



COMPANY PRESENTATION

Pareto Securities' 8th Annual Health Care Conference

Torbjørn Furuseth MD, CFO

LYTIX BIOPHARMA IN BRIEF

COMPANY OVERVIEW

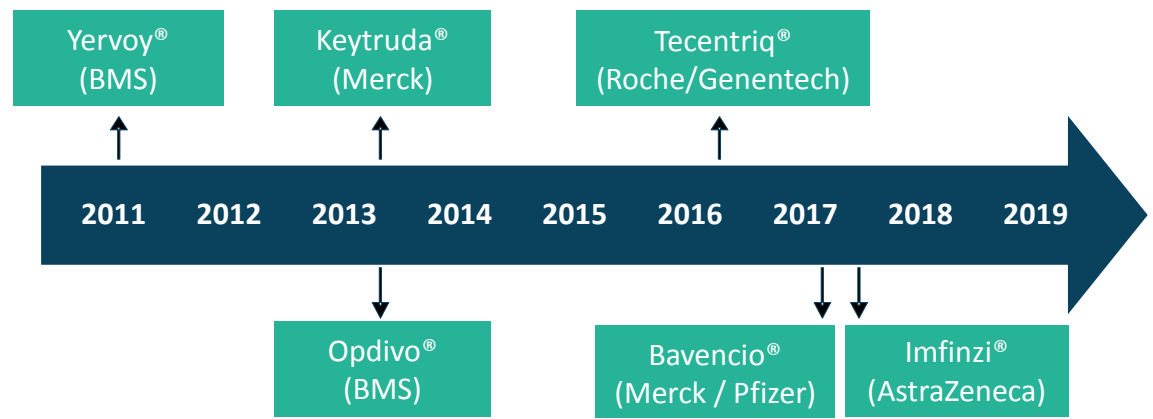
- Clinical-stage pharma company based in Oslo, Norway
- Founded in 2003, main focus on cancer immunotherapy since 2012
- Technology platform built on host defense peptides
- Developing cancer immunotherapies with strong international collaborations
- Strategy to establish partnership for commercialization after phase II

KEY INVESTMENT HIGHLIGHTS

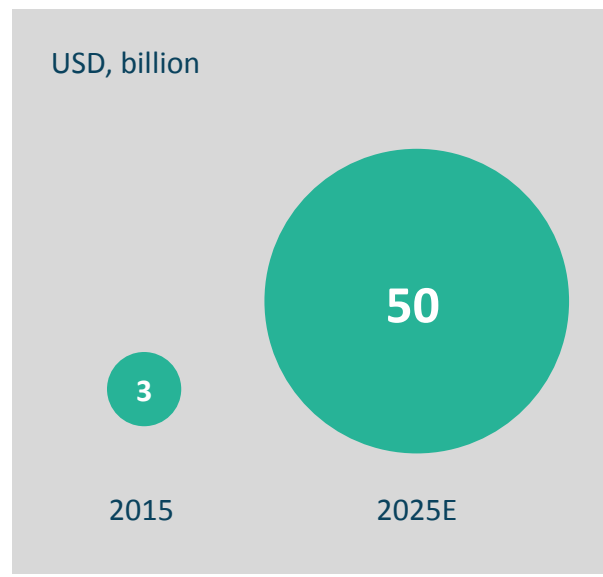
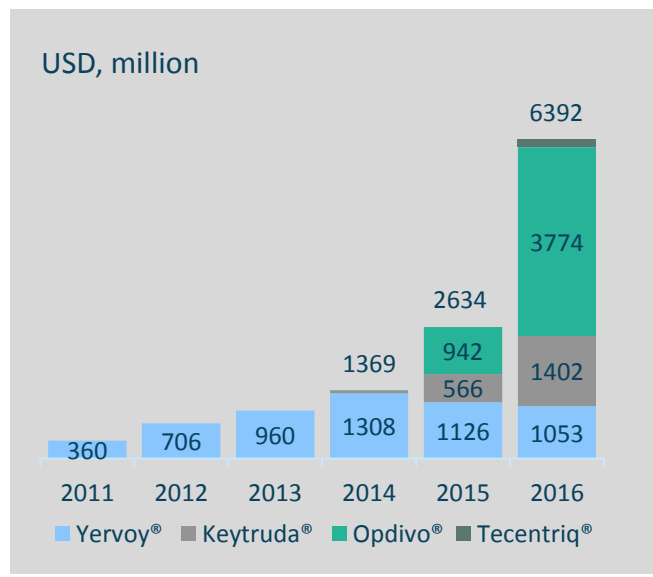
- 1 First-in-class oncolytic peptide turning “cold tumors hot” with unique reshaping the tumor microenvironment
- 2 Clinical data from >50 patients confirming “cold to hot” transition with anti-tumor effects
- 3 Ideal combination drug with other therapies like checkpoint inhibitors and chemotherapy
- 4 Technology platform with opportunities in multiple indications in therapy settings
- 5 Positioned in the fastest growing segment in pharma with revenue potential estimated to USD 50bn

IMMUNO-ONCOLOGY HAS BECOME THE MOST ATTRACTIVE PHARMACEUTICAL SEGMENT

THE FIRST WAVE IN CANCER IMMUNOTHERAPY IS THE IMMUNE CHECKPOINT INHIBITORS



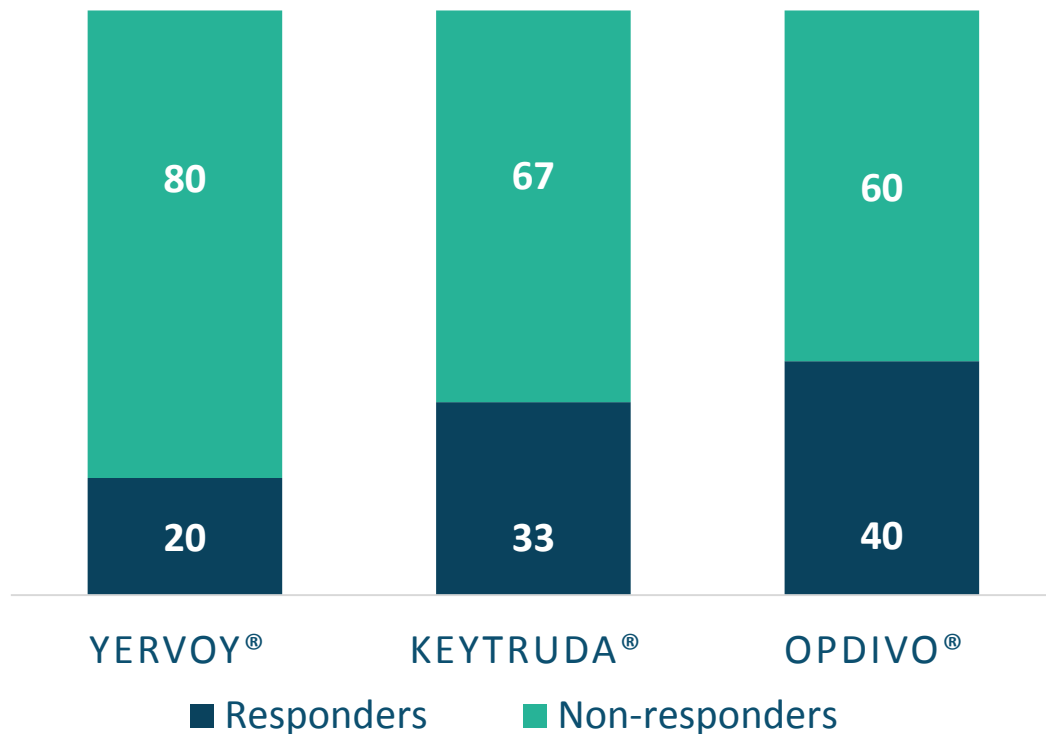
CHECKPOINT INHIBITORS, GLOBAL REVENUE



Source: Global Data, Jefferies

THE MAIN CHALLENGE IN CANCER IMMUNOTHERAPY IS TO TURN COLD TUMORS HOT

MALIGNANT MELANOMA



HOT TUMORS RESPOND TO IMMUNOTHERAPY

- Checkpoint inhibitors are proving to be effective in cancer
- Despite the clinical success of checkpoint inhibitors, only a subset of patients exhibit durable responses
- Immune checkpoint inhibitors seem to work only in "HOT" T cell inflamed tumors

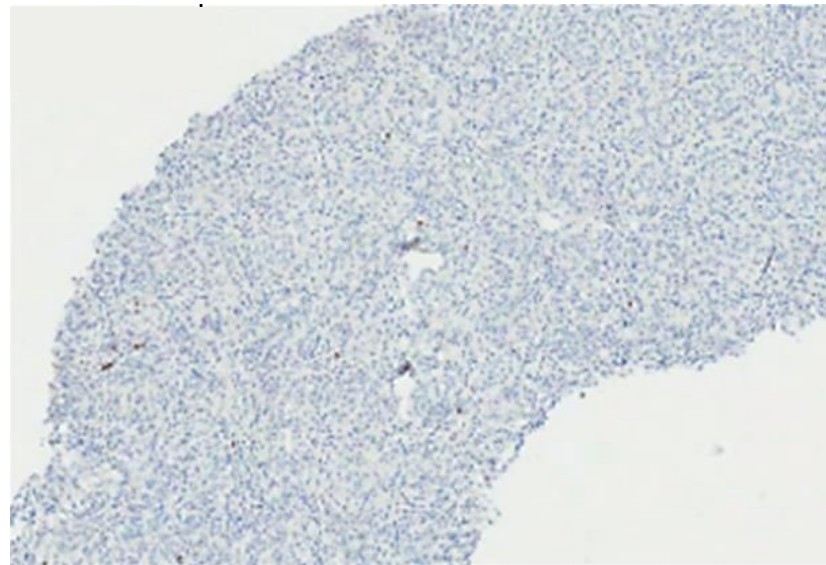
LTX-315 IS A FIRST-IN-CLASS ONCOLYTIC PEPTIDE THAT TURNS “COLD TUMORS HOT”

CLINICAL DATA

- Intra-tumoral treatment with LTX-315
- Enhanced CD8+ T-cell infiltration in 88% of evaluable patients

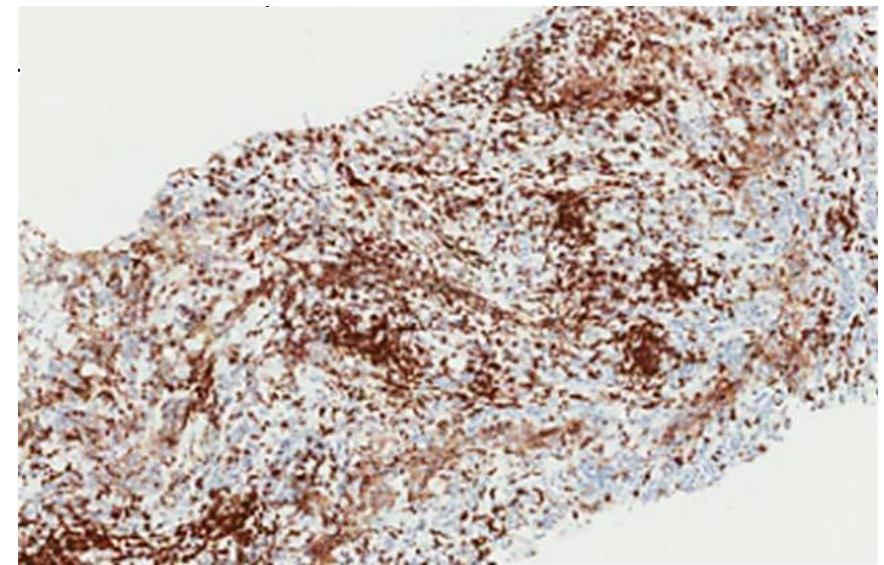


COLD TUMOR
WITH NO T-CELLS



Baseline

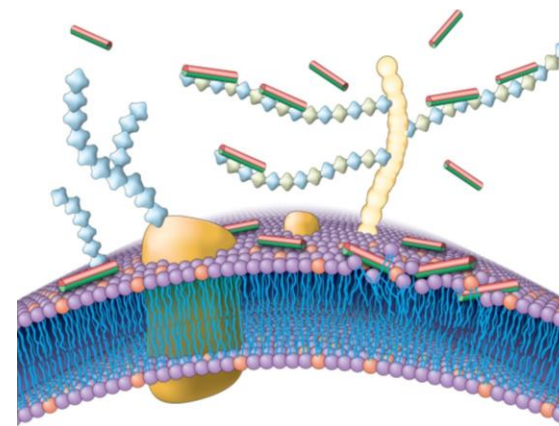
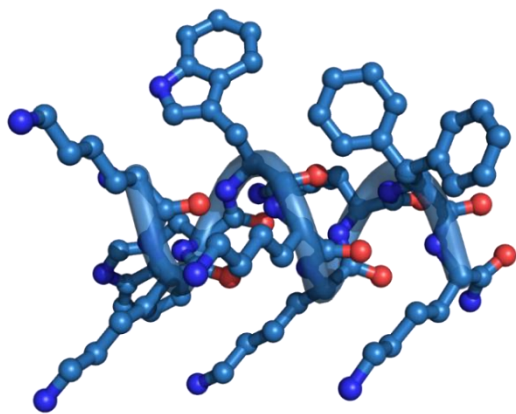
HOT TUMOR
WITH T-CELL INFILTRATION



LTX-315 treated

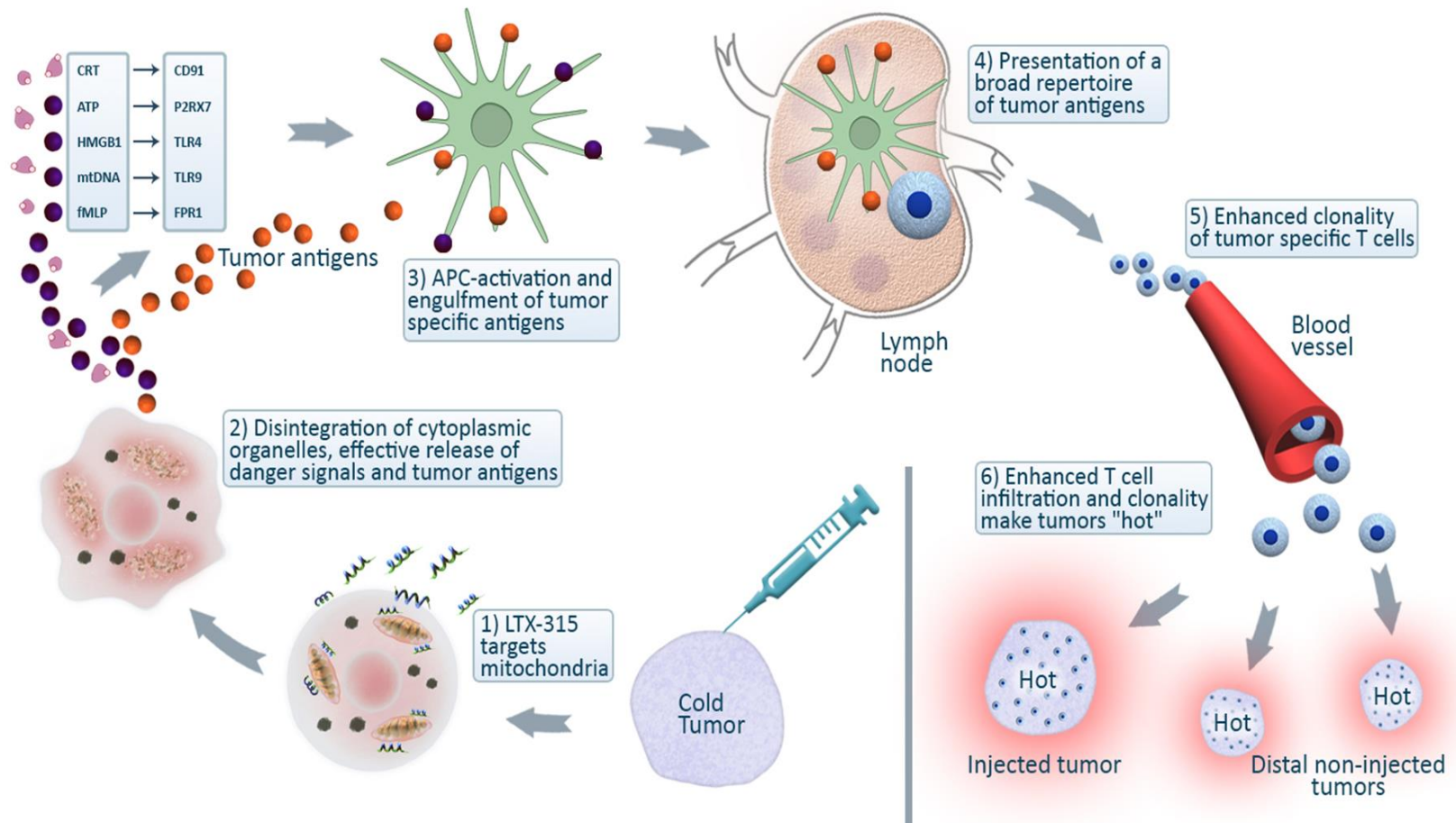
LTX-315 IS AN OPTIMIZED MOLECULE DESIGNED FROM HOST DEFENSE PEPTIDE

HOST DEFENSE PEPTIDES HAVE A DUAL MODE OF ACTION: DIRECT KILLING AND IMMUNE MODULATION



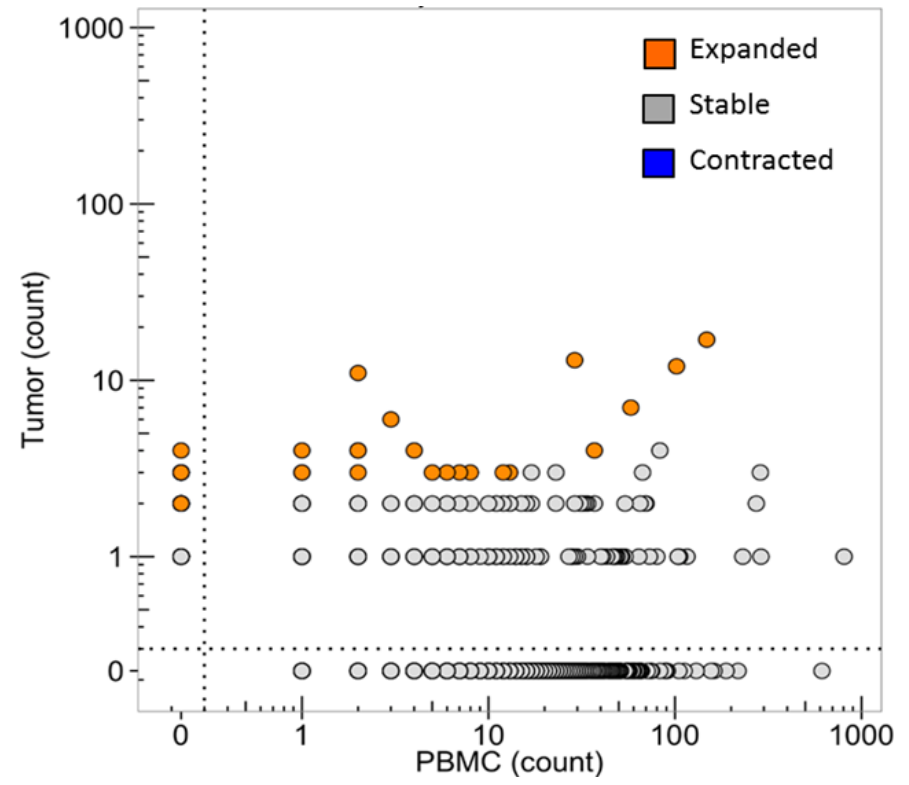
- LTX-315 composed of five cationic residues and four lipophilic residues, including one synthetic
- Able to form an amphipathic structure upon interaction with anionic membranes
- LTX-315 shows specificity for cancer cells overexpressing anionic molecules
- Followed by internalization and targeting of intracellular organelles

LTX-315'S UNIQUE MODE OF ACTION RESULTS IN EFFECTIVE "RELEASE AND RESHAPE" IN THE TUMOR MICROENVIRONMENT

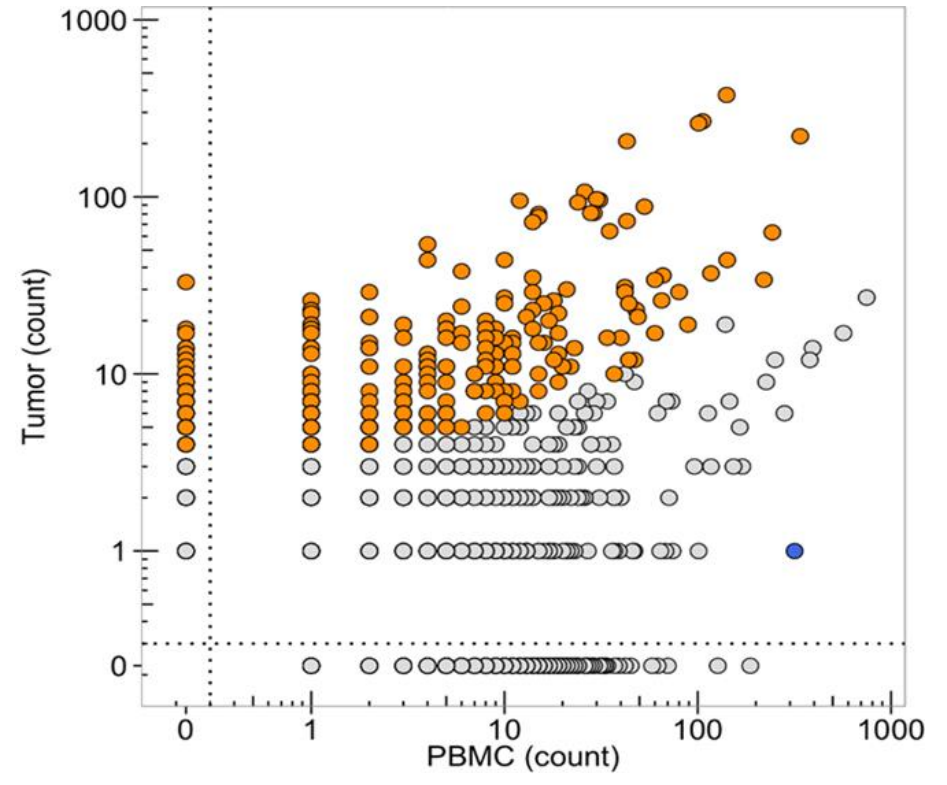


LTX-315 INCREASES NUMBER AND DIVERSITY OF TUMOR INFILTRATING T-CELLS

UNTREATED MELANOMA

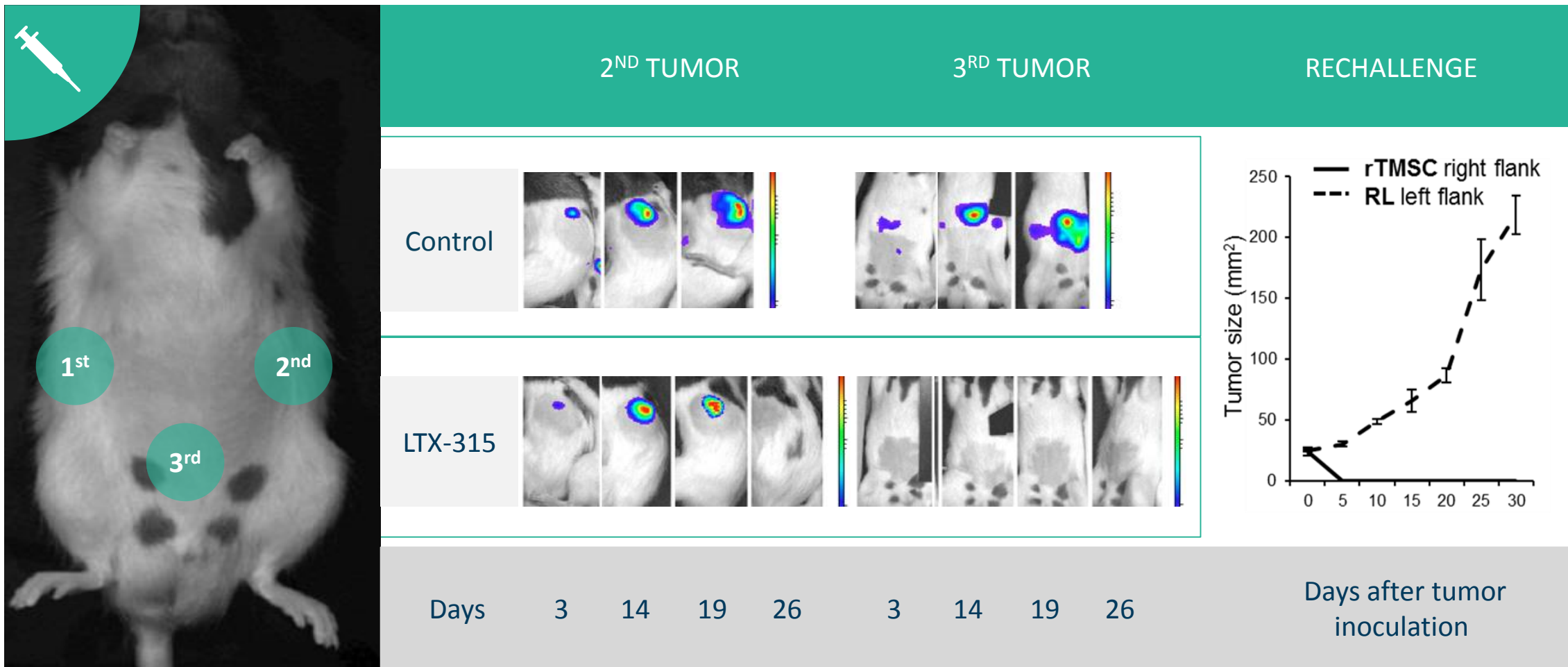


TREATED MELANOMA



Expansion of T-cell clonality in treated tumors

LTX-315 HAS DEMONSTRATED SYSTEMIC IMMUNE RESPONSE – COMPLETE REGRESSION WITH TUMOR SPECIFIC MEMORY

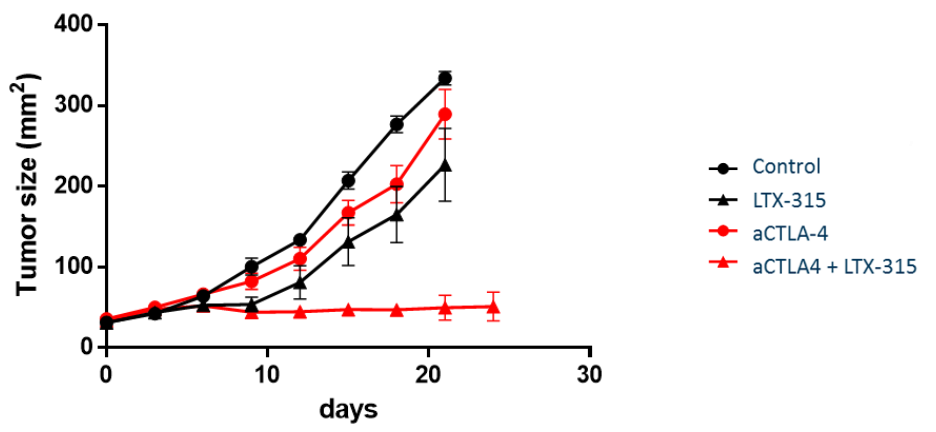


Rat transformed mesenchymal sarcoma model (rTMSC), Rose leukemia (RL)
Nestvold et al. OncoImmunity, In press

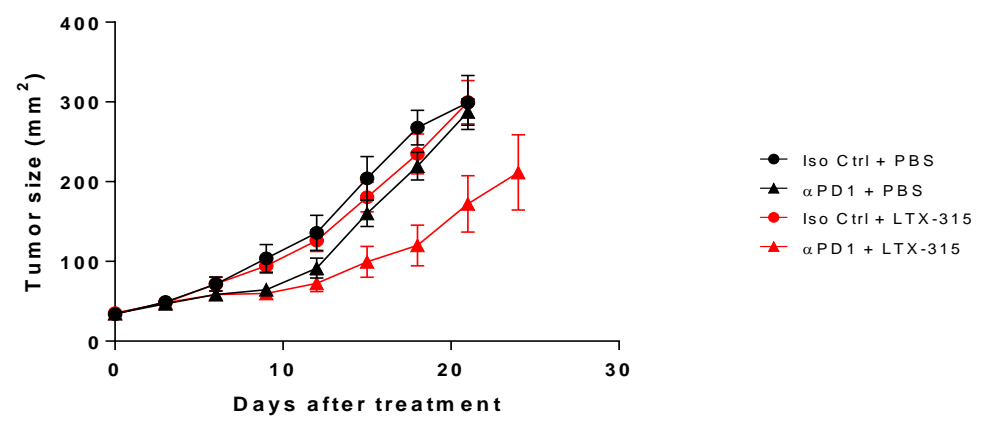
LTX-315 DEMONSTRATES SYNERGY WITH OTHER IMPORTANT CANCER THERAPIES

WITH CHECKPOINT INHIBITORS

LOW DOSE Anti CTLA-4

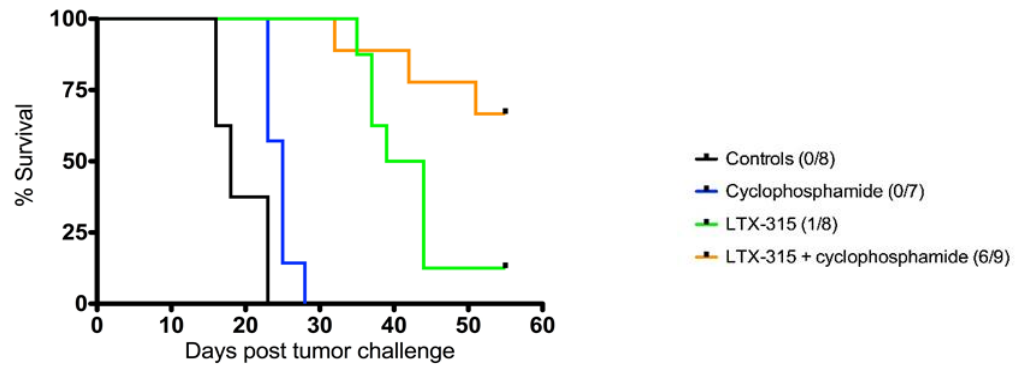


LOW DOSE Anti PD-1

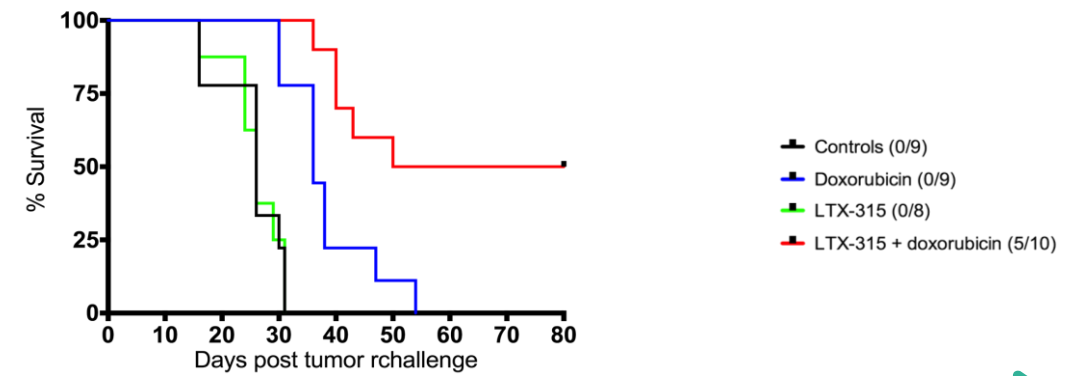


WITH CHEMOTHERAPY

LOW DOSE CYCLOPHOSPHAMIDE (A20 B-LYMPHOMA)



DOXORUBICIN (4T1 BREAST CANCER)



Yamazaki et al., 2016, Cell Death and Differentiation

ONCOLYTIC PEPTIDE LTX-315 HOLDS SEVERAL ADVANTAGES OVER ONCOLYTIC VIRUSES

EFFICACY

- ✓ Comprehensive and rapid disintegration of mitochondria and intracellular organelles
- ✓ Induces all hallmarks of immunogenic cell death and additional immune stimulants
- ✓ Access all cancer cells through electrostatic interaction

SAFETY

- ✓ Transient side effect profile
- ✓ Low risk of neutralizing antibodies
- ✓ No risk of T cell mediated responses towards agent
- ✓ No risk of integration into host genome
- ✓ No risk of virus mutations

DRUG PRODUCT

- ✓ Short half-life of ~20min
- ✓ Low manufacturing cost
- ✓ Simple potency assay testing
- ✓ Easy handling and logistics, storage at 2 to 8°C
- ✓ No potential GMO issues

Oncolytic peptide LTX-315 shows promise to be efficacious, yet a much simpler treatment than oncolytic viruses

STRONG INTERNATIONAL COLLABORATIONS DEMONSTRATING LTX-315 ANTI-TUMOR EFFECTS



HARVARD
UNIVERSITY

LTX-315's ability to reprogram tumors

Prof M. Pittet

 Washington University School of Medicine in St. Louis

LTX-315's ability to release neo-antigens

Prof Schreiber

 **NATIONAL CANCER INSTITUTE**

LTX-315 and involvement of Toll-like receptors (TLR)

Dr. Oppenheim

**GUSTAVE
ROUSSY**

LTX-315's ability to circumvent resistance to PD1- blockade using TLR agonists

Profs Zitvogel & Kroemer



Oslo
University Hospital

LTX-315 in combination with immuno-chemotherapy

Prof G. Mælandsmo



Cornell University

LTX-315 in combination with irradiation

Prof S. Demaria



**Karolinska
Institutet**

LTX-315 and chemotherapy in translational sarcoma models

Prof B. Brodin

LTX-315 ANTI-TUMOR ACTIVITY CONFIRMED IN PATIENTS

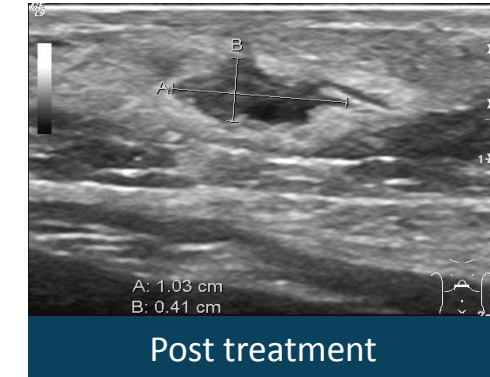
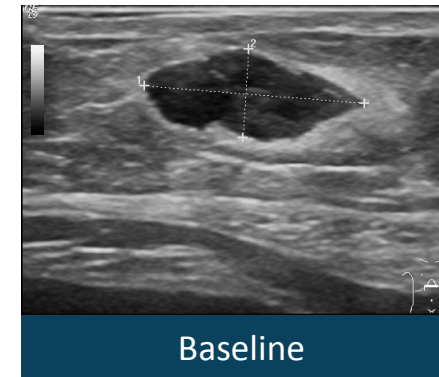
OPEN PHASE I MONOTHERAPY TRIAL

- Heavily pretreated cancer patients with advanced and metastatic disease
- Various solid tumor cancers
- Patients with primary resistance to checkpoint inhibitors
- Dose escalation, multi-lesion injections

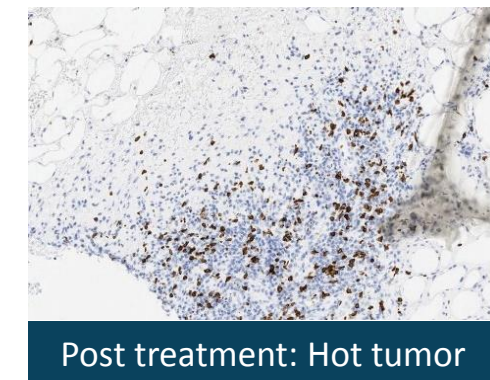
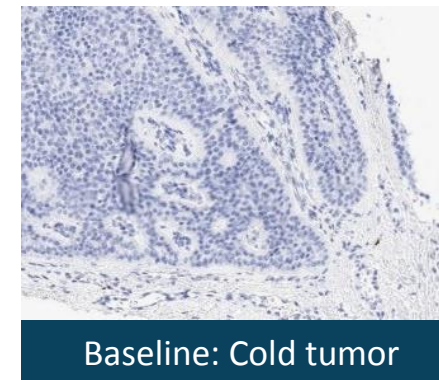
EFFICACY

- 53% stable disease (irRC) (8 of 15 evaluable patients)
 - Median duration of 11 weeks
- Systemic effect documented in patient
- 31% complete and partial regression of injected lesions (8 of 26)
- 88% of patients with enhanced infiltration of CD8+ T-cells in injected lesions (15 of 17)

OCULAR MELANOMA PATIENT (INJ. LESION)

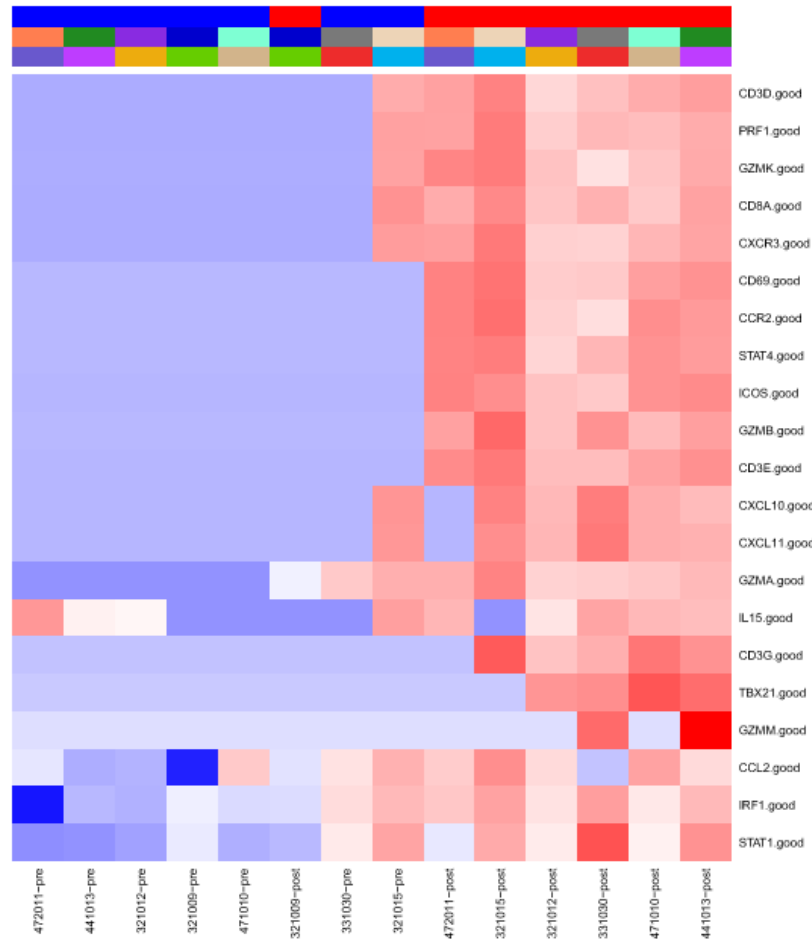


MYOEPITHELIOMA PATIENT (INJ. LESION)

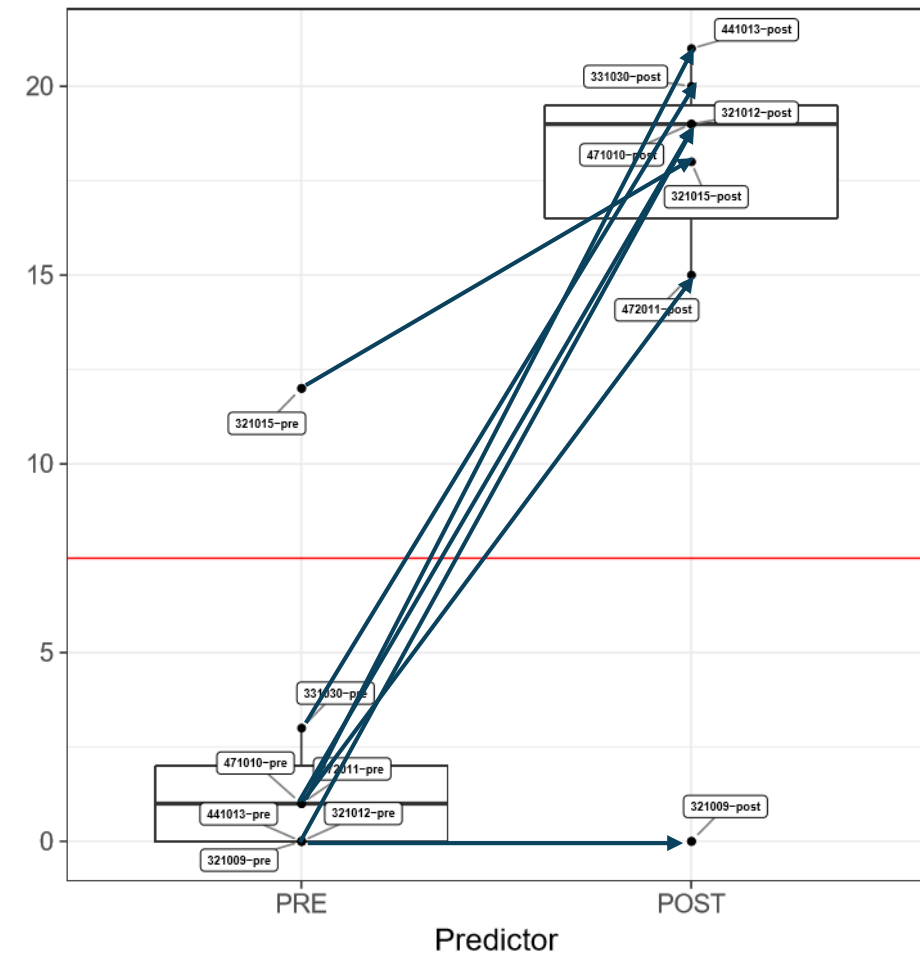


LTX-315 UPREGULATES KEY GENES INVOLVED IN THE IMMUNE-MEDIATED TUMOR REGRESSION IN PATIENTS

IMMUNOSIGN® 21 GENE EXPRESSIONS



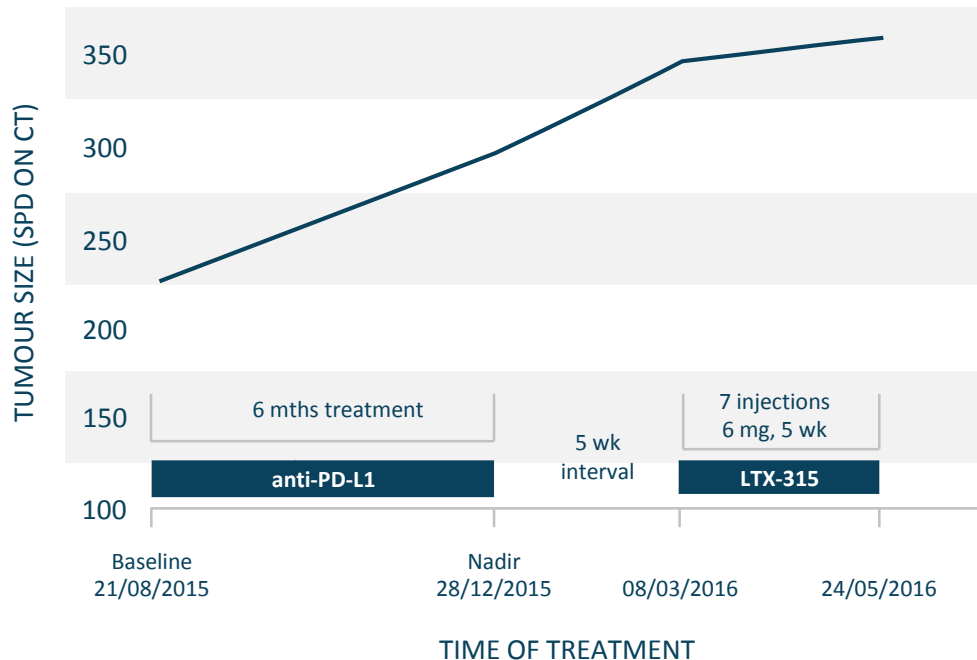
IMMUNOSIGN® 21 SCORE



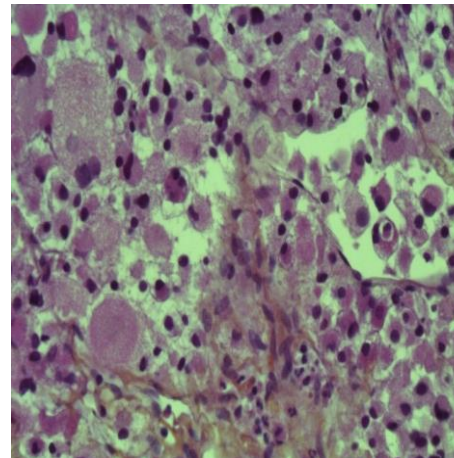
Analysis of all seven available biopsy pairs at HalioDx, Blue topline is pre-treatment, red topline is post treatment

TUMOR REGRESSION DOCUMENTED IN NON-INJECTED TUMOR

- 38 yr female, adrenocortical cancer, diagnosed in year 2000. Metastasis to lung, liver, peritoneum, bone.
- Multiple prior treatments: surgery (primary & met lesions), chemotherapy, radiotherapy
- Progressive disease on anti-PDL1 as last prior treatment before starting LTX-315
- LTX-315 injected into subclavicular lymph node lesion. Best response stable disease (irRC)



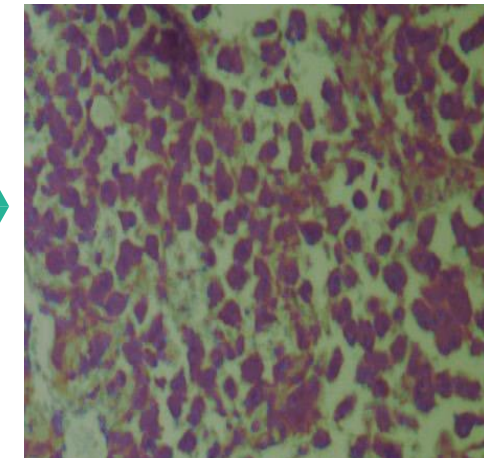
BASELINE:
LARGE NON-INJECTED LESION



ADRENAL CARCINOMA

7 LTX-315 injections

WEEK 6:
LARGE NON-INJECTED LESION



NO VIABLE CANCER CELLS

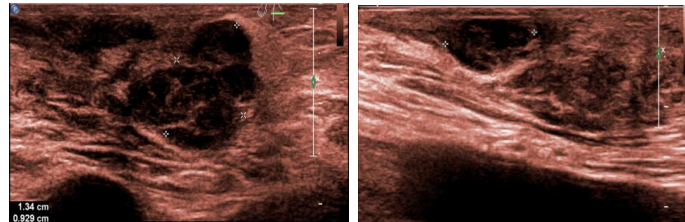
COMPLETE RESPONSE IN MALIGNANT MELANOMA PATIENT STAGE IV WITH PEMBROLIZUMAB POST LTX-315 TREATMENT

PROGRESSIVE DISEASE

- 74 year old male
- Jan 2009: Primary resection
- Sept 2009: bilat inguinal LN resection
- Dec 2010: relapse + metastases
- July 2011: extensive metastasis, Chemotherapy until Oct 2012
- July 2013: Progressive disease, started ipilimumab – gastrointestinal SAE

LTX-315

- May 2014: started LTX-315 injections in two lymph node lesions (3 mg)

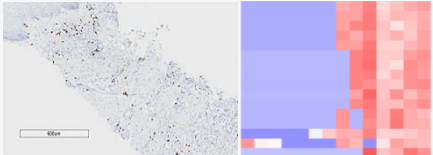
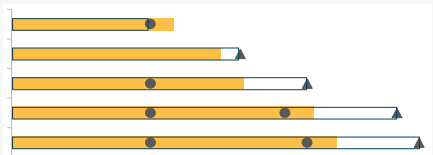
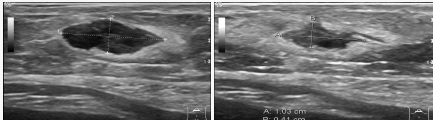
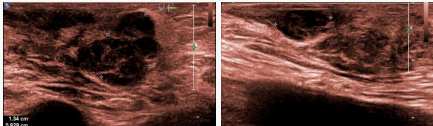


- Received in total 34 injections in the two tumors
- Stable disease for 13 weeks
- Sept 2014: Progression with new metastasis

COMPLETE REMISSION

- Sept 2014: started pembrolizumab
- Patient achieved complete remission (CR)
- Patient is alive and in complete remission
- Expected likelihood of complete response for a patient at this stage is <5%
- LTX-315 may have contributed to priming the tumors for sensitivity to pembrolizumab

LTX-315 HAS SHOWN SEVERAL EFFICACY SIGNALS IN MELANOMA PATIENTS

1	Cold to hot (T cell infiltration) monotherapy	<ul style="list-style-type: none"> 4 of 5 injected tumors with increased CD8+ tumor infiltrating lymphocytes Both injected melanoma tumors had strong response on nanostring analysis 	
2	Stable disease in monotherapy	<ul style="list-style-type: none"> Large tumor burden, heavily pretreated, most patients progressing on CPI 4 of 5 evaluable patients stable disease week 8, 2 of 5 stable disease week 14 	
3	Tumor regression in monotherapy	<ul style="list-style-type: none"> Partial regression in injected tumors in 3 of 6 patients 	
4	LTX-315 followed by pembrolizumab	<ul style="list-style-type: none"> Stage IV patient progressing, started ipilimumab but side effects Stable disease on LTX-315 for 14 weeks, progressing with new tumors Starting pembrolizumab; complete remission for 27 months, and ongoing 	

ONGOING AND PLANNED CLINICAL DEVELOPMENT PROGRAM

△ Interim readout
▲ Final readout

	2017		2018		2019		2020	
	H1	H2	H1	H2	H1	H2	H1	H2
Monotherapy, mixed tumors								
Multiple lesions	Phase I ▲							
Combination								
Malignant melanoma LTX-315 + anti-CTLA-4 Anti-PD-1 pre-treated	Phase I ▲							
Breast cancer (TN) LTX-315 + anti-PD1 2nd-5th line	Phase I ▲							
Phase II Combination			Phase II ▲					
Adoptive T-cell therapy (TBD)			Phase II ▲					
Neo-adjuvant (TBD)			Phase II ▲					

ONGOING CLINICAL TRIAL WITH LTX-315 AND IMMUNE CHECKPOINT COMBINATIONS

Inclusion criteria

MALIGNANT MELANOMA, METASTATIC

- Combination with ipilimumab
- Prior anti-PD-1/PD-L1 treatment
- One or more injectable lesions

BREAST CANCER, METASTATIC TRIPLE NEGATIVE

- Combination with pembrolizumab
- 1-4 prior systemic treatments for metastatic TNBC
- One or more injectable lesions

Dosing

Day 1 and 2:
3, 4 or 5 mg LTX-315 cohorts
Ipilimumab every 3 weeks x 4
Pembrolizumab every 3 weeks

Day 8 and 9:
3, 4 or 5 mg LTX-315

Day 15 and 16:
3, 4 or 5 mg LTX-315

Week 3
Ipilimumab
Pembrolizumab

Outcomes

Baseline

- Biopsy
- CT scan

Week 4 Biopsy

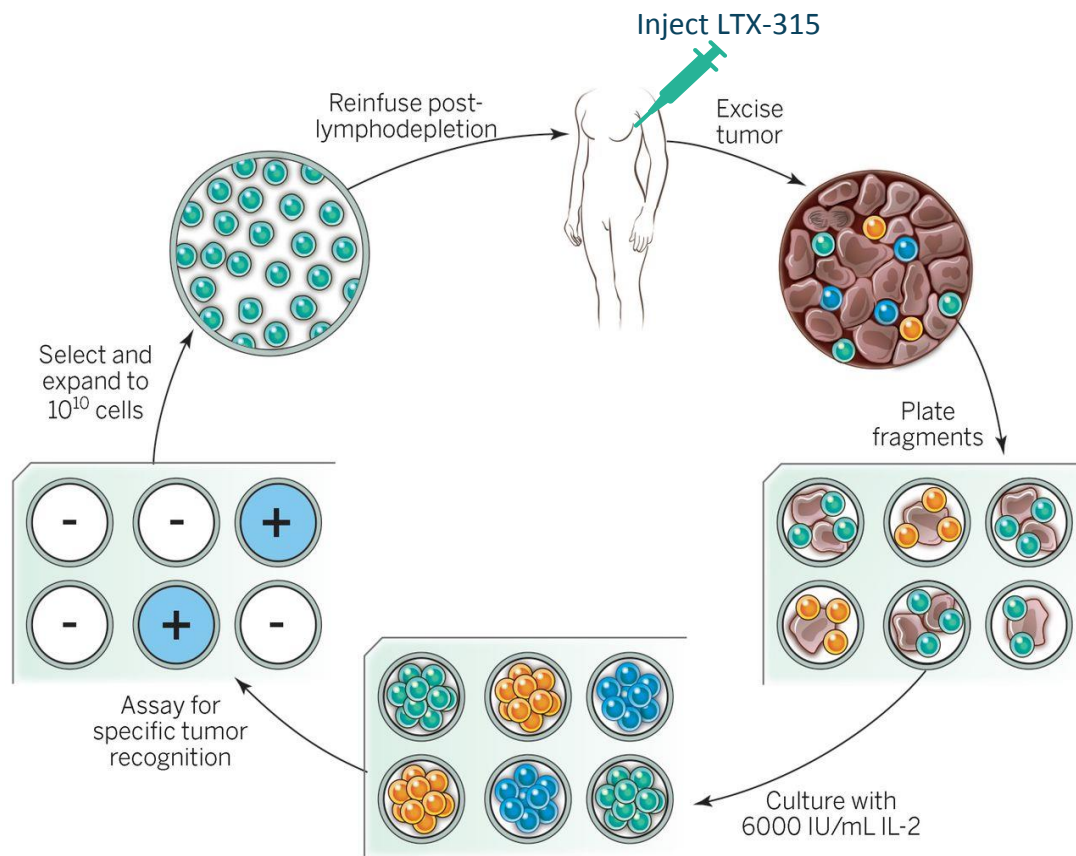
CT scan every 8 weeks

Participating sites



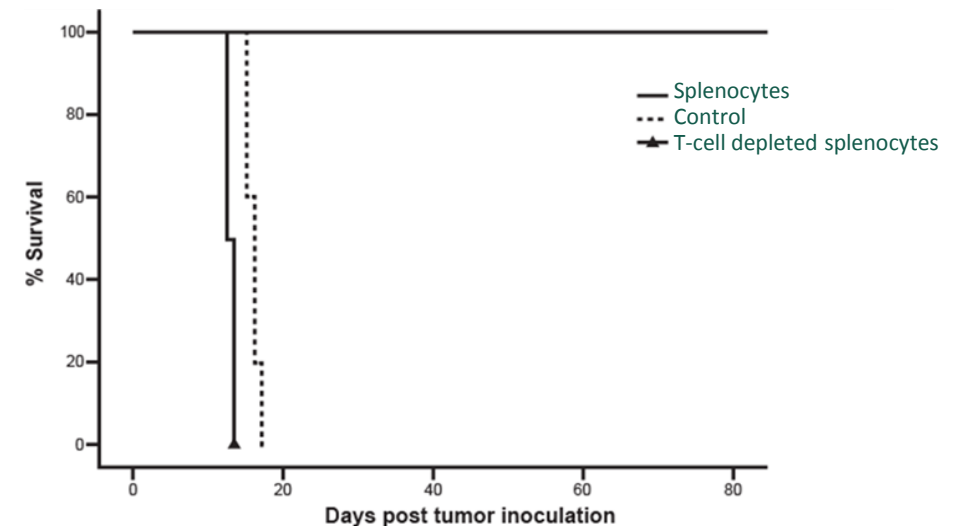
LTX-315 MAY PLAY AN IMPORTANT ROLE IN T CELL THERAPIES

Adoptive T-cell transfer is dependent on tumor infiltrating lymphocytes (TILs)



LTX-315

- Turns tumors hot, i.e ensuring infiltration of T cells
- Rapid oncolysis and infiltration of T cells
- Has proven adoptive T-cell transfer in animal model



STRONG PATENT PORTFOLIO WITH PROTECTION UNTIL 2032

Product	Description	EU	US	JP	Other ¹
LTX-315 Monotherapy	Methods-of-use claims	Granted, expires 2019	3 granted, expires 2022	Granted expires 2019	AU, NO, CA
	Composition-of-matter claims	Pending, expires 2029	Granted, expires 2032	Granted, expires 2029	AU, BR, CA, CN, IN, NZ, KR, RU, SG
LTX-315 Combination	Methods-of-use claims	2 pending, expires 2034	2 pending, expires 2034	Pending, expires 2034	PCT (not selected)
T-cell clonality	Methods-of-use claims	NA	NA	NA	PCT filed February 2017
LTX-401	Composition-of-matter claims	Granted, expires 2030	Granted, expires 2030	Granted, expires 2030	AU, BR, CA, CN, IN, NZ, KR, RU, SG
Technology (adaptive immunity)	Methods-of-use claims	Pending, expires 2027	2 granted, expires 2029 and 2020		AU, CA, NO

¹ Additional countries where patent is granted or pending

LYTIX BIOPHARMA INVESTMENT CASE

Unique product with clinical evidence

- Turning “cold tumors hot” with activation of key genes in tumor
 - Promising clinical data in patients refractory to other available treatment
 - Ideal combination drug with checkpoint inhibitors
 - Strong patent portfolio with protection until 2032, and being further expanded
-

Multiple value triggers

- Positioned in the attractive and fast growing immuno-oncology segment
 - Potential to become a base therapy in multiple solid tumor types
 - Multiple shots on goal with clinical trials in several settings
 - Oncolytic peptide candidates in pipeline entering preclinical development
-

Strong team

- Management team and Board of Directors with international pharmaceutical drug development and commercial experience
- Strong international collaborations and advisory board



THANK YOU