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): **June 15, 2015**

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"), today issued a press release announcing data generated using its next-generation "*ComPACT*" immunotherapy platform, which combines a pan-antigen T cell priming vaccine and T cell co-stimulator in a single product. The data were presented in a poster entitled "*Locally secreted Fc-OX40L is superior to systemic, antibody mediated, OX40 co-stimulation for combination therapy*" at the Cell Symposia, '*Cancer, Inflammation and Immunity*' in Sitges,Spain. The Company's press release is attached as Exhibit 99.1 to this Current Report on Form 8-K.

In addition, the Company will be hosting an investor call today. In connection therewith, the Company's management intends to discuss the slide presentation furnished as Exhibit 99.2 hereto.

The slide presentation and press release attached as Exhibits 99.1and 99.2 to this Current Report on Form 8-K include "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 information included in this Item 7.01 and in Exhibits 99.1 and 99.2 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 a filing.

Item 8.01 – Other Events.

The Company today presented data generated using its next-generation "*ComPACT*" immunotherapy platform, which combines a pan-antigen T cell priming vaccine and T cell co-stimulator in a single product. The data were presented in a poster entitled "*Locally secreted Fc-OX40L is superior to systemic, antibody mediated, OX40 co-stimulation for combination therapy*" at the Cell Symposia, '*Cancer, Inflammation and Immunity*' in Sitges, Spain. The *ComPACT* technology (patent pending) has been engineered to incorporate various fusion proteins targeting co-stimulatory receptors (OX40, ICOS, 4-1BB, and other undisclosed targets), enabling the combination of two important immunotherapy pathways in a single therapy. The data illustrate that systemic OX40 stimulation via antibody therapy led to increased off-target T cell activation, and that the beneficial response with *ComPACT* may be due to increased specificity.

The Company's poster that was presented at the symposium is filed as Exhibit 99.3 to this Current Report on Form 8-K.

Item 9.01 – Financial Statements and Exhibits.

(d) Exhibits.

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

Exhibit Number	Description
99.1	Press Release of Heat Biologics, Inc. dated June 15, 2015
99.2	Presentation materials to be presented at the investor conference call
99.3	Poster entitled "Locally secreted Fc-OX40L is superior to systemic, antibody mediated, OX40 co-stimulation for combination therapy" at the Cell Symposia, 'Cancer, Inflammation and Immunity' in Sitges, Spain

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: June 15, 2015

HEAT BIOLOGICS, INC.

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

EXHIBIT 99.1

Heat Biologics Announces Development of ComPACT, a Next Generation Combination Immunotherapy Platform

Combination Pan-Antigen Cytotoxic Therapy (ComPACT) Designed to Deliver T-Cell Priming and Co-Stimulatory Molecules in a Single Product

Conference Call and Webcast Today at 8:30am EDT

DURHAM, N.C., June 15, 2015 -- Heat Biologics, Inc. ("Heat"), (Nasdaq: HTBX), a clinical stage cancer immunotherapy company, today announced the development of its next-generation combination immunotherapy platform, which combines a pan-antigen T cell priming vaccine and T cell co-stimulator in a single product. This platform, named *ComPACT,* has been engineered to incorporate various fusion proteins targeting co-stimulatory receptors (OX40, ICOS, 4-1BB), enabling the combination of two important immunotherapy pathways in a single therapy. Data generated using the *ComPACT* platform are being presented today at the Cell Symposia, '*Cancer, Inflammation and Immunity*' in Sitges, Spain. The Company will also be hosting a Webcast today to present these data.

Taylor Schreiber, MD, PhD, Heat's Vice President of Research, who led development of*ComPACT*, commented: "It is now widely recognized in the clinical community that combinations between checkpoint inhibitors, T cell co-stimulators, and vaccines can provide superior benefits to any single modality as monotherapy. The first challenge in developing these combinations is to systematically identify synergistic pathways from redundant or antagonistic ones. Another challenge is to deploy combination immunotherapies that may limit systemic toxicity and offer an advantageous overall cost structure compared to combining multiple biologic therapies. Heat's *ComPACT* therapy is designed to achieve these goals."

The presentation by George Fromm, PhD, Heat's Director of Research, reveals the first preclinical analysis of*ComPACT*, incorporating OX40L-Fc, demonstrates significant benefits as compared to traditional OX40 agonistic antibodies. Dr. Fromm commented: "The magnitude of T cell stimulation with *ComPACT* was somewhat unexpected, but clearly demonstrates substantial increases for both primary and memory immune response to those seen by co-administration of a vaccine and OX40 agonist antibody." The data illustrate that systemic OX40 stimulation through antibody therapy led to increased off-target T cell activation, and that the beneficial response with *ComPACT* may be due to increased specificity.

Although the data presented include combinations between gp96-Ig vaccination and stimulation of OX40, the platform has also been developed to target other T cell co-stimulatory receptors including ICOS, 4-1BB and other undisclosed co-stimulatory targets. Heat's *ComPACT* therapy has the potential to provide a product that achieves the envisioned benefits of combination immunotherapy in a single therapy, without the need for multiple independent biologic products. Heat expects to file its first IND with the *ComPACT* platform in 2H, 2016.

Conference Call
Monday, June 15, 2015 @ 8:30am Eastern Time

Domestic:	888-428-9480
International:	719-457-2697
Conference ID:	2367026
Webcast with slides:	http://public.viavid.com/player/index.php?id=114842

Replays: Available through June 30, 2015
Domestic: 877-870-5176
International: 858-384-5517
Passcode: 2367026

About Heat Biologics, Inc.
Heat Biologics, Inc. (www.heatbio.com) is a clinical-stage biopharmaceutical company focused on developing its novel, "off-the-shelf" *ImPACT*™ therapeutic vaccines to combat a wide range of cancers. Our *ImPACT*™ Therapy is designed to deliver live, genetically-modified, irradiated human cells which are reprogrammed to "pump out" a broad spectrum of cancer-associated antigens together with a potent immune adjuvant called "gp96" to educate and activate a cancer patient's immune system to recognize and kill cancerous cells. Heat is conducting a Phase 2 trial and another Phase 1b trial of its viagenpumatucel-L (HS-110) in patients with non-small cell lung cancer as well as a Phase 2 trial with its vesigenurtacel-L (HS-410) in patients with non-muscle invasive bladder cancer.

Forward Looking Statements
This press release includes forward-looking statements on our current expectations and projections about future events. In some cases forward-looking statements can be identified by terminology such as "may," "should," "potential," "continue," "expects," "anticipates," "intends," "plans," "believes," "estimates," and similar expressions. These statements are based upon current beliefs, expectations and assumptions and include statements regarding the potential of Heat's *ComPACT* therapy to provide a product that achieves the envisioned benefits of combination immunotherapy in a single drug, without the need for multiple independent biologic products. These statements are subject to a number of risks and uncertainties, many of which are difficult to predict, including the ability for Heat's *ImPACT*™ or *ComPACT* Therapy to perform as designed, the ability to timely enroll patients and complete the clinical trial on time, the other factors described in our annual report on Form 10-K for the year ended December 31, 2014 and our other filings with the SEC. The information in this release is provided only as of the date of this release, and we undertake no obligation to update any forward-looking statements contained in this release based on new information, future events, or otherwise, except as required by law.

CONTACT:

Heat Biologics, Inc.
Jeff Wolf
Chief Executive Officer
919-240-7133
investorrelations@heatbio.com

Investor Relations & Media Inquiries
Michael Wood
LifeSci Advisors, LLC
646-597-6983
mwood@LifeSciAdvisors.com

EXHIBIT 99.2

Introduction of ComPACT

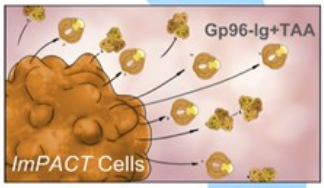
Combination Pan-Antigen Cytotoxic Therapy

June 15, 2015

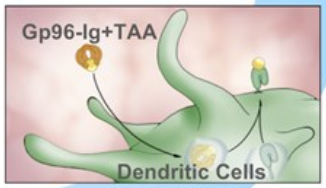
ImPACT Immunotherapy Platform

Specifically Activates Pan-Antigen CD8+ T-Cells to Kill Tumor Cells

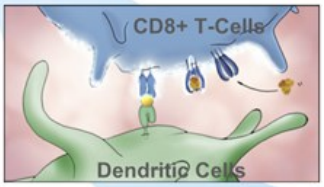
① Intradermal Injected *ImPACT* Cells



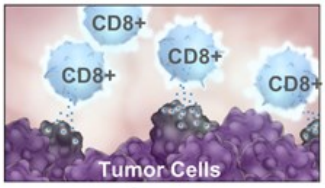
② *ImPACT* cells secrete Gp96-Ig chaperone + tumor antigens (TAA)



③ Dual antigen carrier & adjuvant activates Dendritic Cells



④ Selectively activate CD8+ T-Cells



⑤ CD8+ T-cells circulate & eliminate tumor cells

Heat Biologics

Combination Immunotherapy Design Objectives

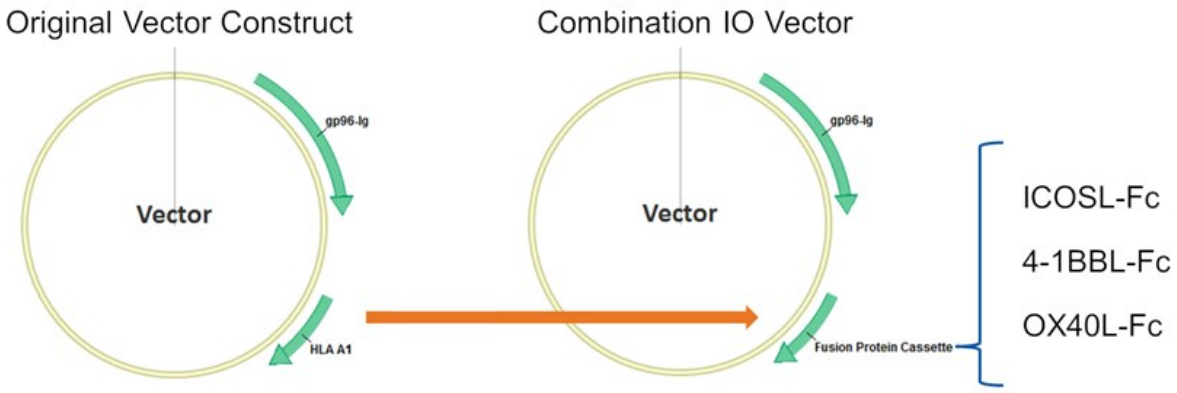
We all know that combination immunotherapy will provide superior clinical benefit than any single checkpoint, co-stimulator or vaccine can as monotherapy.

How can we implement combination therapy:

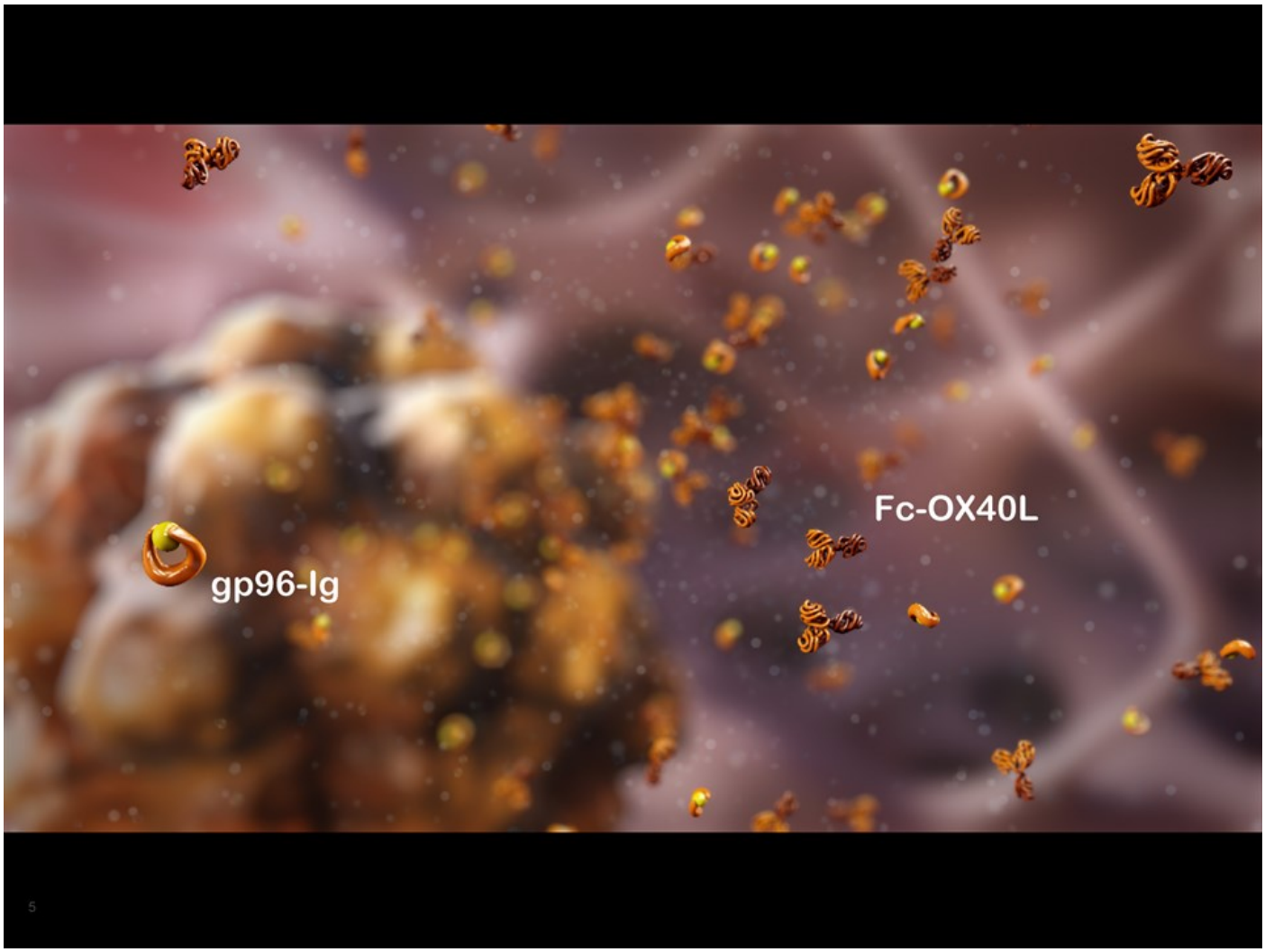
1. In the simplest and most efficacious way
2. With the lowest possible toxicity
3. With a simpler cost structure than 1+1+*n* mAbs/biologics

*Com*PACT Design

Combination Pan-Antigen Cytotoxic Therapy

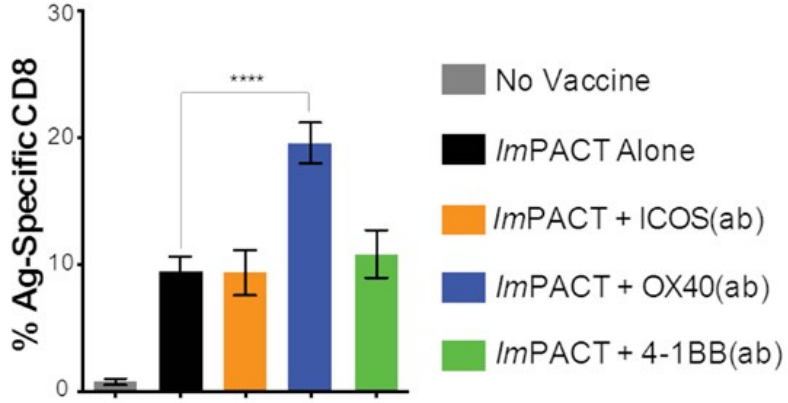


Heat Biologics


Fc-OX40L
gp96-Ig

Construct Prioritization Scheme

- There are multiple co-stimulatory receptors that may synergize with gp96-Ig based vaccines.
- Feasibility was performed by examining the immune response in animals treated with vaccine in combination with agonist antibodies



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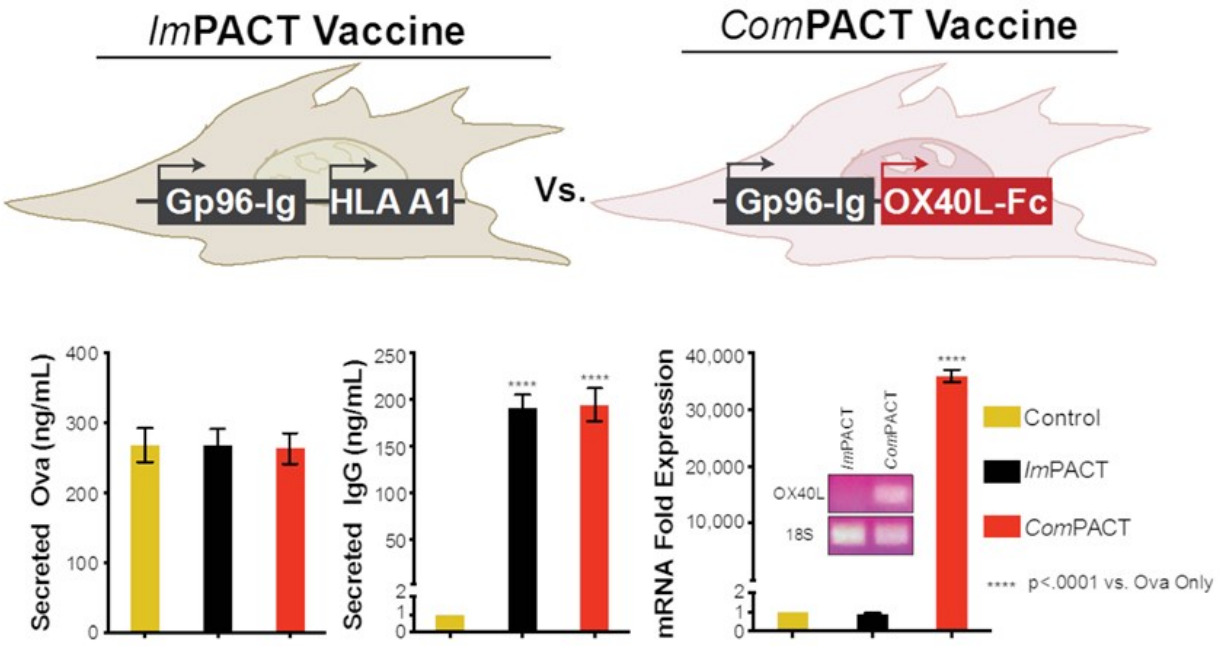
*Com*PACT Characterization



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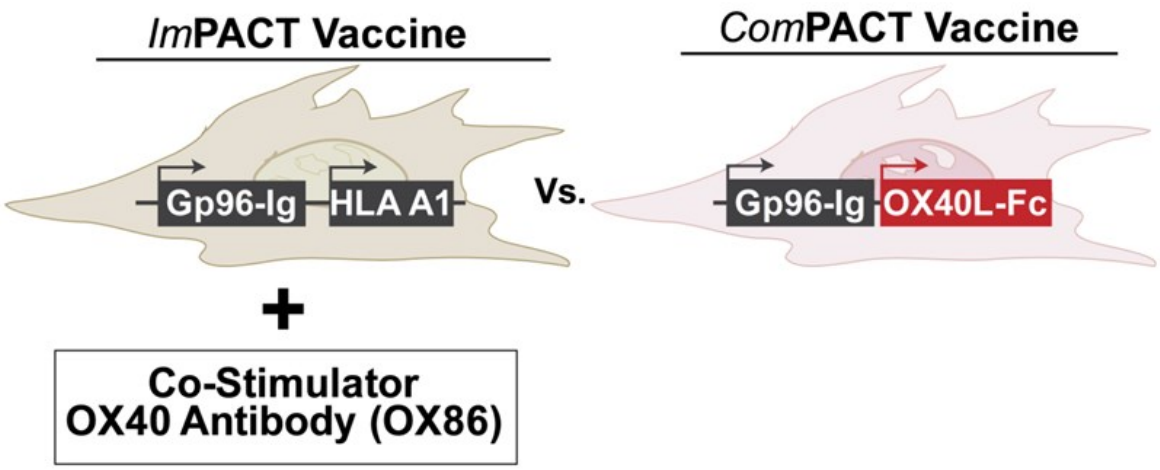
Feasibility Question



- Antibodies rapidly distribute systemically, and produce systemic effects
- With *ComPACT*, Fc-OX40L is local just in the injection site
- Can high enough concentrations be achieved to have an effect?

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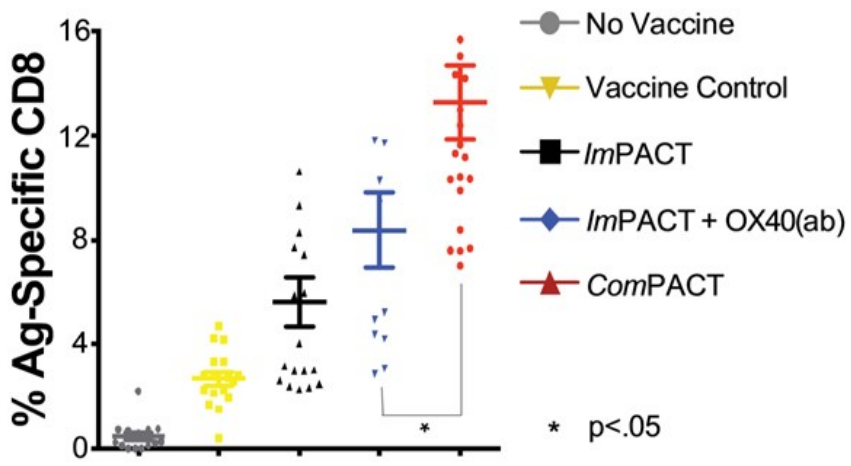
ComPACT Enhances CD8 Proliferation



- Following primary immunization, locally secreted Fc-OX40L (in *ComPACT*) produces superior antigen-specific CD8+ T cell expansion than vaccines combined with OX40 antibodies

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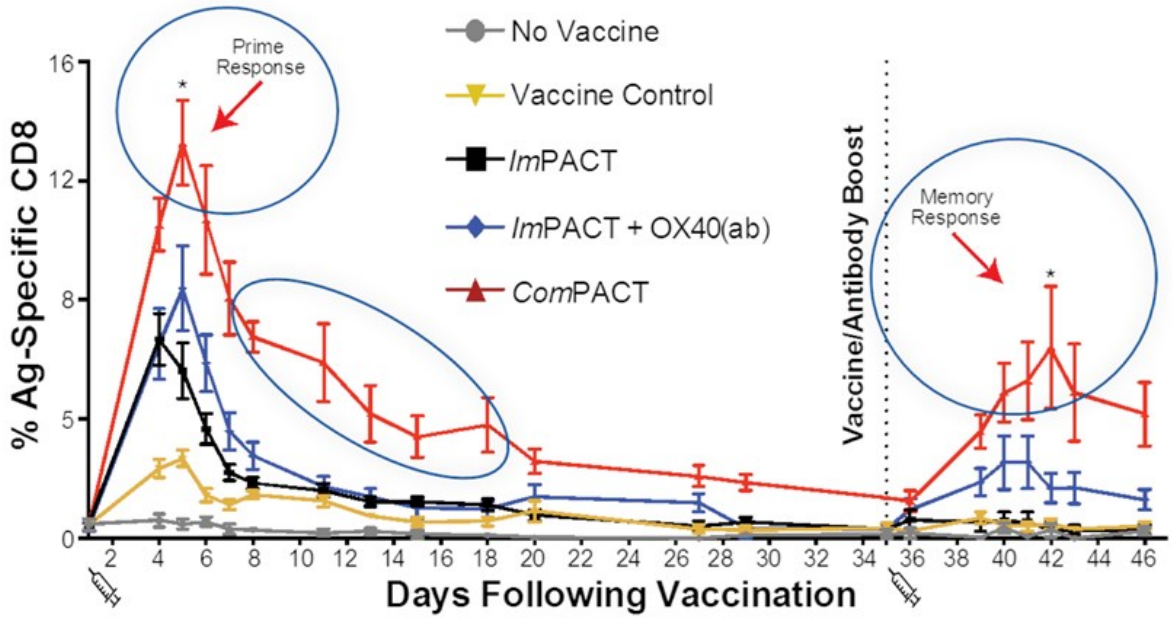
Kinetics of CD8+ T Cell Response



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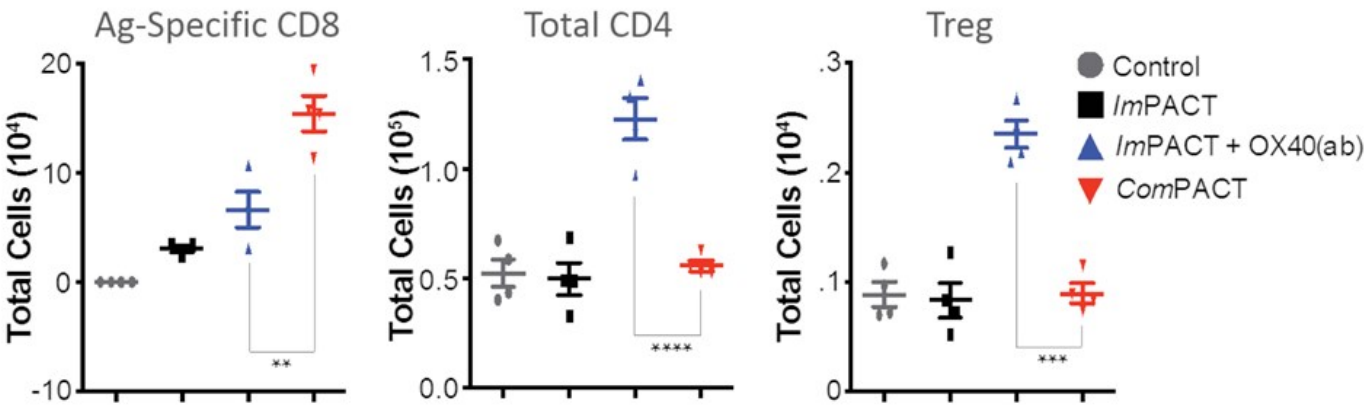
ComPACT Increases Specificity



- *ComPACT* leads to increased antigen-specific CD8 cells
- OX40 antibodies also lead to non-specific increases in CD4 cells and T regulatory cells

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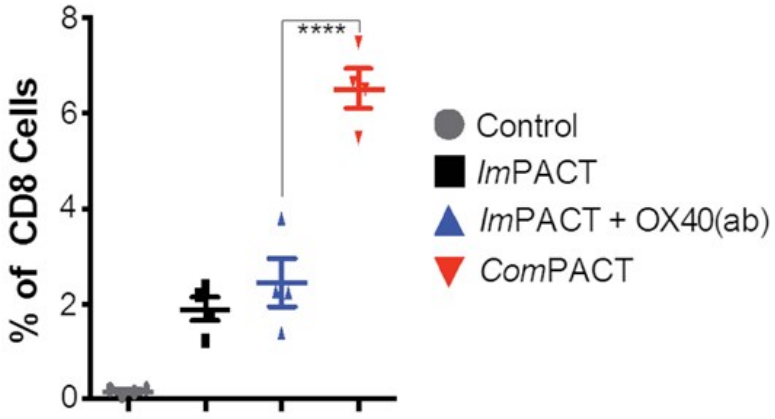
ComPACT Increases CD8+ Memory



- The increase in antigen-specific CD8 cells seen with *ComPACT* is associated with an increase in memory precursor cells ($CD127^{+}KLRG1^{-}$), not seen with OX40 antibodies

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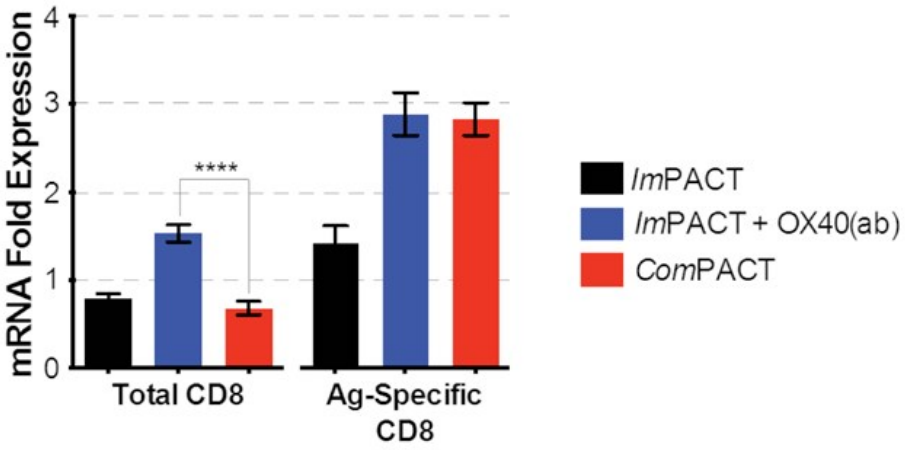
ComPACT Increases Ag-Specific CD8+ Activation



- OX40 antibodies lead to increased activation of both Ag-specific and non-specific CD8, while *ComPACT* activates only Ag-specific CD8 cells

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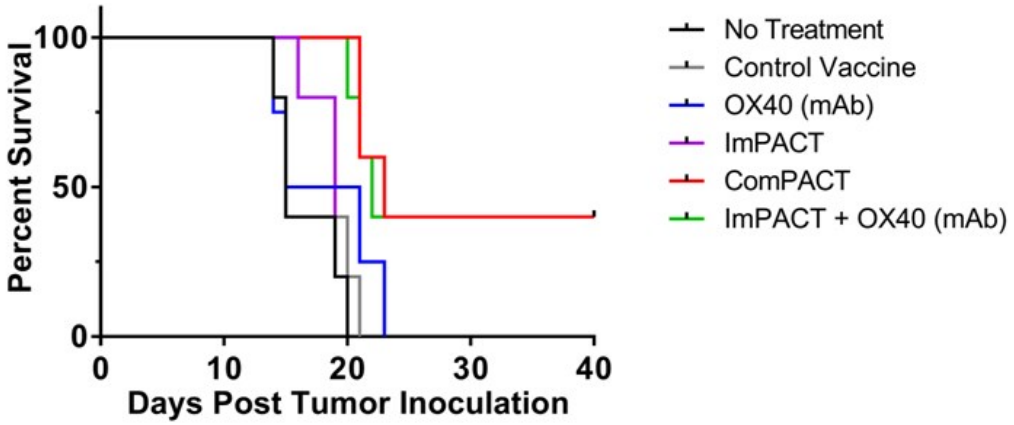
Therapeutic Tumor Immunity

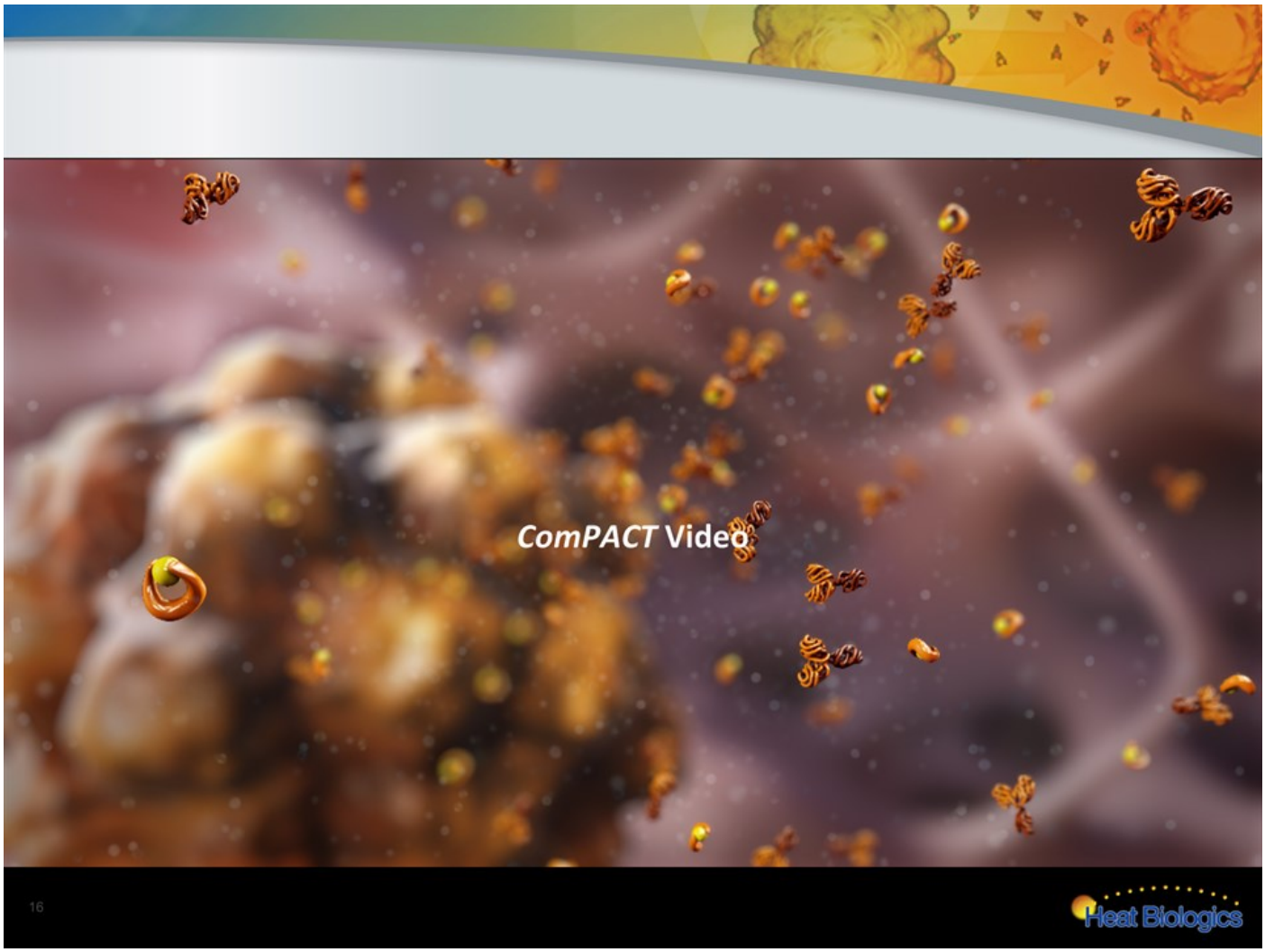


- *ComPACT* leads to improved survival in a mouse colon cancer model, similar to OX40 antibody combined with vaccine

Heat Biologics

Summary

- ✓ Incorporation of OX40L-Fc into a gp96-Ig vaccine vector is feasible
- ✓ This construct leads to enhanced antigen-specific immunity at both priming and boosting
- ✓ The immune-stimulatory effect of *ComPACT* is superior to separate administration of vaccine and OX40 agonist antibody
- ✓ This is due to enhanced specificity, with OX40 antibodies causing systemic cytokine release and off-target proliferation
- ✓ Heat plans to file its first IND for the *ComPACT* platform in 2H 2016



Heat Biologics


Heat Biologics

Locally secreted Fc-OX40L is superior to systemic, antibody mediated, OX40 co-stimulation for combination immunotherapy

George Fromm, Jason Rose and Taylor H. Schreiber
Heat Biologics, Inc., Durham NC

Abstract

The clinical success of checkpoint inhibitory therapy (anti-CTLA-4 and anti-PD-1) in a small percentage of patients has highlighted the need to identify combination approaches that may increase the frequency of responders. Two immunotherapy modalities that are proposed to synergize both with each other, and with checkpoint inhibitors are therapeutic vaccines and T cell co-stimulators.

To identify which T cell co-stimulators enhance the efficacy of an allogeneic, gp96-Ig secreting, cell-based vaccine (*Im*PACT), we investigated the activity of agonistic antibodies targeting OX40, 4-1BB and ICOS administered together with *Im*PACT. These data demonstrated that antigen-specific CD8+ T cell expansion is significantly enhanced by OX40, but not 4-1BB or ICOS stimulation.

Since T cell co-stimulation occurs at the site of immunization, we asked if co-expression of Fc-OX40L by the gp96-Ig secreting allogeneic vaccine cells (**new vaccine: *Com*PACT**) would provide comparable costimulation to systemically administered OX40 agonist antibodies. Interestingly, these data demonstrated that locally secreted Fc-OX40L by *Com*PACT provided superior priming of antigen-specific CD8+ T cells (peak of 13.3% of total CD8+) compared to combinations with OX40 antibodies (8.4%) or vaccine alone (5.6%).

Improved response was related to more potent activation of CD127+KLRG-1- memory precursor cells by *Com*PACT. Systemic administration of OX40 antibodies also led to proliferation of non-specific CD4+ T cells, Tregs and systemic increases in IL-4, IL-5, IL-6, TNFα and IFNγ. Importantly, *Com*PACT led to high frequencies of IFNγ+, TNFα+, granzyme-b+ and IL-2+ antigen-specific CD8+ T cells at both priming and boosting, which enhanced rejection of established CT26 tumors.

These data demonstrate that vaccination and costimulation can be achieved with a single cell-based product, which may simplify clinical development by enhancing the activation of tumor-antigen specific CD8+ T cells.

Gp96-Ig Vaccine and T Cell Co-stimulator Synergy

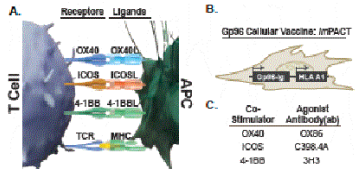


Figure 1. Testing synergy between *Im*PACT and T cell costimulators. (A) Diagram of co-stimulator receptors and ligands on T cells and antigen presenting cells (APC). (B) Schematic of Gp96-Ig *Im*PACT vaccine. (C) Co-stimulator antibodies analyzed.

*Im*PACT Synergy with OX40, but not 4-1BB or ICOS Agonist mAbs

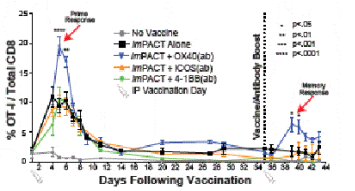


Figure 2. OX40 antibody synergizes with gp96-Ig vaccine to produce T cell expansion. Mice transferred with OT-I (EGFP) cells via tail vein injection on day -1, were then vaccinated with *Im*PACT +/- T cell co-stimulator agonistic antibodies for OX40, ICOS and 4-1BB, and then analyzed by flow cytometry. Mice were boosted with the same combinations on day 35.

*Com*PACT : New Vaccine Combining Gp96-Ig with OX40L-F

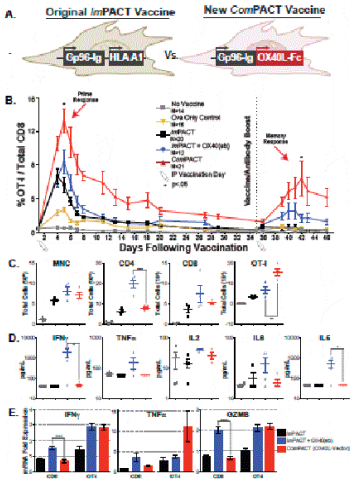


Figure 3. *Com*PACT generates greater T cell expansion than OX40 antibody, and is specific to antigen related CD8 cells. (A) Schematic of new vaccine *Com*PACT. (B) Antigen specific (OT-I/ EGFP) CD8 T cell expansion analyzed by flow cytometry following vaccination and boost by *Im*PACT +/- OX40(ab) or *Com*PACT. Mice were analyzed at day 8 by (C) peritoneal flow cytometry, (D) blood serum cytokines and (E) T cell activation qRT-PCR on sorted CD8 only or OT-I cells. OX40(ab) results in non-specific global activation of immune response, compared to antigen specific CD8 response of *Com*PACT.

*Com*PACT Generates More MPEC Than OX40 Agonist mAbs

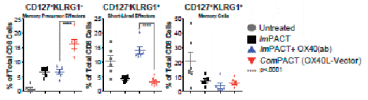


Figure 4. *Com*PACT generates potent Memory Precursor Effector Cell (MPEC) activation allowing for robust immune response after boost. CD8 cells were analyzed by flow cytometry on day 8 of the time-course described in figure 3.

Survival Benefit with *Com*PACT and OX40 Agonist mAbs

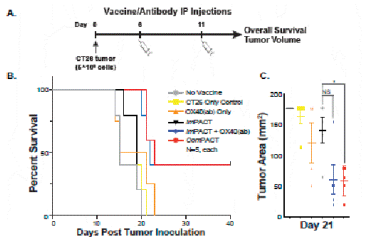


Figure 5. *Com*PACT increases survival in murine CT26 tumor model system. (A) Diagram of experimental setup showing tumor inoculation of $5x10^5$ CT26 cells on day 0 and vaccination days 6 and 11 ($1x10^6$ cells and 100 ig of antibody for appropriate treatments). (B) Overall survival of mice inoculated with CT26 tumor cells and treated with the indicated therapy. (C) Tumor area on day 21 for each sample group. Both *Im*PACT+OX40(ab) and *Com*PACT treatment dramatically hinder tumor progression, however only *Com*PACT results are statistically significant.

Statistical Analysis. One-way ANOVA was used for all sample group analyses. Significance is denoted by *, signifying the following: *p<.05, **p<.01, ***p<.001, and ****p<.0001. Sample sizes are noted in experiments and represent a minimum of 3 distinct biological replicates with error as SEM.

Key Concepts

-We have developed a novel, next-generation cancer immunotherapy vaccine to Gp96-Ig, which we call ***Com*PACT**, incorporating T cell co stimulator OX40L-Fc.

-*Com*PACT stimulates higher frequency proliferation of antigen-specific CD8+ T cells at both priming and boosting, and more MPEC, than OX40 agonist antibodies.

-*Com*PACT demonstrates greater antigen specificity, without off-target proliferation and systemic inflammatory cytokine stimulation seen with OX40 agonist mAbs.

-*Com*PACT delivers a vaccine and co-stimulatory fusion protein in a single compound, with superior specificity than traditional antibodies. This product may simplify the development of combination immunotherapeutics for oncology patients.

Contact: gfromm@heatbio.com