cell mediated immune system against cancer.

#### **Business Combinations**

The Company accounts for acquisitions using the acquisition method of accounting, which requires that all identifiable assets acquired, and liabilities assumed be recorded at their estimated fair values. The excess of the fair value of purchase consideration over the fair values of identifiable assets and liabilities is recorded as goodwill. When determining the fair values of assets acquired and liabilities assumed, management makes significant estimates and assumptions. Critical estimates in valuing certain intangible assets include but are not limited to future expected cash flows from acquired patented technology. Management's estimates of fair value are based upon assumptions believed to be reasonable, but are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates.

(Unaudited)

#### Goodwill and In-Process Research and Development

The Company classifies intangible assets into three categories: (1) intangible assets with definite lives subject to amortization, (2) intangible assets with indefinite lives not subject to amortization and (3) goodwill. The Company determines the useful lives of definite-lived intangible assets after considering specific facts and circumstances related to each intangible asset. Factors the Company considers when determining useful lives include the contractual term of any agreement related to the asset, the historical performance of the asset, and other economic facts; including competition and specific market conditions. Intangible assets that are deemed to have definite lives are amortized, primarily on a straight-line basis, over their estimated useful lives. Intangible assets that are deemed to have indefinite lives, including goodwill, are reviewed for impairment annually, or more frequently if events or changes in circumstances indicate that the asset might be impaired. The impairment test for indefinite-lived intangibles, other than goodwill, consists of a comparison of the fair value of the intangible assets with its carrying amount. If the carrying amount exceeds the fair value, an impairment charge is recognized in an amount equal to that excess. Indefinite-lived intangible assets, such as goodwill, are not amortized. The Company tests the carrying amounts of goodwill for recoverability on an annual basis or when events or changes in circumstances indicate evidence a potential impairment exists, using a fair value-based test. No impairment existed at June 30, 2019.

In-process research and development, or IPR&D, assets are considered to be indefinite-lived until the completion or abandonment of the associated research and development projects. IPR&D assets represent the fair value assigned to technologies that the Company acquires, which at the time of acquisition have not reached technological feasibility and have no alternative future use. During the period that the assets are considered indefinite-lived, they are tested for impairment on an annual basis, or more frequently if the Company becomes aware of any events occurring or changes in circumstances that indicate that the fair value of the IPR&D assets are less than their carrying amounts. If and when development is complete, which generally occurs upon regulatory approval and the ability to commercialize products associated with the IPR&D assets, these assets are then deemed definite-lived and are amortized based on their estimated useful lives at that point in time. If development is terminated or abandoned, the Company may have a full or partial impairment charge related to the IPR&D assets, calculated as the excess of carrying value of the IPR&D assets over fair value. No impairment existed at June 30, 2019.

### **Contingent Consideration**

Consideration paid in a business combination may include potential future payments that are contingent upon the acquired business achieving certain milestones in the future ("contingent consideration"). Contingent consideration liabilities are measured at their estimated fair value as of the date of acquisition, with subsequent changes in fair value recorded in the consolidated statements of operations. The Company estimates the fair value of the contingent consideration as of the acquisition date using the estimated future cash outflows based on the probability of meeting future milestones. The milestone payments will be made upon the achievement of clinical and commercialization milestones as well as single low digit royalty payments and payments upon receipt of sublicensing income. Subsequent to the date of acquisition, the Company reassesses the actual consideration earned and the probability-weighted future earn-out payments at each balance sheet date. Any adjustment to the contingent consideration liabilities expected to be settled within 12 months after the balance sheet date are presented in current liabilities, with the non-current portion recorded under long term liabilities in the consolidated balance sheets.

#### Research and Development

Research and development includes costs associated with developmental products not yet approved by the FDA as well as costs associated with bringing developmental products into advanced phase clinical trials as incurred. These costs consist primarily of pre-manufacturing and manufacturing drug costs, clinical trial execution, investigator payments, license fees, salaries, stock-based compensation and related personnel costs. Other costs include fees paid to consultants and outside service providers related to the development of the Company's product candidates and other expenses relating to the design, development, and testing and enhancement of its product candidates.

(Unaudited)

#### Revenue Recognition

The Company earns substantially all its revenue from a research grant from CPRIT. The Company's contract with CPRIT relates to developing a human TNFRSF25 agonist antibody for use in cancer patients through research and development efforts and a noncommercial license from CPRIT-funded research to CPRIT and other government agencies and institutions of higher education in Texas.

CPRIT advances grant funds upon request by the Company consistent with the agreed upon amounts and schedules as provided in the contract. Funds received are reflected in deferred revenue as a liability until revenue is earned. Grant revenue is earned and recognized when qualifying costs are incurred.

#### Prepaid Expenses and Other Current Assets

The Company's prepaid expenses and other current assets consists primarily of the amount paid in advance for cGMP production of Pelican's PTX-35 antibody and PTX-15 fusion protein for Pelican, as well as Chemistry Manufacturing and Control ("CMC") material for the Company's clinical trial studies for HS-110.

#### Income Taxes

Income taxes are accounted for using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the carrying amounts of assets and liabilities and their respective tax bases, operating loss carryforwards, and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Deferred tax assets are reduced by a valuation allowance to the extent that utilization is not presently more likely than not.

#### Significant Accounting Policies

The significant accounting policies used in preparation of these interim financial statements are disclosed in the 2018 Annual Report and have not changed significantly since such filing.

#### Recently Issued Accounting Pronouncements

In November 2018, the FASB issued ASU 2018-18: *Collaborative Arrangements* (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606. This ASU, in part, requires that certain transactions with collaboration partners be excluded from revenue recognized under Topic 606. ASU 2018-18 is effective for fiscal years beginning after December 15, 2019. The Company is evaluating the impact of this standard and does not plan early adoption of this standard.

In June 2018, the FASB issued ASU 2018-07: Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. This ASU expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from non-employees, and as a result, the accounting for share-based payments to non-employees will be substantially aligned. ASU 2018-07 is effective for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year, early adoption is permitted but no earlier than an entity's adoption date of Topic 606. The Company adopted this ASU in the first quarter of 2019 and there was no material effect on the Company's results of operations or cash flows.

In June 2018, the FASB issued ASU No. 2018-08, Not-For-Profit Entities (Topic 958): Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made, which is intended to clarify and improve the scope and the accounting guidance for contributions received and contributions made. The amendments in ASU No. 2018-08 should assist entities in (1) evaluating whether transactions should be accounted for as contributions (nonreciprocal transaction) within the scope of Topic 958, Not-for-Profit Entities, or as exchange (reciprocal) transactions subject to other guidance and (2) determining whether a contribution is conditional. This amendment applies to all entities that make or receive grants or contributions. This ASU is effective for public companies serving as a resource recipient for fiscal years beginning after June 15, 2018, including interim periods within that fiscal year. The Company adopted this ASU in the first quarter of 2019 and there was no material effect on the recognition or measurement of revenue in the Company's financial statements.

(Unaudited)

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), which requires recognition of a right-of-use asset and liability for future lease payments for contracts that meet the definition of a lease and requires disclosure of certain information about leasing arrangements. Generally, a lease exists when a contract or part of a contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. In determining whether a lease exists, the Company considers whether a contract provides us with both the right to obtain substantially all of the economic benefits from the use of the identified asset and the right to direct the use of the identified asset. The Company adopted the standard on January 1, 2019 using the optional transition method and, as a result, did not recast prior period unaudited comparative financial statements. The Company has determined that its leases, consisting of leases for office and laboratory space without optional terms or variable components, are operating leases. Adoption of the new standard resulted in the recording of operating lease right-of-use assets and associated lease liabilities of \$520,399 and \$528,253, respectively, as of January 1, 2019 on the balance sheet with no cumulative impact to accumulated deficit and did not have a material impact on the Company's results of operations or cash flows.

#### 2. Acquisition of Pelican Therapeutics

In 2017, the Company consummated the acquisition of 80% of the outstanding equity of Pelican, a related party, and Pelican became a majority owned subsidiary of the Company. During the quarter ended March 31, 2018, cash consideration of approximately \$300,000 was distributed to the participating Pelican stockholders and the remainder of approximately \$200,000 for certain Pelican liabilities not satisfied was recognized as other income in the statements of operations and comprehensive loss for the period. In October 2018, Heat entered into an agreement with the University of Miami ("UM") whereby UM exchanged its shares of stock in Heat's subsidiaries, Heat I, Inc. and Pelican. The stock exchange resulted in Heat increasing its controlling ownership in Pelican from 80% to 85%.

Under the agreement, the Company is also obligated to make future payments based on the achievement of certain clinical and commercialization milestones, as well as low single digit royalty payments and payments upon receipt of sublicensing income. The fair value of these future milestone payments is reflected in the contingent consideration account under current liabilities with the non-current portion under long term liabilities on the balance sheet. The estimated fair value of the contingent consideration was determined using a probability-weighted income approach, at a discount of 4.6% based on the median yield of publicly traded non-investment grade debt of companies in the pharmaceutical industry. The Company estimates the fair value of the contingent consideration on a quarterly basis.

Goodwill was calculated as the difference between the acquisition-date fair value of the consideration transferred and the fair values of the assets acquired and liabilities assumed. The goodwill resulting from this acquisition related largely to synergies expected from combining the operations. The goodwill is not deductible for income tax purposes. In-process R&D assets are treated as indefinite-lived until the completion or abandonment of the associated R&D program, at which time the appropriate useful lives will be determined. The Company calculated the fair value of the non-controlling interest acquired in the acquisition as 20% of the equity interest of Pelican, adjusted for a minority interest discount.

As discussed in Note 10, in May 2016, Pelican was awarded a \$15.2 million CPRIT Grant from CPRIT for development of Pelican's lead product candidate, PTX-35. The CPRIT Grant is expected to support Pelican in developing PTX-35 through a Phase 1 clinical trial designed to evaluate PTX-35 in combination with other immunotherapies.

#### 3. Fair Value of Financial Instruments

The carrying amount of certain of the Company's financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and accrued expenses and other payables approximate fair value due to their short maturities.

As a basis for determining the fair value of certain of the Company's financial instruments, the Company utilizes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level I - Observable inputs such as quoted prices in active markets for identical assets or liabilities.

Level II – Observable inputs, other than Level I prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

(Unaudited)

Level III – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

This hierarchy requires the Company to use observable market data, when available, and to minimize the use of unobservable inputs when determining fair value. Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the entire fair value measurement requires management to make judgments and consider factors specific to the asset or liability. The Company's cash equivalents are classified within Level I of the fair value hierarchy.

As of June 30, 2019 and December 31, 2018, the fair values of cash, accounts payable, and accrued expenses approximated their carrying values because of the short-term nature of these assets or liabilities. The Company's short-term investments consist of Level I securities which are comprised of highly liquid money market funds. The estimated fair value of the short-term investments was based on quoted market prices. There were no transfers between fair value hierarchy levels during the quarters ended June 30, 2019 or 2018.

The fair value of financial instruments measured on a recurring basis is as follows:

	As of June 30, 2019							
Description		Total		Level 1	Leve	12		Level 3
Assets:								
Short-term investments	\$	5,648,609	\$	5,648,609		_		_
Liabilities:								
Contingent consideration		3,331,515		_		_	\$	3,331,515

	As of December 31, 2018							
Description	_	Total		Level 1	Level	2		Level 3
Assets:								
Short-term investments	\$	5,570,027	\$	5,750,027		_		_
Liabilities:								
Contingent consideration		3,105,225		_		_	\$	3,105,225

The following table summarizes the change in fair value, as determined by Level 3 inputs, for all assets and liabilities using unobservable Level 3 inputs for the year ended June 30, 2019:

	Contingent
	Consideration
Balance at December 31, 2018	\$ 3,105,225
Change in fair value	226,290
Balance at June 30, 2019	\$ 3,331,515

The change in the fair value of the contingent consideration for the six months ended June 30, 2019 was primarily because of the change in discount rate and the passage of time on the fair value measurement. Adjustments associated with the change in fair value of contingent consideration are included in the Company's consolidated statement of operations and comprehensive loss.

The following table presents quantitative information about the inputs and valuation methodologies used for the Company's fair value measurements of contingent consideration classified as Level 3 as of June 30, 2019:

	Valuation Methodology	Significant Unobservable Input	Weighted Average (range, if applicable)
Contingent Consideration	Probability weighted income approach	Milestone dates	2019-2026
	• •	Discount rate	4.6%
		Probability of occurrence	23% to 86%

(Unaudited)

#### 4. Short-Term Investments

The following summarizes information about short term investments at June 30, 2019 and December 31, 2018, respectively:

	Amortized Cost	Unrealized Gains (Losses)	Estimated Fair Value
June 30, 2019			
Mutual fund	\$ 5,643,152 \$	5,457	\$ 5,648,609
December 31, 2018			
Mutual fund	\$ 5,570,158 \$	\$ (131)	\$ 5,570,027

#### 5. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following at:

	Ju	June 30,		cember 31,
	2	2019		2018
Prepaid manufacturing expense	\$	387,760	\$	559,110
Prepaid insurance		53,567		284,931
Prepaid clinical study expenses		143,827		-
Other prepaid expenses and current assets		99,015		117,276
	\$	684,169	\$	961,317

#### 6. Property and Equipment

Property and equipment are recorded at cost and depreciated using the straight-line method over the estimated useful lives, ranging generally from five to seven years. Expenditures for maintenance and repairs are charged to expense as incurred.

Property and equipment consisted of the following:

	June 30, 2019	Ι	December 31, 2018
Lab equipment	\$ 1,257,525	\$	1,218,532
Leasehold improvements	9,445		9,445
Computers	45,055		38,589
Furniture and fixtures	 58,146		58,146
Total	1,370,171		1,324,712
Accumulated depreciation	 (803,578)		(681,566)
Property and equipment, net	\$ 566,593	\$	643,146

Depreciation expense was \$54,826 and \$122,012 for the three and six months ended June 30, 2019, respectively, and \$64,333 and \$108,408 for the three and six months ended June 30, 2018, respectively.

(Unaudited)

#### 7. Goodwill and In-Process R&D

Goodwill of \$2.2 million and in-process R&D of \$5.9 million were recorded in connection with the acquisition of Pelican, as described in Note 2. The carrying value of goodwill and in-process R&D has remained unchanged and no impairment was recognized as of June 30, 2019 and December 31, 2018.

#### 8. Accrued Expenses

Accrued expenses consist of the following:

	June 30, 2019	Г	December 31, 2018
Compensation and related benefits	\$ 118,340	\$	628,147
Other accrued operating expenses	1,051,269		1,049,904
	\$ 1,169,609	\$	1,678,051

#### 9. Stockholders' Equity

#### Common Stock Warrants

During the three months and six months ended June 30, 2019, there were no changes in the Company's outstanding warrants. As of June 30, 2019, the Company has outstanding warrants to purchase 9,030,730 shares of common stock issuable at a weighted-average exercise price of \$1.89 per share.

#### **Equity Compensation Plans**

The Company maintains various equity compensation plans with substantially similar provisions under which it may award employees, directors and consultants incentive and non-qualified stock options, restricted stock, stock appreciation rights and other stock based awards with terms established by the Compensation Committee of the Board of Directors which has been appointed by the Board of Directors to administer the plans. As of June 30, 2019, there were 126,774 shares remaining available for grant under these plans. As discussed in Note 14, in July 2019, the Company's shareholders approved an increase of 4,000,000 shares in the number of shares available for grant.

#### Stock Options

The following is a summary of the stock option activity for the six months ended June 30, 2019:

	Shares	A E	eighted verage xercise Price
Outstanding, December 31, 2018	465,303	\$	11.60
Granted	2,725,821		1.07
Exercised	(2,000)		1.06
Expired	(14,634)		4.88
Forfeited	(107,585)		1.68
Outstanding, June 30, 2019	3,066,905	\$	2.62

(Unaudited)

The weighted average grant-date fair value of stock options granted during the six months ended June 30, 2019 was \$0.94. The fair value of each stock option was estimated on the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions for stock options granted during the three months ended June 30, 2019:

Dividend yield	0.0%
Expected volatility	131.3%
Risk-free interest rate	2.5%
Expected lives (years)	5.5

The risk-free interest rate is based on U.S. Treasury interest rates at the time of the grant whose term is consistent with the expected life of the stock options. The Company used an average historical stock price volatility based on an analysis of reported data for a peer group of comparable companies that have issued stock options with substantially similar terms, as the Company had limited to no trading history for its common stock. Expected term represents the period that the Company's stock option grants are expected to be outstanding. The Company elected to utilize the "simplified" method to estimate the expected term. Under this approach, the weighted-average expected life is presumed to be the average of the vesting term and the contractual term of the option.

Expected dividend yield was considered to be 0% in the option pricing formula since the Company had not paid any dividends and had no plans to do so in the future. As required by ASC 718, the Company reviews recent forfeitures and stock compensation expense. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Additionally, the Company conducts a sensitivity analysis of the forfeiture rate. Based on these evaluations the Company currently does not apply a forfeiture rate.

The following table summarizes information about stock options outstanding at June 30, 2019:

	<b>Options Outstanding</b>		Opt	ions Vested and Exercisa	able
	Weighted			Weighted	
	Average			Average	
	Remaining	Weighted		Remaining	Weighted
Balance	Contractual	Average	Balance	Contractual	Average
as of	Life	Exercise	as of	Life	Exercise
6/30/2019	(Years)	Price	6/30/2019	(Years)	Price
3,066,905	9.1	\$2.62	1,311,854	8.8	\$4.19

#### Restricted Stock

The following is a summary of restricted stock and restricted stock unit activity for the six months ended June 30, 2019:

	Shares
Unvested, December 31, 2018	56,520
Granted	1,579,179
Vested	(747,805)
Forfeited	(49,340)
Unvested, June 30, 2019	838,554

#### 10. Grant Revenue

In June 2016, Pelican entered into a cancer research grant contract or Grant Contract with CPRIT, under which CPRIT awarded a grant not to exceed \$15.2 million for use in developing cancer treatments by targeting a novel T-cell costimulatory receptor (namely, TNFRSF25). The Grant Contract covers a period from June 1, 2016 through November 30, 2019, as amended. The first tranche of funding of \$1.8 million was received in May 2017, and a second tranche of funding of \$6.5 million was received in October 2017. The remaining \$6.9 million is expected to be requested and received following a planned IND filing in 2019.

(Unaudited)

The grant is subject to customary CPRIT funding conditions including a matching funds requirement where Pelican will match \$0.50 for every \$1.00 from CPRIT. Consequently, Pelican is required to provide \$7.6 million in matching funds over the life of the project. Upon commercialization of the product, the terms of the grant require Pelican to pay tiered royalties in the low to mid-single digit percentages. Such royalties reduce to less than one percent after a mid-single-digit multiple of the grant funds have been paid to CPRIT in royalties.

Through June 30, 2019, all \$8.3 million of grant funding received to date has been recognized as revenue.

#### 11. Net Loss Per Share

Basic net loss per common share is computed by dividing net loss attributable to common stockholders by the weighted-average number of common shares outstanding during the periods. Fully diluted net loss per common share is computed using the weighted average number of common and dilutive common equivalent shares outstanding during the periods. Common equivalent shares consist of stock options and warrants that are computed using the treasury stock method.

For the three and six months ended June 30, 2019 and 2018, all the Company's common stock options, unvested restricted stock units and warrants were anti-dilutive and therefore have been excluded from the diluted calculation.

The following potentially dilutive securities were excluded from the calculation of diluted net loss per share in the three and six months ended June 30 due to their anti-dilutive effect:

	2019	2018
Outstanding stock options	3,066,905	424,592
Restricted stock subject to forfeiture and restricted stock units	838,554	62,207
Outstanding common stock warrants	9,030,730	4,443,230

#### 12. Income Tax

Income taxes are accounted for using the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of assets and liabilities and their respective tax bases, operating loss carryforwards, and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. As of June 30, 2019, \$0.9 million of the deferred tax asset arising from the generation of 2018 net operating losses has been utilized to offset a portion of the previously recorded deferred tax liability associated with indefinite lived R&D in process costs. Specifically, the prior & current year net operating losses gave rise to an indefinite-lived deferred tax asset which provided sufficient support to offset a portion of the Company's indefinite-lived deferred tax liability

In accordance with FASB ASC 740, Accounting for Income Taxes, the Company reflects in the accompanying consolidated financial statements the benefit of positions taken in a previously filed tax return or expected to be taken in a future tax return only when it is considered 'more-likely-than-not' that the position taken will be sustained by a taxing authority. As of June 30, 2019, and December 31, 2018, the Company had no unrecognized income tax benefits and correspondingly there is no impact on the Company's effective income tax rate associated with these items. The Company's policy for recording interest and penalties relating to uncertain income tax positions is to record them as a component of income tax expense. As of June 30, 2019, and December 31, 2018, the Company had no such accruals.

#### 13. Leases

As described in Note 1, effective January 1, 2019, the Company adopted ASC 842 using the optional transition method, applying no practical expedients. In accordance with the optional transition method, the Company did not recast the prior period consolidated financial statements. The lease term is the noncancelable period of the lease. There are no termination provisions or renewal periods reasonably certain of exercise or options controlled by the lessor. Finance leases, variable lease costs and short-term leases are not material to our consolidated financial statements.

(Unaudited)

The Company leases office space under operating leases. Total lease costs, consisting of fixed operating lease costs, in the three and six months ended June 30, 2019 amounted to \$66,894 and \$133,789, respectively.

As of June 30, 2019, lease liabilities have been determined using a discount rate of approximately 8.6%. The rate implicit in the Company's leases is not readily determinable. Accordingly, the Company uses its estimated incremental borrowing rate, which represents the rate of interest that it would pay to borrow on a collateralized basis over a similar term.

As of June 30, 2019, the weighted-average remaining life of the Company's leases is approximately 3.3 years. Operating cash flows in the three and six months ended June 30, 2019 include \$68,742 and \$136,263, respectively, of payments for amounts included in the measurement of operating lease liabilities.

Maturities of operating lease liabilities as of June 30, 2019 were as follows:

Year ending December 31:	
July 1 through December 31, 2019	\$97,496
2020	115,580
2021	118,158
2022	120,737
2023	20,195
Total lease payments	472,166
Less: imputed interest	(60,608)
Present value of operating lease liabilities	\$411,558

In April 2019, the Company entered into a 96-month lease for office and laboratory space that is expected to commence upon the expiration of an existing lease in September 2019. Scheduled lease payments under the new lease total approximately \$1.8 million. As of June 30, 2019, the Company had not taken control of the space and the lease term had not commenced. Accordingly, no right of use asset or lease liability related to the lease has been recorded. The Company expects to incur approximately \$300,000 of the cost of improvements.

#### 14. Subsequent event

On July 23, 2019, the Company held its 2019 Annual Meeting of Stockholders (the "Annual Meeting"). At the Annual Meeting, the Company's stockholders approved an increase of 4,000,000 in the number of shares available for issuance under the Company's 2018 Stock Incentive Plan.

#### ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes included in this Quarterly Report on Form 10-Q. The following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results and the timing of certain events could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those discussed below and elsewhere in this Quarterly Report. This discussion should be read in conjunction with the accompanying unaudited consolidated financial statements and the audited consolidated financial statements and notes thereto included in our Annual Report 10-K for the year ended December 31, 2018 filed with the Securities and Exchange Commission on March 28, 2019 and Amendment No. 1 thereto filed with the SEC on April 24, 2019 (the "2018 Annual Report"). This discussion may contain forward-looking statements that involve risks and uncertainties. See "Forward-Looking Statements."

#### **OVERVIEW**

We are a biopharmaceutical company developing immunotherapies focused on activating a patient's immune system against cancer through T-cell activation and expansion. Our T-cell Activation Platform (TCAP), includes two variations for intradermal administration, Immune Pan-antigen Cytotoxic Therapy ( $ImPACT^{\otimes}$ ) and Combination Pan-antigen Cytotoxic Therapy ( $ImPACT^{\otimes}$ ). HS-110 (viagenpumatucel-L) is our first biologic product candidate in a series of proprietary  $ImPACT^{\otimes}$  based immunotherapies designed to stimulate a patient's own T-cells to destroy cancer. HS-130 ( $ImPACT^{\otimes}$ ) (Combination Pan-antigen Cytotoxic Therapy) is our next-generation allogeneic cell-based drug designed to secrete tumor-associated antigens along with an OX-40 co-stimulator intended to enhance T-cell activation and memory response. To further augment antigen experienced T-cell activation and expansion, we are also developing PTX-35, a novel T-cell co-stimulator agonist antibody targeting TNFRSF25 for systemic administration. These programs are designed to harness the body's natural antigen specific immune activation and tolerance mechanisms to reprogram immunity and provide a long-term, durable clinical effect. We have completed recruiting patients in our HS-110 non-small cell lung cancer (NSCLC) trial, have received U.S. Food & Drug Administration (FDA) clearance of an IND submission for our HS-130 program and are preparing an IND for our PTX-35 program. We are also providing pre-clinical, CMC development, and administrative support for these operations; while constantly focusing on protecting and expanding our intellectual property in areas of strategic interest.

We recently completed patient enrollment in our Phase 2 clinical trial for HS-110 in advanced NSCLC, that administered HS-110 in combination with either Bristol-Myers Squibb's anti-PD1 checkpoint inhibitor nivolumab (Opdivo®) or more recently, Merck & Co., Inc's (Merck's) anti-PD1 checkpoint inhibitor, pembrolizumab (KEYTRUDA®). We also announced interim results of this study in June 2019. This data may represent the first Phase 2 data showing clinical activity of a checkpoint inhibitor combination in NSCLC patients whose disease has progressed after prior treatment with a checkpoint inhibitor (CPI). Our other programs are in pre-clinical and CMC development with an IND filing cleared by the FDA for HS-130 and an anticipated IND filing for PTX-35 in late 2019.

Our T-cell Activation Platform (TCAP), which includes a variation of two TCAPs,  $ImPACT^{\mathbb{R}}$  and  $ComPACT^{TM}$ , is designed to activate and expand tumor antigen specific "killer" T-cells to destroy a patient's cancer. By turning immunologically "COLD tumors HOT," we believe our platform will become an essential component of the immuno-oncology cocktail to enhance the effectiveness and durability of checkpoint inhibitors and other cancer therapies, thereby improving outcomes for those patients less likely to benefit from checkpoint inhibitors alone.

We believe the advantage of our approach is that our biologic agents deliver a broad range of tumor antigens that are unrecognized by the patient's immune system prior to the malignant rise of the patient's tumor. TCAP combines these tumor antigens with a powerful, naturally occurring immune adjuvant, gp96, to actively chaperone these antigens out of our non-replicating allogenic cell-based therapy into the local microenvironment of the skin. The treatment primes local natural immune recognition to activate T-cells to seek and destroy the cancer cells throughout the body. These TCAP agents can be administered with a variety of immuno-modulators to enhance a patient's immune response through ligand specific T-cell activation.

Unlike many other "patient specific" or autologous immunotherapy approaches, our drugs are fully allogenic, "off-the-shelf" products which means that we can administer them immediately without the extraction of blood or tumor tissue from each patient or the creation of an individualized treatment based on these patient materials. Our TCAP product candidates are produced from allogeneic cell lines expressing tumor-specific proteins common among cancers. Because each patient receives the same treatment, we believe that our immunotherapy approach offers superior speed to initiation, logistical, manufacturing and importantly, cost benefits, compared to "personalized" precision medicine approaches.

Our ImPACT® platform is an allogenic cell-based, T-cell-stimulating platform that functions as an immune activator to stimulate and expand T-cells. The key component of this innovative immunotherapy platform is the dual functionality of the heat shock protein, gp96.

As a molecular chaperone, gp96 is typically found within the cell's endoplasmic reticulum and facilitates the folding of newly synthesized proteins for functionalized tasks. But when a cell abnormally dies through necrosis or infection, gp96 is naturally released into the surrounding microenvironment. At this moment, gp96 becomes a Danger Associated Molecular Protein or "DAMP", a molecular warning signal for localized innate activation of the immune system. In this context gp96 serves as a potent adjuvant, or immune stimulator, via Toll-Like Receptor 4/2 (TLR4 and TLR2) signaling which serves to activate professional antigen presenting cells (APCs), such as dendritic cells that upregulate T-cell costimulatory ligands, major histocompatibility (MHC) molecules and immune activating cytokines. It is among the most powerful adjuvants found in the body and uniquely shows exclusive specificity to CD8+ "killer" T-cells through cross-presentation of the gp96-chaperoned tumor associated peptide antigens directly to MHC class I molecules for direct activation and expansion of CD8+ T-cells. Thus, gp96 plays a critical role in the mechanism of action for Heaf's T-cell activating platform immuno-therapies; mimicking necrotic cell death and activating a powerful, tumor antigen-specific T-cell immune response to attack the patient's cancer cells.

ComPACT<sup>™</sup>, our second TCAP, is a dual-acting immunotherapy designed to deliver antigen-driven T-cell activation and specific co-stimulation in a single product. ComPACT<sup>™</sup> is designed to help unlock the body's natural defenses and builds uponImPACT<sup>®</sup> by providing specific co-stimulation to enhance T-cell activation and expansion. This technology has the potential to simplify combination immunotherapy development for oncology patients, as it is designed to deliver the gp96 heat shock protein and a T-cell co-stimulatory fusion protein (OX40L) as a single therapeutic, without the need for multiple, independent biologic products. The potential advantages of ComPACT<sup>™</sup> include: (a) enhanced activation of antigen-specific CD8+ T-cells; (b) serving as a booster to expand the number of antigen-specific CD8+ and CD4+ T-cells compared to OX40L alone; (c) stimulation of T-cell memory function to remain effective in the body after treatment, even if the cancer comes back; (d) demonstration of less toxicity, as the source of cancer associated antigens and co-stimulator are supplied at the same time locally and the draining lymph nodes, which drive targeted, cancer specific immunity towards the tumor rather than throughout the body; and (e) a potential paradigm shift that is designed to simplify combination cancer immunotherapy versus systemic co-stimulation with conventional monoclonal antibodies (mAbs).

Pelican Therapeutics, Inc. ("Pelican"), our subsidiary, is a biotechnology company focused on the development of biologic based therapies designed to activate the immune system.

Pelican is currently developing a CD8+ T-cell costimulatory, TNFRSF25 agonist mAb, PTX-35, which has completed IND-enabling activities in preparation for a first-in-human (FIH) trial for an oncology indication. PTX-35 is designed to harness the body's natural antigen specific immune activation and tolerance mechanisms to reprogram immunity and provide a long-term, durable clinical effect. TNFRSF25 agonism has been shown to provide highly selective and potent stimulation of antigen experienced 'memory' CD8+ cytotoxic T-cells, which are the class of long-lived T-cells capable of eliminating tumor cells in patients. Due to the preferential specificity of PTX-35 to antigen experienced CD8+ T-cells, this agent represents a promising candidate as a T-cell co-stimulator in cancer patients.

When combined in preclinical studies with *ImPACT*® and *ComPACT*™ platform immunotherapies, PTX-35 has been shown to enhance antigen specific T-cell activation to eliminate tumor cells. Pelican is also developing other biologics that target TNFRSF25 for various immunotherapy approaches, including PTX-45, a human TL1A-lg like fusion protein designed as a shorter half-life agonist of TNFRSF25.

We have completed patient enrollment in our HS-110 Phase 2 combination immunotherapy trial, received clearance from the FDA of an IND submission for HS-130, advanced pre-clinical development of Pelican assets in anticipation of an IND submission in 2019, and provided general and administrative support for these operations while protecting our intellectual property. We currently do not have any products approved for sale and we have not generated any revenue from product sales since our inception. We expect to continue to incur significant expenses and to incur increasing operating losses for at least the next several years. We anticipate that our expenses will increase substantially as

- · complete the ongoing clinical trials of our product candidates;
- · maintain, expand and protect our intellectual property portfolio;
- · seek to obtain regulatory approvals for our product candidates;
- · continue our research and development efforts;
- · add operational, financial and management information systems and personnel, including personnel to support our product development and commercialization efforts; and
- operate as a public company.

#### Recent Developments

- · In January 2019, we dosed our first patient in a Phase 2 clinical trial investigating HS-110 in combination with Mercks anti-PD1 checkpoint inhibitor, KEYTRUDA® (pembrolizumab), in patients with advanced non-small cell lung cancer (NSCLC).
- · In February 2019, we announced updated interim results from our ongoing Phase 2 study of HS-110 in patients with advanced NSCLC. The results were presented at the 2019 ASCO-SITC Clinical Immuno-Oncology Symposium. Preliminary data suggests the addition of HS-110 to Nivolumab may restore responsiveness to treatment after tumor progression on prior checkpoint inhibitor therapy; improved survival was observed in patients with low CD8+ "cold" tumor at baseline compared to high CD8+ patients; and the occurrence of injection site reactions correlated with improved overall survival.
- · In April 2019, our CPRIT Grant, initially covering a three-year period from June 1, 2017 through May 31, 2019, was extended from May 31, 2019 to November 30, 2019.
- · In April 2019, we entered into a 96-month lease for office space to replace our current lease for executive offices and laboratory space in North Carolina, which expires in September 2019.
- In June 2019, we announced new interim results from our ongoing Phase 2 study investigating HS-110 in combination with Bristol-Myers Squibb's anti-PD-1 checkpoint inhibitor, nivolumab (Opdivo®). The updated results were obtained from Cohort B patients whose data had matured an additional 3 months since last reported at the ASCO-SITC Clinical Immuno-Oncology Symposium in February of this year. This data may represent the first Phase 2 data showing clinical activity of a CPI combination in non-small cell lung cancer (NSCLC) patients whose disease has progressed after prior treatment with a checkpoint inhibitor (CPI). The Cohort B results were presented at the 2019 American Society of Clinical Oncology (ASCO) Annual Meeting poster session.
- · In July 2019, we announced we completed patient enrollment in our Phase 2 study investigating HS-110 in combination with Bristol-Myers Squibb's anti-PD-1 checkpoint inhibitor, nivolumab (Opdivo®) or Merck's pembrolizumab (Keytruda®). In total, approximately 120 patients have been enrolled in the trial.
- In August 2019, we announced that the FDA cleared the company's Investigational New Drug (IND) application to initiate a Phase 1 clinical trial of HS-130, in combination with HS-110, for patients with advanced solid tumors refractory to standard of care.

#### CRITICAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGMENTS AND ESTIMATES

We believe that several accounting policies are important to understanding our historical and future performance. We refer to these policies as "critical" because these specific areas generally require us to make judgments and estimates about matters that are uncertain at the time we make the estimate, and different estimates—which also would have been reasonable—could have been used, which would have resulted in different financial results.

Our management's discussion and analysis of financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of our consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates based on historical experience and make various assumptions, which management believes to be reasonable under the circumstances, which form the basis for judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

The notes to our consolidated financial statements contained herein and to our audited consolidated financial statements contained in our 2018 Annual Report contain a summary of our significant accounting policies. We consider the following accounting policies critical to the understanding of the results of our operations:

- · Revenue:
- · In-process R&D;
- · Goodwill impairment;
- · Income tax;
- · Contingent consideration;
- Stock-based compensation;
- · Research and development costs, including clinical and regulatory cost; and
- · Recent accounting pronouncements.

#### RESULTS OF OPERATIONS

#### Comparison of the Three Months ended June 30, 2019 and 2018

Revenues. For the three months ended June 30, 2019, we recognized \$0.3 million of grant revenue for qualified expenditures under the CPRIT grant. We recognized \$1.1 million of grant revenue related to CPRIT during the three months ended June 30, 2018. The decrease in grant revenue in the current-year period primarily reflects decreased program spending and the conclusion of the CPRIT contract-year in May 2019. Grant funding for program expenses incurred after May 2019 is subject to grantor approval. We expect to receive the final tranche of grant funding following a planned IND filing later in 2019. As of June 30, 2019, we had no deferred revenue for proceeds previously received. We continue our efforts to secure future non-dilutive grant funding to subsidize ongoing research and development costs.

Research and development expense. Research and development expenses decreased to \$3.4 million for the quarter ended June 30, 2019 from \$3.5 million in the quarter ended June 30, 2018. The components of R&D expense are as follows, in millions:

	Three Months Ended,		
	 June 30,		
	2019		2018
Programs			
HS-110	\$ 1.0	\$	0.8
HS-130	0.1		0.4
PTX 35/15	1.1		1.4
Other programs	0.1		0.1
Unallocated research and development expenses	1.1		0.8
	\$ 3.4	\$	3.5

- · HS-110 expense increased \$0.2 million, primarily due to outsourced clinical trial support services and payments to investigator sites for ongoing clinical trials
- HS-130 expense represented primarily regulatory consulting in the current period and clinical trial materials in the 2018 period.
- PTX expense for 2019 decreased from the comparable 2018 period, primarily reflecting decreased manufacturing costs.
- Other programs include preclinical costs associated with our Zika program, T-cell costimulatory programs, and laboratory supplies.
- Unallocated research expenses in 2019 increased compared to the 2018 period, primarily reflecting increased personnel costs, including stock-based compensation from 2019 stock awards.

General and administrative expense. General and administrative expense increased to \$1.9 million for the quarter ended June 30, 2019 compared to \$1.4 million for the quarter ended June 30, 2018. The increase is primarily attributable to increased personnel costs, including stock-based compensation expense.

Change in fair value of contingent consideration. The change in fair value of contingent consideration was \$0.1 million for the three months ended June 30, 2019, compared to \$0.5 million in the three months ended June 30, 2018. The greater change in the 2018 period primarily reflects an increase in estimated probability factors for milestone achievement.

Non-operating income, net. Other income increased to \$0.1 million for the quarter ended June 30, 2019 compared to 2018. In 2019, other income reflects interest income on cash and short-term investment balances.

Net loss attributable to Heat Biologics, Inc. We had a net loss attributable to Heat Biologics, Inc. of \$4.8 million, or \$0.14 per basic and diluted share for the quarter ended June 30, 2019 compared to a net loss of \$3.8 million, or \$0.26 per basic and diluted share for the quarter ended June 30, 2018.

#### Comparison of the Six Months ended June 30, 2019 and 2018

Revenues. For the six months ended June 30, 2019, we recognized \$1.0 million of grant revenue for qualified expenditures under the CPRIT grant compared to \$1.9 million of grant revenue related to CPRIT during the six months ended June 30, 2018. The decrease in grant revenue in the current-year period primarily reflects decreased program spending and the conclusion of the CPRIT contract-year in May 2019.

Research and development expense. Research and development expenses increased approximately 4% to \$6.6 million for the six months ended June 30, 2019 compared to \$6.4 million for the six months ended June 30, 2018. The components of R&D expense are as follows, in millions:

	Six Months Ended, June 30,		
	 2019	20	018
Programs			
HS-110	\$ 1.8	\$	1.8
HS-410	0.0		0.1
HS-130	0.1		0.5
PTX 35/15	2.0		2.2
Other programs	0.2		0.2
Unallocated research and development expenses	2.5		1.6
	\$ 6.6	\$	6.4

- · HS-110 expense was consistent with the prior-year period, reflecting the current-period mix of development activities, primarily decreased costs associated with the production of drug supplies offset by increased payments to investigator sites for ongoing clinical trials
- · HS-410 expense decreased, reflecting completion of prior clinical trial activities.
- HS-130 expense represented primarily regulatory consulting in the current period and clinical trial materials in the 2018 period.
- PTX expense for 2019 was comparable to the 2018 period, primarily reflecting continued pre-clinical development of PTX-35.
- Other programs include preclinical costs associated with our Zika program, T-cell costimulatory programs, and laboratory supplies.
- The increase in unallocated research expenses primarily reflects personnel costs, including stock-based compensation from 2019 stock awards.

General and administrative expense. General and administrative expense increased to \$5.2 million for the six months ended June 30, 2019 compared to \$3.1 million for the quarter ended June 30, 2018. The increase is primarily attributable to increased stock-based compensation expense.

Change in fair value of contingent consideration. The change in fair value of contingent consideration was \$0.2 million for the six months ended June 30, 2019, compared to \$0.6 million in the six months ended June 30, 2018. The greater change in the 2018 period primarily reflects an increase in estimated probability factors for milestone achievement.

Non-operating income, net. Other income was \$0.3 million for the six months ended June 30, 2019 compared to \$0.2 million in the six ended June 30, 2018. In 2019, other income was primarily related to interest income on cash and short-term investment balances. In 2018, other income is primarily related to the release of escrow funds to us for payment of liabilities related to the Pelican acquisition.

Net loss attributable to Heat Biologics, Inc. We had a net loss attributable to Heat Biologics, Inc. of \$10.5 million, or \$0.32 per basic and diluted share for the six months ended June 30, 2019 compared to a net loss of \$7.1 million, or \$0.72 per basic and diluted share for the quarter ended June 30, 2018.

#### LIQUIDITY AND CAPITAL RESOURCES

#### Sources of Liquidity

Since our inception in June 2008, we have incurred significant losses and we have financed our operations with net proceeds from the private placement of our preferred stock, common stock and debt. As of June 30, 2019, we had an accumulated deficit of \$95.1 million. We had net losses of \$16.6 million and \$12.4 million for the years ended December 31, 2018 and 2017, respectively. We had net losses of \$10.8 million and \$7.5 million for the six months ended June 30, 2019 and 2018, respectively.

We expect to incur significant expenses and continued losses from operations for the foreseeable future. We expect our expenses to increase in connection with our ongoing activities, particularly as we continue the research and development and advance our clinical trials of, and seek marketing approval for, our product candidates and as we continue to fund the Pelican matching funds required in order to access the CPRIT Grant. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Upon achievement of the milestones set forth in our purchase agreement, we will be required to make milestone payments to participating Pelican shareholders, which include a \$2.0 million upon first patient dosing in our first Phase 1 clinical trial of PTX-35 for an oncology indication.

Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. Although we currently have sufficient funds to complete our current Phase 2 clinical trial, as currently planned, and expect that we will have sufficient funds to fund our operations into the third quarter of 2020, we will need to obtain substantial additional future funding in connection with our future planned clinical trials. Adequate additional financing may not be available to us on acceptable terms, or at all. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts. To meet our capital needs, we intend to continue to consider multiple alternatives, including, but not limited to, additional equity financings such as sales of our common stock under at-the-market offerings, if available, debt financings, partnerships, collaborations and other funding transactions. This is based on our current estimates, and we could use our available capital resources sooner than we currently expect. We are continually evaluating various cost-saving measures considering our cash requirements in order to focus our resources on our product candidates. We will need to generate significant revenues to achieve profitability, and we may never do so. As of June 30, 2019, we had approximately \$19.5 million in cash and cash equivalents and short-term investments which we believe is sufficient to fund our operations for one year from date of this filing. Our research and development activities are conducted under our prudent cash management policies. To effectively manage our cash resources and determine allocations of cash among our development programs, we rank our development programs based upon, among other things, progress in clinical development. We place a higher level of priority on our programs that are further in clinical development. These rankings could result in a reduction, delay, or elimination of certain of our research and development programs and are subject to change based upon future events. Our current top priority is the completion of our Phase 2 clinical trial investigating HS-110 in combination with various checkpoint inhibitors in patients with advanced non-small cell lung cancer (NSCLC) as this program is furthest along in clinical development. Our next current highest priority is our CPRIT-funded PTX-35 program, for which we are preparing an IND submission to the FDA. Finally, our HS-130 program, for which we recently received FDA clearance of an IND application for a Phase 1 trial is our next current priority. We place a lower level of priority on our programs that are further from clinical development.

#### **Cash Flows**

Operating activities. The use of cash in all periods resulted primarily from our net losses adjusted for non-cash charges and changes in the components of working capital. The decrease in cash used in operating activities for the six months ended June 30, 2019 compared to the six months ended June 30, 2018 is primarily due to timing of payments to vendors. The 2018 period included an increase in prepaid expense of \$2.0 million, primarily for manufacturing development supplies and services.

*Investing activities.* We used \$0.1 million of cash in investing activities in the six months ended June 30, 2019 for lower levels of spending on lab equipment and for the purchase of short-term investments. We used \$0.5 million of cash in investing activities in the six months ended June 30, 2018 related to the purchase of property and equipment, as we established our San Antonio facilities per the CPRIT grant.

Financing activities. There were no significant cash inflows from financing activities in the six months ended June 30, 2019. The source of \$27.1 million of cash in the six months ended June 30, 2018 was public offerings of stock, proceeds from the exercise of warrants and the issuance of common stock through an at-the-market Common Stock Sales Agreement (the "Underwriting Agreement") with H.C. Wainwright & Co., LLC., net of related stock issuance costs.

#### **Current and Future Financing Needs**

We intend to meet our financing needs through multiple alternatives, including, but not limited to, additional equity financings, debt financings and/or funding from partnerships or collaborations.

However, the actual amount of funds we will need to operate is subject to many factors, some of which are beyond our control. These factors include the following:

- · the progress of our research activities;
- · the number and scope of our research programs;
- · the progress of our preclinical and clinical development activities;
- the progress of the development efforts of parties with whom we have entered into research and development agreements;
- our ability to maintain current research and development licensing arrangements and to establish new research and development and licensing arrangements;
- · our ability to achieve our milestones under licensing arrangements;
- the costs involved in prosecuting and enforcing patent claims and other intellectual property rights;
- the costs and timing of regulatory approvals; and
- · profitability of our clinical laboratory diagnostic and microbiology services business.

We have based our estimate on assumptions that may prove to be wrong. We may need to obtain additional funds sooner or in greater amounts than we currently anticipate. Potential sources of financing include strategic relationships, public or private sales of our equity or debt and other sources. We may seek to access the public or private equity markets when conditions are favorable due to our long-term capital requirements. We do not have any committed sources of financing at this time, and it is uncertain whether additional funding will be available when we need it on terms that will be acceptable to us, or at all. Potential sources of financing that we are pursuing include strategic relationships, public or private sales of our equity (including through the B. Riley FBR, Inc. At Market Issuance Sales Agreement, or FBR Sales Agreement) or debt and other sources. We cannot assure that we will meet the requirements for use of the FBR Sales Agreement especially in light of the fact that we are currently limited by our authorized number of shares of common stock and the rules of the SEC as to the number of shares of common stock that we can sell pursuant to the FBR Sales Agreement due to the market value of our common stock held by non-affiliates. If we raise funds by selling additional shares of common stock or other securities convertible into common stock, the ownership interest of our existing stockholders will be diluted. If we are not able to obtain financing when needed, we may be unable to carry out our business plan, including accessing the CPRIT Grant. As a result, we may have to significantly limit our operations and our business, financial condition and results of operations would be materially harmed.

#### OFF-BALANCE SHEET ARRANGEMENTS

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under Securities and Exchange Commission rules.

#### ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

We are a smaller reporting company as defined by Rule 12b-2 of the Exchange Act and are not required to provide the information required under this item.

#### ITEM 4. CONTROLS AND PROCEDURES.

#### **Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of our Chief Executive Officer and Vice President of Finance, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2019. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it 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. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. We have adopted and maintain disclosure controls and procedures (as defined Rules 13a-15(e) and 15d-15(e) under the Exchange Act) 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 SEC. Our 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. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure contro

#### Changes in Internal Control over Financial Reporting

During the three months ended June 30, 2019, there were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act) that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

#### PART II—OTHER INFORMATION

#### ITEM 1. LEGAL PROCEEDINGS.

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

#### ITEM 1A. RISK FACTORS.

The following information and updates should be read in conjunction with the information disclosed in Part 1, Item 1A, "Risk Factors," contained in our 2018 Annual Report. Except as disclosed below, there have been no material changes from the risk factors and uncertainties disclosed in our 2018 Annual Report.

We have incurred net losses every year since our inception and expect to continue to generate operating losses and experience negative cash flows and it is uncertain whether we will achieve profitability.

As of June 30, 2019, we had an accumulated deficit of \$95.1 million. We had net losses of \$16.6 million and \$12.4 million for the years ended December 31, 2018 and 2017, respectively. We had net losses of \$10.8 million and \$7.1 million for the six months ended June 30, 2019 and 2018, respectively. We expect to continue to incur operating losses until such time, if ever, as we can achieve sufficient levels of revenue from operations. Our ability to achieve profitability will depend on us obtaining regulatory approval for our product candidates and market acceptance of our product offerings and our capacity to develop, introduce and sell our products to our targeted markets. There can be no assurance that any of our product candidates will be approved for commercial sale, or even if our product candidates are approved for commercial sale that we will ever generate significant sales or achieve profitability. Accordingly, the extent of future losses and the time required to achieve profitability, if ever, cannot be predicted at this point.

Even if we succeed in developing and commercializing one or more product candidates, we expect to incur substantial losses for the foreseeable future and may never become profitable. We also expect to continue to incur significant operating expenses and anticipate that our expenses will increase substantially in the foreseeable future as we:

- · continue to undertake preclinical development and conduct clinical trials for product candidates;
- · seek regulatory approvals for product candidates;
- · implement additional internal systems and infrastructure; and
- · hire additional personnel.

We also expect to experience negative cash flows for the foreseeable future as we fund our operating losses. As a result, we will need to generate significant revenues or raise additional financing in order to achieve and maintain profitability. We may not be able to generate these revenues or achieve profitability in the future. Our failure to achieve or maintain profitability would likely negatively impact the value of our securities and financing activities.

We will need to raise additional capital to operate our business and our failure to obtain funding when needed may force us to delay, reduce or eliminate our development programs or commercialization efforts.

During the six months ended June 30, 2019, our operating activities used net cash of approximately \$8.2 million and as of June 30, 2019, our cash and cash equivalents and short-term investments were approximately \$19.5 million. During the years ended December 31, 2018 and 2017, our operating activities used net cash of approximately \$21.7 and \$6.4 million, respectively. We expect to incur additional operating losses in the future and therefore expect our cumulative losses to increase. We do not expect to derive revenue from any significant source in the near future until we or our potential partners successfully commercialize our products. We expect our expenses to increase if and when we initiate and conduct Phase 3 and other clinical trials and seek marketing approval for our product candidates. Until such time as we receive approval from the FDA and other regulatory authorities for our product candidates, we will not be permitted to sell our products and therefore will not have product revenues from the sale of products. For the foreseeable future, we will have to fund all our operations and capital expenditures from equity and debt offerings, cash on hand, licensing fees and grants.

We expect that our current cash and cash equivalents and short-term investments will allow us to continue the enrollment of additional patients in the Phase 2 clinical trial for HS-110; however, if the trial design or size were to change, we may need to raise money earlier than anticipated.

We will need to raise additional capital to fund our future operations and we cannot be certain that funding will be available on acceptable terms on a timely basis, or at all. To meet our financing needs, we are considering multiple alternatives, including, but not limited to, current and additional equity financings, which we expect will include sales of common stock through at the market issuances, debt financings and/or funding from partnerships or collaborations. Our ability to raise capital through the sale of securities may be limited by the number of authorized shares of common stock and various rules of the SEC and the NASDAQ Capital Market that place limits on the number and dollar amount of securities that we may sell. There can be no assurance that we will be able to obtain shareholder approval to increase our number of authorized shares or to meet the requirements for use of at-market-issuance agreements, especially since that we are subject to the smaller reporting company requirements, or to complete any such transactions on acceptable terms or otherwise. Any additional sources of financing will likely involve the issuance of our equity or debt securities, which will have a dilutive effect on our stockholders. To the extent that we raise additional funds by issuing equity securities, our stockholders may experience significant dilution. Any debt financing, if available, may involve restrictive covenants that may impact our ability to conduct our business. If we fail to raise additional funds on acceptable terms, we may be unable to complete planned preclinical and clinical trials or obtain approval of our product candidates from the FDA and other regulatory authorities or continue to maintain our listing on the NASDAQ Capital Market. In addition, we could be forced to delay, discontinue or curtail product development, forego sales and marketing efforts, and forego licensing in attractive business opportunities. Any additional sources of financing will likely involve the issuance of our equity or

#### Our failure to meet the continued listing requirements of the NASDAQ Capital Market could result in a de-listing of our common stock.

Our shares of common stock are currently listed on the NASDAQ Capital Market. If we fail to satisfy the continued listing requirements of the NASDAQ Capital Market, such as the corporate governance requirements, minimum bid price requirement or the minimum stockholder's equity requirement, the NASDAO Capital Market may take steps to de-list our common stock. Any de-listing would likely have a negative effect on the price of our common stock and would impair stockholders' ability to sell or purchase their common stock when they wish to do so. On June 21, 2019, we received written notice from the Listing Qualifications Department of NASDAQ Stock Market LLC ("NASDAQ") notifying us that for the preceding 30 consecutive business days (May 9, 2019 through June 20, 2019), our common stock did not maintain a minimum closing bid price of \$1.00 per share ("Minimum Bid Price Requirement") as required by NASDAQ Listing Rule 5550(a)(2). The notice has no immediate effect on the listing or trading of our common stock which will continue to trade on the NASDAO Capital Market under the symbol "HTBX". In accordance with NASDAO Listing Rule 5810(c)(3)(A), we have a compliance period of 180 calendar days, or until December 18, 2019, to regain compliance with NASDAQ Listing Rule 5550(a)(2). Compliance can be achieved automatically and without further action if the closing bid price of our common stock is at or above \$1.00 for a minimum of ten consecutive business days at any time during the 180-day compliance period, in which case NASDAO will notify us of our compliance and the matter will be closed. If, however, we do not achieve compliance with the Minimum Bid Price Requirement by December 18, 2019, we may be eligible for additional time to comply. In order to be eligible for such additional time, we will be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for the NASDAQ Capital Market, with the exception of the Minimum Bid Price Requirement, and must notify NASDAQ in writing of our intention to cure the deficiency during the second compliance period. No assurance can be given that we will be able to satisfy our continued listing requirements and maintain the listing of our common stock on the NASDAQ Capital Market. We intend to attempt to take actions to restore our compliance with NASDAQ's listing requirements, but we can provide no assurance that any action that requires stockholder approval will be approved by our stockholders or that any action taken by us would result in our common stock meeting the NASDAQ listing requirements, or that any such action would stabilize the market price or improve the liquidity of our common stock.

### ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

None that were not previously disclosed in our Current Reports on Form 8-K.

### ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

Not Applicable.

### ITEM 4. MINE SAFETY DISCLOSURES.

Not Applicable.

## ITEM 5. OTHER INFORMATION.

None.

#### ITEM 6. EXHIBITS.

The exhibits filed as part of this Quarterly Report on Form 10-Q are set forth on the Exhibit Index. The Exhibit Index is incorporated herein by reference.

#### **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.

### HEAT BIOLOGICS, INC.

Date: August 14, 2019

By: /s/ Jeffrey A. Wolf

Jeffrey A. Wolf

Chairman and Chief Executive Officer (Principal Executive Officer)

By: /s/ Robert J. Jakobs

Robert J. Jakobs

Vice President of Finance

(Principal Financial and Accounting Officer)

Date: August 14, 2019

## EXHIBIT INDEX

Exhibit No.	Description
1.1	At Market Issuance Sales Agreement, dated April 3, 2019, by and between Heat Biologics, Inc. and B. Riley FBR, Inc. (previously filed as an exhibit to the
	Current Report on Form 8-K with the Securities and Exchange Commission on April 4, 2019 (File No. 001-35994))
10.1	Attachment to CPRIT Contract (previously filed as an exhibit to the Current Report on Form 8-K with the Securities and Exchange Commission on April 18.
	2019 (File No. 001-35994))
10.2	Lease between Durham KTP Tech 7, LLC and Heat Biologics, Inc. dated April 17, 2019 (previously filed as an exhibit to the Current Report on Form 8-K
	with the Securities and Exchange Commission on April 18, 2019 (File No. 001-35994))
31.1*	Certification of Chief 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.
31.2*	Certification of Vice President of Finance 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.
32.1*	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Vice President of Finance pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
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.

# CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO RULE 13a-14 OR RULE 15d-14 OF THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

#### I, Jeffrey Wolf, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Heat Biologics, 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: August 14, 2019 By: /s/ Jeffrey Wolf

Name: Jeffrey Wolf Title: Chief Executive Officer (Principal Executive Officer)

# CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO RULE 13a-14 OR RULE 15d-14 OF THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

#### I, Robert Jakobs, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of Heat Biologics, 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: August 14, 2019

By: /s/ Robert Jakobs

Name: Robert Jakobs
Title: Vice President of Finance
(Principal Financial and Accounting Of

(Principal Financial and Accounting Officer)

# 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

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Heat Biologics, Inc. (the "Registrant") hereby certifies, to such officer's knowledge, that:

- (1) the accompanying Quarterly Report on Form 10-Q of the Registrant for the quarter ended June 30, 2019 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: August 14, 2019

By: /s/ Jeffrey Wolf
Name: Jeffrey Wolf
Title: Chief Executive Officer
(Principal Executive Officer)

# 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

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Heat Biologics, Inc. (the "Registrant") hereby certifies, to such officer's knowledge, that:

- (1) the accompanying Quarterly Report on Form 10-Q of the Registrant for the quarter ended June 30, 2019 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: August 14, 2019

By: /s/ Robert Jakobs

Name: Robert Jakobs Title: Vice President of Finance

(Principal Financial and Accounting Officer)