Intensity THERAPEUTICS

Issuer Free Writing Prospectus
Filed Pursuant to Rule 433
Registration No. 333-280681
June 11, 2025

Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995 that involve substantial risks and uncertainties, including statements regarding the development and regulatory status of our product candidates, such as statements with respect to our lead product candidate INT230-6, and the timing of clinical trials and data from those trials for our product candidates, and our discovery programs that may lead to our development of additional product candidates, the potential utility of our technology and therapeutic potential of our product candidates, the potential commercialization of any of our product candidates, and the sufficiency of our cash resources. All statements, other than statements of historical facts, contained in this presentation, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words "anticipate," "believe," "estimate," "expect," "intend," "may," "might," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make as a result of various risks and uncertainties, including but not limited to: the initiation, timing, progress and results of future preclinical studies and clinical trials, and our research and development programs; our need to raise additional funding before we can expect to generate any revenues from product sales; our plans to develop and commercialize our product candidates, our potential inability to satisfy the Nasdaq Capital Market's requirements for continued listing and be subject to delisting; and other factors included in the section entitled "Risk Factors" in the Company's preliminary prospectus supplement filed with the SEC, the Company's Annual Report on Form 10-K for the year ended December 31, 2024 and in the Company's subsequent SEC filings. Any of these outcomes could cause our actual results to differ from those contained in the forward-looking statements of the Company's filings with the SEC.

The forward-looking statements contained in this presentation reflect our current views as of the date of this presentation with respect to future events, and we assume no obligation to update any forward-looking statements except as required by applicable law. The Intensity Therapeutics, Inc. name and logo are our trademarks. We also own the service mark and the registered U.S. trademark for DfuseRx. The trademarks, trade names and service marks appearing in this presentation are the property of the Company. We have omitted the ® and ™ designations, as applicable, for the trademarks named in this presentation.

Free Writing Prospectus

This presentation highlights basic information about us and the proposed offering. Because it is a summary, it does not contain all of the information that you should consider before investing. We have filed a registration statement on Form S-3 (including a base prospectus) (File No. 333-280681) and accompanying preliminary prospectus supplement with the SEC for the offering to which this presentation relates. Before you invest, you should read the prospectus supplement and the accompanying prospectus in the registration statement (including the risk factors described therein) and other documents we have filed with the SEC for more complete information about us and the offering.

You may access these documents for free by visiting EDGAR on the SEC Web site at http://www.sec.gov. The preliminary prospectus supplement is available on the SEC website at http://www.sec.gov. Alternatively, we or any underwriter participating in the offering will arrange to send you the prospectus if you contact ThinkEquity, Prospectus Department, 17 State Street, 41st Floor, New York, New York 10004, telephone: (877) 436-3673.

This presentation shall not constitute an offer to sell, or the solicitation of an offer to buy, nor will there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of such state or jurisdiction. The offering will only be made by means of a prospectus supplement and related base prospectus.

Company Overview

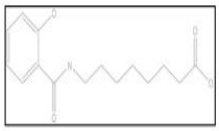
- Novel solid tumor cancer treatment approach using a new delivery technology that causes cancer cell death, leading to an immune response
- Over 200 patients enrolled in 2 completed clinical trials (1 metastatic & 1 presurgical)
- Ongoing studies: Phase 3 in metastatic sarcoma; Phase 2 in presurgical breast cancer
- Veteran leadership with public company and phase 3 clinical development experience
- Robust IP portfolio – 18 issued patents (3 in the US) and patent protection in 41 countries
- Multiple industry, government and university hospital partnerships
- Cost-efficient business model structured to create significant value

INT230-6

A water-based drug designed for intratumoral use in fatty tumors

Three Key INT230-6 Components

All are powders



1. SHAO (10 mg/mL)

- A novel diffusion enhancer molecule that is soluble in both fat & water

2. CISPLATIN[1] (0.5 mg/mL) – Commercial IV drug

- Direct killing: Cause apoptotic cell death
- Immune effects: Attracts and binds T-Cells

3. VINBLASTINE[2] (0.1 mg/mL) – Commercial IV drug

- Direct killing: Stop cell replication
- Immune effects: Matures dendritic cell

Manufacturing Process

Mixes components in a vessel:

- SHAO, Cisplatin, Vinblastine
- +Water
- +Excipients

Result:

- Cisplatin and Vinblastine form a molecular complex (non-covalent) with SHAO
- This clear solution is soluble in fat and water

Sterile Filling

INT230-6

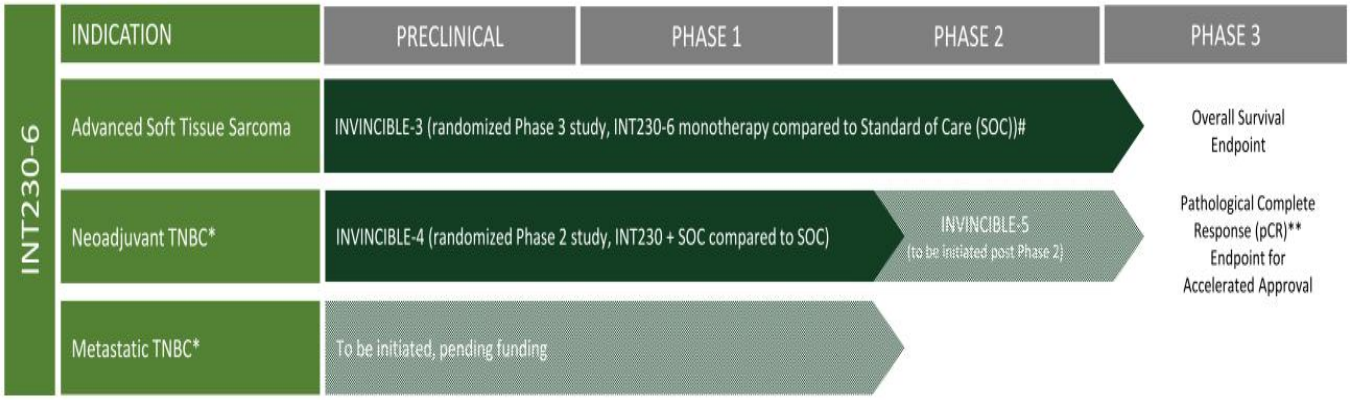
When mixed, SHAO makes the cytotoxic agents soluble in fat and water at the same time

[1] *Clin Cancer Res; 20(11) June 1, 2014*

[2] *Cancer Res; 2009 Sept 1: 69(17): 6987-6994*

Late-Stage Pipeline Programs

For Metastatic and Presurgical Settings



New patient enrollment in INVINCIBLE-3 paused March 18, 2025 pending additional funding

* TNBC: triple negative breast cancer

**Pathological Complete Response (pCR): refers to the absence of any evidence of cancer in the breast tissue and regional lymph nodes after neoadjuvant therapy (chemotherapy given before surgery)

Orphan Drug (Sarcoma INT230-6 components)

- Tax credits for qualified clinical trials
- Exemption from user fees
- Potentially seven years of marketing exclusivity (post-approval)

Fast Track Designation (Metastatic Breast Cancer)

- More frequent meetings with FDA
- Priority and rolling reviews
- Eligibility for accelerated approval

Solid Tumors – Why are these invaders so deadly?

Many cancers typically lack blood vessels, are hard and dense, have high fat content and delivering intravenously or orally administered drugs into cancer cells is challenging

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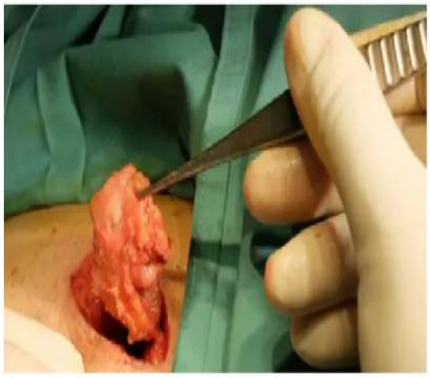
Presurgical Breast Cancer



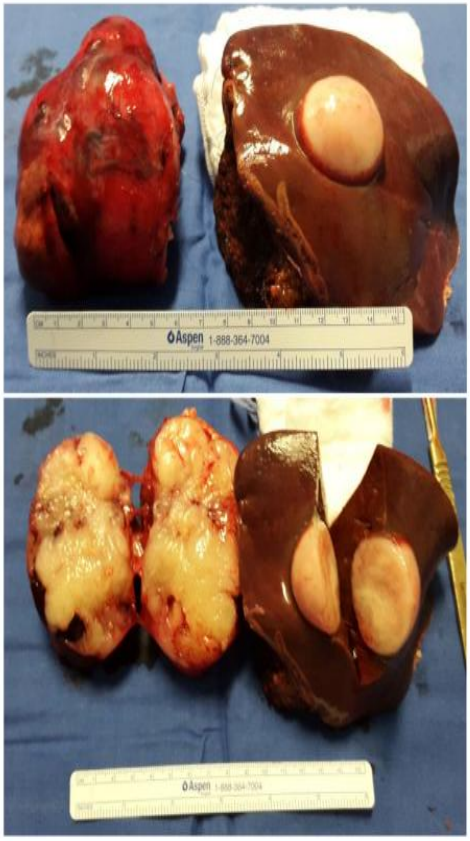
Breast Cancer – Lumpectomy

Lumpectomy is the surgical resection of a breast tumor and some surrounding tissue.

Tumor sizes typically up to 5 cm.

Lumpectomy photo from:
ihttps://icloudhospital.com/specialties/lumpectomy-partial-breast-resection

Metastatic Sarcoma



Sarcoma

Upper panel: Gross appearance of mesenteric leiomyosarcoma on left and liver metastasis on right.

Lower panel: Each lesion bi-valved.

Tumor sizes typically up to 30 cm

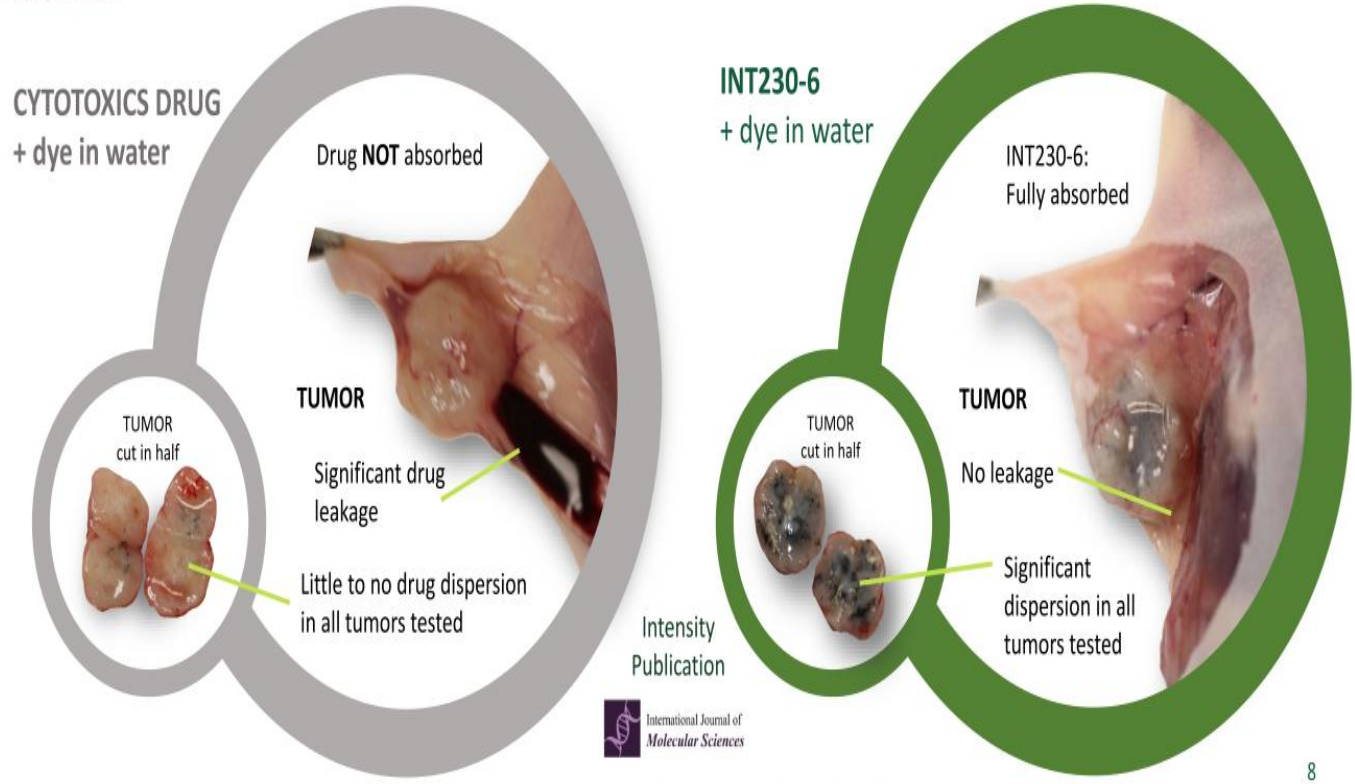
Sarcoma tumor images from:
Schoucair, Ramy et. al. (2018). International Journal of Surgery Case Reports. 49. 10.1016

INT230-6: A Unique Anti-Cancer Therapy

A Water Solution That Kills Fatty or Stromal Tumors and Does Not Harm Healthy Tissue

Human pancreatic cancer in mouse model

*Tumors contain high percentages of fat and are under high pressure



Intensity Publication

International Journal of Molecular Sciences

Dose is set by a tumor's volume or diameter

Phase 2 Presurgical Breast Cancer Study *(INVINCIBLE-2) 91 Women*

Women who waited from diagnosis to surgery without treatment, except for 1 to 3 doses of INT230-6

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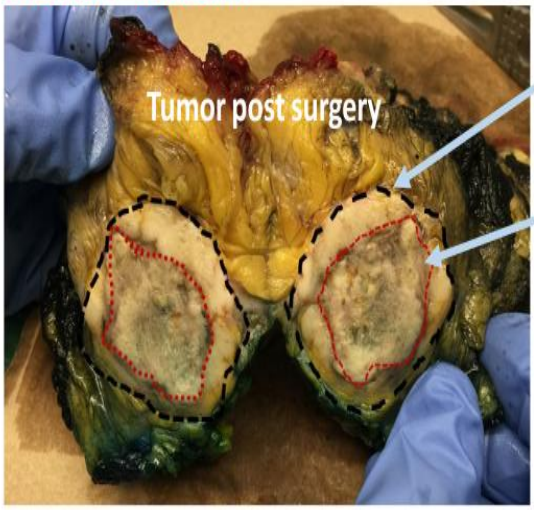
Patient #14:

3.9 cm invasive ductal cancer: 2 injections

May 6 — Injection #1: Dose 7.4 cc

May 13 — Injection #2: Dose 14.8 cc

May 20 — Surgery



Final Pathology (significant necrosis ~85%)

Tumor Extent

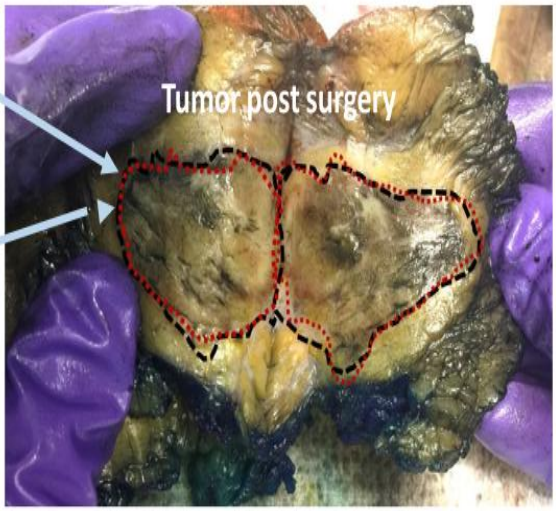
Extent of necrosis within the tumor after INT230-6 injections

Patient #20:

4.4 cm invasive lobular cancer: 1 injection

May 27 — Dose 21.3 cc

June 16 — Surgery

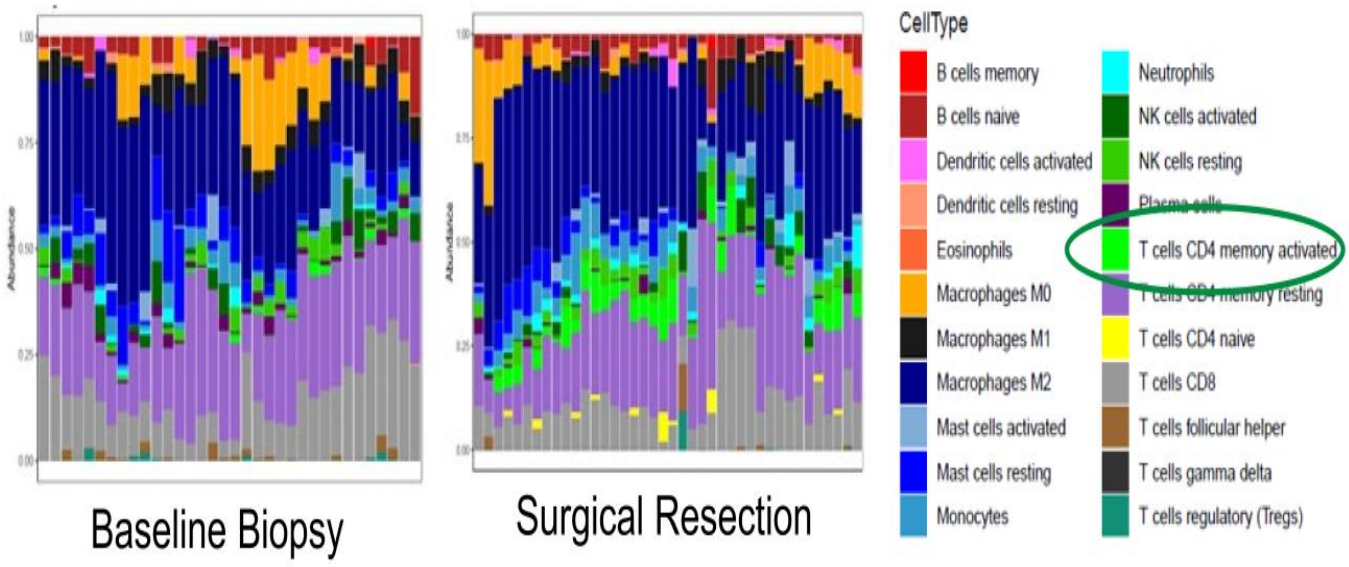


Final Pathology (significant necrosis ~95%) Cancer is mostly ghost cells

The degree of tumor death is dependent on the total dose given per treatment

Phase 2 Presurgical Breast Cancer Study *(INVINCIBLE-2)*

Differential Immune Cell Composition in Regions of Interest Within INT230-6 Treated Tumors



Changes in the immune cell composition pre- and post-treatment in INT230-6 treated tumors

Each bar represents an individual patient

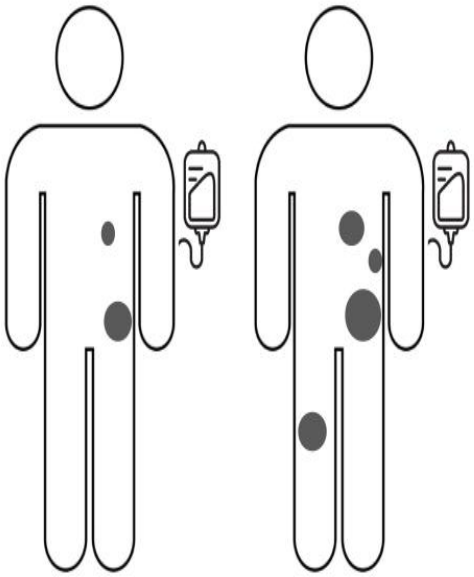
The most significant changes are increases in the tumors of CD4 memory T-cells and NK T-cells

INT230-6 Dosing Paradigm is Personalized

Current Dosing Methods are One-Size-Fits All

Current Systemic Treatment Approach

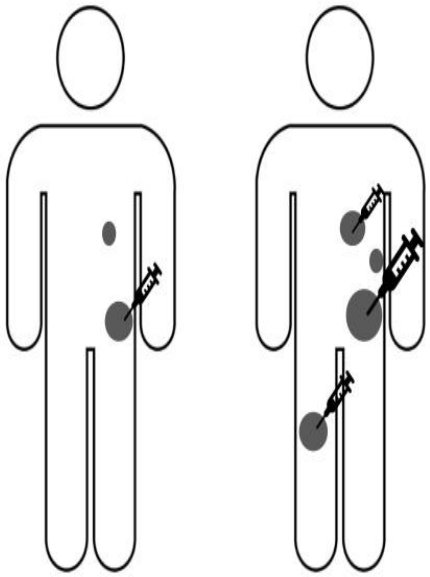
Dosing is set by patient's height and weight, or fixed dosing, though body size has no correlation with survival



Those patients with more disease have worse outcomes

Our Treatment Approach

INT230-6 dosing is set by amount of patient's tumor burden, dose for each tumor is set by its size



Patients with different tumor burdens receive a personalized dose to kill their tumors and induce a patient-specific immune response

It is unnecessary to inject all tumors, especially tumors <1 cm[11]

INT230-6 for
Presurgical Triple-Negative Breast Cancer
INVINCIBLE-4 Study

Triple-Negative Breast Cancer (TNBC) Is a Virulent Subtype Associated With Early Onset and Increased Risk of Early Recurrence

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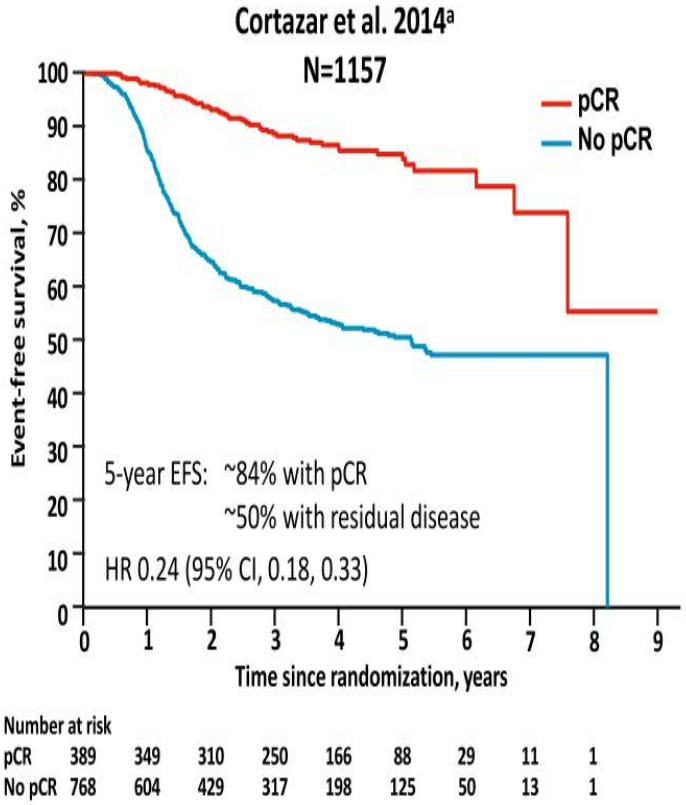
- TNBC accounts for 15% to 20% of breast cancers[a,b]

Region	New cases	Deaths
Worldwide[c]	~420,000	~150,000
United States[d]	~56,000	~10,000

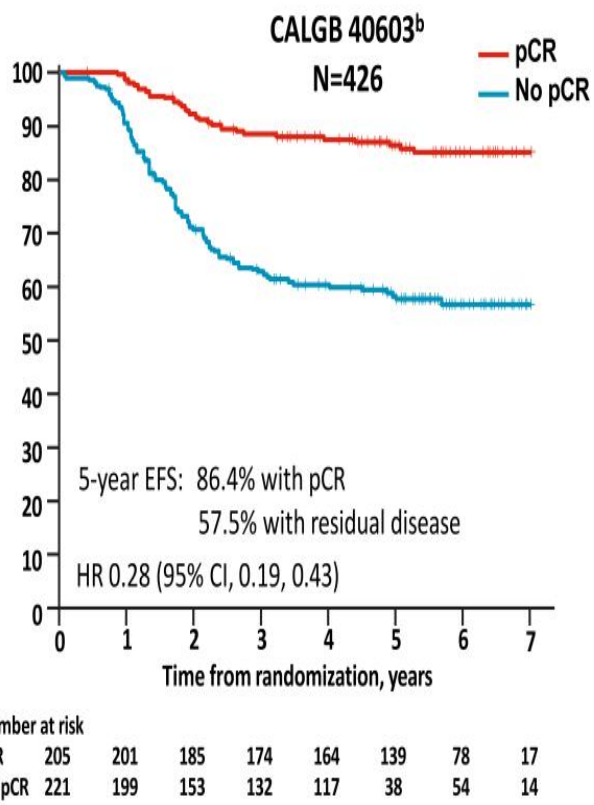
- At diagnosis:
  - Majority of tumors (~70%) are histologically grade 3 and highly proliferative[e]
  - Majority diagnosed at stage II (43%) or stage III (19%)
- Recurs 1 to 3 years following diagnosis in lungs, liver, and brain

[a] Arnedos M, et al. *Ther Adv Med Oncol*. 2012;4(4):195-210; [b] Bauer KR, et al. *Cancer*. 2007;109(9):1721-8; [c] Bray F, et al. *CA Cancer J Clin*. 2018;68:394-424; [d] Siegel RL, et al. *CA Cancer J Clin*. 2020;70:7-30; [e] Urru SAM, et al. *BMC Cancer*. 2018;18(1):56.

Poor Survival Prognosis in High-Risk, Early-Stage TNBC Having Residual Disease (no pCR) After Neoadjuvant Chemotherapy



Number at risk									
pCR	389	349	310	250	166	88	29	11	1
No pCR	768	604	429	317	198	125	50	13	1

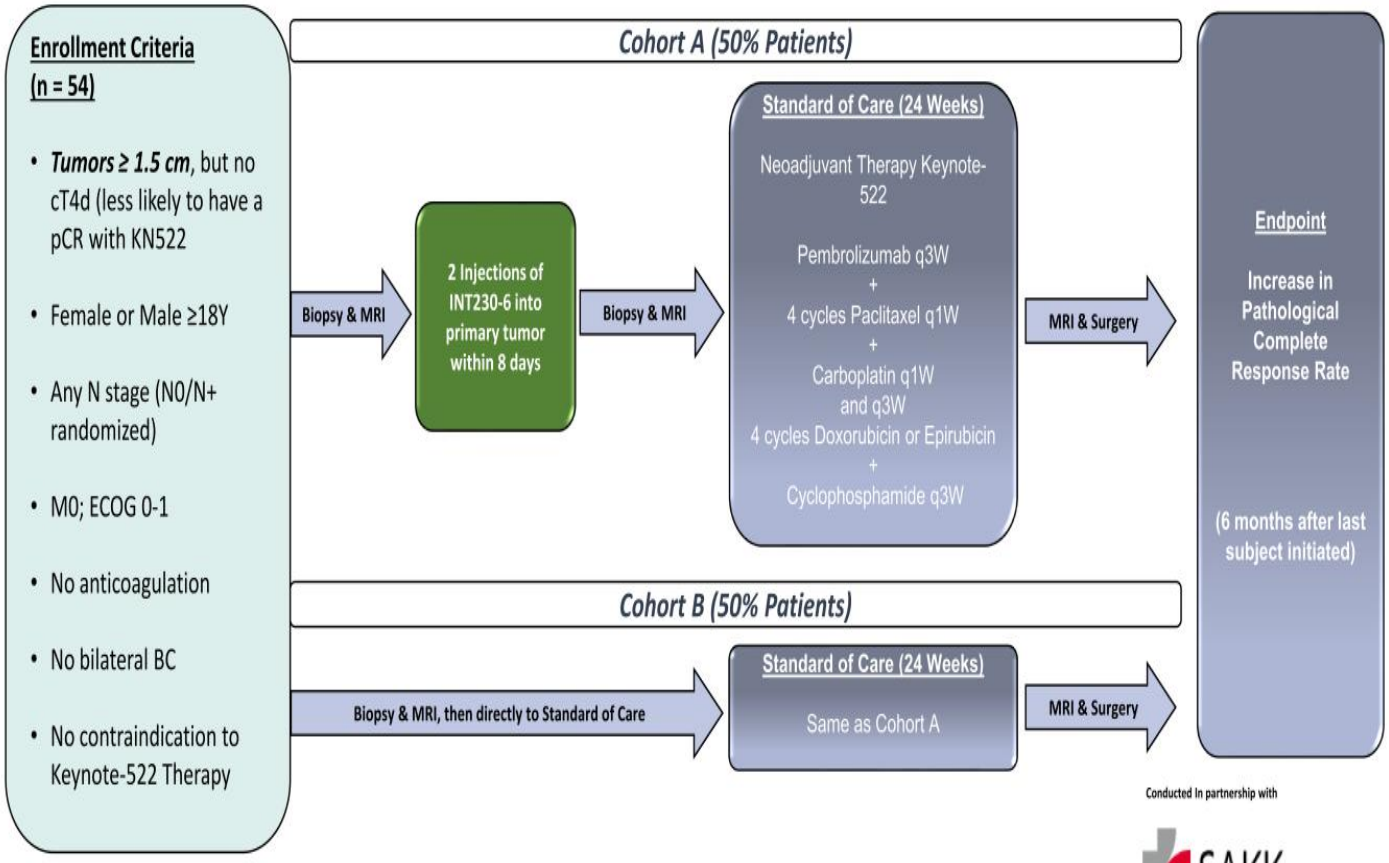


Number at risk								
pCR	205	201	185	174	164	139	78	17
No pCR	221	199	153	132	117	38	54	14

[a] Cortazar P, et al. *Lancet*. 2014;384:164-172; [b] Sikov WM, et al. Presented at ASCO 2019 Abstract 591.

Phase 2 Neoadjuvant Triple Negative Breast Cancer (TNBC) Study *(INVINCIBLE-4)*

Keynote-522 +/- INT230-6 Trial Design



Conducted In partnership with

Non-comparative pCR hypothesis testing trial design

Phase 2 INVINCIBLE-4 TNBC Study *(IT-04)*

After 8 Days: live cancer has decreased significantly (as seen by lower contrast uptake)

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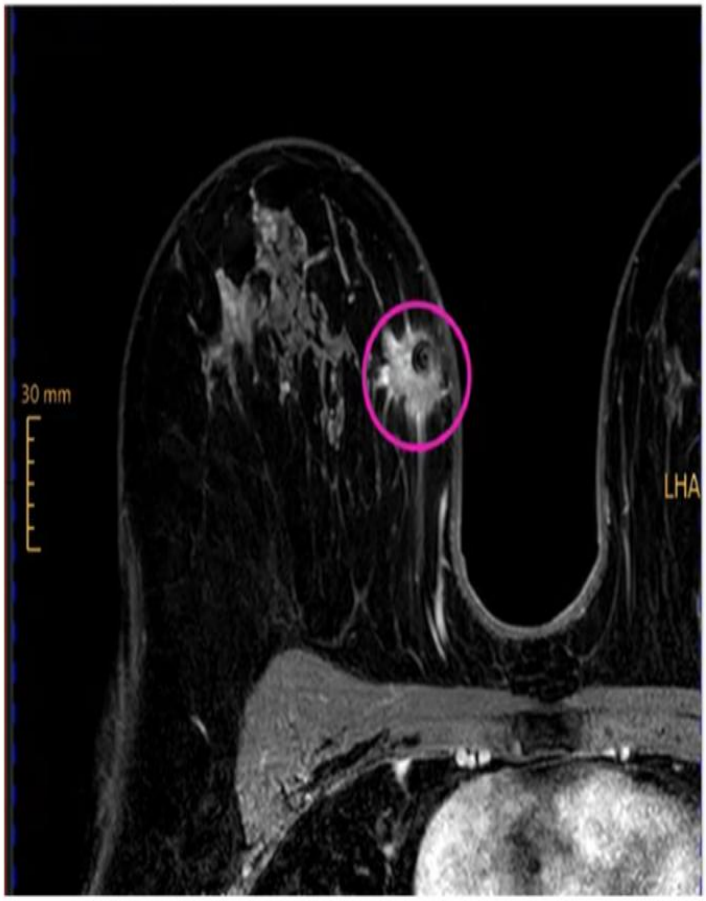
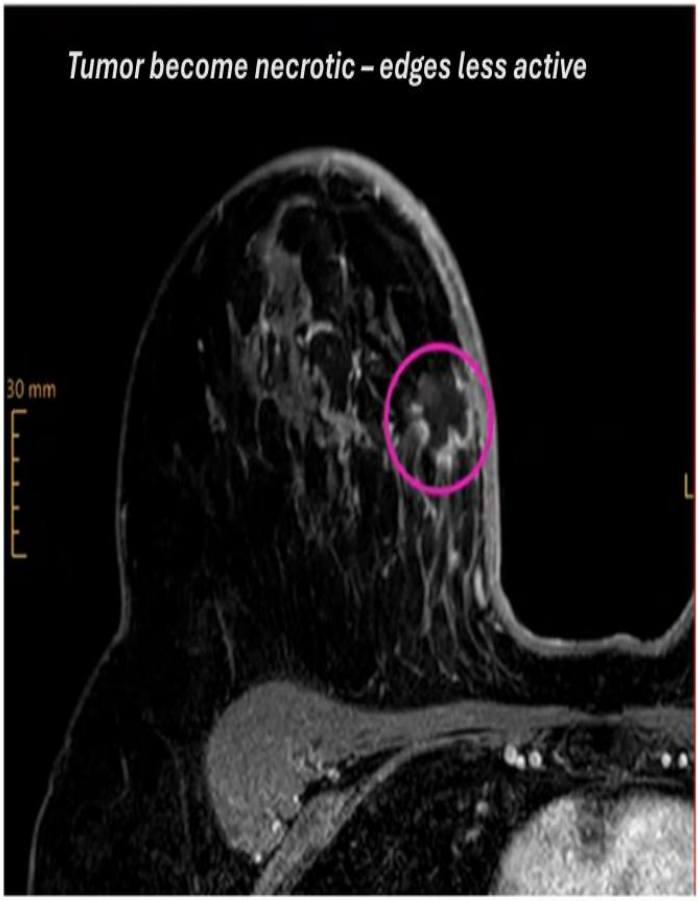
Before first injection



AFTER 2 Injections



INT230-6 in Metastatic Cancers

Phase 1/2 Refractory or Metastatic Cancer Study *(IT-01)*

Favorable Safety as Active Agents Remain in the Tumor

IT-01 Study

110* patients, 20 cancer types; **64** patients on INT230-6 alone, **30** on INT230-6+Keytruda and **18** of INT230-6 + Yervoy

>95% of the active agents remain in the tumor relative to the drugs given IV
The drug retention is independent of the cancer type, location or size

Only 7 patients (10.9%) had a Grade 3 treatment emergent adverse events (TEAE) related to INT230-6 alone (no Grade 4 or 5)

Most common drug-related adverse events were mild or moderate injection site pain, fatigue, and brief nausea

*Two patients were in both the INT230-6 alone and INT230-6 + Keytruda cohorts

Phase 1/2 Refractory or Metastatic Cancer Study *(IT-01)*

Live cancer decreases significantly over time (as seen by lower contrast uptake)

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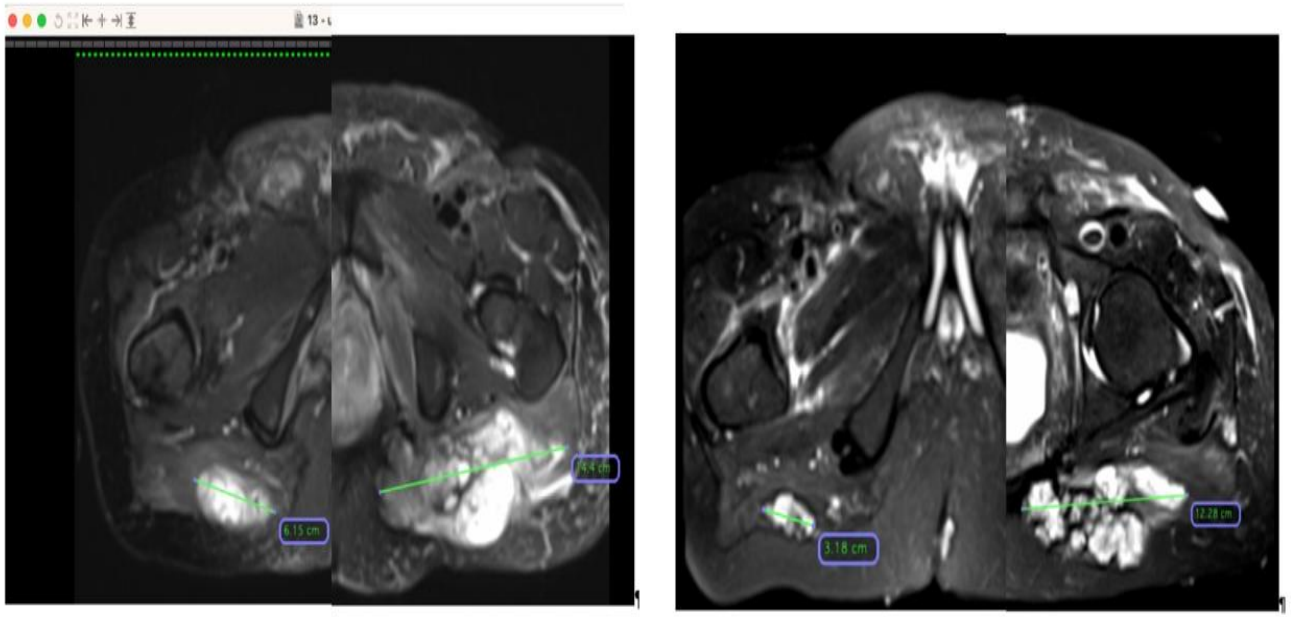
Sarcoma subject:

2 tumors at baseline: 21Mar 2018

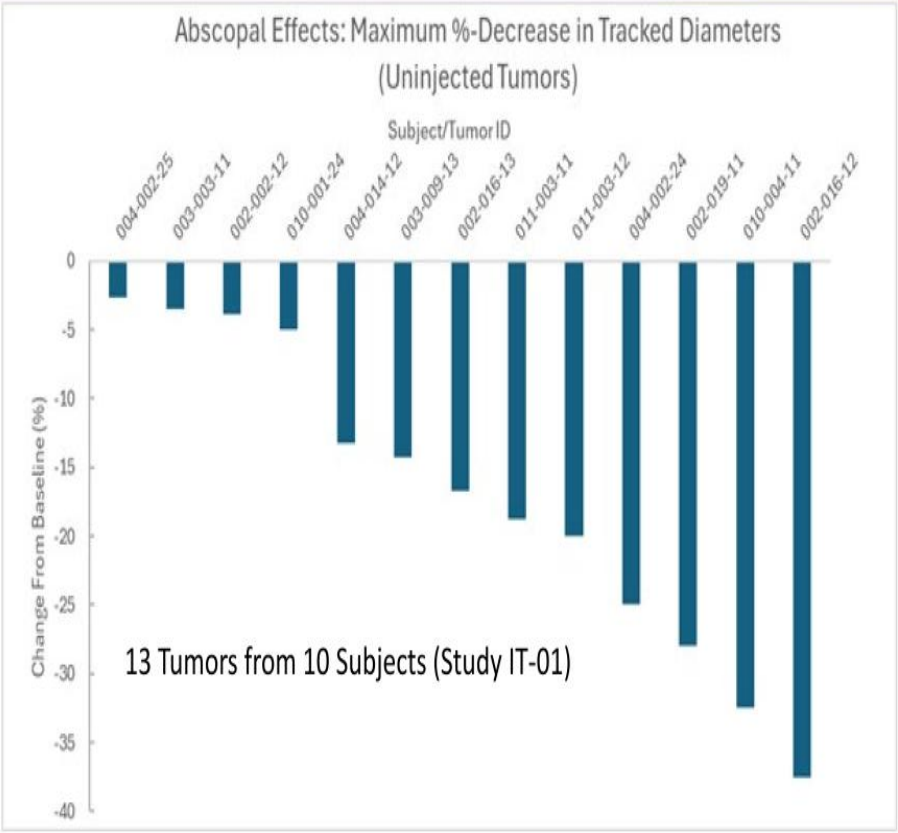
FU3: 30Oct2018



6.15 cm 14.4 cm 3.18 cm 12.28 cm

Tumor become necrotic and cystic: volume increases then declines

Abscopal Responses - Maximum reduction in Longest Diameter of Uninjected Tumors



Abscopal effects may be underestimated;

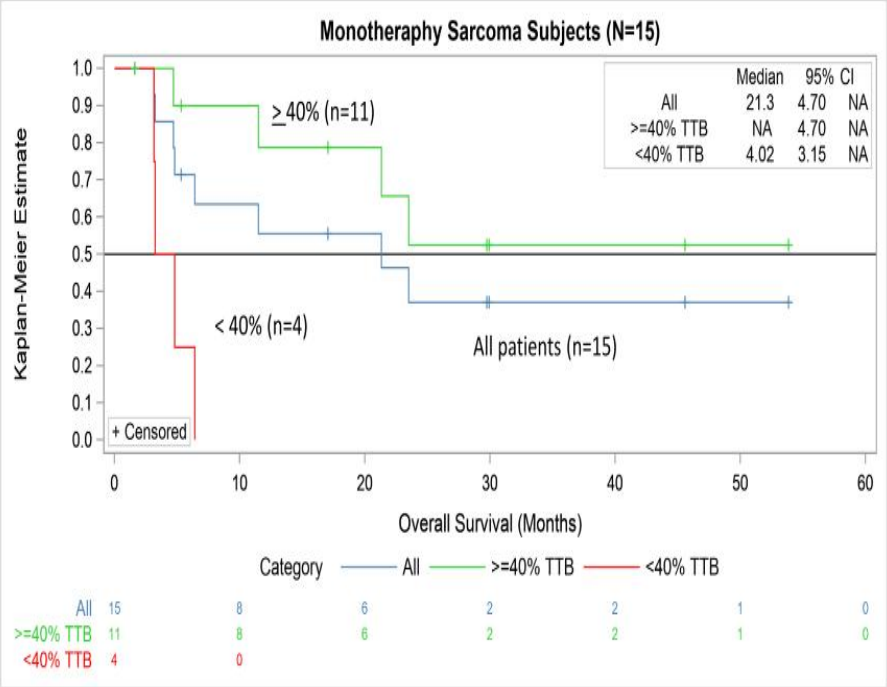
- No tumors under 1 cm in diameter were recorded, and
- Many tumors above 1 cm were untracked per RECIST target guidelines

Refractory or Metastatic Sarcoma Subpopulation Study *(IT-01)*

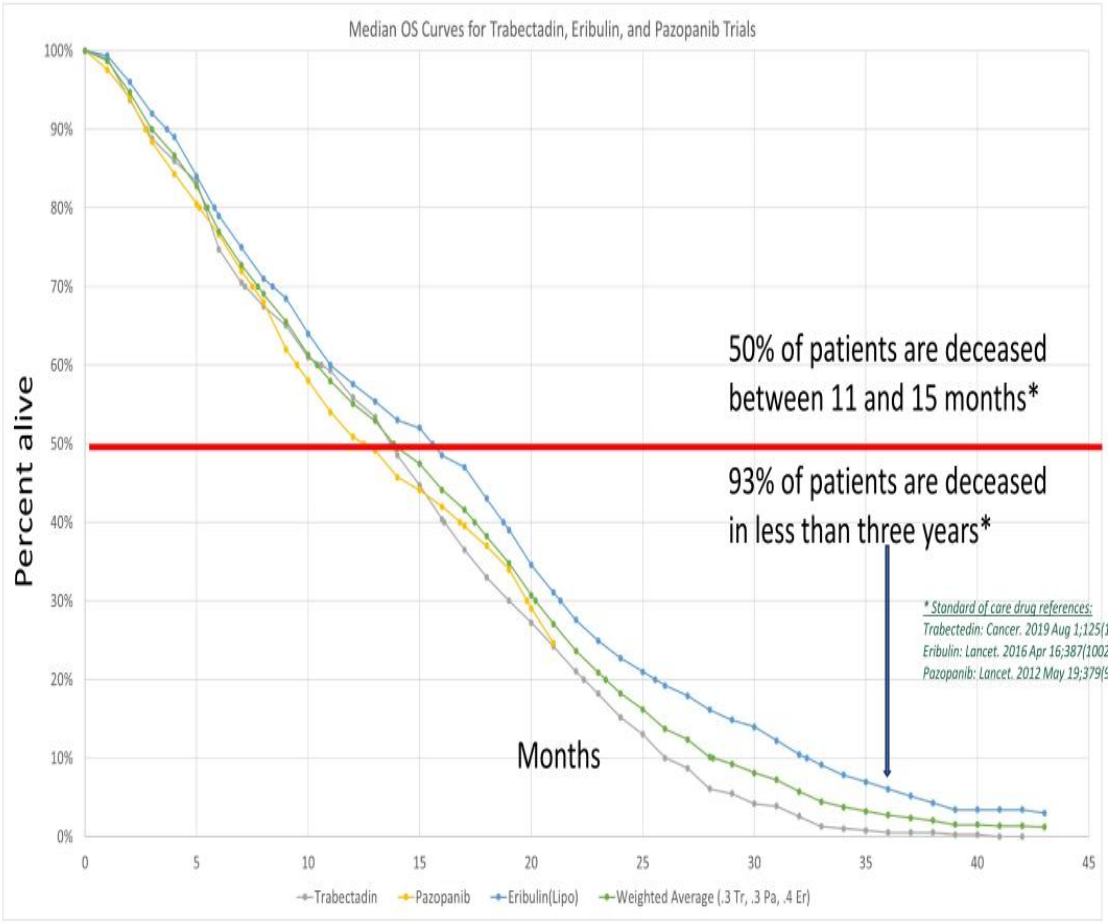
Median Overall Survival (mOS): 21.3 Month All Patients;
mOS not yet reached for dose ≥ 40% of TTB

Median OS improved with more drug administered relative to the patient's total tumor burden (TTB)

Kaplan Meier estimates



Overall Survival (OS) of Sarcoma Patients is Poor After First Therapy fails Second and Third line Treatments – Trabectedin, Pazopanib and Eribulin



Phase 3 Soft Tissue Sarcoma (STS) Study *(INVINCIBLE-3)*

Trial Design – 32 sites contracted; study treating patients

n = 333

Enrollment Criteria

- Subtypes: unresectable or metastatic
  - Liposarcoma
  - Undifferentiated pleomorphic sarcoma
  - Leiomyosarcoma
- ≥ 18 years
- ECOG PS ≤ 2
- 2L/3L
- Measurable disease by RECIST 1.1
- At least one target tumor for injection > 2 cm in longest diameter

2:1

222 patients

INT230-6 Monotherapy

- INT230-6 every 14 days, 5 sessions
- Maintenance every 12 weeks, for 22 months

Dose of 1 mL of INT230-6 per every 2cc of an injected tumor (max 175 mL per session)

111 patients

Standard of Care

- **Pazopanib**: 800 mg PO QD

or

- **Trabectedin**: 1.5 mg/M^2 BSA as a 24-hour IV infusion Q21 days

or

- **Eribulin**: 1.4 mg/M^2 BSA IV on Days 1 and 8 q21 days EU 1.23 mg//M^2

Primary Endpoint
•Overall Survival (OS)

Secondary Endpoints
•OS for leiomyosarcoma
•OS for liposarcoma

Exploratory
Quality of Life (QoL)

Interims Looks
At 20%, 40% and 60% of events (deaths)

Final Data Readout
At 80% of events (deaths)

- No crossover allowed between SOC and INT230-6.
- Disease progression will be determined by the World Health Organization (WHO) criteria in conjunction with scan data.

Anticipated Key Milestones

*Contingent on sufficient capital financing to fund clinical trials

Financial Highlights

Balance Sheet

(All Figures in Thousands)	Pro Forma March 31, 2025*
Cash and Cash Equivalents	2,829
Total Assets	4,965
Total Debt	-
Total Liabilities	2,731
Total Stockholder's Equity	2,234

Cash and Cash Equivalents, Total Assets, and Total Stockholder's Equity adjusted to include $1.9 million of net proceeds from the April 2025 financing

Capitalization Table

	June 5, 2025
Shares Outstanding	18,398,202
Options (WAEP $4.10)	4,040,801
Warrants (WAEP: $1.70)	8,308,229
Fully Diluted Shares Outstanding	**30,747,232**

Management Team

Extensive Oncology, Drug Development, and Public Company Experience

Lewis H. Bender, *MIT ChE, MS, MA, MBA*
Founder and CEO

- Drug delivery expertise Preclinical through Phase 3
- Public biotech company CEO experience

Emisphere — CEO, CTO, VP, BD & Manufacturing

Roche — Manufacturing

Interleukin Genetics — CEO

Joseph Talamo, *CPA*
Chief Financial Officer

- Public CFO, 30 years,
- Extensive M&A and financing transactions

LISATA Therapeutics; HiberCell; Bristol Myers Squibb; OSI pharmaceuticals; KPMG

Kimberly Guedes, *RN, MBA*
Vice President, Clinical Operations

- 25 years experience
- Global Phase 3 Experience

Bristol Myers Squibb; MERCK; Centrexion Therapeutics

John Wesolowski, *MBA, CPA*
Principal Accounting Officer and Controller

Yale; KMG

KEY MANAGEMENT

Doranne Frano
VP, Regulatory & Quality

Ian B. Walters, MD
Chief Medical Officer

Barbara Mohl
VP, Human Resources

Rita Cooney Ph.D.
Analytical Chemistry

Joseph Bernadino, Josh Rodriques
Manufacturing API and Drug Product

James M. Ahlers
EVP, Corporate Strategy

La Jolla Pharmaceutical; portage; Bristol Myers Squibb; REGENERON; Emisphere; CYTEC; Emisphere; Danforth Advisors; Intarcia

BOARD OF DIRECTORS

Lewis H. Bender
Founder and CEO

Daniel Donovan
CEO, rareLifeSolutions, Inc.

Emer Leahy, Ph.D.
CEO, PsychoGenics Inc.

Mark A. Goldberg, MD
CEO, Allucent
Executive Chairman, THREAD Research

Thomas Dubin
Former Chief Counsel, Alexion

Emisphere; Roche; Pfizer; rareLife solutions; PsychoGenics; THREAD; Allucent; ALEXION AstraZeneca Rare Disease

Company Highlights

Unmet need	Poor survival prognosis in target indications using standard of care
Diffusion-based MOA	Utilizes a novel diffusion enhancer molecule that is soluble in both fat & water
Two Ongoing Trials	Phase 2 in presurgical breast cancer, Phase 3 in metastatic sarcoma
Favorable Safety	No grade 4 or grade 5 treatment emergent adverse effects displayed
Metastatic Disease	Significant necrosis seen in treated tumors post surgery, abscopal effects also present

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A NEW WEAPON
IN THE WAR ON CANCER

Thank you!