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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (date of earliest event reported): **January 6, 2017**

Heat Biologics, Inc.

(Exact name of registrant as specified in charter)

Delaware
(State or other jurisdiction of incorporation)

001-35994	**26-2844103**
(Commission File Number)	*(IRS Employer Identification No.)*

801 Capitola Drive
Durham, NC 27713
(Address of principal executive offices and zip code)

(919) 240-7133
(Registrant's telephone number including area code)

N/A
(Former Name and Former Address)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12(b) under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 7.01 – Regulation FD Disclosure.

Heat Biologics, Inc. (the "Company") will be making an investor presentation at the Biotech Showcase 2017 Conference on Wednesday, January 11, 2017, at 9:30 a.m. Pacific Standard Time at the Hilton San Francisco Union Square in San Francisco, California and additional presentations over the next few weeks. In connection with the presentations, the Company intends to discuss the updated slide presentation furnished as Exhibit 99.1 hereto, which is incorporated herein by reference.

The slide presentation attached as Exhibit 99.1 to this Current Report on Form 8-K includes "safe harbor" language pursuant to the Private Securities Litigation Reform Act of 1995, as amended, indicating that certain statements contained in the slide presentation are "forward-looking" rather than historical.

The information included in this Item 7.01 and in Exhibit 99 shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that Section or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing. The Company undertakes no duty or obligation to update or revise information included in this Current Report on Form 8-K or any of the Exhibits.

Item 9.01 – Financial Statements and Exhibits.

(d) Exhibits

The following exhibits are being filed as part of this Report.

99.1 Presentation materials to be provided at Heat Biologics, Inc. presentations

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 hereunto duly authorized.

Dated: January 6, 2017

HEAT BIOLOGICS, INC.

By: /s/ Jeff Wolf
Name: Jeff Wolf
Title: Chairman, President and Chief Executive Officer

EXHIBIT INDEX

Exhibit Number	Description
99.1	Presentation materials to be provided at Heat Biologics, Inc. presentations

EXHIBIT 99.1

Forward Looking Statements

This presentation includes statements that are, or may be deemed, "forward-looking statements." In some cases, these forward-looking statements can be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should," "approximately" or, in each case, their negative or other variations thereon or comparable terminology, although not all forward-looking statements contain these words. They appear in a number of places throughout this presentation and include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things, our ongoing and planned discovery and development of drugs targeting cancer, the strength and breadth of our intellectual property, our ongoing and planned preclinical studies and clinical trials, the timing of and our ability to make regulatory filings and obtain and maintain regulatory approvals for our product candidates, our ability to partner our product development, the degree of clinical utility of our products, particularly in specific patient populations, expectations regarding clinical trial data, our results of operations, financial condition, liquidity, prospects, growth and strategies, the length of time that we will be able to continue to fund our operating expenses and capital expenditures, our expected financing needs and sources of financing, the industry in which we operate and the trends that may affect the industry or us.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events, competitive dynamics, and healthcare, regulatory and scientific developments and depend on the economic circumstances that may or may not occur in the future or may occur on longer or shorter timelines than anticipated. Although we believe that we have a reasonable basis for each forward-looking statement contained in this presentation, we caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this presentation as a result of, among other factors, the factors referenced in the "Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2015 and our quarterly report on Form 10-Q for the subsequent quarters (collectively, our "SEC Filings"). In addition, even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate are consistent with the forward-looking statements contained in this presentation, they may not be predictive of results or developments in future periods. Any forward-looking statements that we make in this presentation speak only as of the date of such statement, and we undertake no obligation to update such statements to reflect events or circumstances after the date of this presentation, except as required by law.

You should read carefully the factors described in the "Risk Factors" sections of our SEC Filings to better understand the risks and uncertainties inherent in our business.

Investment Opportunity

Platform technologies designed to activate and expand "killer" T cells against multiple tumor antigens

Clinical proof of concept for platform mechanism

Increased CD8+ T cells in tumors associated with clinical response

Favorable safety profile to-date

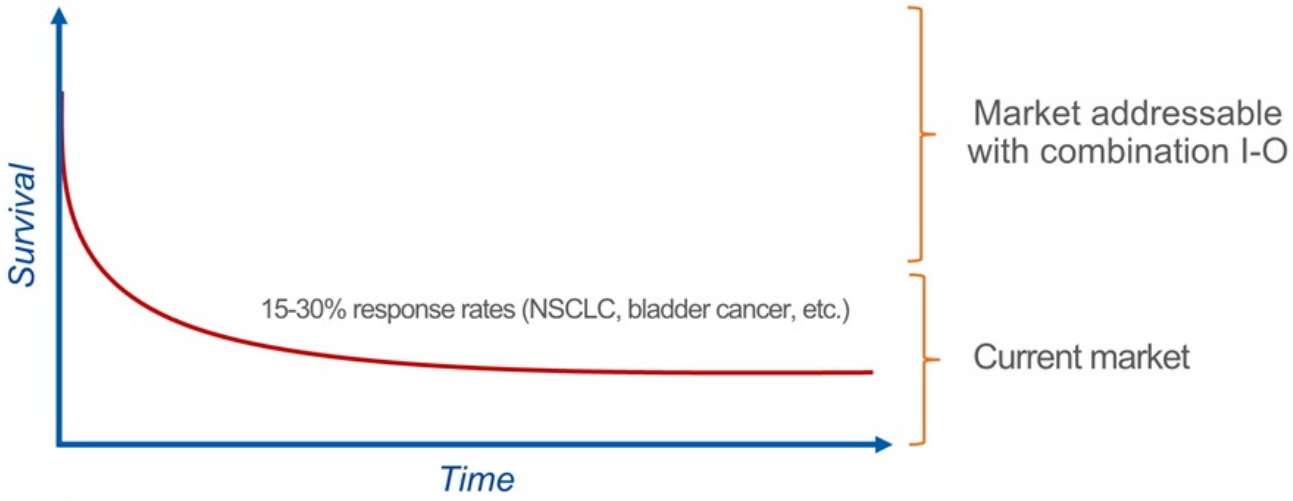
Conducting vaccine + PD-1 checkpoint inhibitor combo trial in non-small cell lung cancer (NSCLC)	Over 1,000 doses administered in ~200 patients

Focused on immuno-oncology (I-O) combinations that have the potential to dramatically improve patient outcomes

Heat Biologics

Unmet Need in Immuno-Oncology (I-O)

- Clinical responses to checkpoint therapy (e.g., Opdivo®) occur primarily in patients who are:
  - PD-L1 positive
  - Tumor infiltrating lymphocyte (TIL) positive

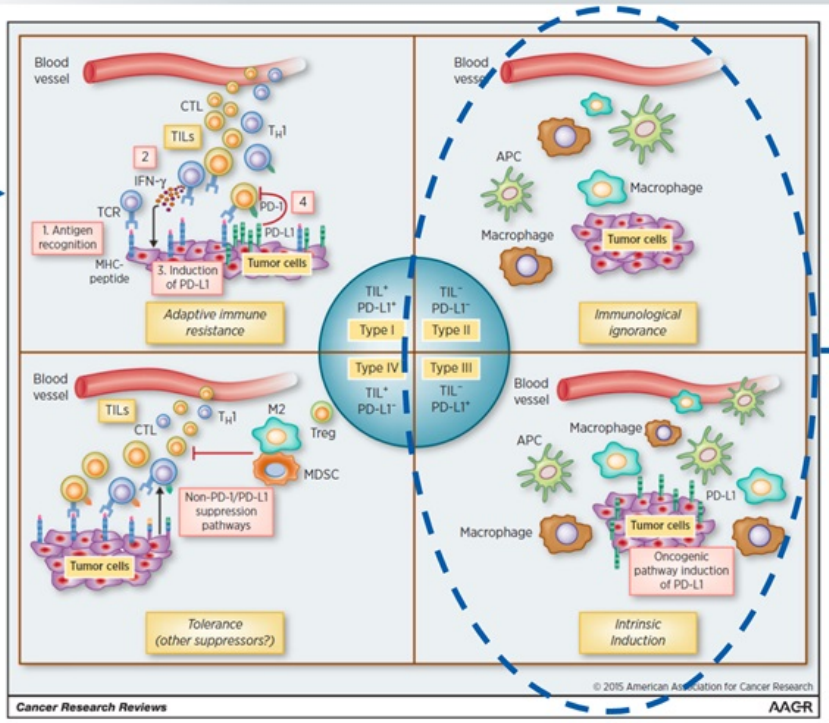


Majority of patients are not benefiting from current I-O treatment

Source: Teng et al., 2015 Can Res

Majority of Patients do not Respond to Checkpoints

Only ~25% of patients respond to checkpoints



Heat's focus is on the majority of patients who do not respond to checkpoint therapy (low TIL)

Heat is focusing on converting 'cold' tumors to 'hot' tumors by activating highly specific "killer" T cells

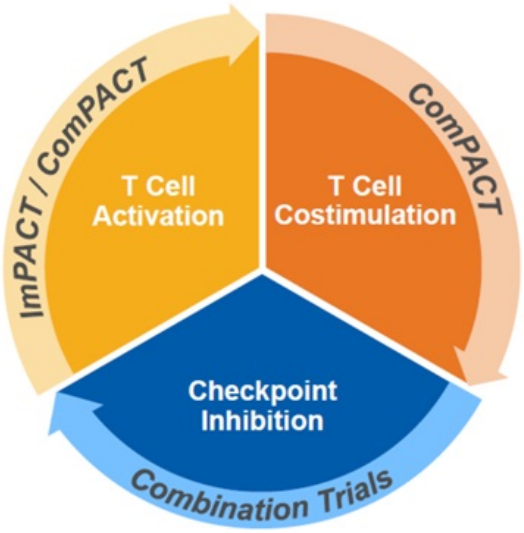
Source: Teng et al., 2015 Can Res

Heat Biologics

Vision and Strategy

Focused on I-O combinations that have the potential to dramatically improve patient outcomes

Activation of CD8+ "killer" T cells



Co-stimulation to enhance immune response

Overcome tumor defenses through combination therapies

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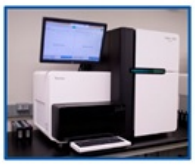
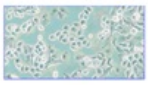
Heat's Product Development

Cancer Cell Lines & Patient Samples

Heat's Antigen Screening & Selection Algorithm



Select Cell Line with Most Antigen Overlap



Transfect with Heat's Technology

Transition to CMO to Mass Produce

Platform Technology Highlights

- Applies to multiple cancers and infectious diseases
- Designed to activate "killer" T cells
- Targets multiple tumor antigens
- Enables scalable, low cost manufacturing relative to autologous cell therapies

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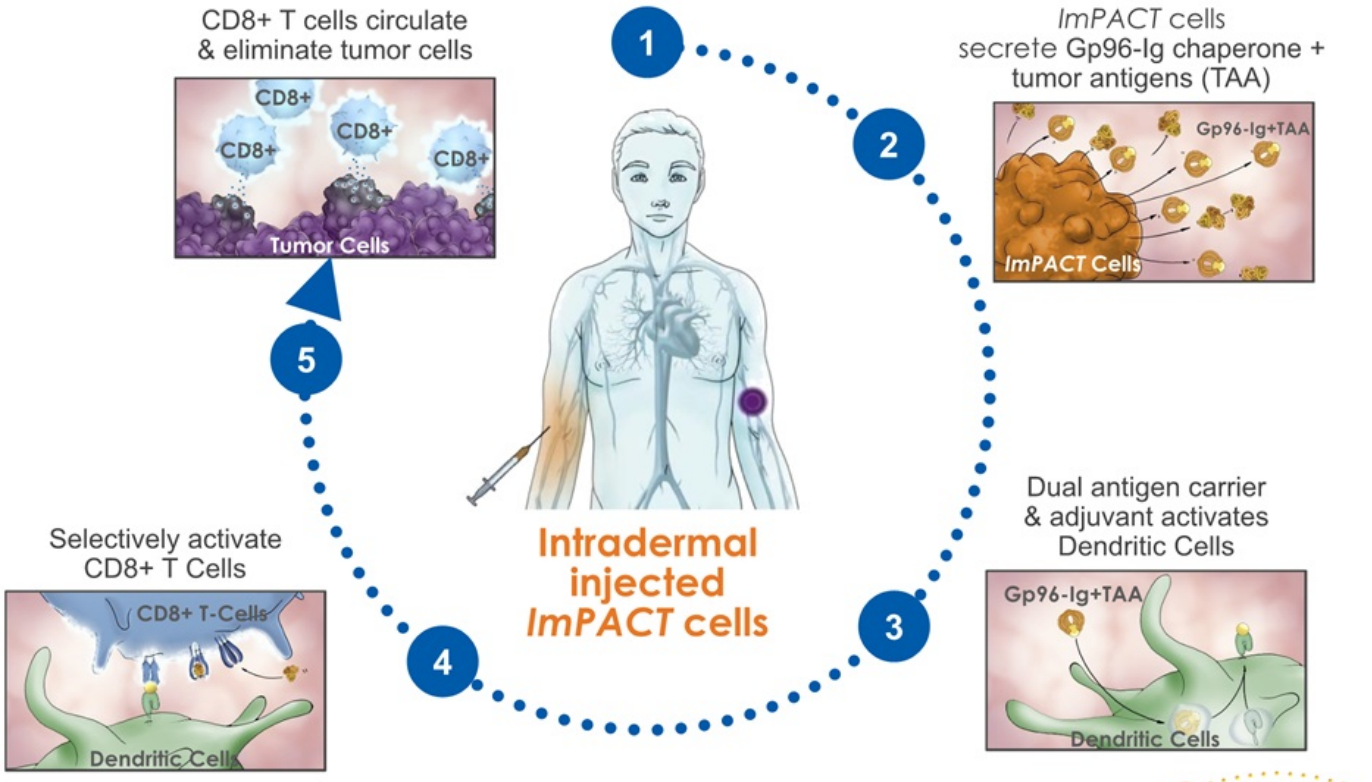
ImPACT Platform Technology



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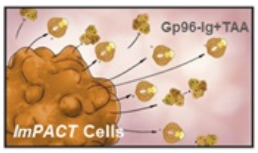
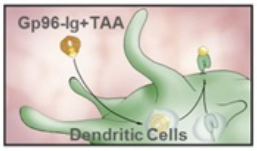
Clinical Proof of Concept

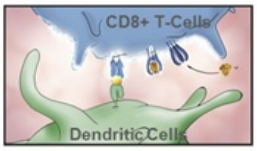
Secrete Gp96-Ig



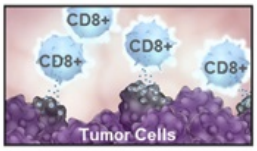
Pan-Antigen



T Cell Activation



Tumor Infiltration



Future I-O combinations will focus on checkpoint blockade and durable T cell responses

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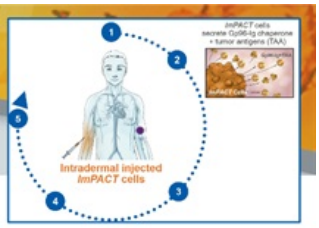
Antigen Overlap with Patient Tumors



Antigen	HS-410
ACTL8	+++
ADAM22	+++
ADAM23	+++
ATAD2	+++
ATAD2B	+++
BIRC5 (survivin)	+++
CASC5	+++
CEP290	+++
CEP55	+++
CTAGE5 (NY-ESO-1)	+++
DCAF12	+++
DDX5	+++
FAM133A	+++
IL13RA2	+++
IMP3	+++
KIAA0100	+++
MAGEA11	+++
MAGEA3	+++
MAGEA6	+++
MPHOSPH10	+++
ODF2	+++
ODF2L	+++
OIP5	+++
PBK	+++
RQCD1	+++
SPAG1	+++
SPAG4	+++
SPAG9	+++
TMEFF1	+++
TTK	+++

Antigen	23-002	25-001	25-004	25-005	25-003	25-007	25-008
ACTL8	–	–	–	–	–	–	–
ADAM22	+++	+++	++	+++	+++	+++	+++
ADAM23	+	++	+++	–	+++	+++	+++
ATAD2	+++	+++	–	+++	+++	+++	+++
ATAD2B	+++	+++	–	+++	+++	+++	+++
BIRC5	+++	+++	–	–	++	++	+++
CASC5	+++	+++	++	++	+++	+++	+++
CEP290	+++	+++	++	+++	+++	+++	+++
CEP55	+++	+++	++	++	+++	++	++
CTAGE5	+++	+++	++	+++	+++	+++	+++
DCAF12	+++	+++	–	+++	+++	+++	+++
DDX5	+++	+++	–	+++	+++	+++	+++
FAM133A	–	–	–	–	+	–	–
IL13RA2	++	++	–	–	+	+++	–
IMP3	+++	+++	–	+++	+++	+++	+++
KIAA0100	+++	+++	–	+++	+++	+++	+++
MAGEA11	+	+	+++	–	–	–	+
MAGEA3	–	+	++	–	+	–	++
MAGEA6	–	++	–	–	+	–	++
MPHOSPH10	+++	+++	+++	+++	+++	+++	+++
ODF2	+++	+++	++	+++	+++	+++	+++
ODF2L	+++	+++	–	+++	+++	+++	+++
OIP5	++	+	+++	+	+	++	+
PBK	+++	++	+++	–	+	+	++
RQCD1	+++	+++	++	+++	+++	+++	+++
SPAG1	++	+++	+++	+++	+++	+++	+++
SPAG4	++	++	–	++	++	+	++
SPAG9	+++	+++	+++	+++	+++	+++	+++
TMEFF1	–	+	–	–	–	–	–
TTK	+++	+++	–	+	++	++	+

- Product candidate was selected due to high expression of >30 shared cancer antigens
- >15 of these antigens were also found in individual patient tumors

This information can be used to track whether the proliferating T cells are tumor antigen specific

Source: Heat's HS-410 Ph 1b NMIBC trial results

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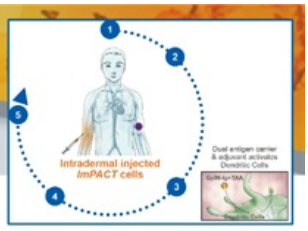
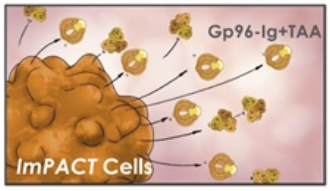
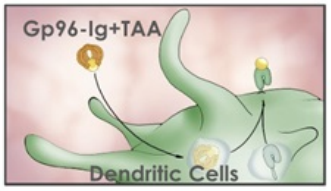
Polyclonal T Cell Activation



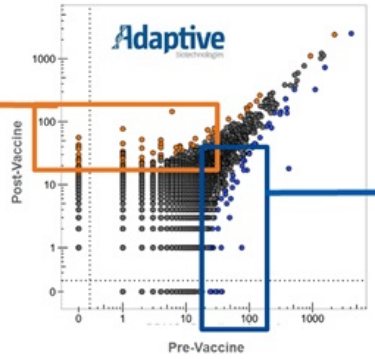




T Cell Proliferation

T Cell Receptor Sequencing from Patient Blood Revealed:

Higher numbers of proliferating T cells post-vaccine



Example Patient Response

Low numbers of proliferating T cells pre -vaccine

Many clones also found in patient tumors

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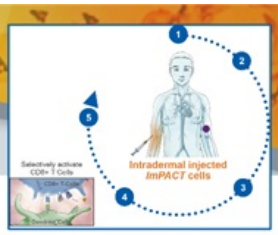
11 *Source: Phacilitate Immunotherapy, Heat NSCLC HS-110 Ph 1b Trial Update, 2016*

Pan-Antigen "Killer" T Cell Activation

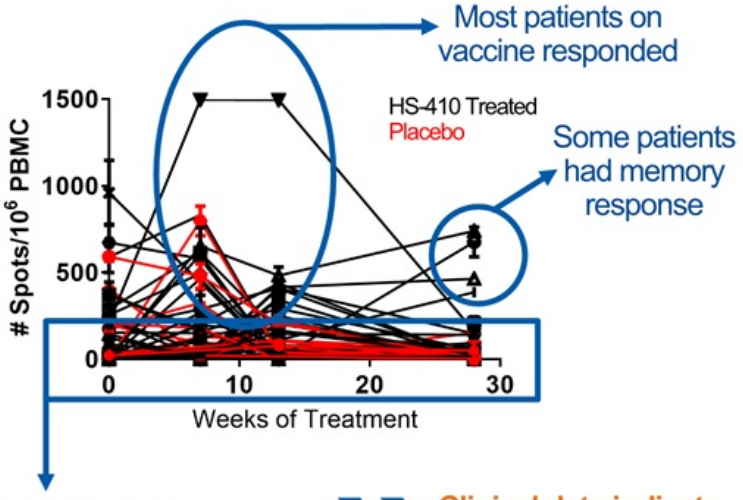


Antigen-specific immune responses were measured against individual antigens (e.g., survivin and NY-ESO-1)

Antigens included in initial analysis

Antigen	HS-410
ACTL8	+++
ADAM22	+++
ADAM23	+++
ATAD2	+++
ATAD2B	+++
BIRC5 (survivin)	+++
CASC5	+++
CEP290	+++
CEP55	+++
CTAGE5(NY-ESO-1)	+++
DCAF12	+++
DDX5	+++
FAM133A	+++
IL13RA2	+++
IMP3	+++
KIAA0100	+++
MAGEA11	+++
MAGEA3	+++
MAGEA6	+++
MPHOSPH10	+++
ODF2	+++
ODF2L	+++
OIP5	+++
PBK	+++
RQCD1	+++
SPAG1	+++
SPAG4	+++
SPAG9	+++
TMEFF1	+++
TTK	+++

Patient ELISPOT Responses (IFNγ)



BCG did not cause T cell activation

Clinical data indicate antigen specific T cell response

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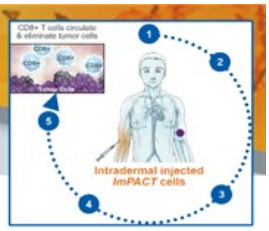
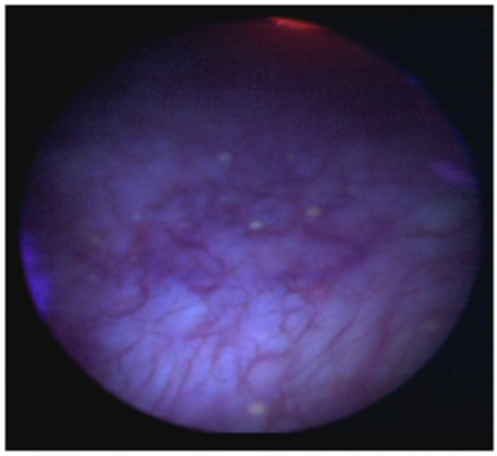
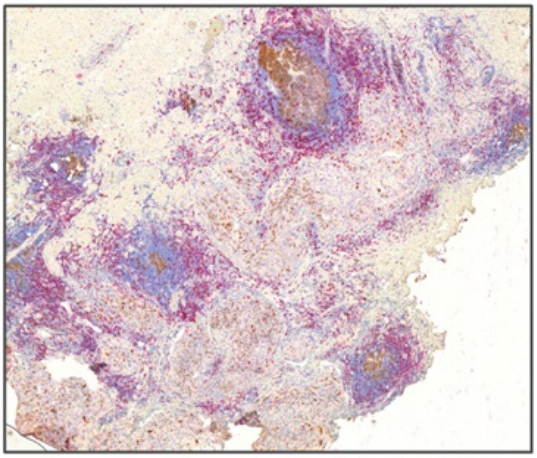
Source: Heat's HS-110 Ph 1b NSCLC trial results reported at World Lung Conf in Dec. 2016; HS-410 Ph 2 NMIBC trial results reported at SUO in Nov. 2016

Increasing TILs at the Tumor Site





Blue-light cystoscopy from patient treated with HS-410

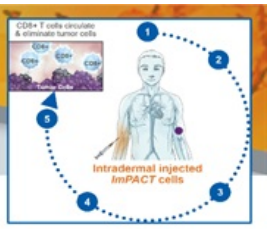


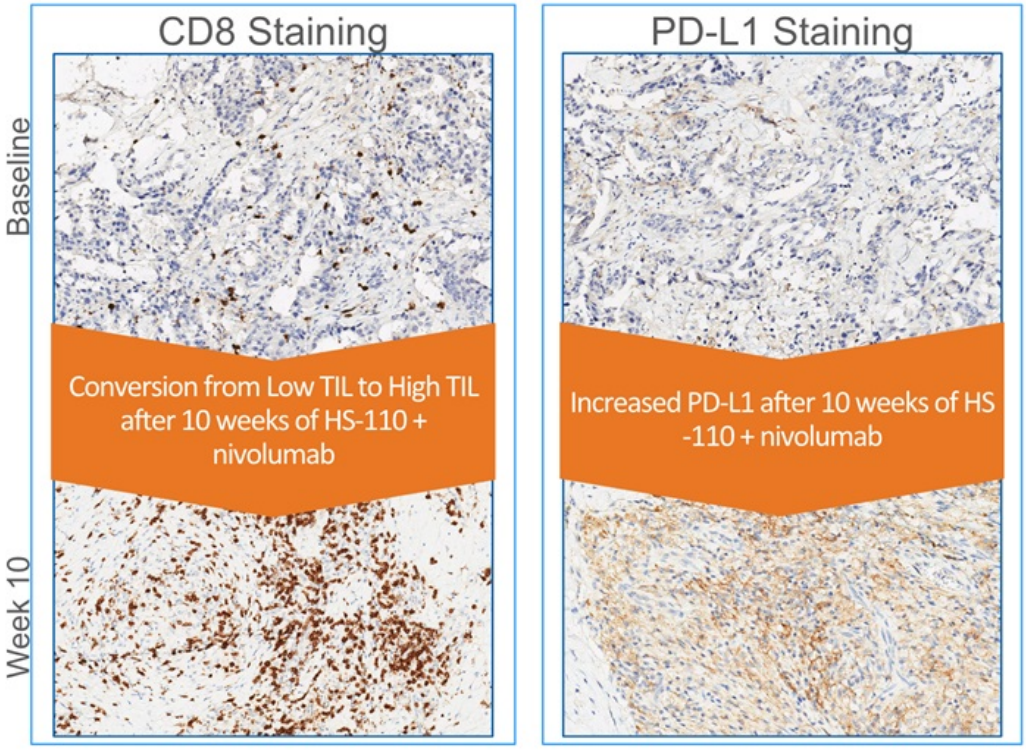
Tumor biopsy from patient treated with HS-410

- Images of the bladder (above) showed changes that resemble lymphoid (T cell rich) structures, which we believe indicates that HS-410 leads to a localized immune response within the bladder

Source: Heat's HS-410 Phase 2 NMIBC interim monotherapy trial results announced January 26, 2016

*ImPACT*ing the Tumor Microenvironment





Clinical proof of mechanism

Drives "killer" CD8+ T cells into tumors

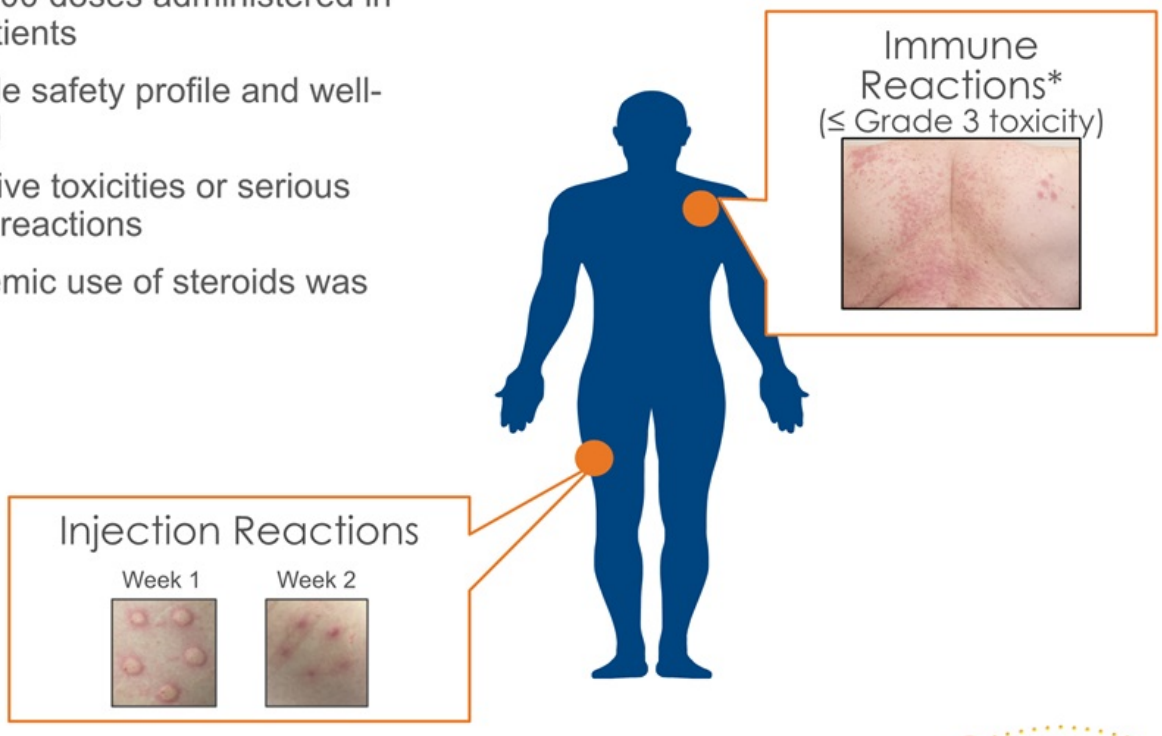
Increases PD-L1 expression

Source: Data extracted from two patients as reported in Heat's HS-110 Ph 1b NSCLC trial results, Dec 2016

Heat Biologics

Favorable Safety Profile To-Date

- Over 1,000 doses administered in ~200 patients
- Favorable safety profile and well-tolerated
- No additive toxicities or serious adverse reactions
- No systemic use of steroids was required

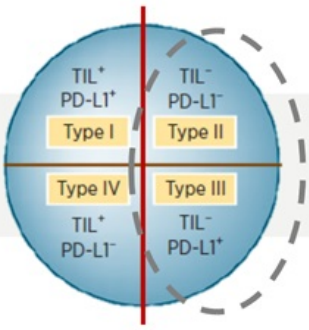


*Represents the only patient of ~200 patients dosed who discontinued treatment for a vaccine-related adverse event; Source: Heat's HS-410 and HS-110 data results, Dec 2016

Heat Biologics

Fulfill Unmet Need for Non-Small Cell Lung Cancer

CD8^{+} (TIL^{+}) patients may respond to anti-PD-(L)1



CD8^{-} (TIL^{-}) patients may not respond to anti-PD-(L)1

Approx. 50% PD-1 ORR

Approx. 10% PD-1 ORR

Estimated 45% NSCLC patients being underserved by single-agent anti-PD-(L)1 may benefit from vaccine combination

1. National Cancer Institute 2013 statistics; Graphic source: Teng et al., 2015 Can Res; Gettinger et al., 2015 JCO

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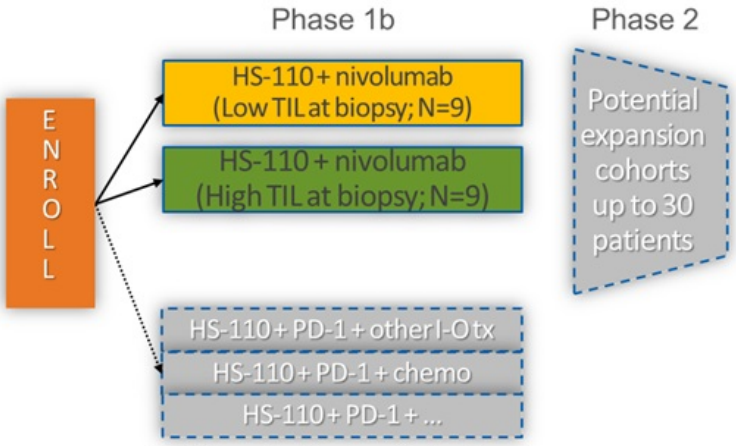
HS-110 NSCLC Trial Overview

Objective
- Evaluate safety and tolerability of HS-110 + a PD-1 checkpoint inhibitor

Patient Population
- Potential to expand each cohort up to 30 patients[1]

Secondary Endpoints
- Immune response, overall response rate, overall survival and progression-free survival

Enrollment
- 5 – 10 U.S. sites
- Partnership with Yale Cancer Center on TIL analysis



HS-110 weekly intradermally for 18 weeks; nivolumab i.v. every other week until progression

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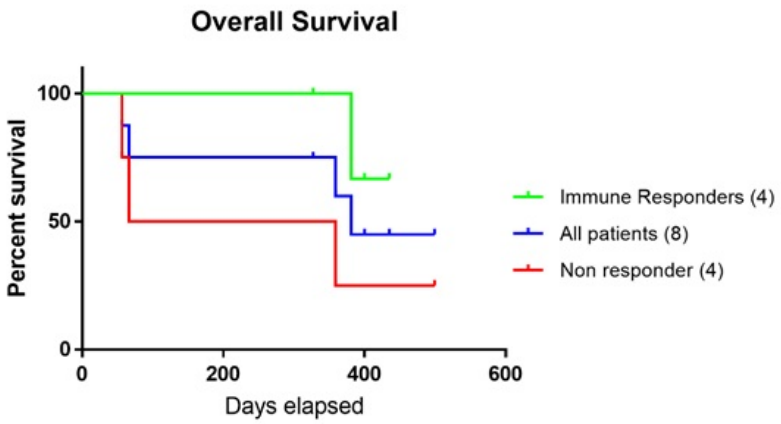
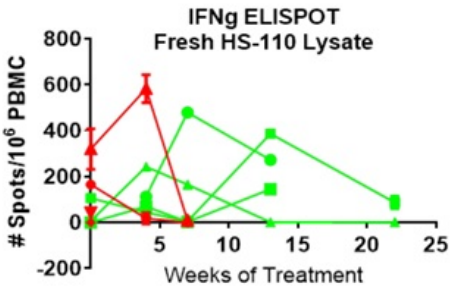
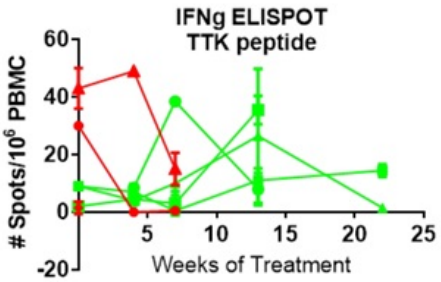
Immune Response Correlates with Overall Survival



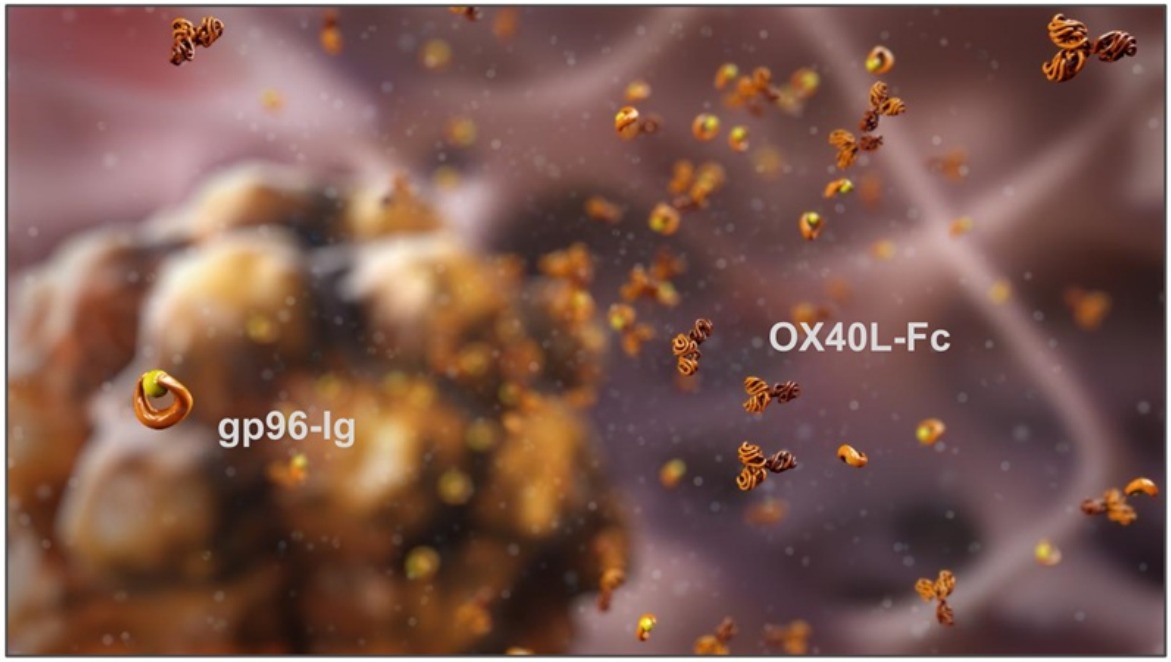




Source: HS-110 Ph 1b NSCLC data (left); HS-110 Ph 1b NSCLC data reported at World Lung Dec. 2016 (right)

Heat Biologics

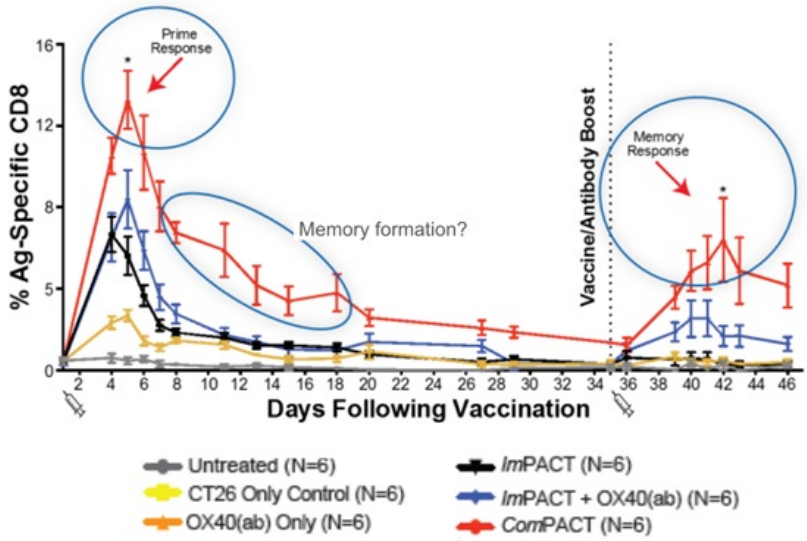
ComPACT Platform Technology

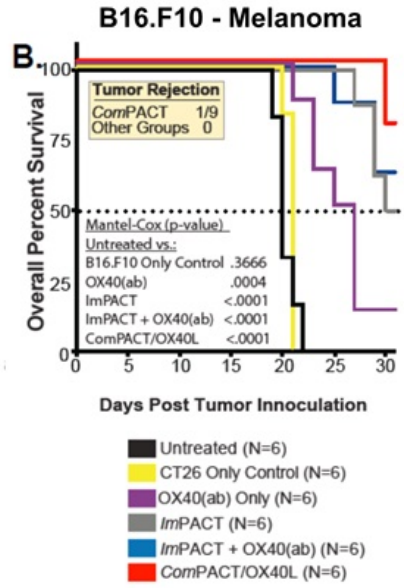


The first potential dual-acting immunotherapy designed to deliver T cell activation and costimulation in a single product – combination therapy without additive costs

Heat Biologics

ComPACT Outperforms OX40 Monoclonal Antibodies in Preclinical Models





ComPACT alone leads to ~50% complete tumor rejection as compared to ~16% with OX40 agonist antibody combinations[1]

Source: 1) Demonstrated in preclinical models for CT26 – Colon Cancer; Fromm et al. Society for Immunotherapy of Cancer Annual Meeting, 2016

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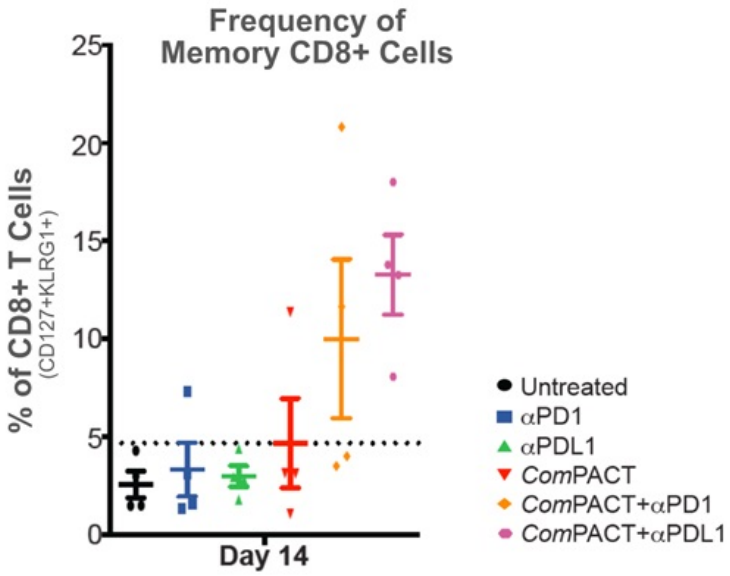
ComPACT Synergizes with PD-1 Blockade



***ComPACT* synergizes with PD-1 blockade to drive memory "killer" T cell differentiation**

Source: Fromm et al. Society for Immunotherapy of Cancer Annual Meeting, 2016

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Leveraging gp96 Platform to Target Zika Virus & Other Infectious Diseases

- Zolovax, a wholly-owned subsidiary, formed to leverage our platform into infectious diseases
- Collaborating with the University of Miami (UM) to explore whether the gp96 vaccine might stimulate a similar virus-specific response in the placenta of Zika-infected women that could clear the virus
- Focusing on the unmet need of protecting the fetus of Zika-infected women
- Compelling data generated
  - In NIH-funded studies, the gp96-based vaccine induced a potent and localized immune response and mucosal immunity
  - U.S. Department of Defense funded research grant awarded to UM in malaria

Highlights

- √ Clinical proof of concept
- √ Favorable safety profile and low toxicities to-date
- √ Pan-antigen “killer” T cell activation and expansion
- √ Applicable to multiple cancers and infectious diseases
- √ Ready-to-use; scalable, low cost manufacturing
- √ Unencumbered commercialization rights

Focused on I-O combinations that have the potential to dramatically improve patient outcomes

Financial Snapshot

Founded in 2008, completed IPO 2013

Nasdaq	HTBX
Shares Outstanding	23.9M
Share Price	$0.90[1]
Market Cap	$21.5M[1]
Cash & Equiv.	$8.5M[2]

1. As of January 4, 2017; 2. As reported for the three months ended September 30, 2016

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THANK YOU