Zacks Small-Cap Research
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Heat Biologics Inc (HTBX - NASDAQ)

Multiple Milestones on the Horizon

Based on our DCF model and a 15% discount rate, Heat Biologics is valued at approximately $5.00 per share. Our model applies a 15% probability of ultimate approval and commercialization for HS-110 in a broad NSCLC setting. The model includes contributions from the US, EU and rest of world.

Current Price (8/17/2018)	$1.89
Valuation	**$5.00**

OUTLOOK

Heat Biologics has developed two novel immunotherapies designated ImPACT & ComPACT. They utilize genetically-modified cells to secrete a broad array of cancer antigens accompanied by a gp96 adjuvant to stimulate a CD8+ T-cell mediated anti-cancer immune response.

The company's key indication in NSCLC is addressed with portfolio candidates HS-110 and HS-130, both administered in conjunction with checkpoint inhibitors. Heat is currently conducting Phase II trials for HS-110 and expects to begin the HS-130 trial in 4Q:18. Other pipeline constituents emerged from the company's acquisition of Pelican Therapeutics in 2017. Pelican is developing a T-cell co-stimulating antibody targeting the cell surface receptor TNFRSF25 called PTX-35.

The valuation assumes a 2023 FDA approval of HS-110 and a 2023 launch of the compound in the US, followed by a 2024 launch in the EU and global availability by 2025 that will be achieved through the efforts of partners.

SUMMARY DATA

52-Week High	**7.90**
52-Week Low	**1.09**
One-Year Return (%)	**-62.2**
Beta	**0.92**
Average Daily Volume (sh)	**961,658**
Shares Outstanding (mil)	**23.1**
Market Capitalization ($mil)	**43.7**
Short Interest Ratio (days)	**1.77**
Institutional Ownership (%)	**2.25**
Insider Ownership (%)	**0.97**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2017 Estimate	**N/A**
P/E using 2018 Estimate	**N/A**
Zacks Rank	**N/A**

Risk Level	**Above Average**
Type of Stock	**Small-Growth**
Industry	**Med-Biomed/Gene**

ZACKS ESTIMATES

Revenue

(In millions of USD)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2017	$0.0 A	$0.4 A	$0.5 A	$0.6 A	$1.5 A
2018	$0.8 A	$1.1 A	$1.2 E	$1.2 E	$4.3 E
2019					$4.8 E
2020					$2.8 E

Earnings per Share

	Q1	Q2	Q3	Q4	Year
2017	-$1.18 A	-$0.91 A	-$0.64 A	-$0.81 A	-$3.08 A
2018	-$0.75 A	-$0.27 A	-$0.12 E	-$0.12 E	-$0.81 E
2019					-$0.76 E
2020					-$0.74 E

*2018 quarterly EPS does not sum due to distortion from 2Q share issuance.

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WHAT'S NEW

Second Quarter 2018 Results

Heat Biologics, Inc. (NASDAQ: HTBX) reported second quarter 2018 results in an August 14th release and concurrently filed the supporting 10-Q with the SEC. Following a busy first quarter which included a stock split, an investor update and an interim data report for HS-110, the second quarter was more subdued, but did include a comprehensive list of milestones and a $21 million capital raise.

In the second quarter, Heat reported total revenues of $1.1 million compared to $411 thousand in 2Q:17. This amount represented CPRIT grant money which is directed towards the PTX-35 T-cell activation platform. Research and development costs totaled $3.5 million, rising 62% as expenditures for PTX-35 accelerated to $1.4 million and the HS-130 program increased to $0.4 million. No funds were directly allocated to these programs in 2Q:17. General and administrative expenses fell by 14% to $1.4 million as costs related to the Pelican acquisition that occurred in 2Q:17 did not appear in 2Q:18.

Cash and equivalents as of June 30, 2018 were $24.7 million, compared to $9.8 million at the end of 2017. Heat continues with no debt on the books. Cash burn was ($8.0) million in 2Q:18 compared to ($2.5) million in 2Q:17 with the amount lower than earnings of ($4.1) million due to cash prepayments likely related to trial expenses.

Since our initiation last month, Heat has continued to enroll in its active HS-110 trial and prepare for its IND filing for HS-130 and PTX-35. While our valution only accounts for sales of HS-110, the company has other candidates in development that could yield value as great as HS-110. Following the release of the 2Q:18 results, we maintain our target price of $5.00.

Corporate Milestones

Heat is conducting Phase II trials for HS-110 and preparing HS-130 (ComPACT) and PTX-35 for IND submission. Below we list key milestones on the horizon for Heat Biologics. Over the next two years we anticipate the following events.

- Closing of $20.7 million public offering – 2Q:18
- Receive $6.9 million in CPRIT grant funds – 3Q:18
- HS-110 (NSCLC) interim data readout - 4Q:18
- ComPACT IND filing – 4Q:18
- ComPACT first patient enrollment – 4Q:18
- IND for PTX-35 – 1Q:19
- Receipt of $6.9 MM in CPRIT grant funds (PTX-35) – 1Q:19
- Enroll first patient in PTX-35 Phase I trial – 1Q:19
- Complete Phase II NSCLC enrollment – 2Q:19
- Interim ComPACT data readout – 2Q:19
- HS-110 Phase II final readout – 2Q:19
- HS-110 End of Phase II Meeting – Mid 2019
- HS-110 NSCLC Phase III ready – 3Q:19
- Interim PTX-35 data readout – 3Q:19
- Discussion with potential partners – 2018 / 2019
- Develop Phase III / commercial manufacturing capacity for HS-110 – 2018 / 2019

PROJECTED FINANCIALS

Heat Biologics, Inc. - Income Statement

Heat Biologics Inc.	2017 A	Q1 A	Q2 A	Q3 E	Q4 E	2018 E	2019 E	2020 E
Total Revenues	**$1.5**	**$0.8**	**$1.1**	**$1.2**	**$1.2**	**$4.3**	**$4.8**	**$2.8**
YOY Growth								
Research & Development	$8.3	$2.9	$3.5	$2.4	$2.4	$11.2	$15.0	$16.2
General & Administrative	$6.4	$1.8	$1.4	$1.9	$2.0	$7.0	$8.0	$8.2
Other	$0.2	$0.0	$0.5	$0.0	$0.0	$0.6		
Income from operations	($13.3)	($3.9)	($4.2)	($3.1)	($3.2)	($14.4)	($18.2)	($21.6)
Operating Margin	*-878%*	*-520%*	*-371%*	*-258%*	*-263%*	*-335%*	*-379%*	*-773%*
Interest Income	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Other Income	$0.1	$0.2	($0.1)	$0.0	$0.0	$0.0	$0.0	$0.0
Interest Expense	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Pre-Tax Income	($13.2)	($3.7)	($4.2)	($3.1)	($3.2)	($14.4)	($18.2)	($21.6)
Provision for Income Tax	$0.8	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Tax Rate	*-6.1%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Net Income	**($12.4)**	**($3.7)**	**($4.2)**	**($3.1)**	**($3.2)**	**($14.4)**	**($18.2)**	**($21.6)**
Non-controlling Interest	($0.6)	($0.2)	($0.2)	($0.2)	($0.2)	($0.8)	($0.8)	($0.8)
Net Income After NCI	**($11.8)**	**($3.5)**	**($4.1)**	**($2.9)**	**($3.0)**	**($13.6)**	**($17.4)**	**($20.8)**
Net Margin	*-816%*	*-496%*	*-371%*	*-258%*	*-263%*	*-335%*	*-379%*	*-773%*
Reported EPS	**($3.08)**	**($0.75)**	**($0.27)**	**($0.12)**	**($0.12)**	**($0.81)**	**($0.70)**	**($0.74)**
YOY Growth	*-56.9%*	*-36.7%*	*-69.9%*	*-80.6%*	*-84.9%*	*-74%*	*-15%*	
Basic Shares Outstanding	3.85	4.71	14.73	23.30	24.00	16.68	25.00	28.00

Source: Company Filing // Zacks Investment R

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HISTORICAL STOCK PRICE

Heat Biologics, Inc. – Share Price Chart



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