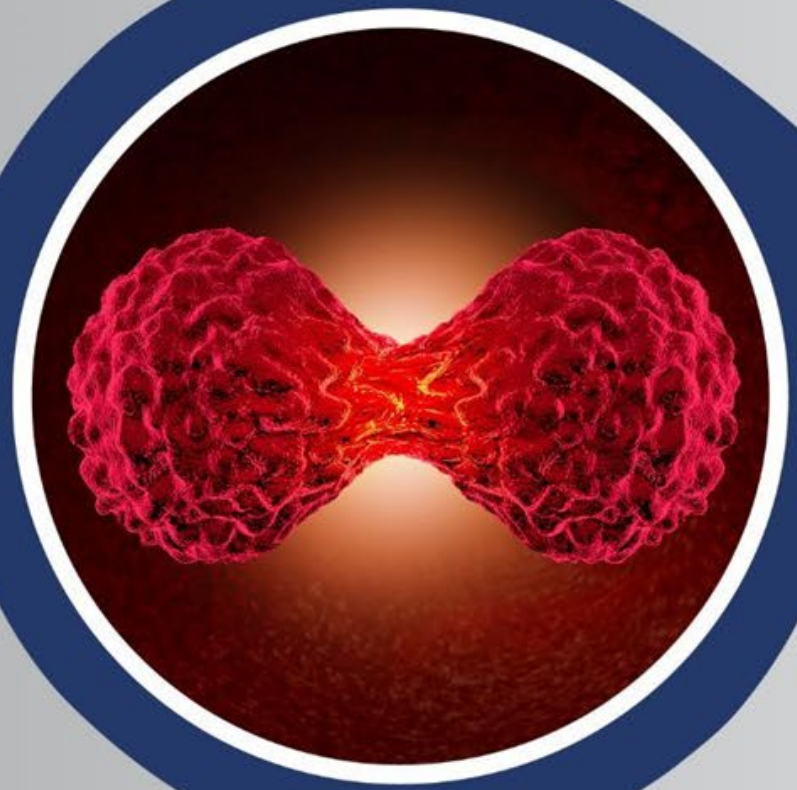


ONCTERNAL therapeutics™

TARGETING CANCER

New Science. New Cancer Therapies. New Hope.

Company Overview – May 2024

FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking statements (including within the meaning of §21E of the U.S. Securities Exchange Act of 1934, as amended, and § 27A of the U.S. Securities Act of 1933, as amended). Forward-looking statements, which generally include statements regarding goals, plans, intentions and expectations, are based upon current beliefs and assumptions of Oncternal Therapeutics, Inc. ("Oncternal") and are not guarantees of future performance. Statements that are not historical facts are forward-looking statements, and include statements regarding the expected timing for achieving key milestones, the timing of regulatory communications and completing and announcing results of clinical trials of Oncternal's product candidates, the anticipated market potential, duration of patent coverage, ability to obtain and maintain favorable regulatory designations, potential accelerated approval pathways for Oncternal's product candidates and preclinical programs, and Oncternal's anticipated cash runway.

All forward-looking statements are subject to risks and uncertainties, including risks and uncertainties inherent in Oncternal's business, including risks associated with the clinical development and process for obtaining regulatory approval of Oncternal's product candidates such as potential delays in the commencement, enrollment and completion of clinical trials; the risk that results seen in a case study of one patient likely will not predict the results seen in other patients in the clinical trial; the risk that interim results of a clinical trial do not predict final results and that one or more of the clinical outcomes may materially change as patient enrollment continues, following more comprehensive reviews of the data, as follow-up on the outcome of any particular patient continues, and as more patient data become available; and other risks described in Oncternal's filings with the U.S. Securities and Exchange Commission ("SEC"). Except as required by applicable law, Oncternal undertakes no obligation to revise or update any forward-looking statement. All forward-looking statements in this presentation are current only as of the date on which the statements were made. Additional factors that could cause actual results to differ materially from those expressed in the forward-looking statements are discussed in Oncternal's filings with the SEC.

ONCT-534, ONCT-808 and zilovertamab are investigational product candidates that have not been approved by the U.S. Food and Drug Administration for any indication.

This presentation includes certain information obtained from trade and statistical services, third-party publications, and other sources. Oncternal has not independently verified such information and there can be no assurance as to its accuracy.

Corporate Highlights

ONCT-534: DUAL-ACTION ANDROGEN RECEPTOR INHIBITOR (DAARI)

- Fourth cohort (300mg once daily) fully enrolled in Phase 1/2 dose escalation study in R/R mCRPC
- Received Fast-Track designation from U.S. FDA
- Activity in preclinical prostate cancer models of androgen receptor inhibitor resistance, including LBD mutations, AR overexpression and AR splice variants such as AR-V7

ONCT-808: AUTOLOGOUS CAR T CELL THERAPY TARGETING ROR1

- Encouraging clinical activity in Phase 1/2 clinical study in aggressive B-cell NHL, including CD19 CAR T treatment failures
- Study is open and enrolling with protocol amendments
- Robust and scalable manufacturing process using closed system

ZILOVERTAMAB: POTENTIALLY FIRST-IN-CLASS MONOCLONAL ANTIBODY TARGETING ROR1

- Encouraging 100% PFS for patients with CLL and TP53 aberrations being further investigated
- Discussions ongoing with BTK inhibitor developers

MULTIPLE CATALYSTS WITHIN CASH RUNWAY PERIOD

- ONCT-534 Phase 1/2 dose escalation study in R/R mCRPC initial data in 2Q 2024
- ONCT-808 clinical data update in aggressive B-cell NHL in mid 2024
- Cash and short-term investments of $27.0M as of March 31, 2023, cash runway into Q1 2025

Experienced Team

ONCTERNAL therapeutics™

James Breitmeyer, MD, PhD
CEO, Founder, Director

Bavarian Nordic · Lilly · cadence Pharmaceuticals · HCRI Harvard Clinical Research Institute

Richard Vincent
CFO

Genoa Pharmaceuticals · sorrento Therapeutics · Zavante · elan +7

Salim Yazji, MD
CMO

Baxter · Baxalta · Novartis · Exelixis · Calimmune · Johnson & Johnson

Raj Krishnan, PhD
CTO/CSO

Gilead · Dynavax · Amgen · Merck

Chase Leavitt
General Counsel

Lineage Cell Therapeutics · Tang Capital Management · Latham & Watkins

Pablo Urbaneja
SVP, Corporate Development

Coherus BioSciences · McKinsey & Company

David Hale
Co-founder
Board Chairman

Santaris · micromet · CancerVax · GensiaSicor

Michael Carter, MB
Director

Roche · ICI · HealthCare Royalty Partners

Jill DeSimone
Director

Merck · teva · Bristol Myers Squibb · Abbott · ISIS Pharmaceuticals · Caliper LifeSciences

Daniel Kisner, MD
Director

Rosemary Mazanet, MD, PhD
Director

Amgen · Columbia Care · University of Pennsylvania Health System

Bill LaRue
Director

Bank of America · cadence Pharmaceuticals · CancerVax

Xin Nakanishi, PhD
Director

SPH 上海医药 Shanghai Pharma · Pfizer · SPHBio Shanghai Pharma Biotechnologies

Charles Theuer, MD, PhD
Director

TRACON Pharmaceuticals · Pfizer · TargeGen · National Cancer Institute

Robert Wills, PhD
Director

Roche · janssen · Johnson & Johnson

Robust Pipeline – Novel Product Candidates in Multiple Indications

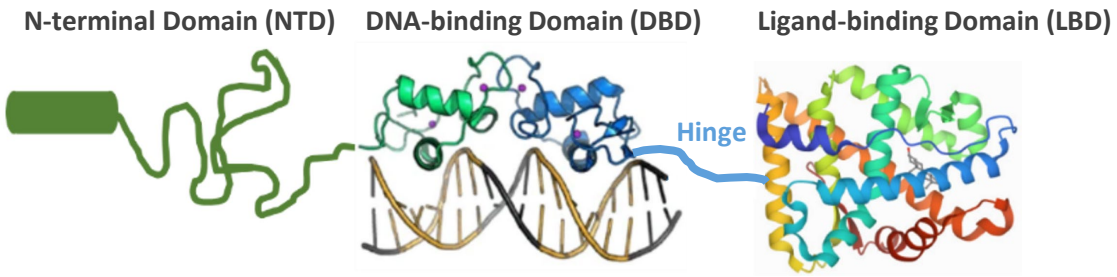
Modality	Product Candidate	Indication	Preclinical	Phase 1	Phase 2	Phase 3
Dual-Action AR Inhibitor	**ONCT-534**	Prostate Cancer			Patients Treated	
ROR1 Cell Therapy	**ONCT-808 (Autologous CAR T)**	Aggressive B-cell NHL			Patients Treated	
ROR1 mAb	**Zilovertamab**	Hematological Malignancies and Solid Tumors (ISTs)				Seeking Partnership

Table of Contents

ONCT-534 Dual-Action Androgen Receptor Inhibitor (DAARI)

Differentiated Mechanism of Action

- ONCT-534 acts on both the N-terminal domain (NTD) and the ligand-binding domain (LBD) of the androgen receptor (AR) and induces AR protein degradation
  - NTD binding essential for activity against splice-variants
- Current standard of care treatments, such as enzalutamide or apalutamide, bind to LBD only



Potential to address unmet needs in prostate cancer

- Potential next-generation treatment option for patients with R/R metastatic prostate cancer
- Compelling preclinical efficacy in vitro and in vivo
  - Activity against enzalutamide-sensitive and resistant models, including AR overexpression, LBD mutants, splice variants tumors
- Dose escalation portion of Phase 1/2 Study ONCT-534-101 in patients with mCRPC ongoing; received Fast Track designation by U.S. FDA in October 2023
- Potential in other AR-driven disease, including luminal AR-triple negative breast cancer (LAR-TNBC) and non-oncology rare disease indication

Oncternal Prostate Cancer Scientific Advisory Board

Johann de Bono, M.D., Ph.D.
Regius Professor of Cancer Research at The Institute of Cancer Research, London

- Director of the joint Drug Development Unit at The ICR and The Royal Marsden NHS Foundation Trust, London
- Lead trials of abiraterone, cabazitaxel, enzalutamide and multiple PARPi

Evan Yu, M.D.
Professor and Section Head of Medical Oncology at the Fred Hutch Cancer Center

- Medical Director of Clinical Research Support for the Fred Hutch Children's Cancer Consortium
- Focused on personalized-medicine approach and the discovery of unique prostate cancer biomarkers

Matthew Smith, M.D., Ph.D.
Director of the Genitourinary Oncology Program at Mass General

- Internationally recognized expert in prostate cancer and authored >150 peer-reviewed articles
- Lead investigator in darolutamide pivotal study

Scott Dehm, Ph.D.
Professor in Cancer Research at the University Minnesota

- Research focused on the role of AR and alterations in AR signaling in prostate cancer development and progression and re-activation the androgen/AR pathway

Howard Soule, Ph.D. – *pro-bono advisor*
Executive Vice President & Chief Science Officer at the Prostate Cancer Foundation

- Senior fellow of the Milken Institute, and member of the DoD Prostate Cancer Research Program
- Vice president and managing director of CaP CURE

Gunnar Kaufmann, Ph.D.
SVP and CSO and Head of Open Innovation at Kyowa Kirin, Inc.

- Former CSO at Oncternal, and Adjunct Assistant Professor at The Scripps Research Institute
- Led ONCT-534 preclinical development

ONCT-534 Differentiated vs other AR-targeting Therapeutic Agents

	AR antagonist	PROTAC	ANITEN	DAARI
Examples	Enzalutamide (Pfizer) Apalutamide (J&J) Darolutamide (Bayer)	ARV-110 (Arvinas)	EPI-7386 (ESSA)	ONCT-534
First-in-class Molecule	X	√	√	√
AR Degradation	X	√	X	√
N-terminal domain Binding	X	X	√	√
Active against AR LBD Mutants	certain mutants[1,2]	certain mutants[3]	?	√
Active in ENZA-resistant in vivo models	darolutamide	√	√	√
Active in AR-overexpressing in vivo models	√	√	√	√
Active in AR-SV expressing in vivo models	X	X	?	√
Active in CRPC models using intact rodents	apalutamide[4]	√	?	√

√ = Yes, X = No, ? = Unknown

1) Joseph Cancer Discov 2013; 2) Moilanen Sci Rep 2015; 3) Cancer Discov 2022; 4) Clegg Cancer Res 2012

ONCT-534 Positioning within the Evolving Prostate Cancer Landscape

Prostate Cancer Treatment Paradigm

- Active surveillance
- Surgical / chemical castration (LHRH analogues)

AR Pathway Inhibitors

- XTANDI (enzalutamide) – Pfizer/Astellas
- NUBEQA (darolutamide) – Bayer
- ERLEADA (apalutamide) – J&J
- ZYTIGA (abiraterone acetate) – J&J

Chemotherapy

PARP Inhibitors

- LYNPARZA – AZ
- TALZENNA – Pfizer

RLTs

- PLUVITCO – Novartis

Development Programs (not exhaustive)

NTD-Inhibitor

- Masofaniten - ESSA

AR degraders

- Bavdegalutamide – Arvinas
- BMS-986365 - BMS

Other MoA

- ODM-208 (CYP11A1 inhibitor) – Merck
- PF-06821497 (EZH2 inhibitor) – Pfizer

RLTs

- 177Lu-PNT2002 – Point/Lilly
- RYZ101 – RayzeBio/ BMS

ADCs/Bispecifics

- ARX517 (PSMA ADC) – Ambrx/J&J
- JANX007 (PSMA-CD3 TCE) – Janux
- JNJ-8081 (PSMA-CD3 TCE) – J&J

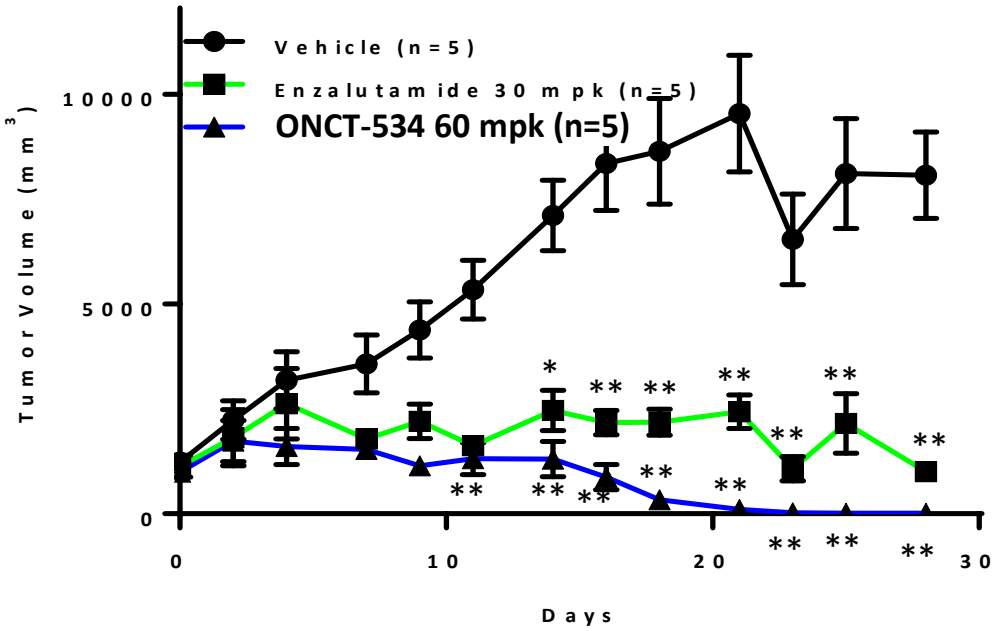
Other MoA

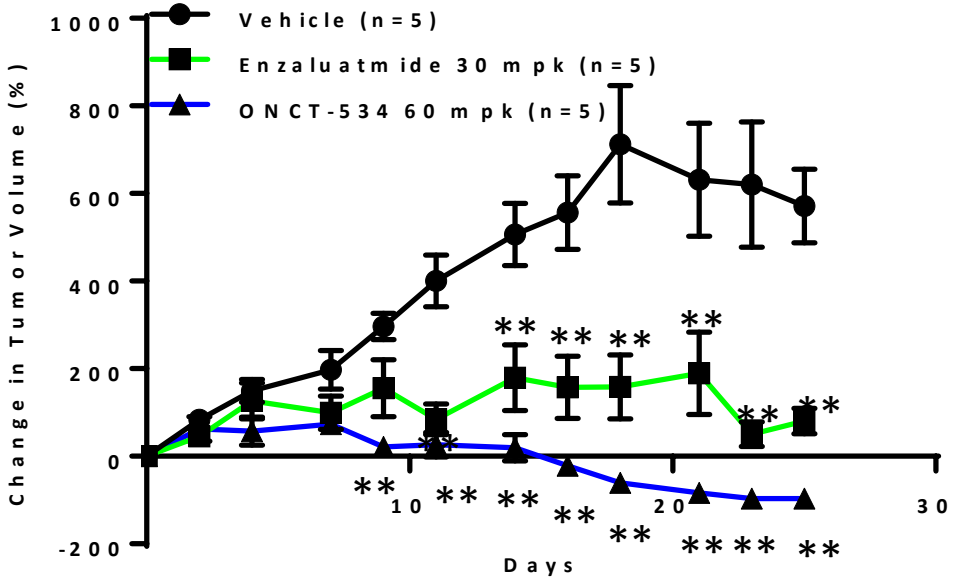
- Gedatolisib (PI3K/mTOR inhibitor) – Celcuity
- Afuresertib (AKT inhibitor) - Laekna

ONCT-534 future positioning

ONCT-534 initial positioning

ONCT-534 Exhibits Anti-tumor Activity in an ENZA-Sensitive, AR-overexpressing VCaP Model in Castrated Male Rats



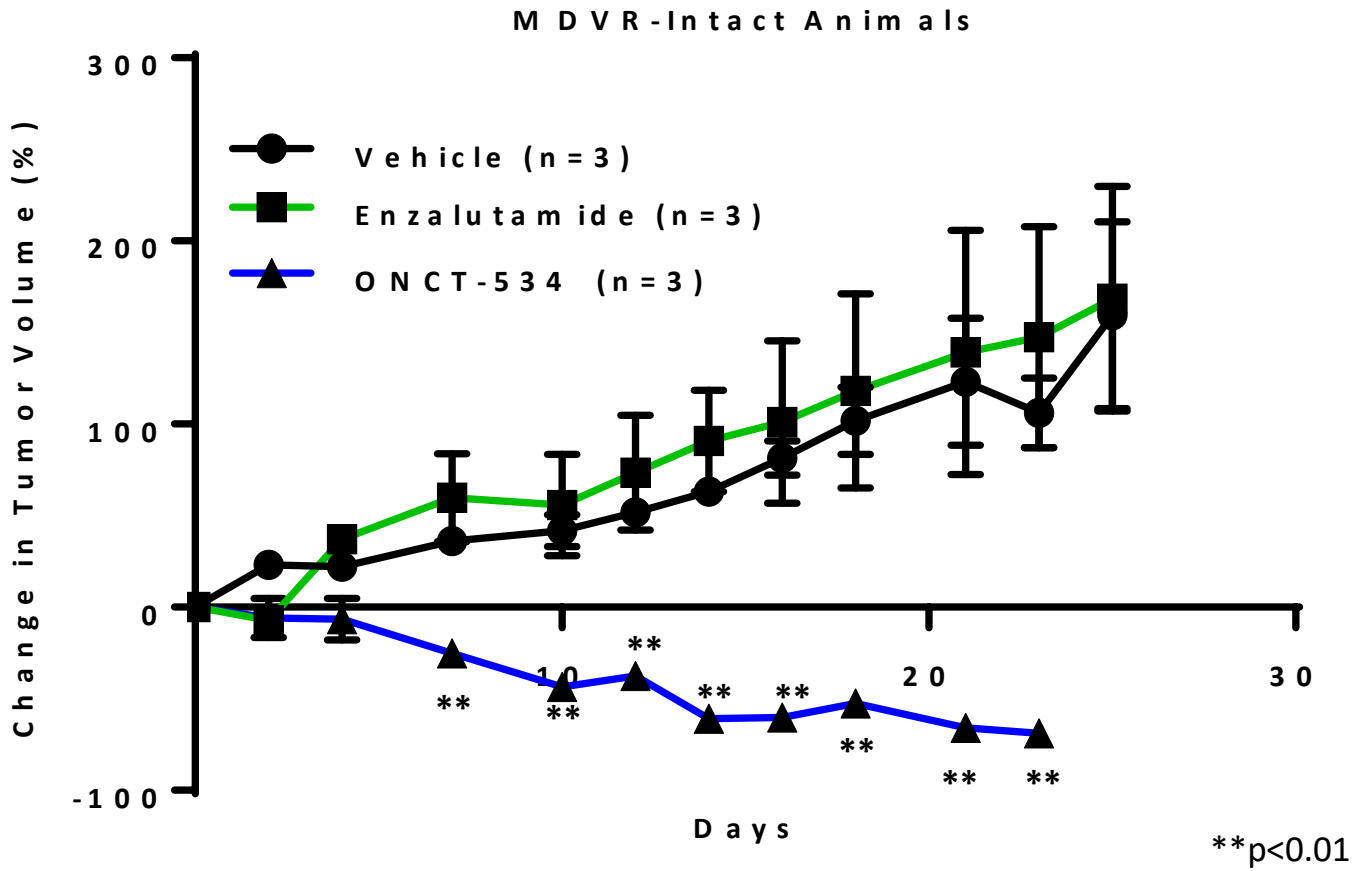


**p<0.01

ONCT-534 is active against prostate cancer models expressing high levels of a native sequence AR

Ponnusamy, Clin Cancer Res 2019

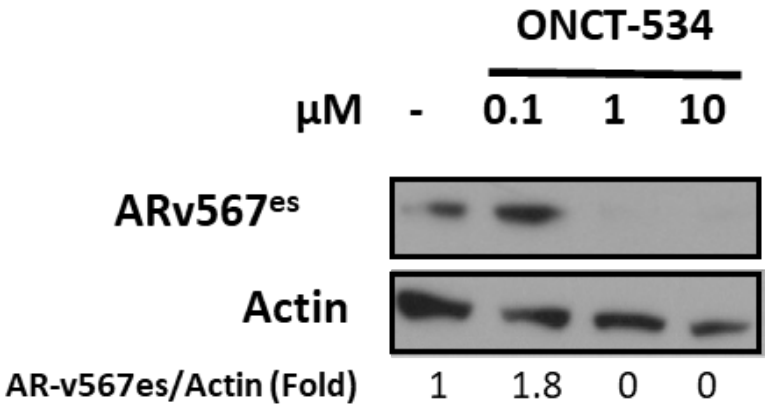
ONCT-534 Exhibits Anti-tumor Activity in ENZA-Resistant MDVR VCaP Model in Uncastrated Male Rats

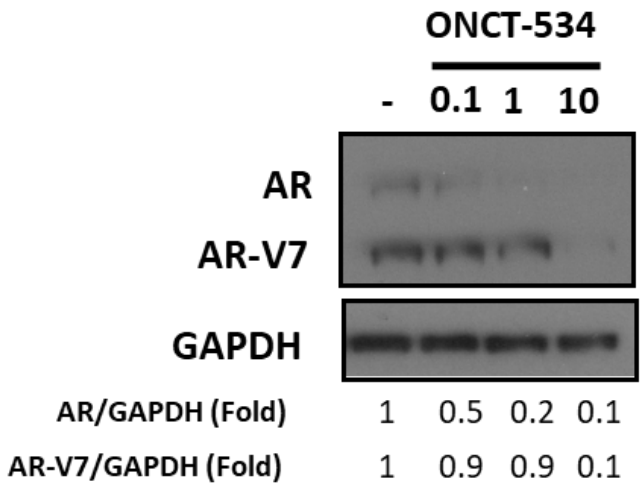


**p<0.01

ONCT-534 is active against enzalutamide-resistant MDVR prostate cancer model, even in the presence of normal androgen levels

ONCT-534 Induces Degradation of AR-SV Proteins in Prostate Cancer Cells



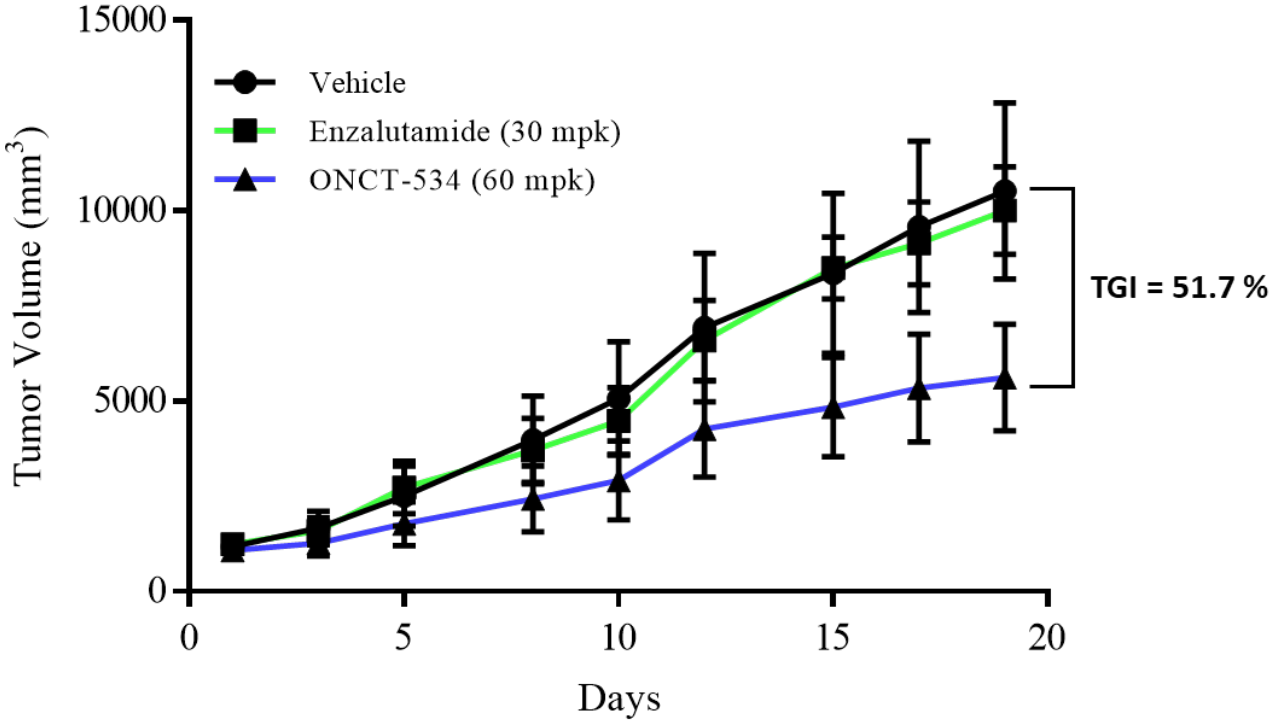


- ONCT-534 induces degradation of both native AR and splice variants ARv567^{es} and AR-V7 lacking the AR LBD
- Other studies show degradation is ubiquitin dependent

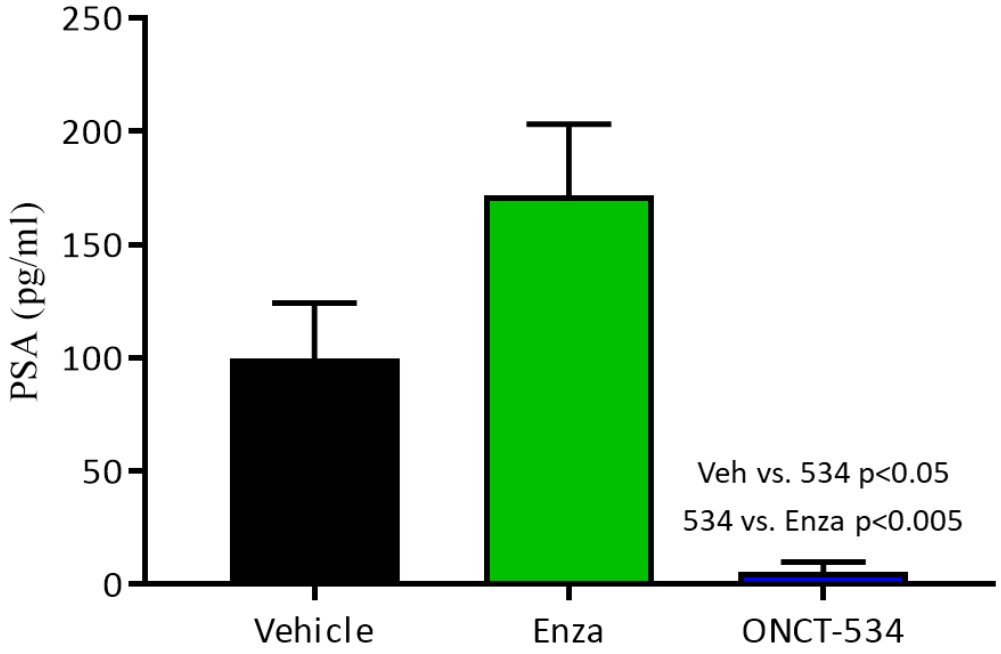
Oncternal company information

ONCT-534 Exhibits Anti-tumor Activity in AR-V7-Splice Variant Positive 22Rv1 CRPC Model

Change in Tumor Volume



Reduction in Serum PSA levels



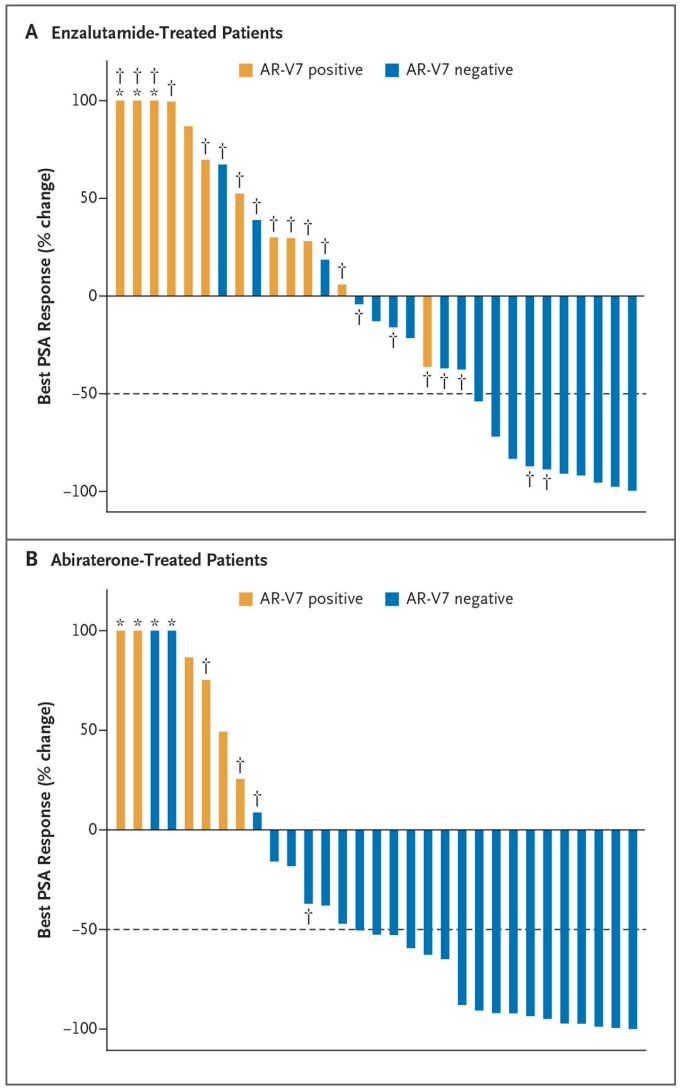
ONCT-534 is active against splice variant prostate cancer models lacking the LBD & enzalutamide is inactive

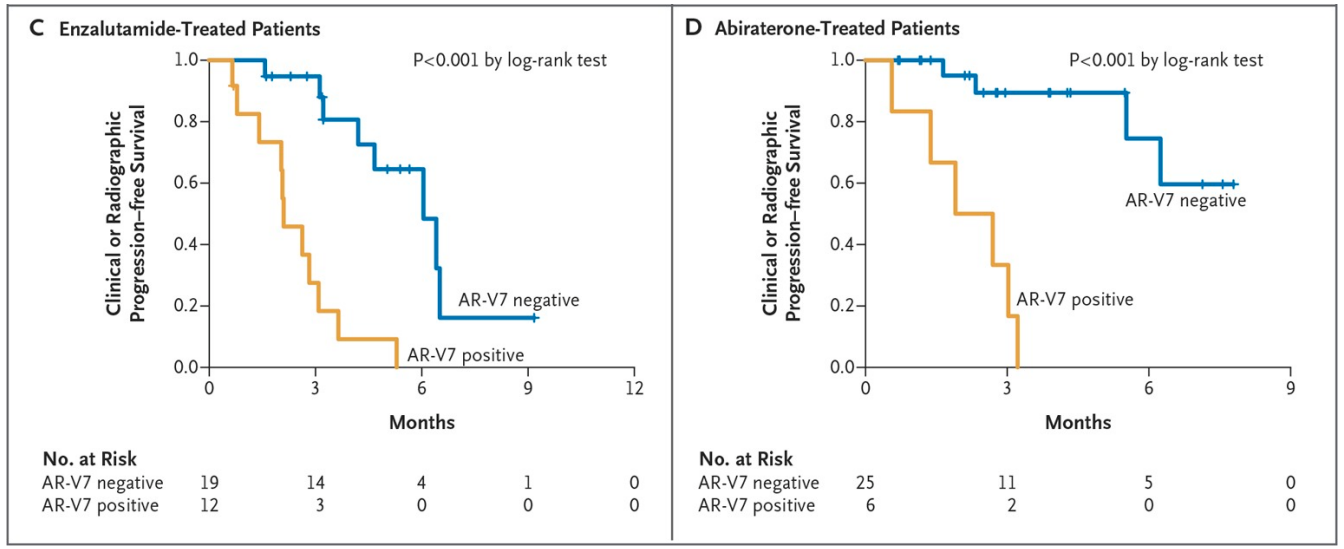
- Note: model is mixed AR dependent and AR independent, 50% is maximal AR dependent growth

1) Compagno 2007 PLoS One; 2) Li 2012 Cancer Res

Narayanan, AACR-NCI-EORTC, 2021

AR-V7 Splice Variant with Loss of AR-LBD Associated with Poor Outcomes





Treatment[1]	Baseline AR-V7+	Response: AR-V7 status	PSA50	P- value	rPFS	P- value	OS (95% CI)	P value
Abiraterone (N=31)	19% (6/31)	+	0% (0/6)	.004	2.3 mos	<.001	10.6 mos (8.5–NR)	.002
		–	68% (17/25)		>6.3 mos		>11.9 mos (11.9–NR)	
Enzalutamide (N=31)	39% (12/31)	+	0% (0/12)	.004	2.1 mos	<.001	5.5 mos (3.9–NR)	.006
		–	53% (10/19)		6.1 mos		NR (NR–NR)	

Patient Treatment Status[2]	Before enzalutamide or abiraterone	Post enzalutamide	Post abiraterone	Post abiraterone & enzalutamide
AR-V7 Prevalence	12%	25%	51%	67%

CRPC=castration-resistant prostate cancer; CTC=circulating tumor cell; M1=metastatic disease; NR=not reached; OS=overall survival; PSA=prostate specific antigen; rPFS=radiographic progression-free survival. 1. Antonarakis ES et al. NEJM. 201410.1056/NEJMoa1315815. 2. Antonarakis ES et al. ASCO 2014

Antonarakis NEJM 2014

Concepcion, Raoul S. “AR-V7 Predicts Response in CRPC” November 9, 2018.

ONCT-534-101 – Fourth Dose Level Fully Enrolled in Phase 1/2 Study

Eligibility:
- mCRPC with progressive disease
- R/R to next-gen AR pathway inhibitor
- Measurable disease
- Prior chemo allowed
- PSA increasing & > 2
- Any AR phenotype: native, amplified, LBD mutant, splice variant
- ECOG 0-2
- No CNS mets or seizure history

Dose Level 1:
40 mg oral daily

Dose Level 2:
80 mg oral daily

Dose Level 3:
160 mg oral daily

Dose Level 4:
300 mg oral daily

Dose Level 5:
600 mg oral daily

Phase 1 Adaptive BOIN design
- Safety & tolerability
- Activity (PSA)
- Identify MTD
- N = ~27

Fully enrolled

Dose Level A
- N = 9-16 evaluable

Dose Level B
- N = 9-16 evaluable

Phase 2 Simon 2-stage design
- Compare Safety & efficacy (PSA)
- Estimate ORR, CRR, DOR, PFS
- Correlate efficacy with AR phenotype
- PK/PD and AR levels
- Select RP2D and patient target

mCRPC: metastatic castrate resistant prostate cancer; Androgen Receptor pathway inhibitor: enzalutamide, darolutamide, apalutamide, abiraterone; LBD: AR ligand binding domain; MTD: Maximum Tolerated Dose; RP2D: Recommended Phase 2 Dose; ORR: Objective Response Rate; CRR: Complete Response Rate; DOR: Duration of Response

Table of Contents

ROR1 (Receptor Tyrosine Kinase-Like Orphan Receptor 1)

Compelling Tumor-Specific Target

ONCTERNAL therapeutics™

- Expressed on **most B-cell malignancies**, including
  - diffuse large B-cell lymphoma (DLBCL), chronic lymphocytic leukemia (CLL), mantle cell lymphoma (MCL)
- Expressed on **many solid tumors**
  - Increased ROR1 expression associated with more aggressive tumors, shorter PFS and OS
- ROR1 activity associated with **aggressive phenotype**
  - Invasion, metastasis, stem cell-like behavior, and resistance to treatment
- **Oncternal ROR1 pipeline differentiated and advancing**
  - Deep target biology expertise & immunotherapy experience

ROR1 Expressed on Multiple Solid and Liquid Tumors

CLL	95%
MCL	95%
Uterus	96%
Lymphoma	90%
Prostate	90%
Skin	89%
Pancreatic	83%
Adrenal	83%
Lung	77%
Breast	75%
Testicular	73%
Colon	57%
Ovarian	54%

Zhang 2012 AJP

Green 2008 Trends Cell Biol. 2008; Matsuda T 2001 Mech Dev.; Fukuda 2008 PNAS; Hudecek 2010 Blood; Zhang 2012 Am J Pathology; Zhang 2014 PNAS

Cell Therapy Scientific Advisory Board

Supporting ONCT-808 development and next-gen ROR1 Cell Therapies

ONCTERNAL therapeutics™

Michael Wang, MD

Endowed Professor in the Department of Lymphoma & Myeloma at MD Anderson Cancer Center

- Director of the Mantle Cell Lymphoma Program of Excellence and Co-Director of the B-Cell Lymphoma Moon Shot Program at MD Anderson Cancer Center
- Lead PI in Tecartus® registrational study
- Over 200 peer-reviewed publications

Angela Shen, MD, MBA

Clinical and Translational Market Sector Leader Mass General Brigham; CMO Walking Fish

- Deep clinical, regulatory, and strategic expertise in autologous and allogeneic cell therapies
- Experienced CMO in the cell therapy biotech space
- Led clinical team responsible for designing and launching Kymriah® registrational study

Marcela Maus, MD, PhD

Associate Professor, Medicine, Harvard Medical School Director of Cellular Immunotherapy, Cancer Center, Massachusetts General Hospital

- Translational physician-scientist in cancer immunology
- Lab focuses on the design, generation, and use of innovative forms of immune cell engineering
- Trained in the laboratories of Drs. Katherine High, Michel Sadelain, and Carl June

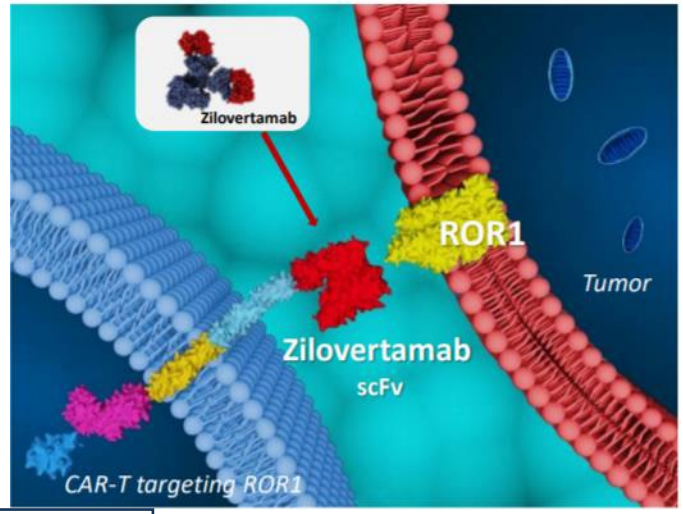
Sadik Kassim, PhD

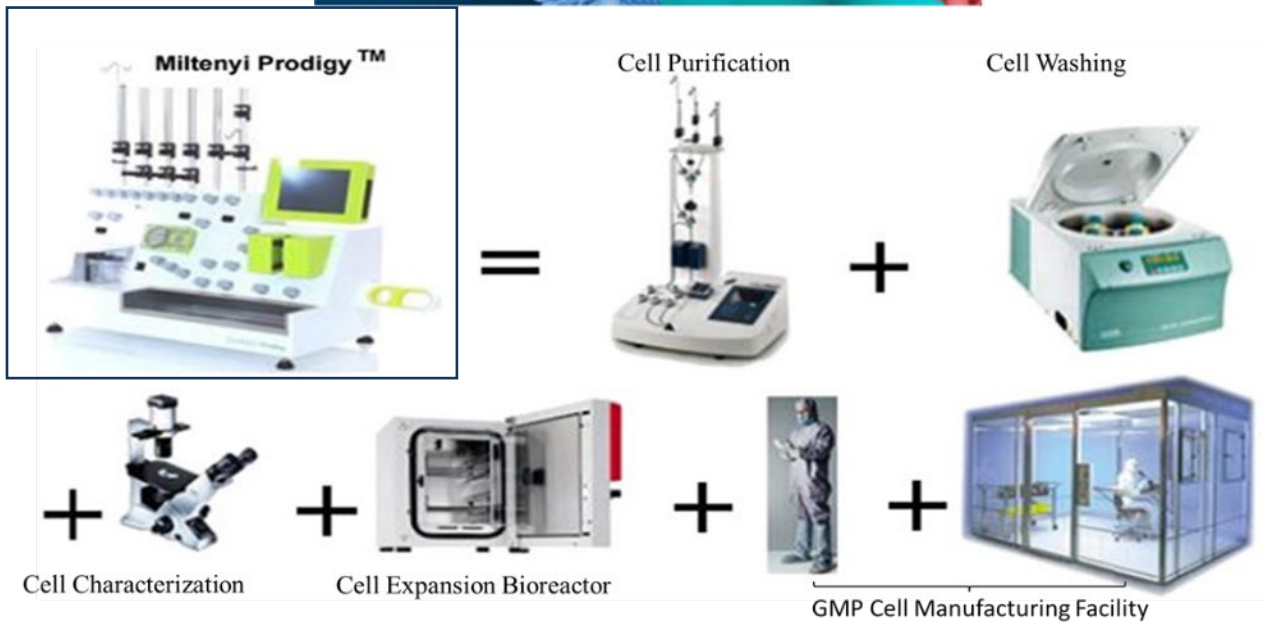
CTO (Genomic Medicines) Danaher Corporation

- Chief Technology Officer at Vor Biopharma
- Chief Scientific Officer at Mustang Bio
- Led the BLA and MAA CMC efforts for Kite's Tecartus®
- Former Head of Early Analytical Development for Novartis' Cell and Gene Therapies Unit
- Scientific news editor of Human Gene Therapy journal

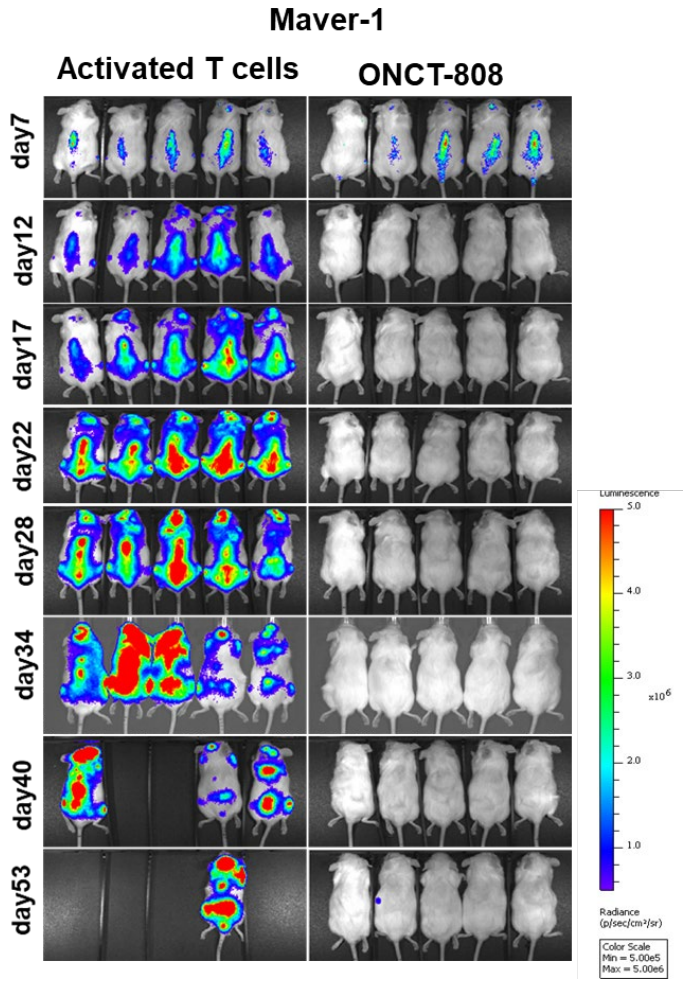
ONCT-808 – CMC and Manufacturing

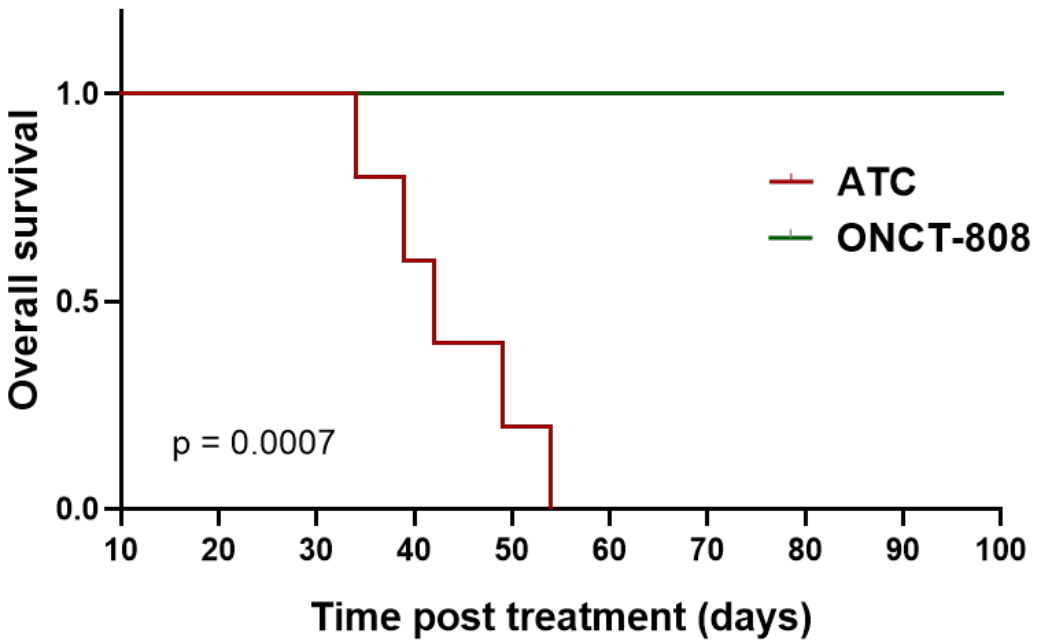
1. **ROR1 targeting CAR construct optimized with demonstrated high potency against ROR1+ cancer cells**
2. **Lentivirus production process completed**
3. **Oncternal ROR1 CAR T cell product process optimized and confirmed**
   - Flexible, closed, fully-automated Prodigy system eliminates manual processing
   - **7-day production process**
   - Up to **2 billion CAR+ T cells produced**
   - Encouraging CAR T cell phenotypes likely to persist and expand





ONCT-808 Exhibits Anti-Tumor Activity in ROR1+ Model: Maver-1 MCL Xenograft





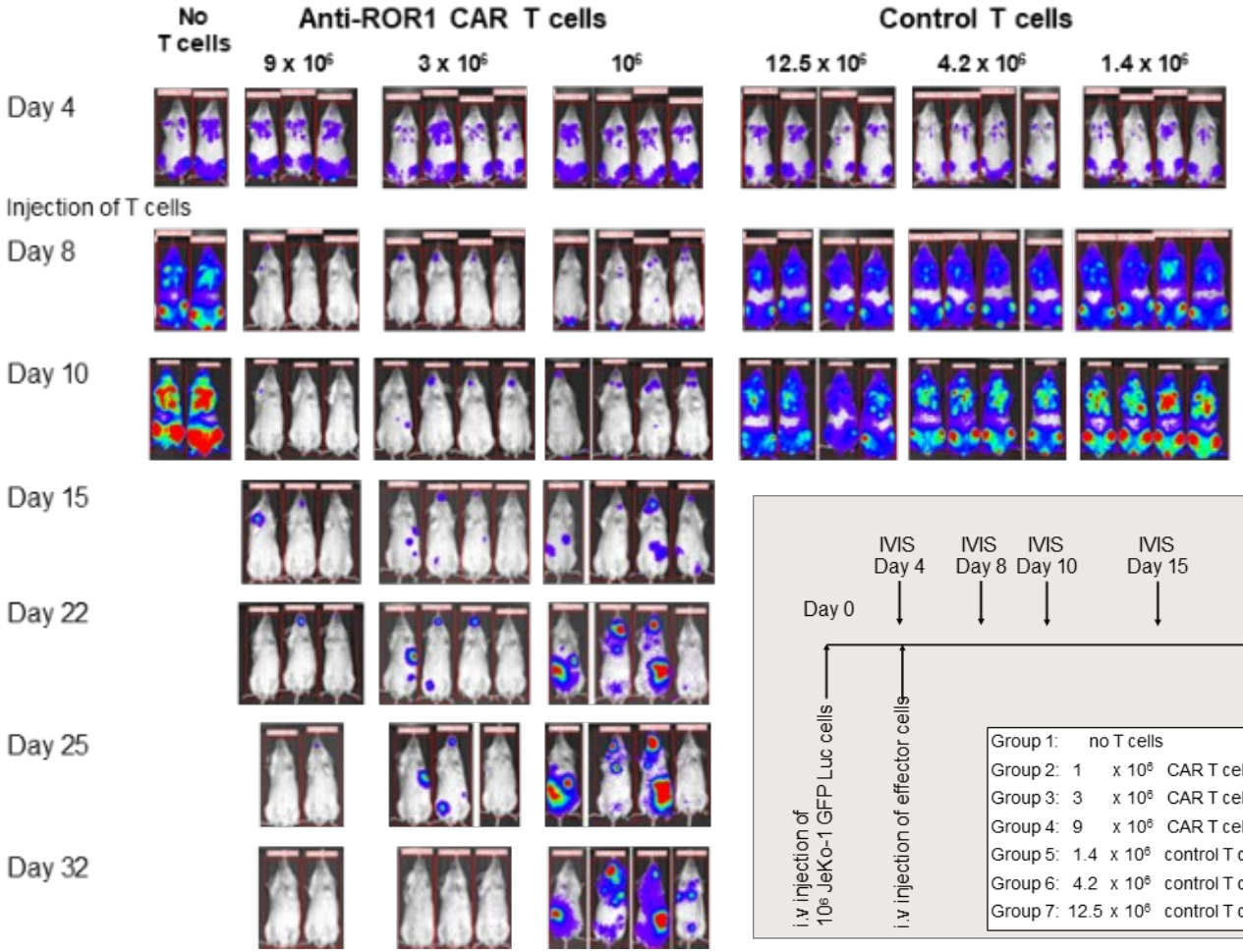
Maver FF-luc (2x10^6 cells per mouse, 5 mice per treatment arm)

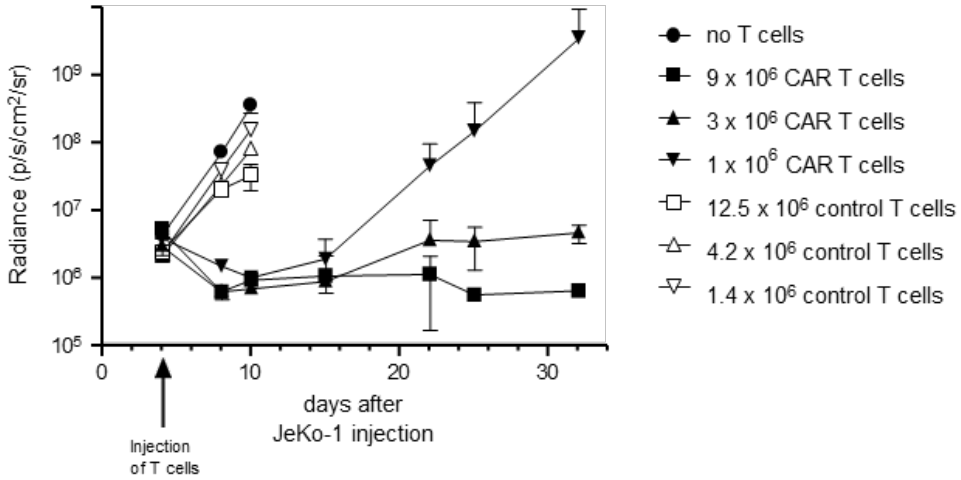
a. Activated T cells (6x10^6 cells per mouse)
b. ONCT-808 CAR T cells (6x10^6 CAR+ cells per mouse)

Collaboration with
Dr. Michael Wang (MDACC)

THE UNIVERSITY OF TEXAS MD Anderson Cancer Center
Making Cancer History®

ONCT-808 Exerts Anti-Tumor Activity in ROR1+ Model: Jeko-1 MCL



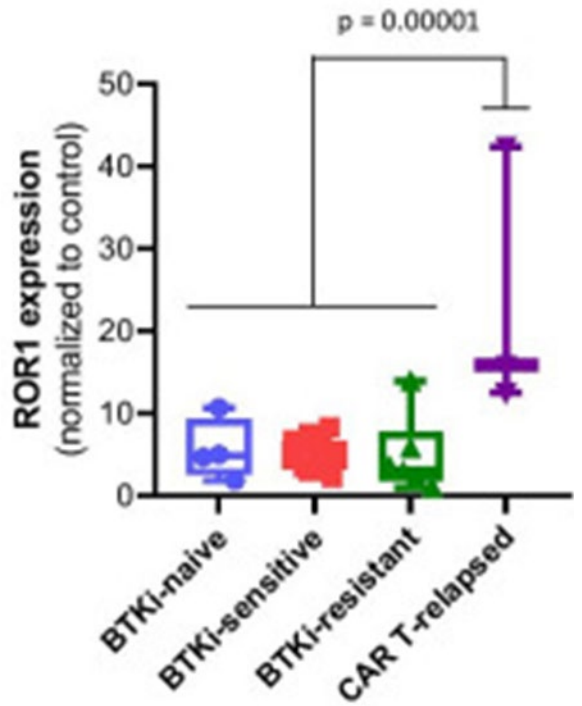


Data generated in collaboration with Dr. Evren Alici (Karolinska Institutet), presented at EHA 2022

- **Strong anti-tumor activity of ROR1 CAR T cells demonstrated in MCL xenograft mouse model**

Support for ROR1 Targeting of Aggressive B-NHL

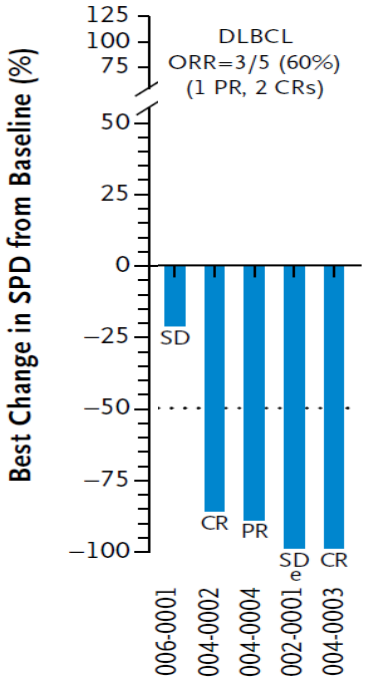
ROR1 Expression by LOT



ROR1 expression was highest in brexucabtagene autoleucel (Tecartus®)-relapsed samples (*n* = 3) among analyzed cell samples from MCL patients

Jiang 2021 J Hematol Oncol

Phase 1 ROR1 ADC Efficacy Data



Patients with DLBCL responses had 3, 7, and 7 prior regimens (including HDT/HSCT in 1 patient and CAR T cells in 3 patients)

Wang 2022 NEJM Evid

Phase 1 ROR1 ADC Safety Data

"…as expected with a monomethyl auristatin E-containing antibody–drug conjugate, adverse events (AEs) included acute neutropenia and cumulative neuropathy…"

"…no clinically-concerning AEs occurred to suggest ROR1-mediated toxicities or nonspecific zilovertamab vedotin binding to normal tissues…"

Wang 2022 NEJM Evid

ONCT-808 ROR1 Targeting Autologous CAR T
Use of Zilovertamab scFv May Address Common CAR T Challenges

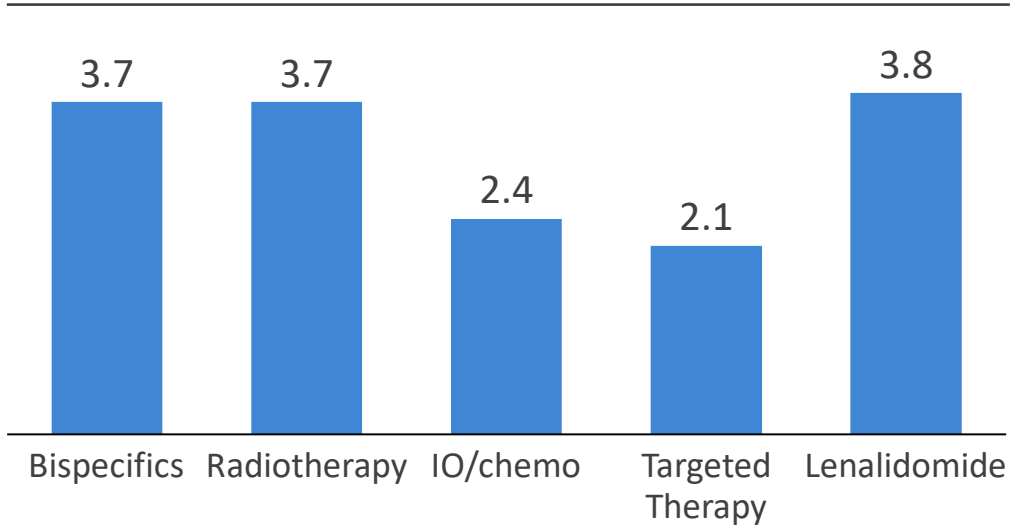
ONCTERNAL therapeutics™

	Known CAR T Cell Therapy Challenges	Possible Advantages of Zilo-based ROR1 CAR T
Efficacy	• Increasing number of relapses following CD19 CAR T cell therapy due to reduced expression, mutations or loss of the target antigen tumor evading CAR T cell efficacy	**Potential for fewer antigen-negative relapses** • ROR1 expression associated with aggressive and/or refractory tumor phenotype[1,2] • ROR1 antigen loss can render cancer cells less aggressive and susceptible to chemo[3] **Multiple liquid and solid tumor targets**
Safety	• Safety issues possibly related to activation of CAR T by normal cells expressing the target antigen • CD19 and BCMA are expressed on subsets of healthy B cells leading to B-cell aplasia and increased risk of infections with CAR T therapy	**Potential for less toxicity** • The antibody-drug conjugate zilovertamab vedotin (MK-2140) did not lead to off tumor, on target toxicities in clinical studies[4,5] • ROR1 is not expressed on mature B cells and thus, targeting ROR1 not likely to lead to B-cell aplasia

1) Kipps 2022 Blood, 2) Meck 2021 Cells, 3) Borcherding 2014 Protein Cell, 4) Wang 2022 NEJM Evid, 5) Wang 2022 Blood

ONCT-808 can address low ORR and short PFS for patients with aggressive B-NHL failing CD19 CAR-T treatment

Median progression-free survival (PFS, months) after CD19 CAR-T relapse in DLBCL, by treatment[1]



Di Blasi 2022 Blood, Post-CAR relapse in DLBCL

- Current outcomes post-CAR treatment are poor across all therapies, with 14% ORR, 7% CR, mPFS of 3 months and mOS of 5 months
- The prevalence of aggressive NHL in the US is ~30,000 cases, with ~5,000 patients eligible for 3rd line auto CAR T treatment[2], many of which eventually relapse
- As CAR T moves up to 2nd line the number of CD19 CAR T eligible patients and those who relapse will be significantly larger

1 Di Blasi 2022 Blood, Post-CAR relapse in DLBCL

2 Wenzhen 2021 JNCCN, Epidemiology of Diffuse Large B Cell Lymphoma (DLBCL) and Follicular Lymphoma (FL) Patients by Line of Therapy in the United States (US) and Europe (EU)

ONCT-808-101 - ROR1 CAR T Phase 1/2 Study Open and Enrolling Patients

Eligibility:
- Aggressive B-cell NHL
  - LBCL
  - MCL
- Failed chemo-immunotherapy
- Failed or ineligible for CD19 CAR T therapy (Phase 1 only)
- Able to undergo CAR T cell treatment

CAR T cell manufacturing at Dana Farber CMCF

Dose Level 1:
$0.3x10^6$ CAR^+ T cells/kg

Dose Level 2:
$0.6x10^6$ CAR^+ T cells/kg

Dose Level 3:
$1x10^6$ CAR^+ T cells/kg

3+3 Dose escalation

Phase 1 Objectives:
- Safety & tolerability
- Determine MTD or MAD
- Select 2 Phase 2 doses

Dose Level A
N = 7-18 evaluable

Dose Level B
N = 7-18 evaluable

Randomized to 2 dose levels

Phase 2 Objectives:
- Risk/benefit of ONCT-808
  - Safety & tolerability
  - Efficacy (ORR, CRR, DOR)
- PK of ONCT-808

LBCL: Large B-Cell Lymphoma (Diffuse LBCL NOS, Primary mediastinal LBCL, High-grade BCL, DLBCL arising from indolent lymphoma or CLL, Follicular lymphoma grade 3B, Richter's syndrome); MCL: Mantle Cell Lymphoma; CMCF: Cell Manipulation Core Facility; MTD: Maximum Tolerated Dose; MAD: Maximum Administered Dose; RP2D: Recommended Phase 2 Dose; ORR: Objective Response Rate; CRR: Complete Response Rate; DOR: Duration of Response

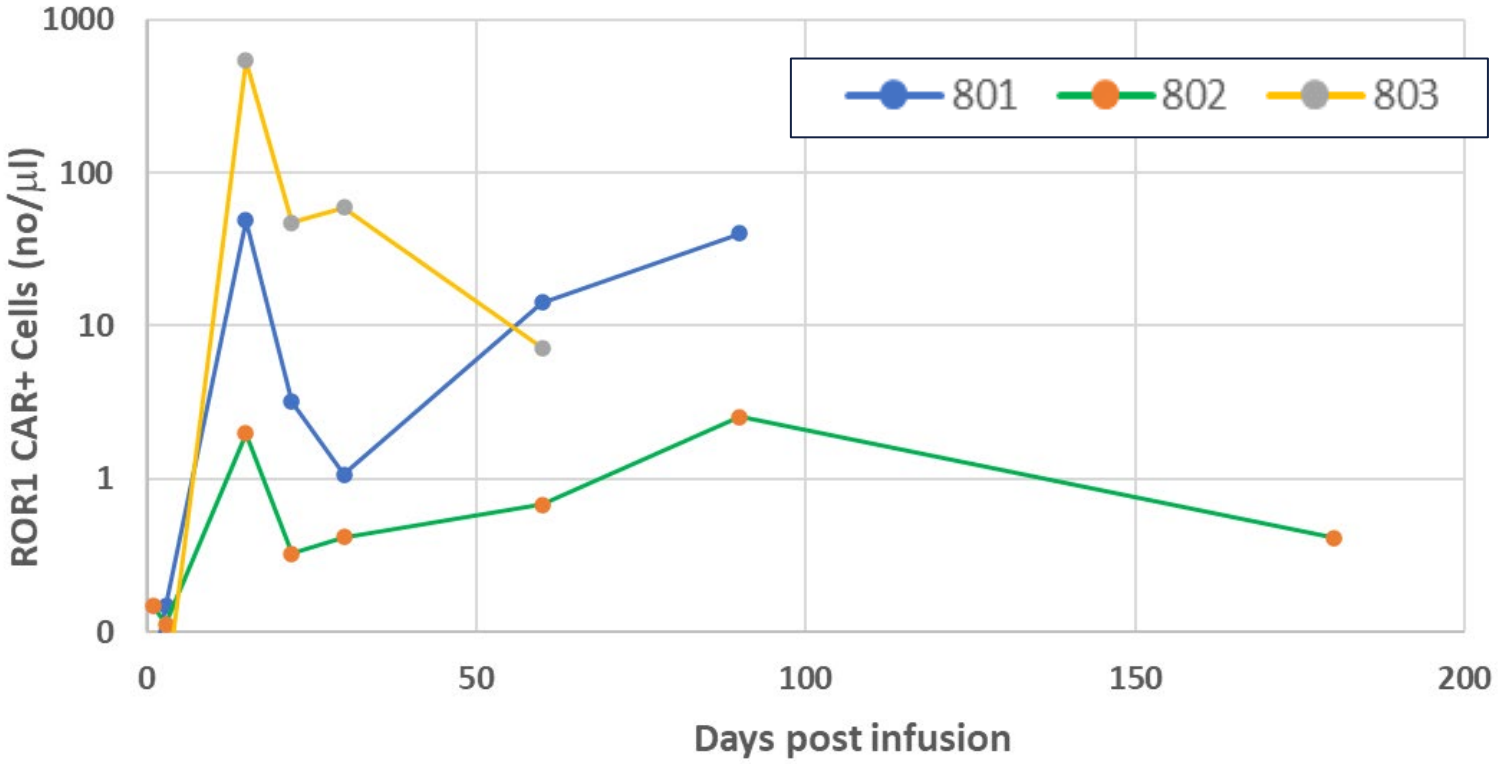
ONCT-808-101 – Status Update

- Encouraging response signal in dosing cohort of $1x10^6$ CAR T cells per kg
  - 2/3 patients achieved complete metabolic response (CMR) by FDG PET-CT
  - 1/3 patients achieved partial response (PR) by FDG PET-CT
  - Common adverse events included decreased blood counts, pneumonia and Grade 1-2 CRS
- Grade 5 (fatal) SAE in dose level of $3x10^6$ CAR T cells per kg
  - Patient was an 80-year-old with bulky disease who had received four previous lines of therapy including CD19 CAR T and CD79b ADC
  - SAE consistent with CRS and immune effector cell-associated neurotoxicity syndrome (ICANS)
  - Initial autopsy report showed no histological evidence of his lymphoma
- In alignment with FDA, Oncternal has implemented protocol changes for an updated study design that includes modified eligibility criteria and testing lower doses; enrollment open

Data cutoff: December 4, 2023

ONCT-808-101 - Encouraging ONCT-808 CAR T Expansion and Persistence

Study ONCT-808-101: CAR T Expansion and Persistence by Patient

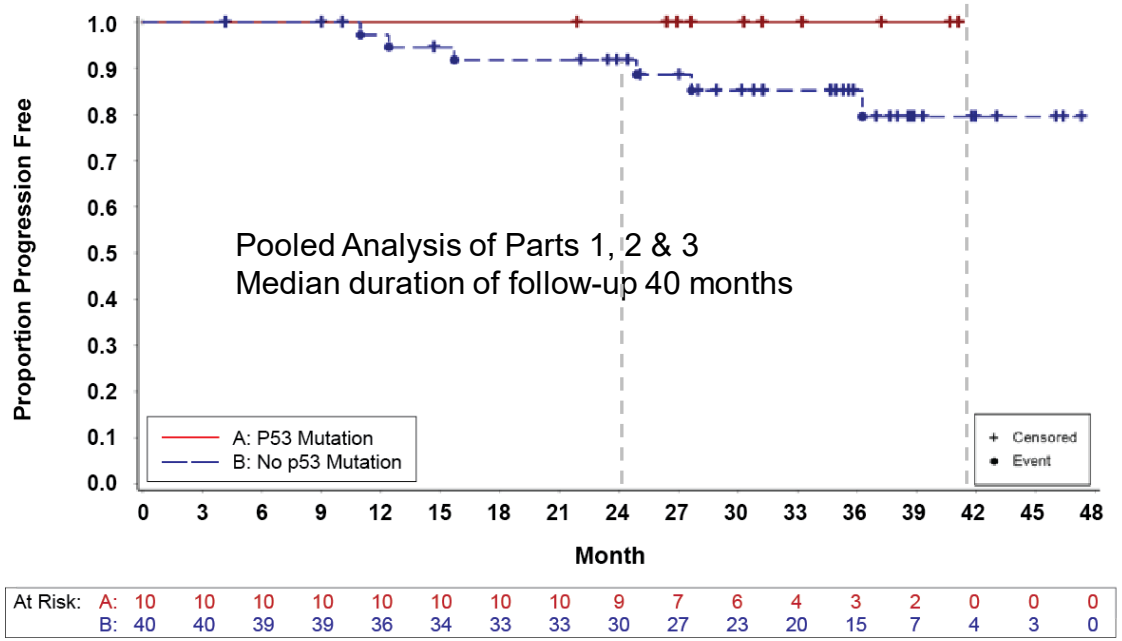


- ONCT-808 CAR T cells expand and are persistent in all three patients from the 1 x 10^6 CAR T cells/kg cohort up to 6 months
- Expansion significantly associated with response in Axi-Cel study (Neelapu NEJM 2017)

Table of Contents

Zilovertamab: Clinical activity in TP53 aberrant cancers including CLL

CIRM-0001 Phase 1/2 Study of Zilovertamab + ibrutinib in patients with CLL and aberrant TP53 (ASH 2022 Oral Presentation*)



PFS for p53 mut/del(17p) at **~42 months was 100%** for zilovertamab + ibrutinib (N=5 R/R, N=5 TN)

*Lee 2022, Blood

- Zilovertamab inhibits CLL-cell expression of genes induced by activated ERK1/2, NF-κB, STAT3, and NRF2 in CLL patients with TP53 mutation who have been treated with BTKi
- Zilovertamab + ibrutinib was well tolerated, with a safety profile similar to ibrutinib alone
- Prolonged PFS with zilovertamab + ibrutinib in TP53-altered CLL to be further investigated preclinically, potential in other tumor types
- Investigator-sponsored study of zilovertamab in combination with docetaxel in patients with metastatic CRPC to continue
- Partnerships and collaborations required to support future clinical trials

Table of Contents

Anticipated Pipeline Milestones

ONCT-534 DAARI	
• Prostate cancer Phase 1/2 study	**Patients treated**
– Initial clinical data	**2Q 2024**
– Additional clinical data readouts	**4Q 2024**
ONCT-808 ROR1 CAR T cell therapy	
• Aggressive B-cell NHL Phase 1/2 study	**Initial data reported**
– Clinical data update	**mid 2024**
– Additional clinical data readouts	**4Q 2024**

Financial Information: ONCT (Nasdaq)

Cash & Cash Investments @ March 31, 2024 Cash Runway into Q1 2025	$27.0M
Debt	$0M
Capitalization[(1)]:	
Common Shares Outstanding	3.0M
Awards / Warrants in the Money @ March 31, 2024[(2)]	0.5M
Fully Diluted in the Money	3.5M
Non-Dilutive Support • NIH Grants MOA, indication expansion	$4.0M

(1) Reflects a 1-for-20 reverse stock split effective January 8, 2024
(2) Excludes out-of-the-money awards and warrants totaling ~0.4M

Corporate Highlights

ONCT-534: DUAL-ACTION ANDROGEN RECEPTOR INHIBITOR (DAARI)

- Fourth cohort (300mg once daily) fully enrolled in Phase 1/2 dose escalation study in R/R mCRPC
- Received Fast-Track designation from U.S. FDA
- Activity in preclinical prostate cancer models of androgen receptor inhibitor resistance, including LBD mutations, AR overexpression and AR splice variants such as AR-V7

ONCT-808: AUTOLOGOUS CAR T CELL THERAPY TARGETING ROR1

- Encouraging clinical activity in Phase 1/2 clinical study in aggressive B-cell NHL, including CD19 CAR T treatment failures
- Study is open and enrolling with protocol amendments
- Robust and scalable manufacturing process using closed system

ZILOVERTAMAB: POTENTIALLY FIRST-IN-CLASS MONOCLONAL ANTIBODY TARGETING ROR1

- Encouraging 100% PFS for patients with CLL and TP53 aberrations being further investigated
- Discussions ongoing with BTK inhibitor developers

MULTIPLE CATALYSTS WITHIN CASH RUNWAY PERIOD

- ONCT-534 Phase 1/2 dose escalation study in R/R mCRPC initial data in 2Q 2024
- ONCT-808 clinical data update in aggressive B-cell NHL in mid 2024
- Cash and short-term investments of $27.0M as of March 31, 2023, cash runway into Q1 2025