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): **May 31, 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))

Indicate by check mark whether the registrant is an emerging growth company as defined in in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☑

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

Item 8.01. Other Events

Heat Biologics, Inc. (the "Company") will be making several investor presentations over the next several weeks. In connection with the presentations, the Company intends to discuss the slide presentation attached as Exhibit 99.1 hereto, which is incorporated herein by reference.

The slide presentation attached as Exhibit 99.1 to this Report 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 or in the press release are "forward-looking" rather than historical.

The Company undertakes no duty or obligation to update or revise information included in this Report or any of the Exhibits.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Heat Biologics, Inc. investor presentation dated May 31, 2017

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: May 31, 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	Heat Biologics, Inc. investor presentation, dated May 31, 2017

EXHIBIT 99.1

Forward Looking Statements

This presentation includes statements that are, or may be deemed, ‘‘forward-looking statements’’ within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. 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, 2016 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.

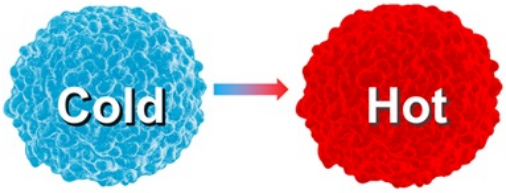
You should read carefully the factors described in the “Risk Factors” sections of our SEC Filings to better understand the risks and uncertainties inherent in our business.

Investment Opportunity

Heat Biologics **Turning COLD Tumors HOT**

Mission

Our Mission is to Activate CD8+ ”Killer” T cells to Turn “COLD” Tumors “HOT”



Our goal is to combine with checkpoint inhibitors and other immunotherapies to dramatically increase their effectiveness

What are COLD and HOT tumors?

COLD Tumors

Tumors that have not been subject to robust CD8+ "Killer" T cell attack

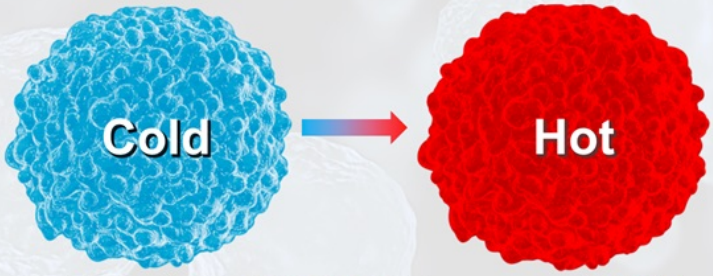
Biopsied tumors contain minimal CD8+ T cells

HOT Tumors

Tumors that have been subject to robust CD8+ "Killer" T cell attack

Biopsied tumors are loaded with CD8+ T-cells

***HOT** tumors are associated with clinical response*



Turning **COLD** Tumors **HOT**

Heat Biologics

The Checkpoint Revolution

- Checkpoint inhibitors are dramatically changing the standard of care against a wide variety of cancers
  - 5 checkpoints approved to treat seven different cancers since 2014
  - Additional checkpoints against new tumors expected later this year
- Citibank, Goldman Sachs project checkpoints will be used to treat up to **60%** of cancers, generating **$30B – $40B** revenues per year

Approved Checkpoint Inhibitors

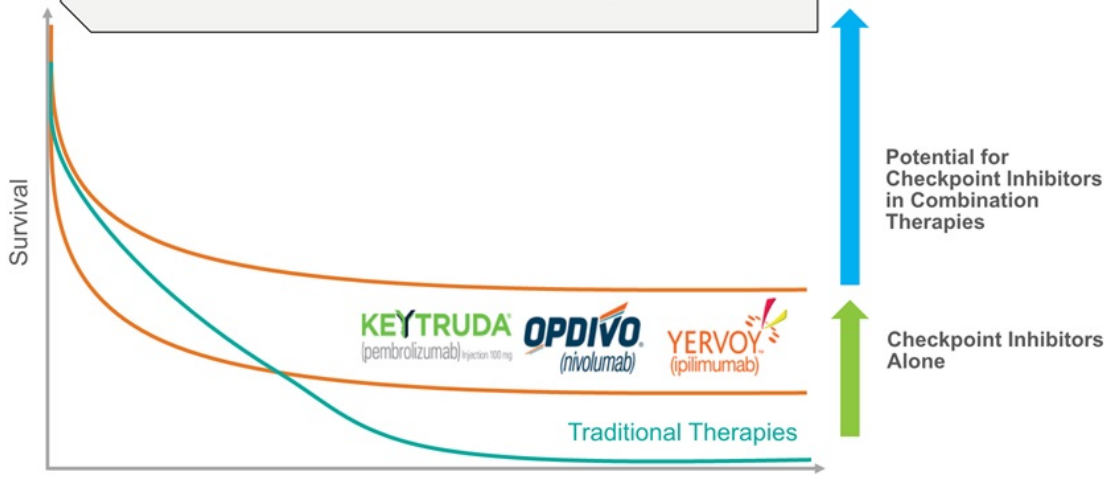
Targets	Checkpoint	Company	Approved Indications
CTLA-4	Ipilumumab	BMS	Metastatic melanoma
PD-1	Nivolumab	BMS	Metastatic melanoma NSCLC Bladder cancer Hodgkin lymphoma Renal cell carcinoma
PD-1	Pembrolizumab	Merck	Metastatic melanoma NSCLC Head and neck
PD-L1	Atezolizumab	Genentech	Bladder cancer
PD-L1	Avelumab	Pfizer	Merkel cell carcinoma

Additional checkpoint approvals expected later this year

But there is a problem…

The Problem with Checkpoints

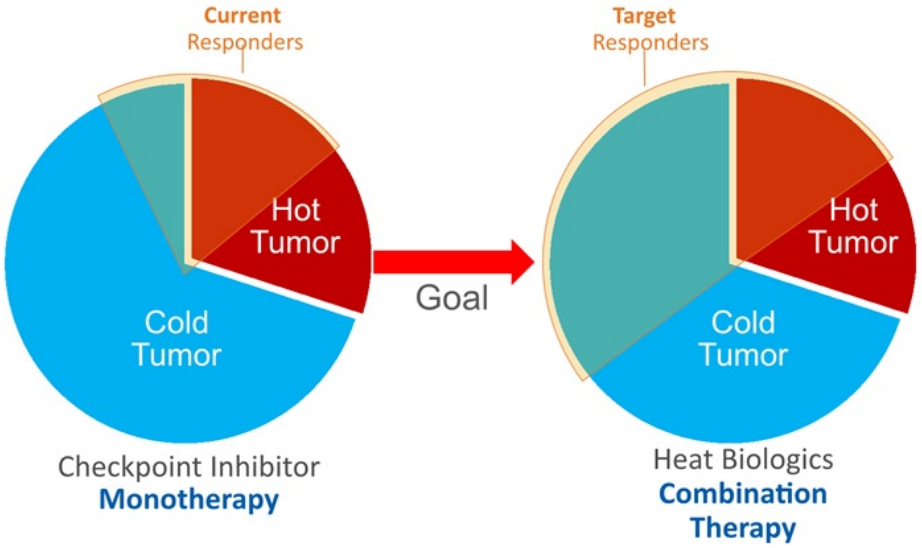
Checkpoint inhibitors dramatically increase survival in patients with **HOT** tumors, but are **largely ineffective in patients with COLD tumors**



Heat Biologics

Turning COLD tumors HOT

Focused on turning COLD tumors HOT to enhance the effectiveness of checkpoint therapy for the majority of patients who don't respond to checkpoints alone



Checkpoint Inhibitor
Monotherapy

Heat Biologics
Combination Therapy

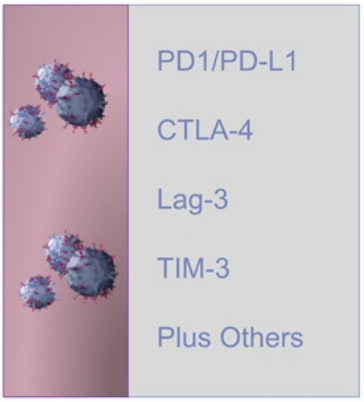
Our goal is to dramatically increase the number of patients responding to checkpoints

Heat Biologics

Checkpoint Combination Advantages

Heat's *ImPACT* Technology

- Activates CD8+ T cells, a critical component of effective anti-cancer immunity
- Activated T cells invade tumor site
- Simple once-a-week intradermal injection
- Well-tolerated with combinations
- Clinical and preclinical data supports activity with *ImPACT* and checkpoint inhibitors



Heat Biologics

Combination Therapies

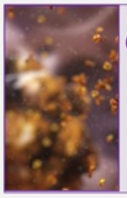
Unlocking the Body's Natural Defenses with a Broad Range of Combination Therapies

T Cell Activation

***ImPACT* Therapy**

Cell-Based Delivery of Multiple Antigens

Activation of Patients' CD8+ "Killer" T Cells

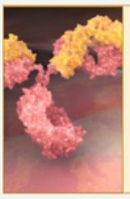


***ComPACT* Therapy**

Cell-Based Delivery of Multiple Antigens

Activation of Patients' CD8+ "Killer" T Cells

Co-Stimulation

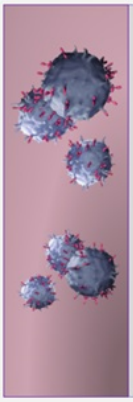


Pelican **PTX-25**
Monoclonal Antibody

Pelican **PTX-15**
Fusion Protein

Co-Stimulation to Enhance T cell Activation and Expansion

Checkpoint Inhibitors



PD1/PD-L1

CTLA-4

Lag-3

TIM-3

Plus Others

Heat Biologics

ImPACT / *ComPACT* Therapies

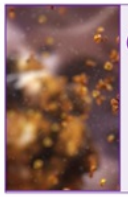
"Off-the-shelf" Cellular Therapies to Activate "Killer" T Cells

T Cell Activation

***ImPACT* Therapy**

Cell-Based Delivery of Multiple Antigens

Activation of Patients' CD8+ "Killer" T Cells



***ComPACT* Therapy**

Cell-Based Delivery of Multiple Antigens

Activation of Patients' CD8+ "Killer" T Cells

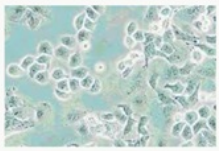
Co-Stimulation to Enhance T cell Activation and Expansion

Heat Biologics

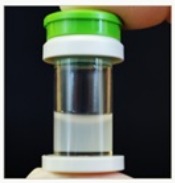
ImPACT/ComPACT Manufacturing

Robust, Multi-Antigen T Cell Activation

Sample	Screen	Select	Scale-Up
Collect Cancer Cell Line & Patient Tissue Samples	Compare Using Our Proprietary Technology	ID Cell Line with Most Antigen Overlap	Scale-Up for Manufacturing by CMO



Transfect with Activation Technology



- Same process for *ComPACT* and *ImPACT*
- Frozen, fully-diluted single-dose vial
- Final drug product: 1 million or 10 million cells
- Easily scaled manufacturing

Low COG, off-the-shelf alternative to autologous therapies

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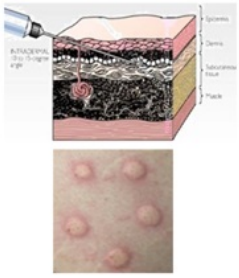
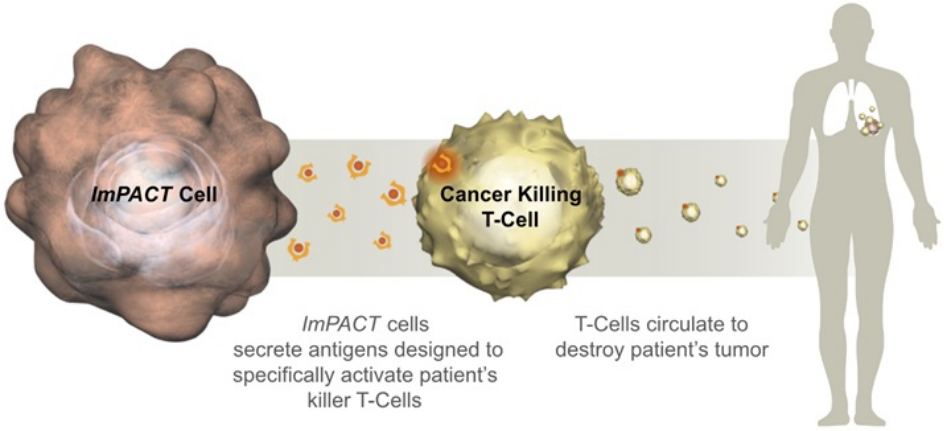
ImPACT: Immune Pan-Antigen Cytotoxic Therapy

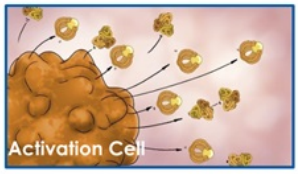


Cluster of five 0.1 mL intradermal injections

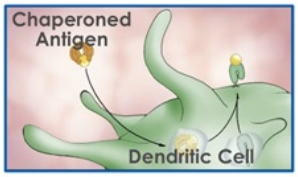


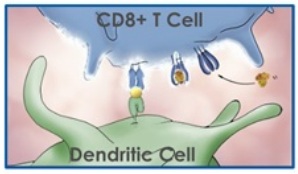
ImPACT cells secrete antigens designed to specifically activate patient's killer T-Cells

T-Cells circulate to destroy patient's tumor

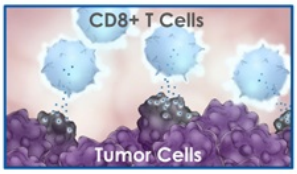


Activated cells **EXPRESS** chaperoned antigens





Chaperoned antigens activate dendritic cells which then **ACTIVATE** & **PROLIFERATE** CD8+ T cells



CD8+ T cells locate and **ELIMINATE** cancer cells

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Heat Pipeline

Combination Therapies Designed to Activate the Body's Own CD8+ T Cells to Fight Cancer

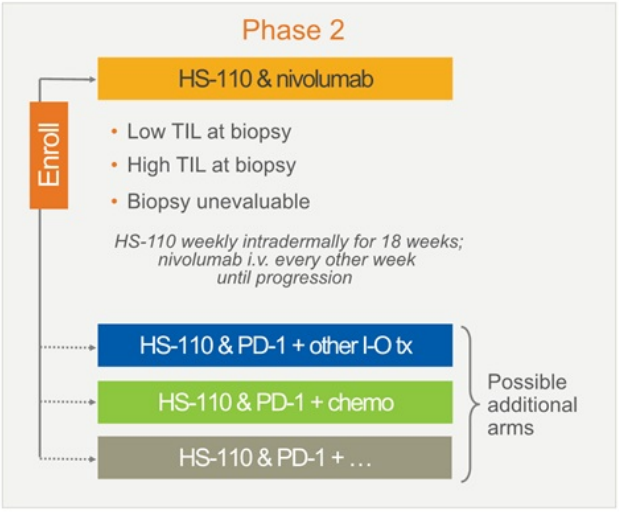
THERAPEUTIC VACCINES			
HS-110 (viagenpumatucel-L)	**NSCLC**	**Phase II**	*ImPACT* activation technology in combination with nivolumab and other checkpoint inhibitors TBA
HS-120	**NSCLC**	**Preclinical**	*ComPACT* activation technology in combination with checkpoint inhibitors TBA
CO-STIMULATORS			
PTX-25	**TBA**	**Preclinical**	Humanized monoclonal antibody, functional agonist of human TNFRSF25
PTX-15	**TBA**	**Preclinical**	TL1A-Ig fusion protein, functional agonist of human TNFRSF25

Met Clinical Endpoints to Progress to Phase 2

Heat Biologics

HS-110 Phase 2 Lung Trial Design

Objective	• Evaluate objective response rate of HS-110 with a PD-1 checkpoint inhibitor • Currently 2nd line therapy or greater
Patient Population	• Phase 1b expanded to Phase 2 in 1Q17 based upon efficacy
Secondary Endpoints	• Safety and tolerability, immune response, overall survival and progression-free survival
Enrollment	• 5 – 10 U.S. sites • Up to 60 patients • Partnership with Yale Cancer Center on TIL analysis

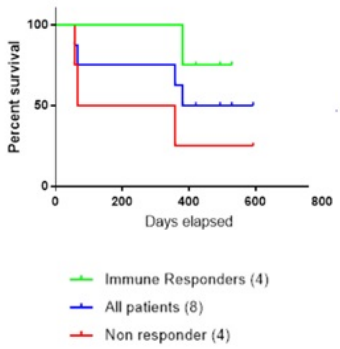


Flexible trial design permits additional combinations

Heat Biologics

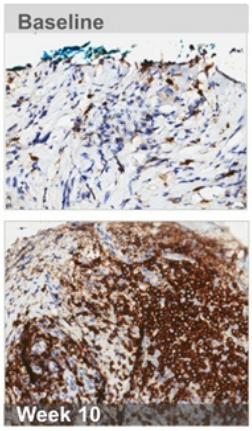
Activated Immune Response Correlates to Clinical Response

Overall Survival



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

Response at Week 10



Key Findings

- Immune response to HS-110 observed in all 5 patients who had reduced tumors
- Patients with no immune response to HS-110 did not have reduced tumors
- Timing of immune responses to HS-110 corresponded to clinical responses
- Of 5 patients enrolled in the low TIL cold tumor cohort, 3 (60%) **exhibited substantial tumor reduction**
- This exceeds the 10% response observed in low TIL patients treated with nivolumab alone

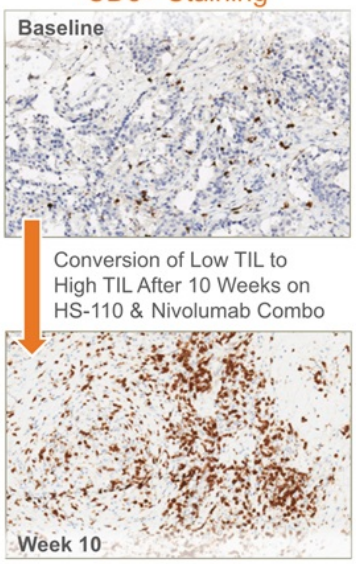
Source: March, 2017 Heat Biologics Trial Update

Heat Biologics

T Cell Tumor Infiltration

T Cell Infiltration Observed Deep Inside Tumors

CD8+ Staining



Clinical evidence that HS-110 is turning COLD tumors HOT

- "Killer" CD8+ T cells driven deep into tumors
- "Cold" tumors with no previous activation made highly active ("HOT")
- Expression of PD-L1 increased with CD8+ T cell infiltration in some tumors

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

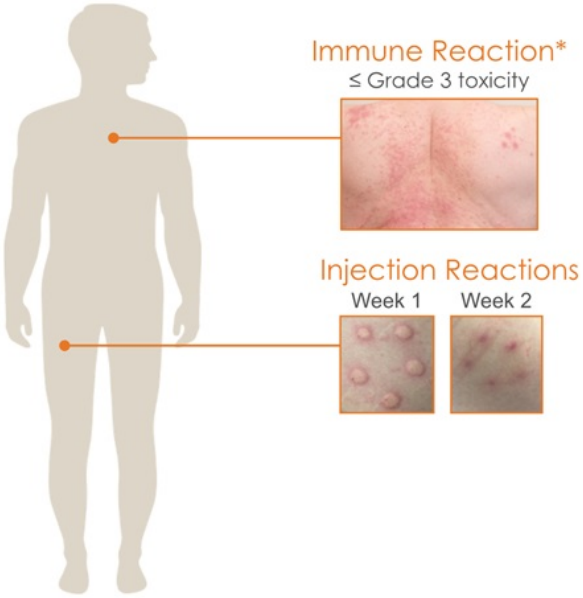
Heat Biologics

Positive Safety Signals

1,000+ Doses – No Serious Adverse Reactions

Favorable Safety Profile To Date

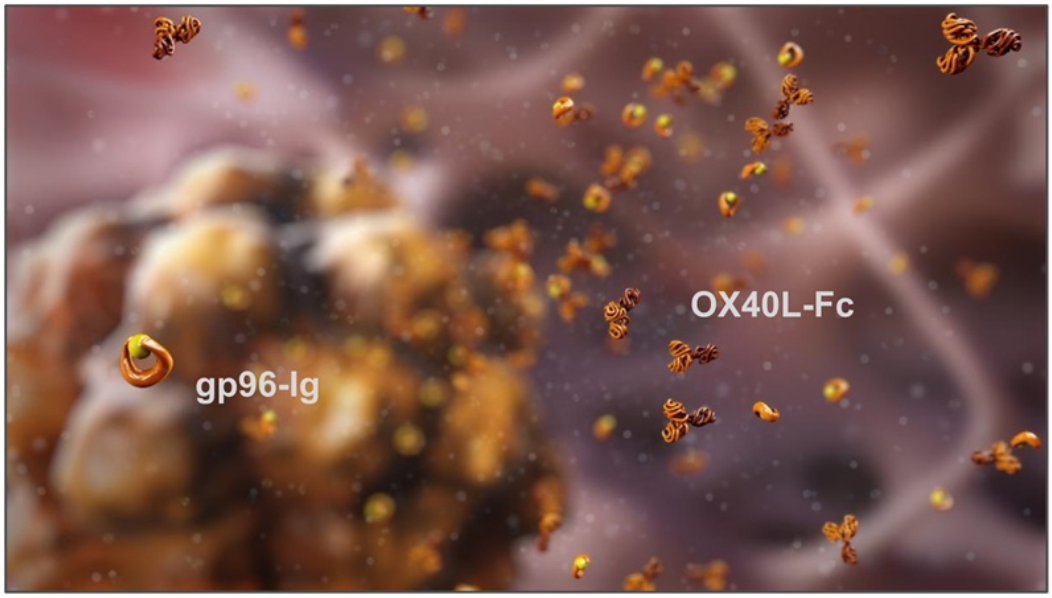
- Over 1,000 doses administered to ~200 patients
- Only one patient ended treatment due to a non-serious adverse reaction*
- No systemic use of steroids required to treat reactions
- No serious adverse reactions
- No additive toxicities



*Represents the only patient of ~200 patients dosed who discontinued treatment for a vaccine-related adverse event

Heat Biologics

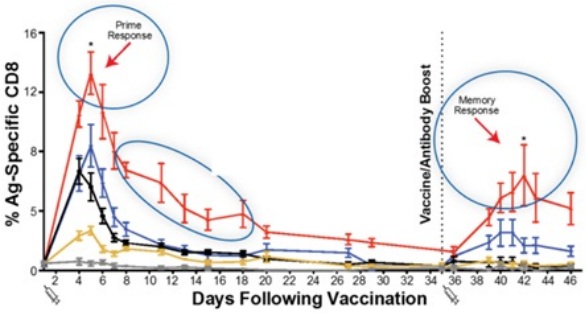
ComPACT Platform Technology

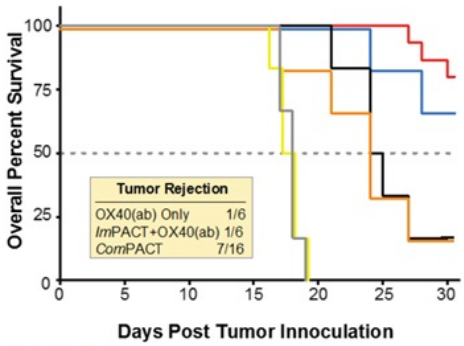


The first potential dual-acting immunotherapy designed to deliver T cell activation and costimulation in a single product – combination therapy without additive costs

Heat Biologics

ComPACT Outperforms OX40 Monoclonal Antibodies in Preclinical Models





Untreated (N=6)
CT26 Only Control (N=6)
OX40(ab) Only (N=6)
*Im*PACT (N=6)
*Im*PACT + OX40(ab) (N=6)
*Com*PACT (N=6)

- *ComPACT* leads to ~50% complete tumor rejection as compared to ~16% with OX40 agonist antibody combinations

Heat Biologics

T Cell Co-Stimulation

T Cell Co-stimulation to Enhance Immune Response Against Cancer

Co-Stimulation

Pelican **PTX-25**
Monoclonal Antibody

Pelican **PTX-15**
Fusion Protein

CO-STIMULATORS			
PTX-25	**TBA**	**Preclinical**	Humanized monoclonal antibody, functional agonist of human TNFRSF25
PTX-15	**TBA**	**Preclinical**	TL1A-Ig fusion protein, functional agonist of human TNFRSF25

Heat Biologics Acquires Pelican Therapeutics

- Heat has **acquired 80% controlling interest** in Pelican
- Pelican will operate as a subsidiary in Texas
- PTX-25 - potential best-in-class co-stimulator
- Pre-clinical synergy with Heat's *ImPACT* and checkpoint therapy
- $15.2M CPRIT Grant to fund clinical development

PELICAN Therapeutics

Heat Biologics

Emerging Target in T Cell Co-Stimulation

Many companies are pursuing co-stimulators with less specificity for CD8+ "memory" activation

Target	Lead mAb	Clinical Stage	Companies	Comments
4-1BB/4-1BBL	Urelumab, PF-05082566	Phase 1/2	BMS Pfizer	Original phase II halted, now enrolling at lower doses
CD27	Varlilumab	Phase 2	BMS Celldex	mAb works by ADCC, no clinical evidence of agonism
OX40/OX40L	MEDI0562, MEDI6383	Phase 1	Genentech GSK Medimmune	Enrolling
GITR	TRX518	Phase 1	Merck	Enrolling
CD40/CD40L	CP-870893	Phase 1	Pfizer	Enrolling
HVEM/BTLA		Preclinical	BMS	IND Enabling
HVEM/LIGHT		Preclinical	BMS	IND Enabling
TNFRSF25/TL1A	**PTX-25, PTX-15**	**Preclinical**	**HEAT/PELICAN**	**IND Enabling**

None of these co-stimulators have advanced beyond phase 2 trials

Only Pelican is targeting TNFRSF25, an emerging target in immuno-oncology

Potential Best-in-Class Co-Stimulator

- PTX-25 is a potential best-in-class T cell co-stimulator specific to “killer” CD8+ “memory” T cells
- Pre-clinical studies show advantages over competing T cell co-stimulator programs based on CD8+ T cell specificity
- $15.2 million New Company Product Development Award from the Cancer Prevention and Research Institute of Texas (CPRIT)
  - Propels PTX25 through a ~70-patient first-in-man clinical program
  - Advance multiple products through preclinical development, and at least one through Phase I trials

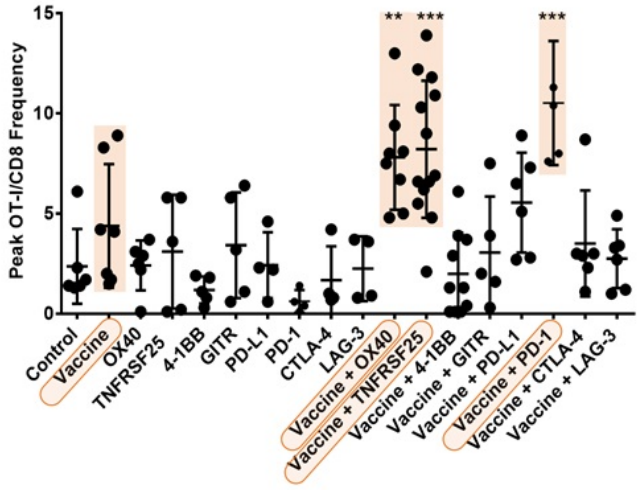
Pre-clinical studies show advantages over competing T cell co-stimulator programs based on CD8+ T cell specificity

- Antigen-specific T cell proliferation
- Increased effector cytokine production
- *Increased effector immune function*
- *Increased survival in preclinical models*

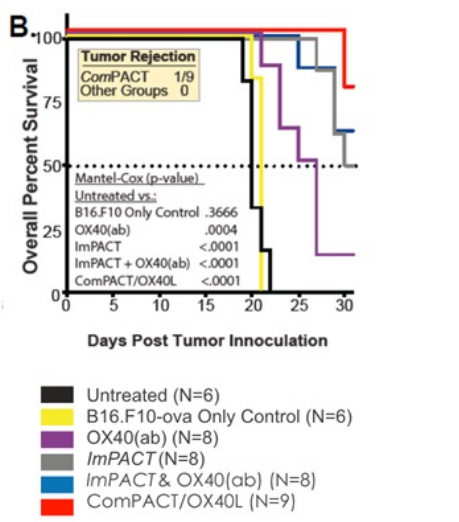
Pre-Clinical Data

Strong supporting pre-clinical data combining co-stimulators with Heat's *ImPACT/ComPACT* therapies

CD8+ T Cell Activation



B16.F10 – Melanoma

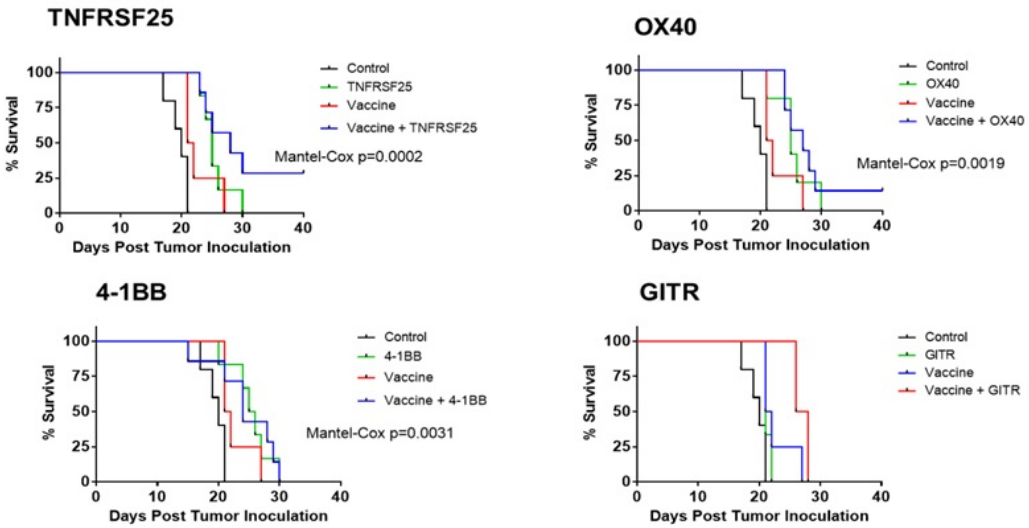


Source: Fromm et al. Society for Immunotherapy of Cancer Annual Meeting, 2016

Heat Biologics

PTX-25 Comparative Pre-Clinical Anti-Tumor Activity

TNFRSF25 agonism with murine mAb shows increased survival compared to other co-stimulators



Comparative activity of OX40, GITR, 4-1BB and TNFRSF25 agonist mAbs in a long-established (9-day) B16-F10 melanoma model

Schreiber T. *et al.* SITC 2014

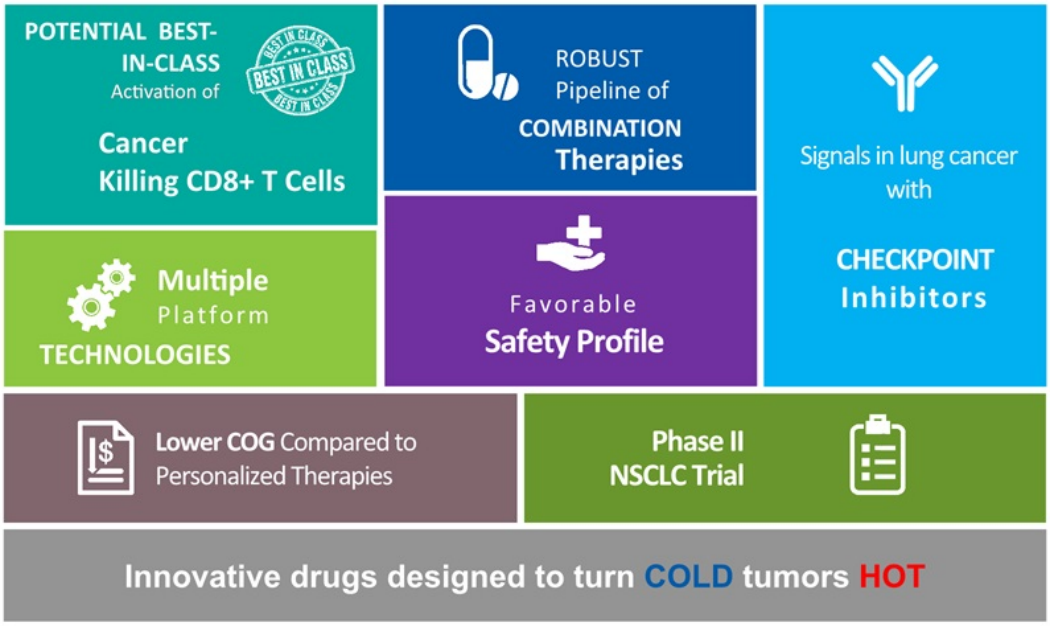
Heat Biologics

Corporate Highlights

Nasdaq **HTBX**	Shares Outstanding **35.6M**	Shares Price **$0.70[1]**
Market Cap **$25M[1]**	Cash & Equiv. **$11.1M[2]**	Grant Funds **$15.2M**

1. As of May 26, 2017;
2. As reported as of March 31, 2017

Heat Biologics Highlights



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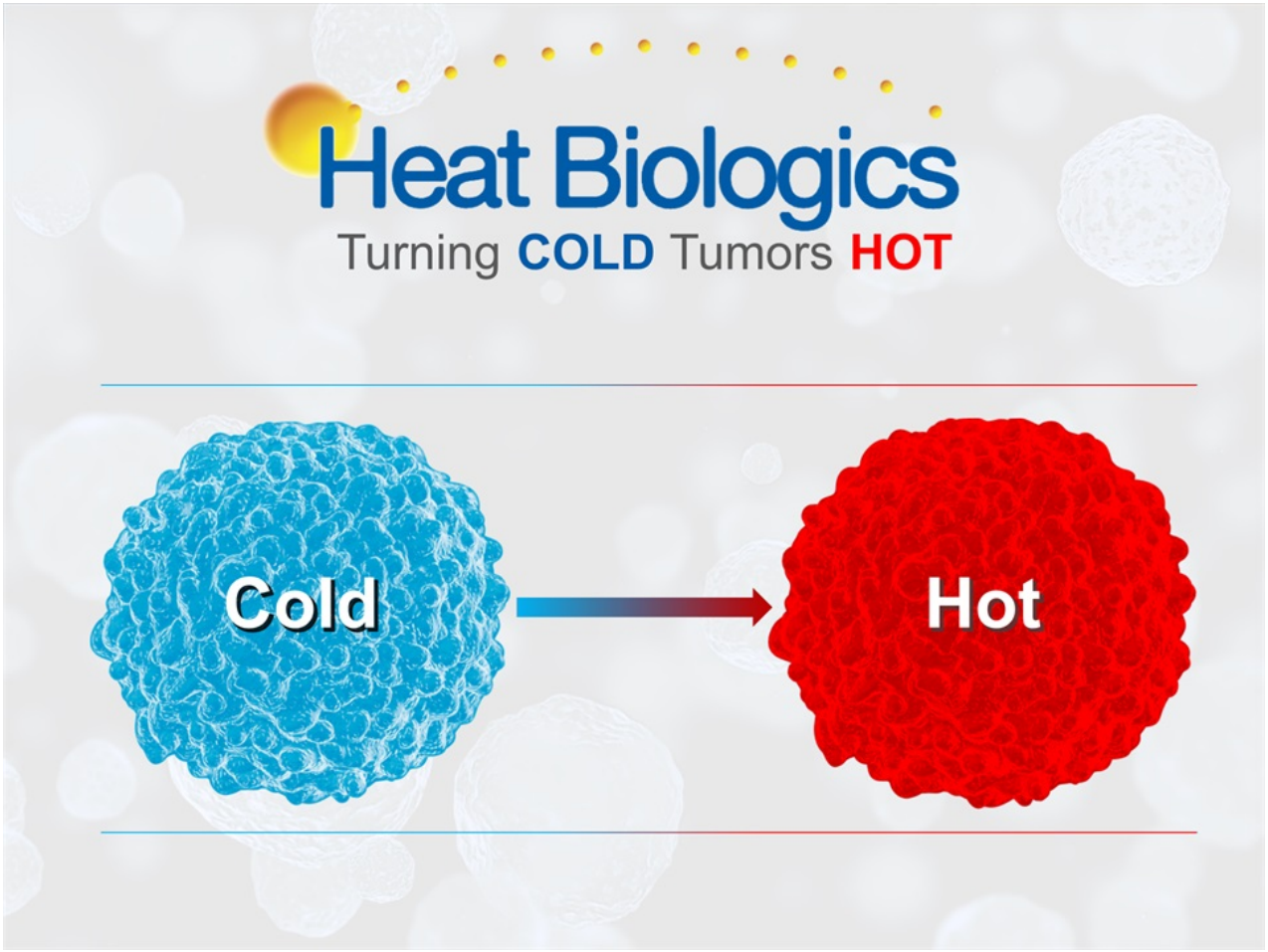
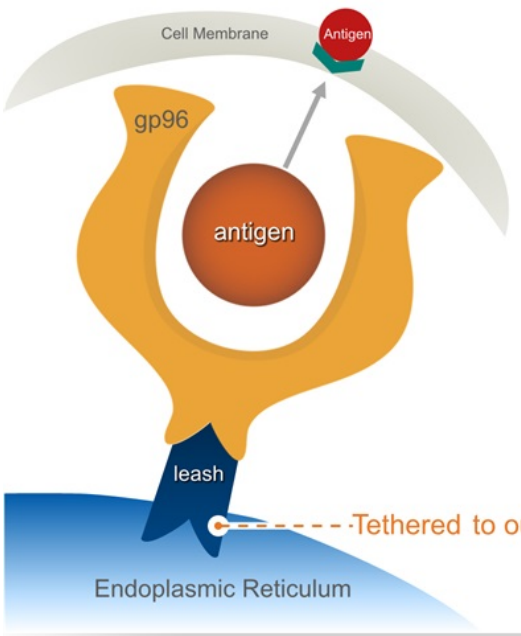

Heat Biologics
Turning COLD Tumors HOT
Cold
Hot

Appendix

Introducing gp96

*The Immune System's "Swiss Army Knife"**



"Molecular Warning System"

- Natural biological process to deliver proteins (antigens) & gp96 adjuvant to our immune system
- Gp96 "chaperones" newly-created proteins to the cell membrane where they are released and embedded
- Activates a cytotoxic T-cell response to the antigen it is carrying when cells die through necrosis
  - Enables MHC I antigen cross-presentation to CD8+ T-cells
- Gp96 + protein are only naturally released via necrosis
  - Exposure of gp96 outside the cell activates an immune response to the antigen it is carrying
  - Enables MHC I antigen cross-presentation specifically to CD8+ T-cells
- Among the most powerful adjuvants and the only adjuvant to show exclusive specificity to CD8+ ("killer") T-cells
  - Provides long-term immunity against the infectious agent

*Schild, H. & Rammensee, H. ***Gp-96 – The Immune System's Swiss Army Knife***. Nature Immunology 2, 100-101 (2000)

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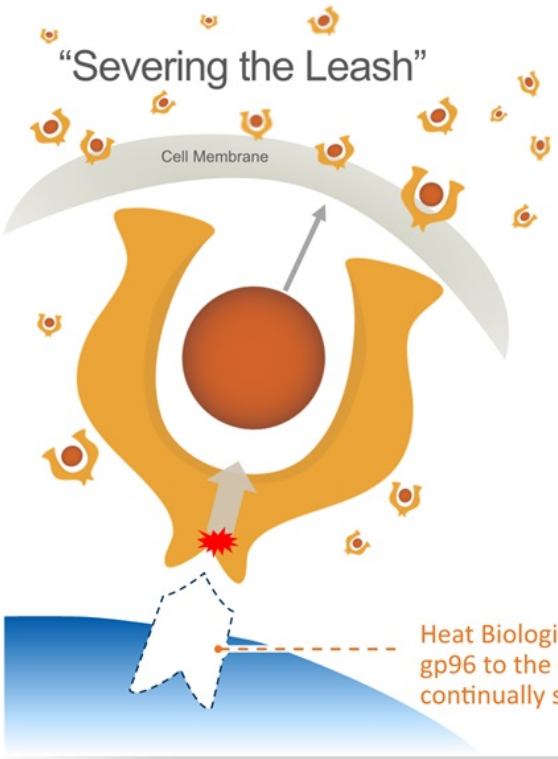
ImPACT Therapy



Heat Biologics *ImPACT* technology reprograms cancer cells to continuously secrete their own antigens bound to heat shock protein gp96 to seek out and destroy a variety of tumours

- Genetically modify tumor cells by "severing the leash" that binds the gp96 to the endoplasmic reticulum of the cell and replacing it with a sequence that pumps gp96 out of the cell
- Enables living cancer cells to "pump-out" their own surface antigens along with their gp96 chaperone
  - Mimics necrotic cell death
- Activates a powerful pan-antigen cytotoxic T-cell immune response

Heat Biologics ***ImPACT*** technology removes the leash that binds gp96 to the cell, replacing with a sequence that allows cells to continually secrete gp96 along with their "chaperoned" antigen

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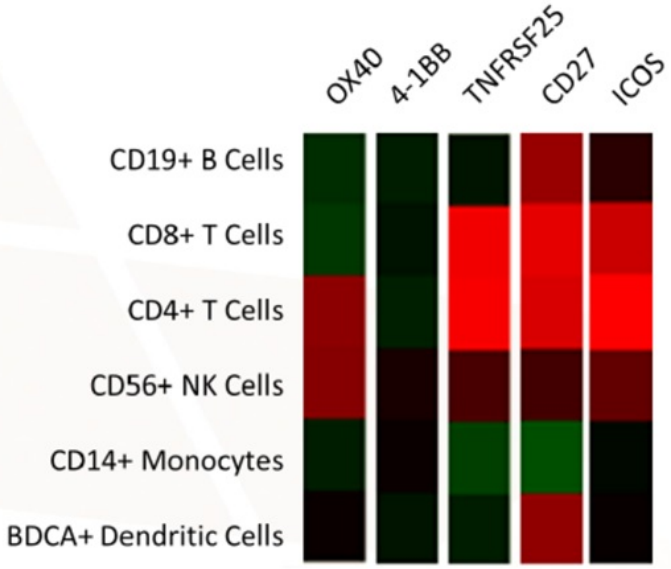
Expression of T cell Costimulators

Compared to other T cell costimulators, TNFRSF25 is preferentially expressed on CD8+ T cells



TNFRSF25 is preferentially expressed by human CD8+ T cells (red = high expression)

Genomics Institute of the Novartis Research Foundation
Su *et al*. PNAS 2004:**101**(16);6062-7

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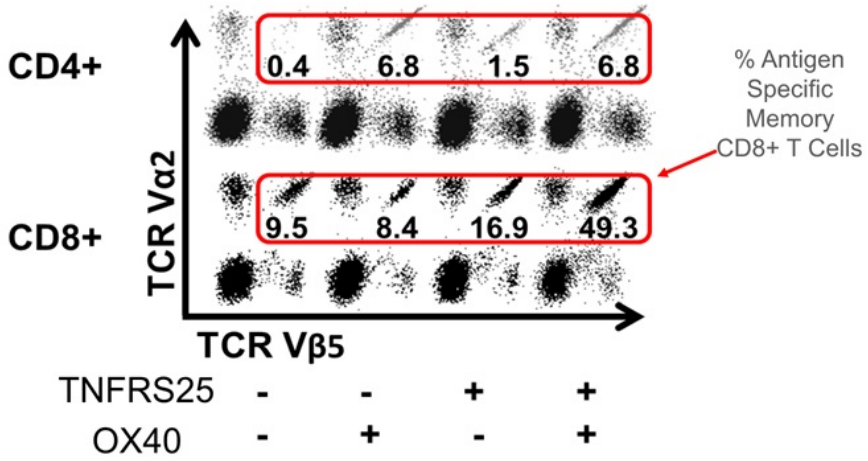
Preferential CD8+ T cell Induction with TNFRSF25

Pre-clinical studies with murine agonist antibody shows preferential CD8+ T cell Induction; differentiation from other T cell costimulators

- The frequency of antigen-specific memory CD4+ or memory CD8+ T cells were examined following treatment of mice with a vaccine alone, or in combination with OX40 or TNFRSF25 antibodies



- **TNFRSF25 preferentially 'boosts' CD8+ T cell immunity, whereas OX40 is preferential to CD4+ T cells**

Schreiber et al. J Immunol 2012:189(7);3311-8

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Highlights from Pelican Pre-clinical Studies

- mAb to TNFRSF25, drives the development of **antigen-specific CD8+ T cells** (this effect mimics TLIA, the natural monogamous ligand of TNFRSF25)
- mAb to TNFRSF25 results in costimulation and expansion of antigen-experienced memory T cells, both CD4+ and CD8+
  - notable is a significantly enhanced effect on **memory CD8+ T cells**
- Costimulation occurs only in the context of **TCR recognition of antigen**
- TNFRSF25 appears to have **superior activity** in stimulating memory CD8+ cells relative to OX40, 4-1BB and GITR
- Agonism with TNFRSF25 mAb leads to increases in **effector cytokine** and **effector immune function,** and **increases survival in mouse models**
- In mouse melanoma models, TNFRSF25 mAb results in increased survival **compared to agonism of OX40, GITR, 4-1BB** with respective agonist mAbs