



Developing next generation antibodies into
transformative cancer therapies that
improve patients' lives

Corporate Presentation
Nasdaq: CMPX
March 2026

DISCLAIMER

This presentation has been prepared by Compass Therapeutics, Inc. ("we," "us," "our," or the "Company"). Statements contained herein are made as of the date of this presentation unless stated otherwise, and this presentation shall not under any circumstances create an implication that the information contained herein is correct as of any time after such date or that information will be updated or revised to reflect information that subsequently becomes available or changes occurring after the date hereof.

This presentation contains forward-looking statements. Statements in this presentation that are not purely historical are forward-looking statements. Such forward-looking statements include, among other things, references to Compass's financial position to continue advancing its product candidates, expectations about cash runway, business and development plans, and statements regarding Compass's product candidates, including their preclinical and clinical development, therapeutic potential and tolerability profile, and clinical trial milestones such as the expected trial design, timing of enrollment, patient dosing and data readouts, regulatory plans with respect to Compass's product candidates and the therapeutic potential thereof. Actual results could differ from those projected in any forward-looking statements due to numerous factors. Such factors include, among others, Compass's ability to raise the additional funding it will need to continue to pursue its business and product development plans, the inherent uncertainties associated with developing product candidates and operating as a development stage company, Compass's ability to identify additional product candidates for development, Compass's ability to develop, initiate and complete clinical trials for, obtain approvals for and commercialize any of its product candidates, competition in the industry in which Compass operates and market conditions. These forward-looking statements are made as of the date of this presentation, and Compass assumes no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements, except as required by law. Investors should consult all of the information set forth herein and should also refer to the risk factor disclosure set forth in the reports and other documents Compass files with the U.S. Securities and Exchange Commission (SEC) available at www.sec.gov, including without limitation Compass's latest Annual Report on Form 10-K, Quarterly Report on Form 10-Q and subsequent filings with the SEC.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions, and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

This presentation concerns drugs that are under clinical investigation, and which have not yet been approved for marketing by the U.S. Food and Drug Administration (FDA). It is currently limited by Federal law to investigational use, and no representation is made as to its safety or effectiveness for the purposes for which it is being investigated.

Compass Corporate Highlights

Tovecimig: DLL4xVEGF-A

»»» **Achieved primary endpoint** in Ph 2/3 study in patients with BTC
Key secondary endpoints (PFS / OS) expected in April 2026

Compelling Data in Pts w/ BTC

»»» **17.1% ORR** (p=0.031) in 2L pts with BTC (compared to 5% with FOLFOX in 2L)

Multi-\$B Market Potential

»»» **\$1B+ opportunity** in BTC in the US (supported by 3rd-party market research)
~85% of 2L pts with BTC currently have no approved therapeutic alternative

Deep Expertise in Antibodies

»»» **Four novel clinical candidates**

Well Capitalized

»»» **Cash runway into 2028** with \$209M at YE 2025

Diversified / Robust Pipeline with Multiple Value Inflection Points

Program	Target	Discovery	Pre-Clinical	Phase 1	Phase 2	Phase 3	Anticipated Milestones
Tovecimig (CTX-009)	DLL4 x VEGF-A	Biliary Tract Cancer (2L)					17.1% ORR (met primary endpoint) April 2026: PFS / OS data
		Colorectal Cancer (monotherapy 3L/4L)					Completed (monotherapy activity)
		Phase 2 Study – DLL4+ tumors					Mid-2026 Phse 2 Study in DLL4+ tumors: CRC, Gastric, Ovarian, Renal, HCC
CTX-471	CD137	Basket Study – NCAM (CD56)+					Mid-2026: Trial initiation
		Basket Study – Post-checkpoint					Completed
CTX-8371	PD-1 x PD-L1	Solid Tumors (cohort expansion in NSCLC & TNBC)					H1 2026: Phase 1 data Expansion cohorts initiated
CTX-10726	PD-1 x VEGF-A	Solid tumors					Q1 2026: Phase 1 initiation
Bispecifics / Trispecifics	Multiple						Ongoing

* Not shown: Investigator Sponsored Trial of tovecimig in 1st line biliary tract cancer

Leadership Team Experienced in Drug Discovery and Development



Thomas J. Schuetz, MD, PhD
President, CEO, &
Vice Chairman of the Board



Barry Shin, JD, MBA
Chief Financial Officer



Arjun Prasad, MBA, MPH
Chief Commercial Officer



Cynthia Sirard, MD
Chief Medical Officer



Bing Gong, PhD
Chief Scientific Officer



Jon Anderman, JD
SVP, General Counsel &
Corporate Secretary



Ian Chia, PhD
VP, Business Development



Karin Herrera
SVP, Clinical
Operations



James Kranz, PhD
VP, CMC



Neil Lerner, CPA, MIM
SVP, CAO



Kris Sachsenmeier, PhD
VP, Translational Science

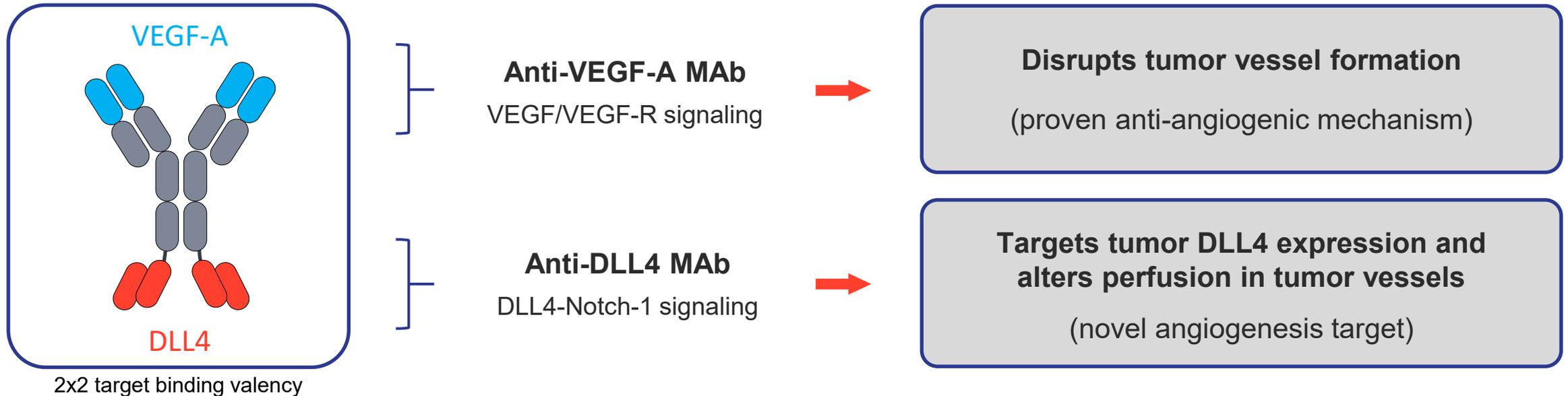


Tovecimig (CTX-009)

DLL4 X VEGF-A bispecific antibody

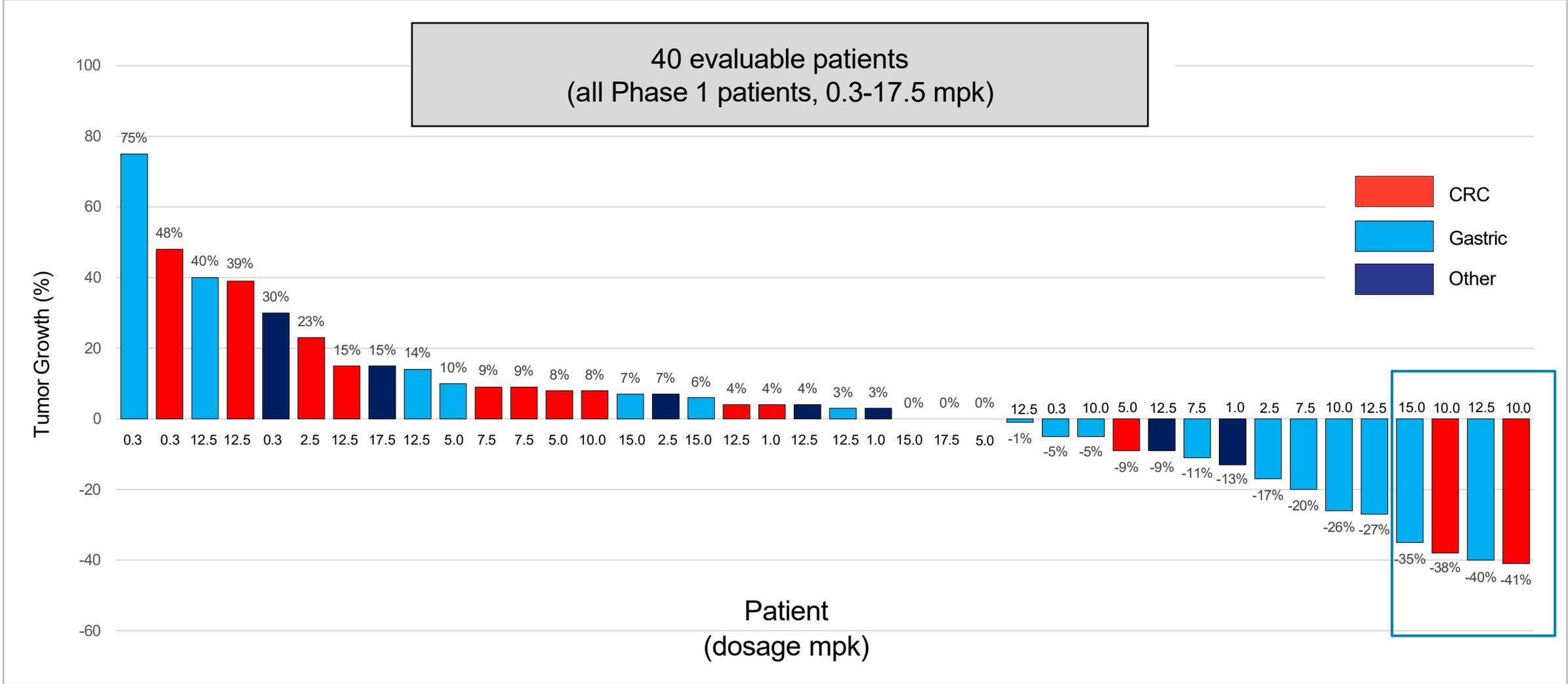


Tovecimig: Bispecific with Compelling MOA (DLL4 x VEGF-A)

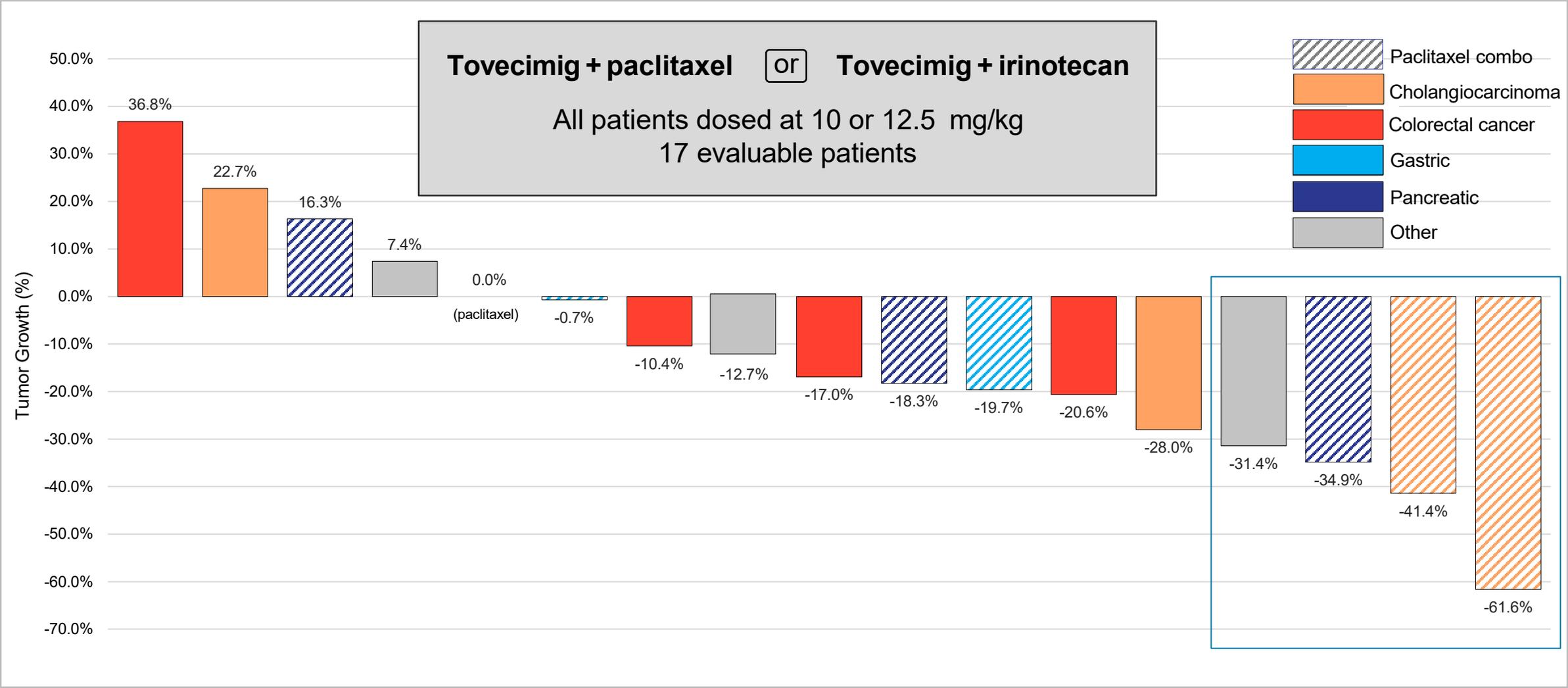


- Dual blockade: **VEGF-A** – validated target for blockbuster oncology therapeutics (e.g.: Avastin®)
DLL4 (Notch-1 ligand) – mediates resistance to anti-VEGF therapies
- Bispecific anchors in tumor microenvironment (DLL4) to disrupt angiogenesis
- Only DLL4 X VEGF bispecific to demonstrate monotherapy activity in patients with CRC and GC¹

Tovecimig: Monotherapy Activity in Ph 1a Data

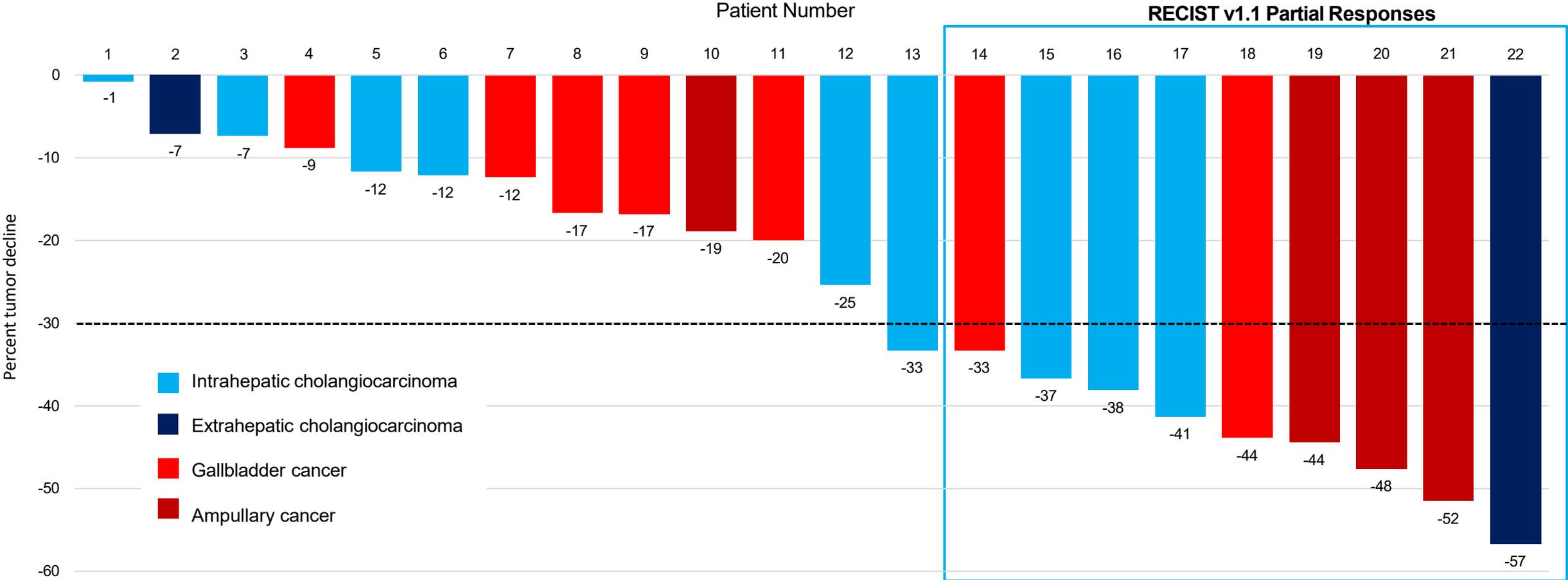


Tovecimig: Combination Activity in Ph 1b Data



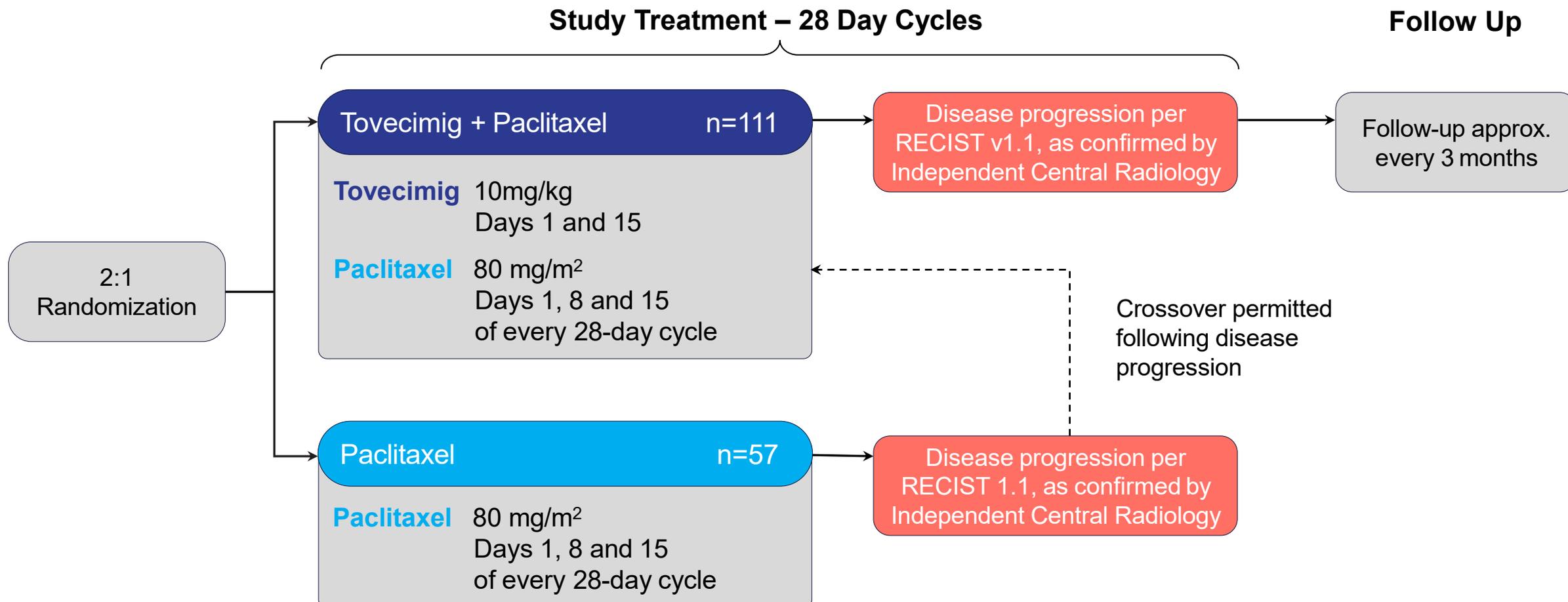
Tovecimig: Phase 2 BTC Data

Investigator-assessed responses in single-arm study (paclitaxel combo)



COMPANION-002: Phase 2/3 U.S. BTC Study

Registrational-intent study in patients who have received one prior line of therapy



Primary Endpoint: **ORR**

Key Secondary Endpoints: **PFS, OS, DoR**

Tovecimig: Ongoing Phase 2/3 – Secondary Endpoints

Secondary Endpoint Analyses:

80% OS events (134 of 168) reached in Q1 2026

Triggers analysis of Secondary Endpoints of PFS and OS

Reference: ABC-06¹ study of FOLFOX in patients with BTC treated in the second-line setting

- ABC-06 Study: <10% OS at **18 months** (median OS = 6.2 months)
- COMPANION-002: >**20%** OS at >**18 months** median follow-up (as of Sept 2025)

1. PMID: 33798493

Next Expected Update: Key Secondary Endpoints in April 2026

Progression-Free Survival

Overall Survival (RPSFT²)

Overall Survival (intent to treat)

Topline Safety

2. RPSFT = "Rank Preserving Structural Failure Time," a statistical method that adjusts for the effect of crossover

Tovecimig: Ongoing Phase 2/3 Summary - Primary Endpoint

COMPANION-002 Study (BTC)		Tovecimig + Paclitaxel	Paclitaxel
Intent-to-Treat Population		n=111	n=57
Overall Response Rate (CR+PR)		19 (17.1%)	3 (5.3%)
Two-Sided p-value		p=0.031	
Best Overall Response (RECIST v1.1 by blinded independent radiology review)	Complete Response (CR)	1 (0.9%)	0 (0.0%)
	Partial Response (PR)	18 (16.2%)	3 (5.3%)
	Stable Disease (SD)	49 (44.1%)	19 (33.3%)
	Non-CR / Non-PD*	9 (8.1%)	2 (3.5%)
	Progressive Disease (PD)	18 (16.2%)	24 (42.1%)
	Not Evaluable (NE)**	16 (14.4%)	9 (15.8%)

*Non-CR / Non-PD: patients enrolled based on local radiology scan results, but displayed no clearly definable target lesions as determined by independent central radiology.

** Not Evaluable: patients who did not receive a Week-8 scan; these patients are not evaluable for response only, but will be evaluable for PFS/OS analyses.

Safety Data: The safety profile of tovecimig in this study to date has been consistent with prior studies.

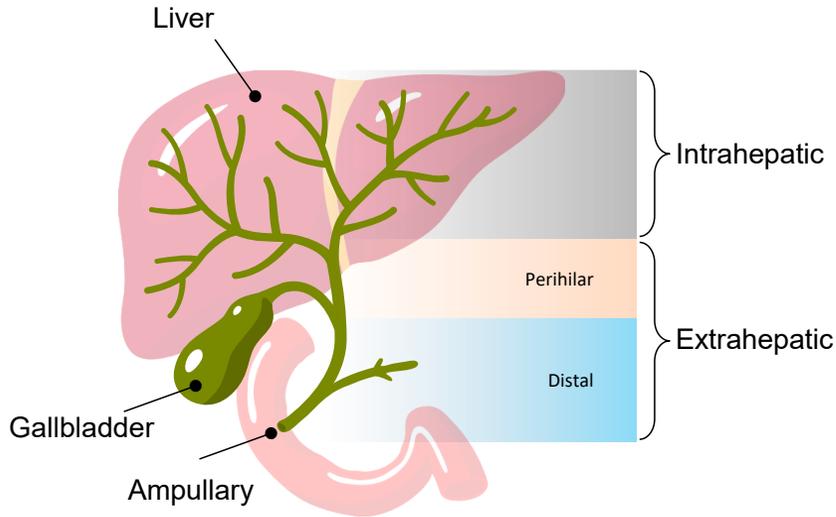
Safety Monitoring: An independent Data Safety Monitoring Committee reviewed safety data at four separate (pre-specified) meetings and recommended continuation of the study with no modification after each meeting.

Tovecimig: Potential to Become Standard of Care in 2L BTC

Line	Program	N	ORR	Survival Metrics	
				Median Progression Free Survival	Median Overall Survival
Months					
0 2 4 6 8 10 12 14					
First Line					
1L	Gem/Cis + Durv ¹	341	26.7%	7.2 m	12.8 m
1L	Gem/Cis + Pembro ²	533	28.7%	6.5 m	12.7 m
Second Line					
2L	ABC-06 ³	81 BSC	0%	5.3 m	
		81 FOLFOX	5%	4.0 m	6.2 m
Tovecimig* in 2L					
2L	Tovecimig + Paclitaxel ⁴	111	17.1% (p=0.031)	PFS / OS Data Expected April 2026	

*Historical data presented. Tovecimig is investigational, and no head-to-head studies have been conducted.

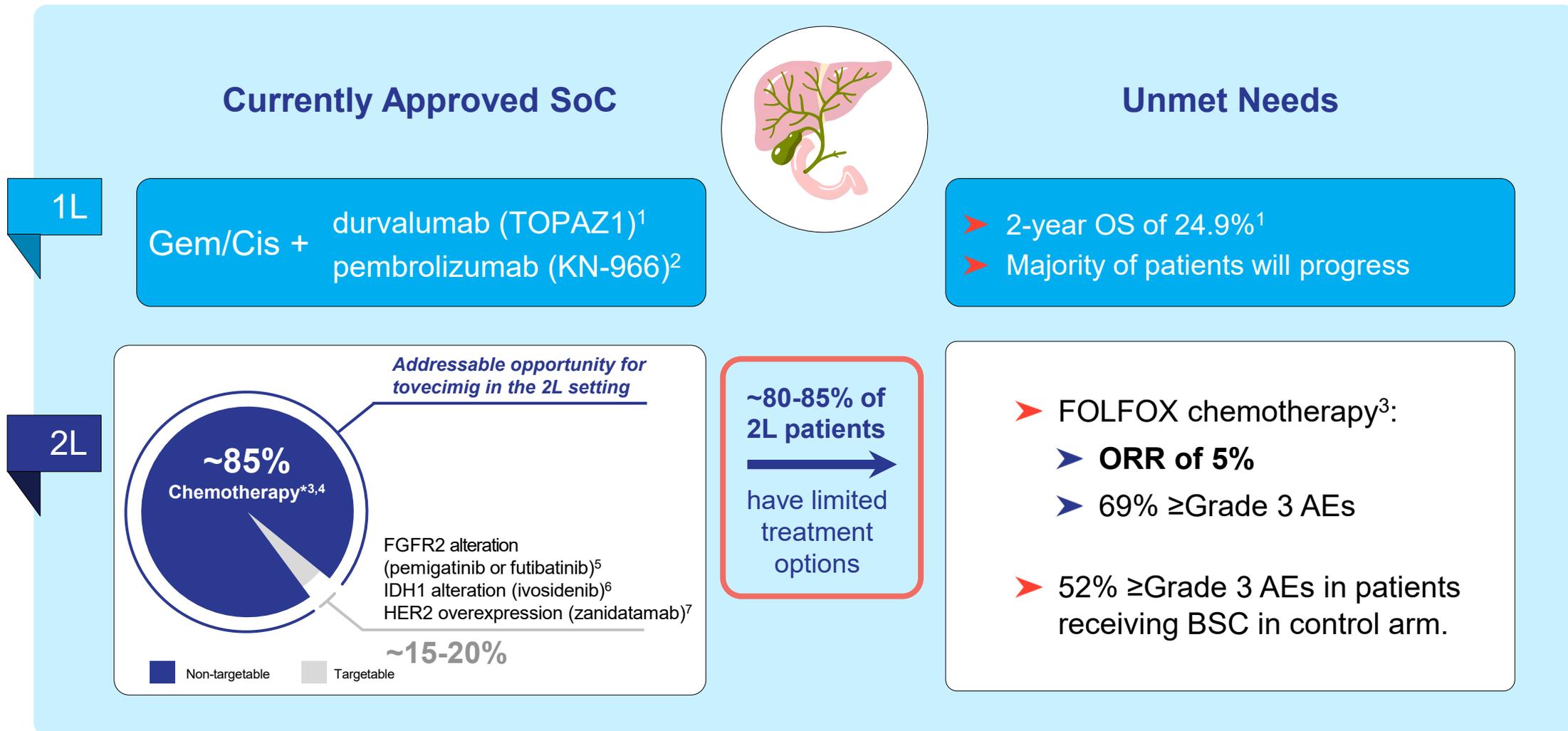
Incidence of BTC is Significant and Not Fully Appreciated



Cancer site	Epidemiology-based (2026 SEER)	Claims-based (ICD: 2021-2022)	3 rd Party Mkt. Research
Liver & intrahepatic bile duct	15% ² of 42,340 ¹	---	---
Gallbladder & other biliary	12,640 ¹	---	---
Other & unspecific primary	11% ³ of 67,800 ¹	---	---
Total Incidence	~26,500¹	~22,800⁴	~25,000⁵

US BTC incidence projected to grow to ~34,000 patients by 2037⁶

Significant Unmet Needs in Current Treatments for BTC



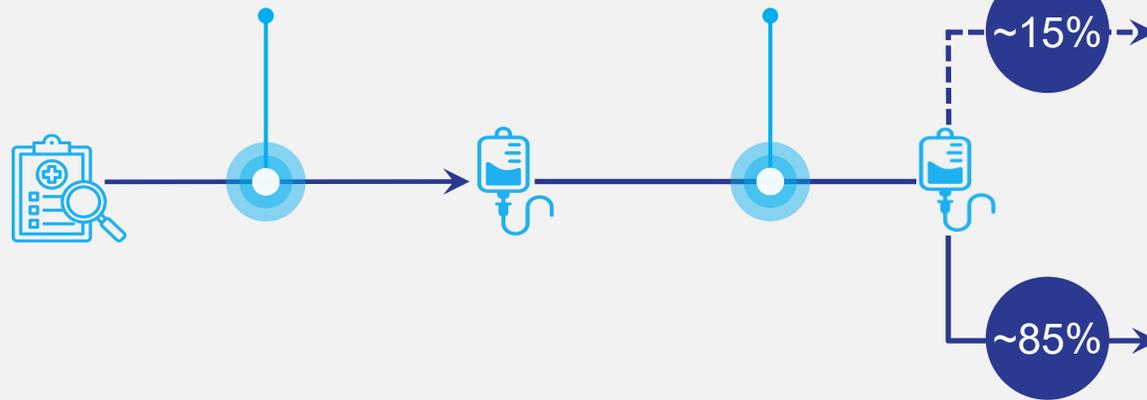
2L BTC U.S. Market Potential is >\$1 Billion

Annual BTC incidence in the U.S. (~23K+ in 2023)¹

Clinical progression

~90% receive 1L treatment
(~10% undergo resection but only ~5% are cured after surgery)²

~70% of 1L patients receive 2L treatment³



Approved 2L targeted therapies^{4,5}
(contraindications include: ocular toxicity, hyperphosphatemia)

Chemotherapy/
Opportunity for tovecimig

Patient Numbers*

~26.5K

~24K

>15K

*Patient numbers are estimates based on Company analysis of references.

Tovecimig: Potential Solid Tumor Opportunities

Indications with approved angiogenic inhibitors and/or tumors that are DLL4 enriched

							
Indications	BTC	CRC	Gastric/GEJ	Glio-blastoma	HCC	Ovarian	RCC
Incidence	~26.5k ¹	~154k ¹	~30k ²	~15k ³	~35k ²	~20k ¹	~73k ⁴
CTX-009 Clin. Active ⁵	✓	✓	✓	TBD	TBD	TBD	TBD
Avastin Approved ⁶		◆		◆	◆	◆	◆
DLL4+ Enriched ⁷	✓	✓	✓	✓	✓	✓	✓

Potential for expansion into numerous solid tumor indications

BTC: Biliary tract cancer; CRC: Colorectal cancer; GEJ: Gastroesophageal junction; HCC: Hepatocellular carcinoma; RCC: Renal cell carcinoma

Tovecimig: Strong Near-Term Momentum

BTC (2L) Data Ph 2/3

- Achieved primary endpoint in Ph 2/3 study
- PFS / OS data expected April 2026

BTC (1L) Study IST Enrolling

- MD Anderson Cancer Center investigator sponsored trial in 1L patients
- Tovecimig added to front line gem / cis / durvalumab

Further Expansion Opportunities

- Broad potential expansion into multiple solid tumor indications

Tovecimig granted Fast Track Designation in BTC in April 2024

CTX-471

CD137 agonist



CTX-471: Potential Best-in-Class CD137 (4-1BB) Agonist

CTX-471: Next Generation CD137 Agonist

Fully human, IgG4, optimized affinity for agonistic antibody

Unique epitope: non-ligand blocking

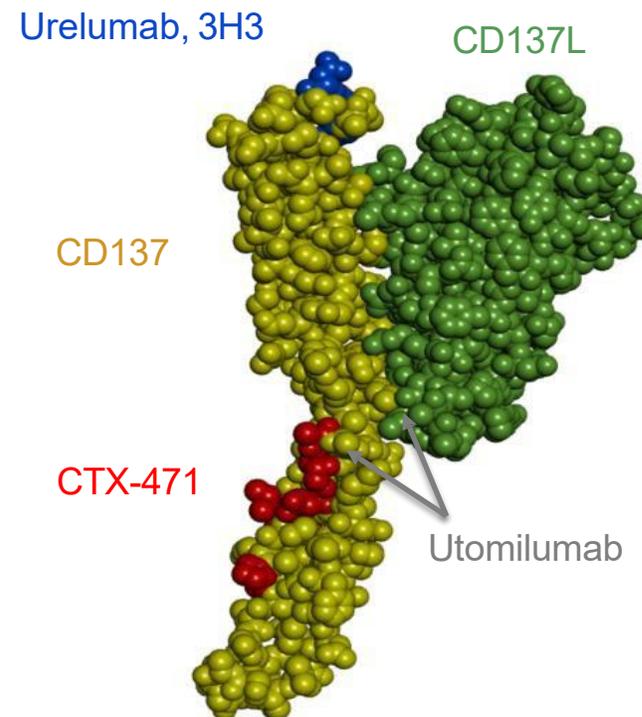
CTX-471: Signals of Activity in Phase 1

Monotherapy Phase 1a ascending dose study completed

- MTD defined by immune thrombocytopenia

Monotherapy Phase 1b Post-PD-1 Cohort Expansions completed

- 60 patients with 17 different tumor types enrolled
- 4 PRs observed: melanoma (3 of 11) and mesothelioma (1 of 4)
- 1 CR: small cell lung cancer (1 of 3)
- Potential biomarker of response identified in biopsies: NCAM (CD56)+ tumors were more likely to respond to CTX-471

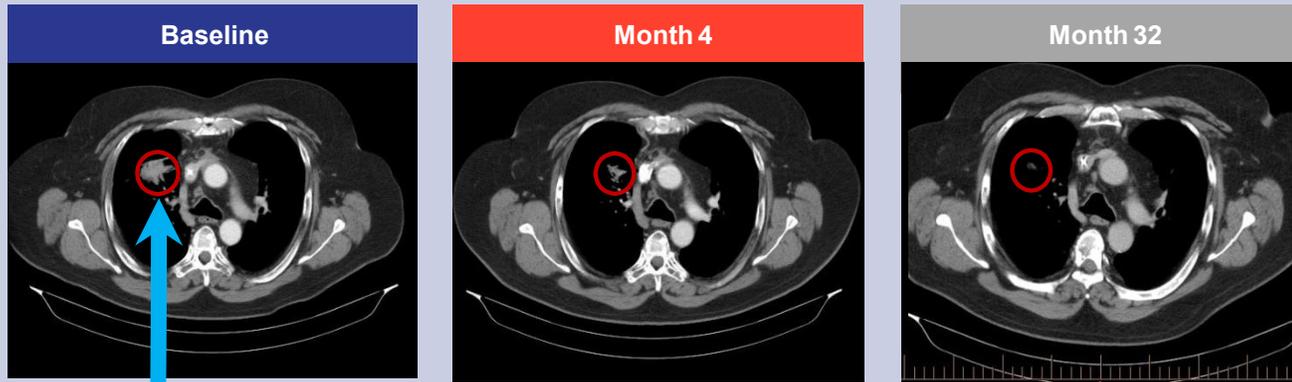


JCI Insight. 2020;5(5):e133647

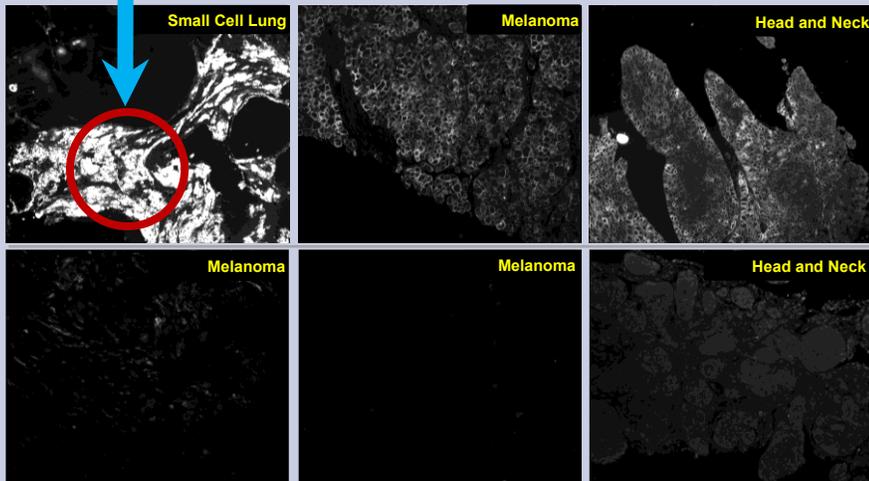
Advancing to Ph 2 NCAM (CD56)+ Basket Study

Mid-2026 expected initiation

CTX-471: Complete Response in Small Cell Lung Cancer Patient



- CTX-471 treated patient with advanced SCLC had a PET negative **complete response** after ~3 years on therapy
- Previously treated with: carboplatin/etoposide plus atezolizumab (1L), and nivolumab (2L)



Patients with Clinical Benefit (CR / PR / SD)

NCAM Biomarker

Patients with Progressive Disease

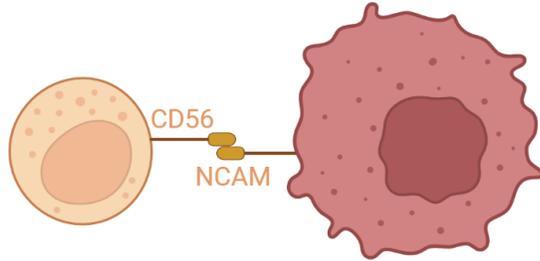
NCAM (CD56) was identified as a potential biomarker of activity in Phase 1 studies of CTX-471

NCAM (CD56) High in Patients with CTX-471 Disease Control

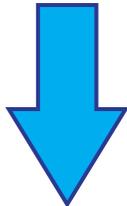
NCAM may render tumors sensitive to CTX-471 treatment: proposed mechanism of action

1

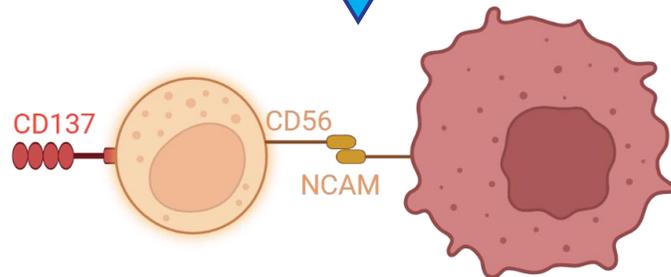
NCAM (CD56) "Positive" Tumor



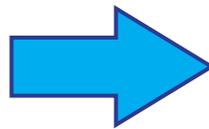
Binding of tumor cell to NK cell via NCAM (CD56)



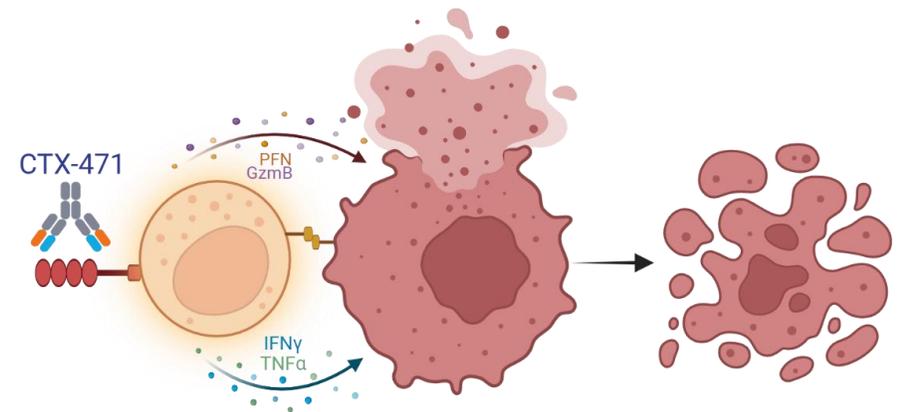
2



Infiltration and upregulation of **CD137** leading to an activated NK cell

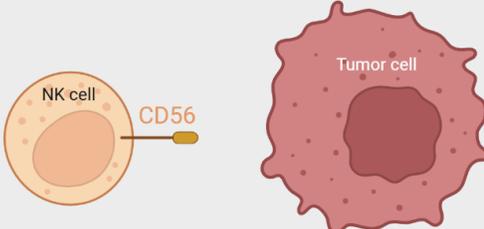


3



CD137 agonism via binding of **CTX-471** leading to tumor cell killing

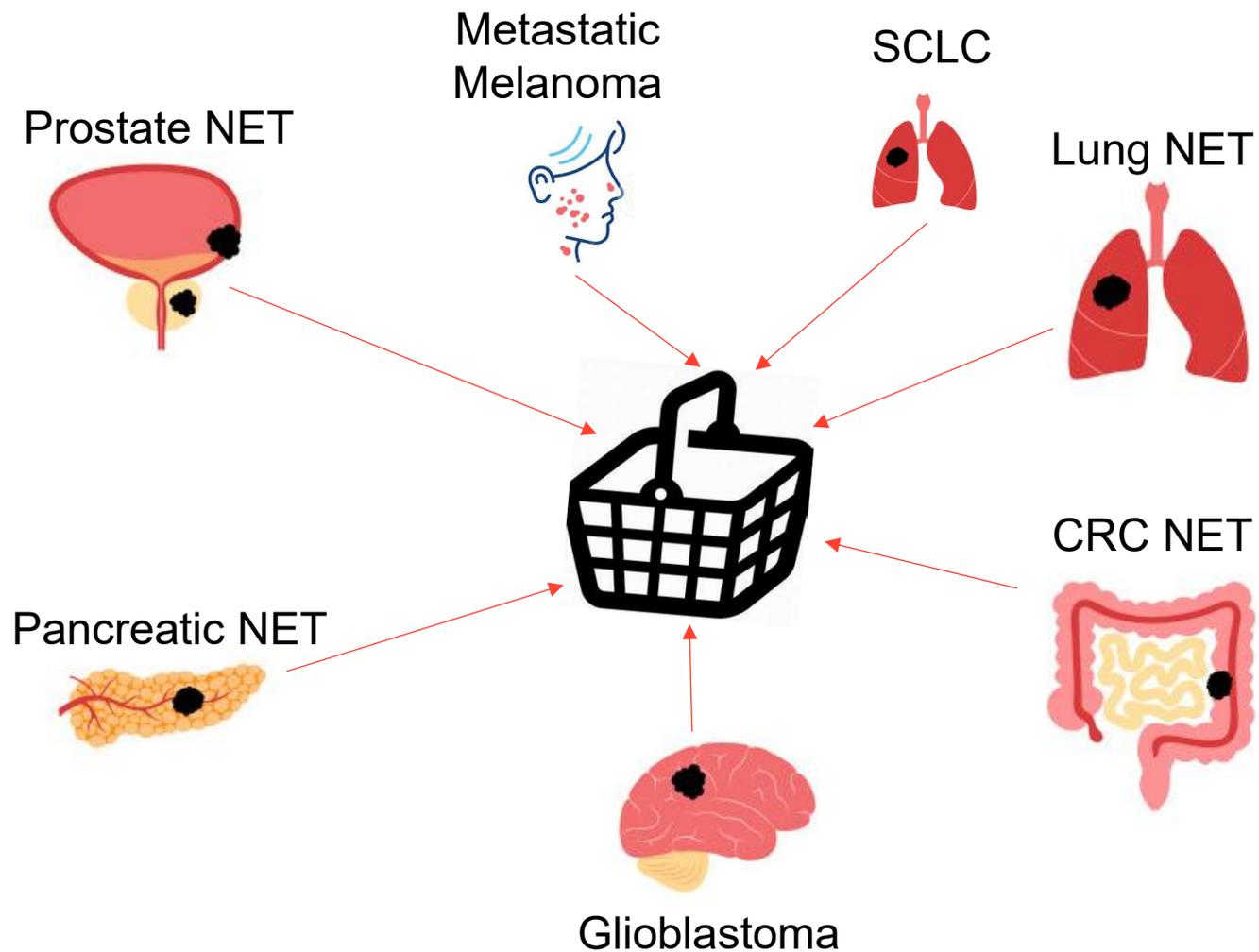
NCAM (CD56) "Negative" Tumor



The diagram shows an orange NK cell on the left with yellow CD56 receptors on its surface. It is not bound to a red tumor cell on the right. The text 'No NCAM (CD56) binding to NK cell' is written below the diagram.

No NCAM (CD56) binding to NK cell

CTX-471: Proposed NCAM (CD56) Basket Trial



US 2023 – SEER Database	
Indication	NCAM Pts
SCLC*	37,000
Glioblastoma*	14,707
Metastatic/Melanoma	5,610
Pancreatic NET	3,203
Prostate NET	2,883
NSCLC NET	2,383
Colon NET	1,530
TOTAL	60,316

* ~100% NCAM+

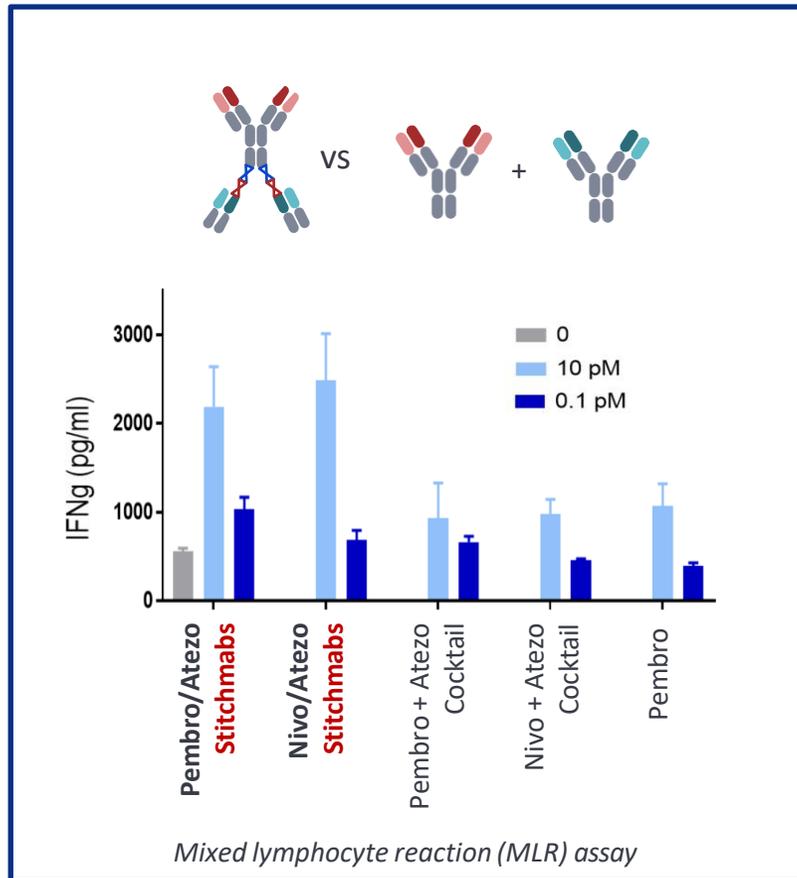
CTX-8371

PD-1 x PD-L1 bispecific antibody

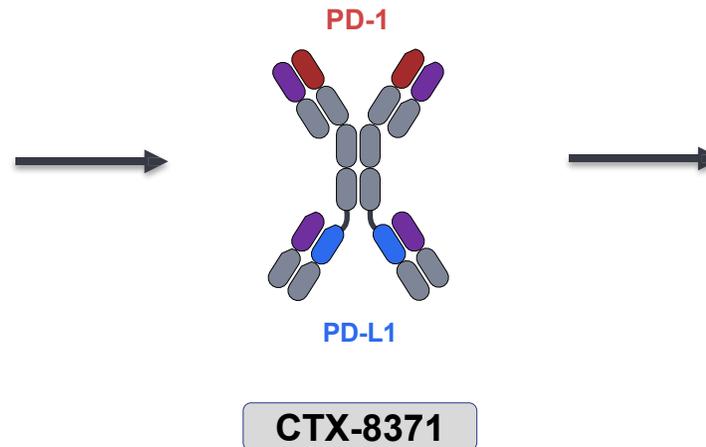


StitchMabs™ Platform was Utilized to Identify CTX-8371

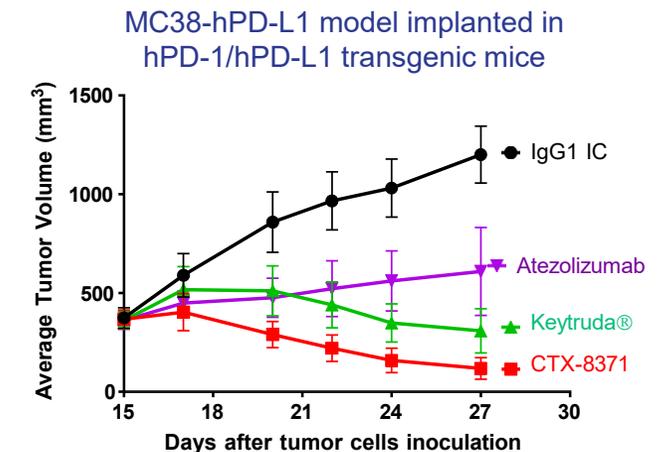
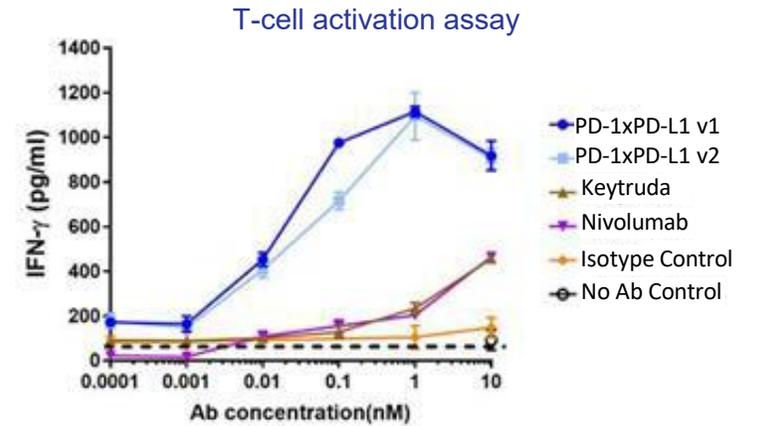
Engineered Synergistic Activity
of PD-1 / PD-L1 in Stitchmabs format



Proprietary Structural Design

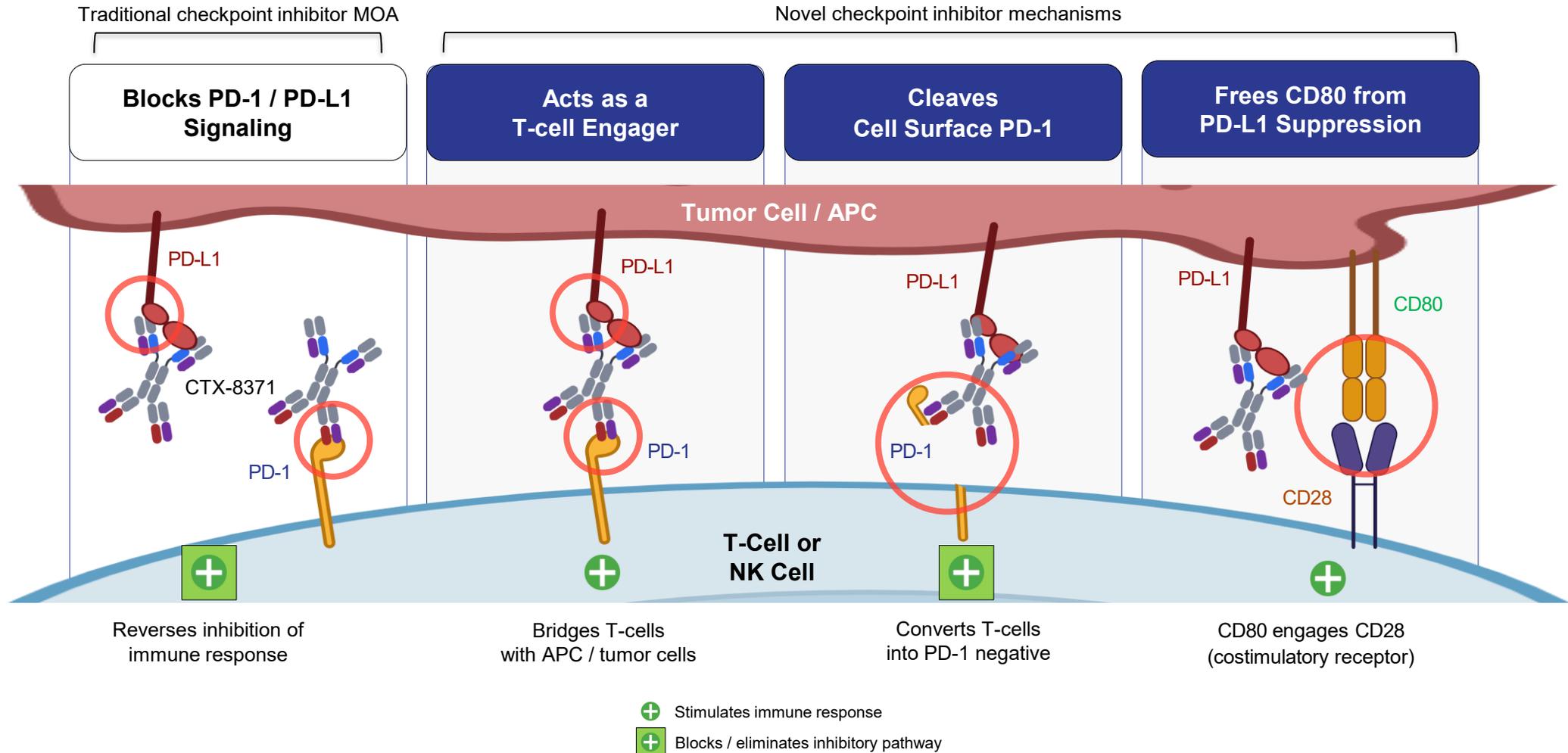


Superior Activity



CTX-8371: Differentiated MoA Leads to Enhanced T-Cell Activation

Potentially first-in-class – converting PD-1 positive T-cells into PD-1 negative T-cells



CTX-8371: Development Status

Phase 1 Study Design

Multiple ascending dose, “3+3” dose-escalation study

5 doses (mg/kg):

0.1 → 0.3 → 1.0 → 3.0 → 10.0

Post PD-1 or PD-L1 patient population:
Melanoma, NSCLC, HNSCC, HL, TNBC

Trial Highlights

Three responses in the first 15 patients

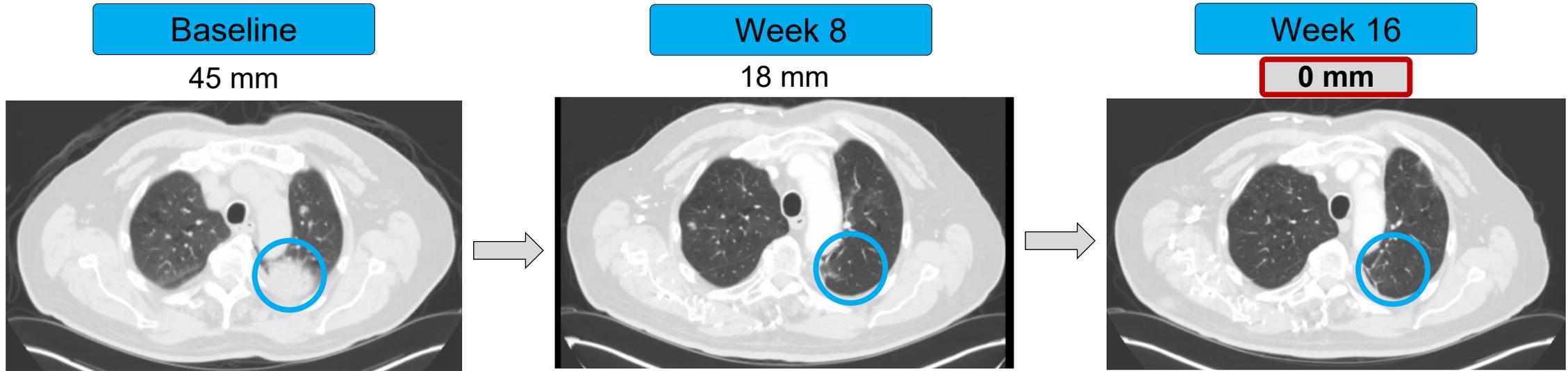
Confirmed Partial Responses in patients
with NSCLC, TNBC, and HL

No DLTs, suggesting a differentiated safety profile

Enrolling cohort expansion in NSCLC & TNBC
with HL cohort to begin in Q2

Potential for proprietary combination regimens with tovecimig and CTX-471

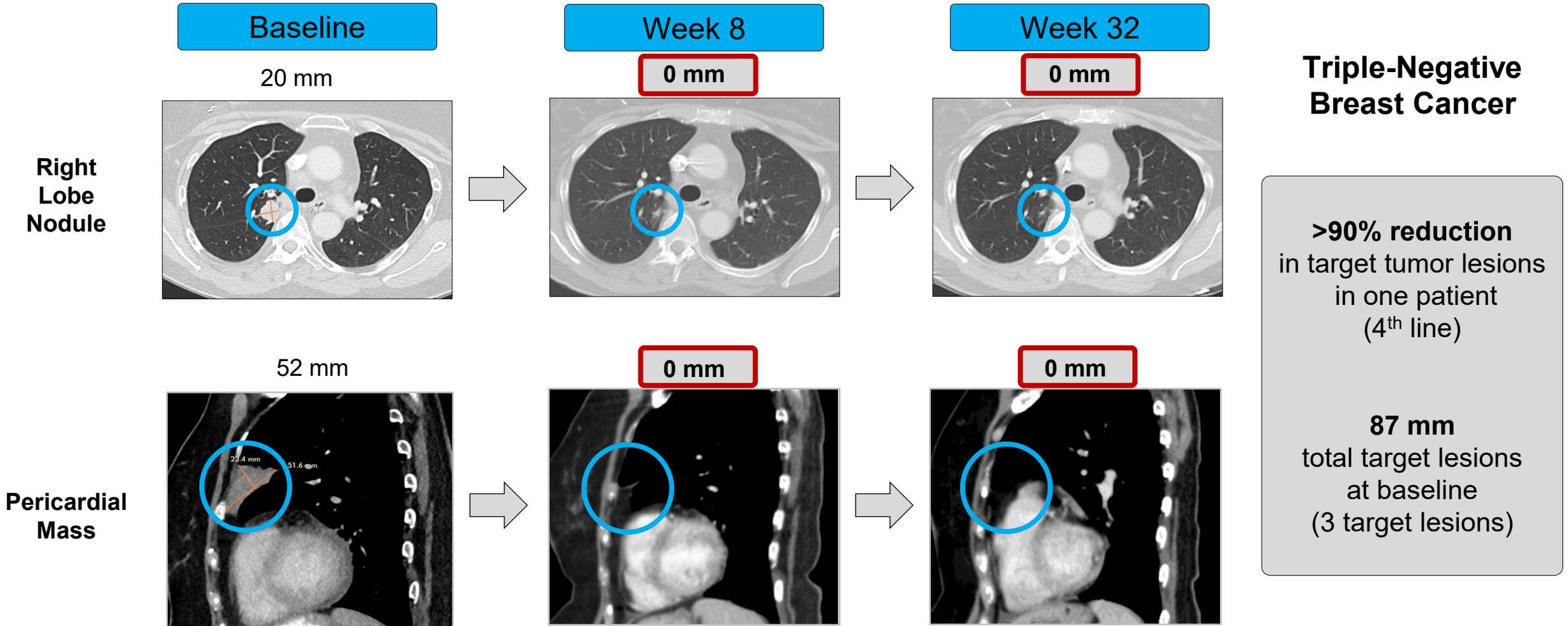
CTX-8371: Patient with NSCLC Target Lesion #1 Imaging



Non-Small Cell Lung Cancer

- **Complete resolution** of target tumor lesions in one patient after initial pseudo-progression 4th line with 59 mm total target lesion burden @ baseline

CTX-8371 in TNBC: Confirmed, Deep and Durable Partial Response



CTX-10726

PD-1 x VEGF-A bispecific antibody



CTX-10726: PD-1 x VEGF-A Bispecific

CTX-10726: Drug Discovery and Engineering

Fully human, glycosylated IgG1 with silenced Fc- γ receptor binding

- *Anti-VEGF* Clinically proven mechanism (bevacizumab)
- *Anti-PD-1* Proprietary anti-PD-1 scFv with highly stable structure
High affinity, cooperative target binding
More potent PD-1 blockade observed preclinically
(vs prior published data for other drugs in class*)
Leverages clinical experience from CTX-8371 program

CTX-10726: Development Pathway

IND clearance by FDA in early 2026

Phase 1 initiation expected in Q1 with potential clinical data in 2026

MOA validated by ivonescimab & other PD-1 x VEGF programs

Advanced CMC process with commercial-level yields

Novel composition of matter IP

*Comparison based on reported PD-1 blockade data (IC50, nM) for ivonescimab

CTX-10726 Builds on Compass' Deep VEGF-IO Expertise

Tovecimig
Anti-VEGF-A



Anti-DLL4

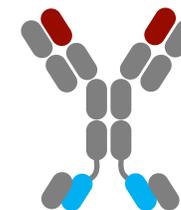
CTX-8371
Anti-PD-1



Anti-PD-L1

CTX-10726

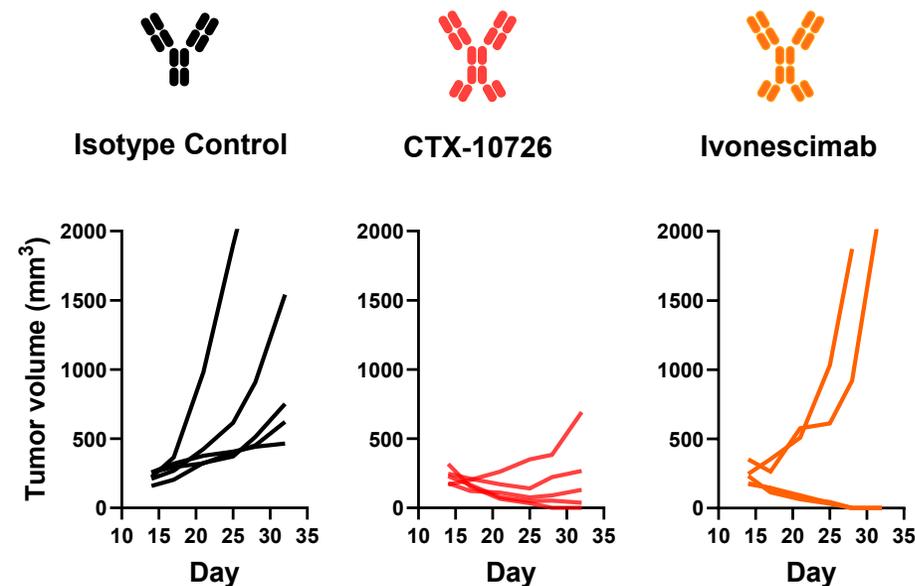
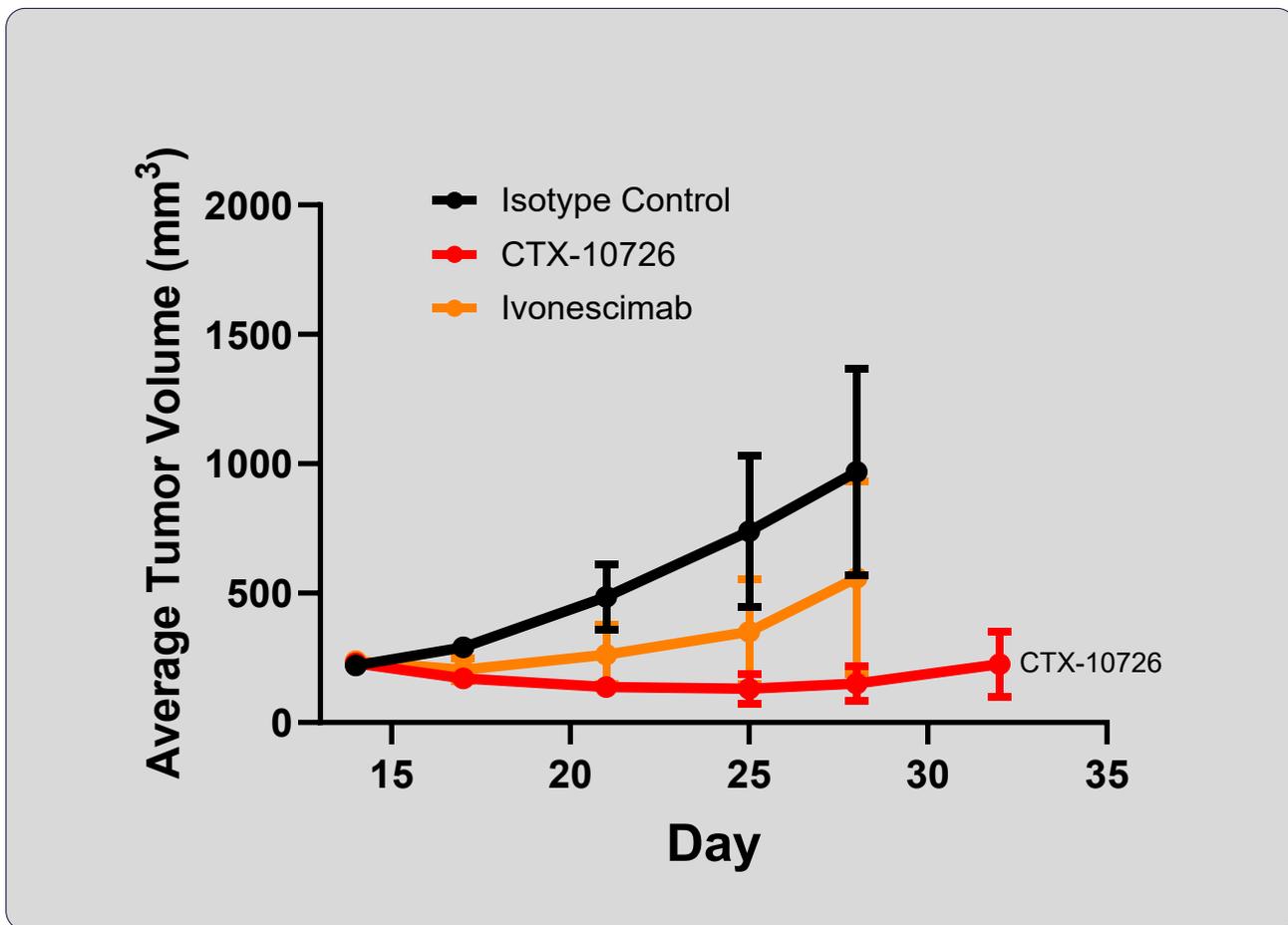
Anti-VEGF-A



Anti-PD-1

CTX-10726: Superior Anti-PD-1 Activity Compared to Iponescimab

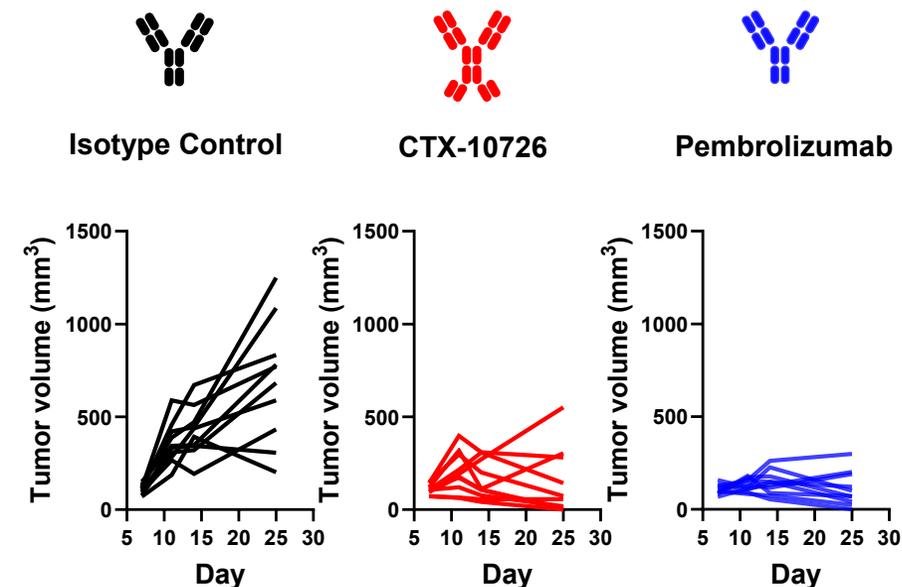
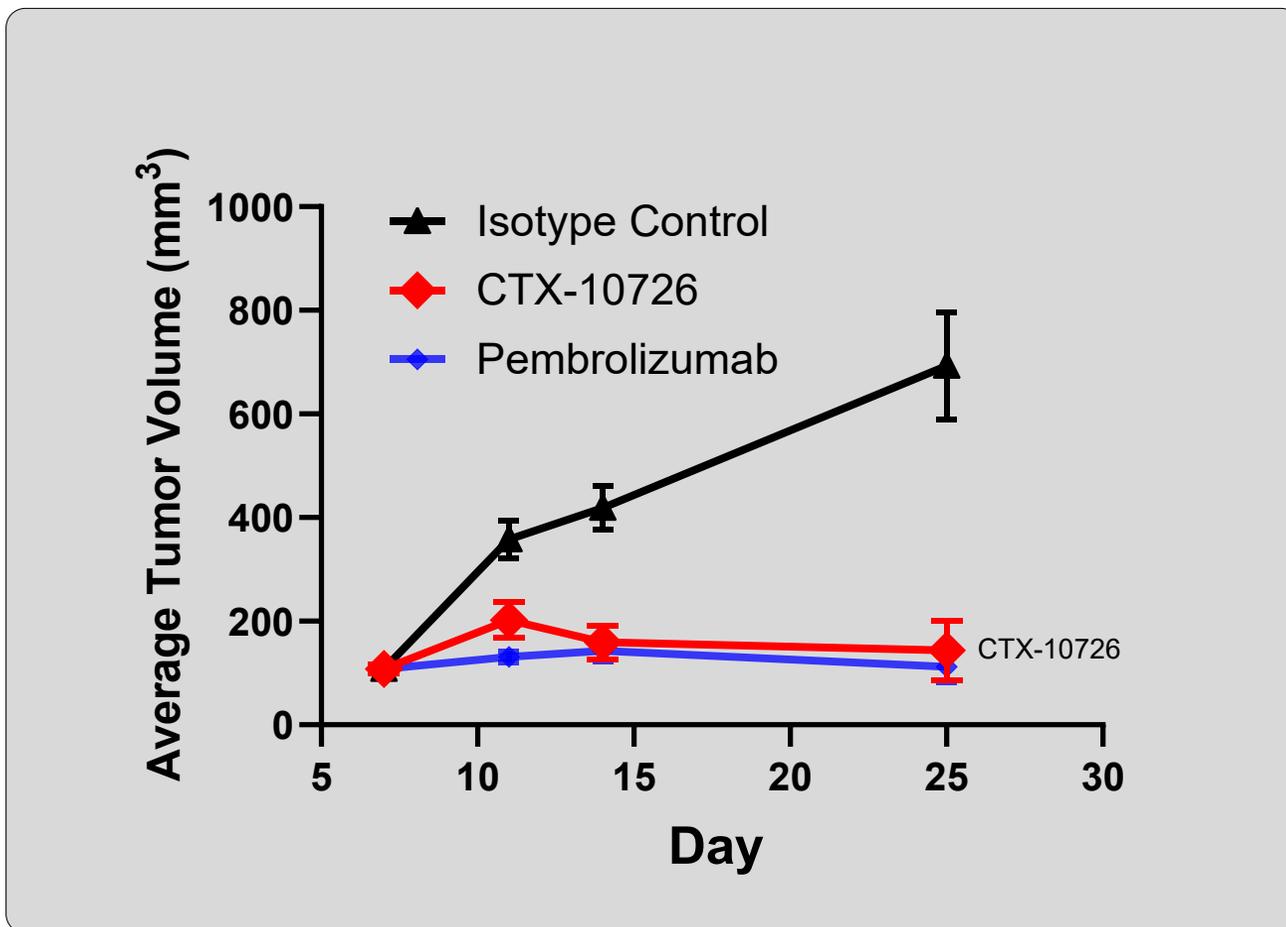
Transgenic Mouse Model (MC38)
(express human PD-1/PD-L1)



- Data compares anti-PD-1 arms of ivonescimab and CTX-10726
- No human VEGF-A in this experiment

CTX-10726: Anti-PD-1 Activity Comparable to Pembrolizumab

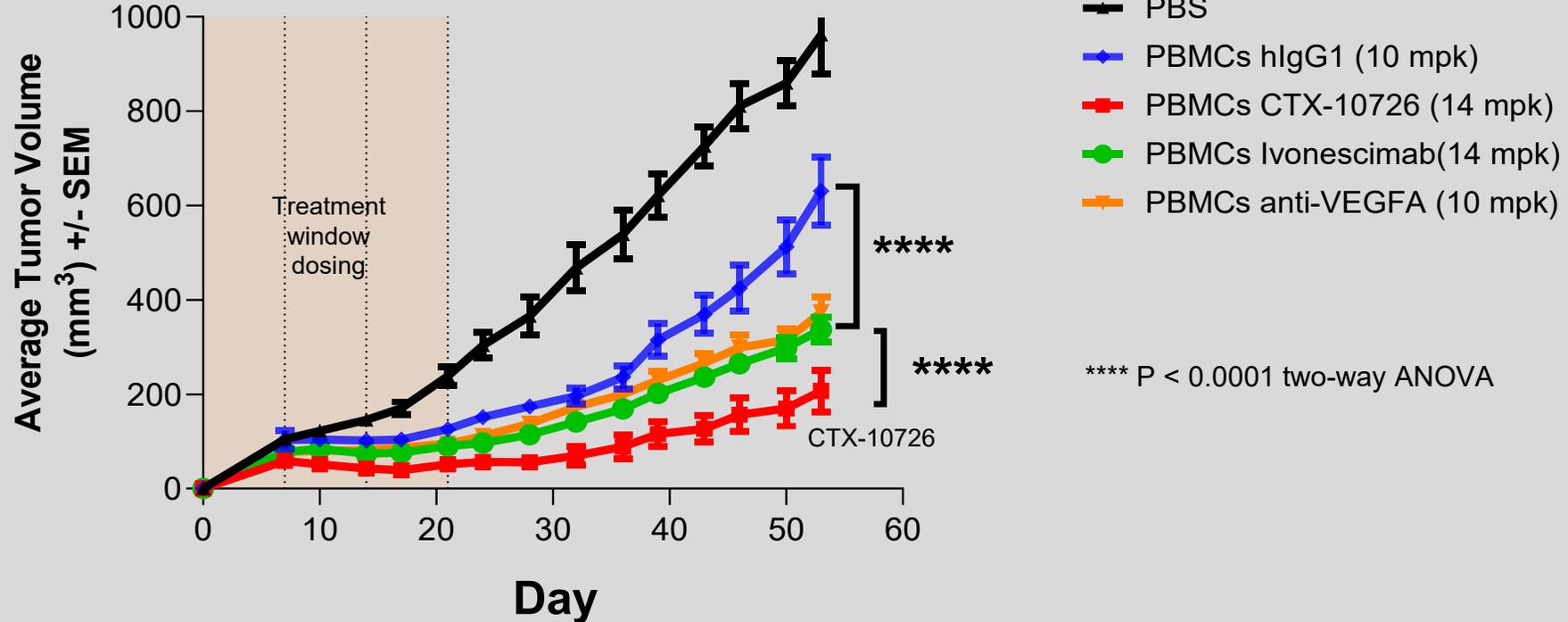
Transgenic Mouse Model (MC38)
(express human PD-1/PD-L1)



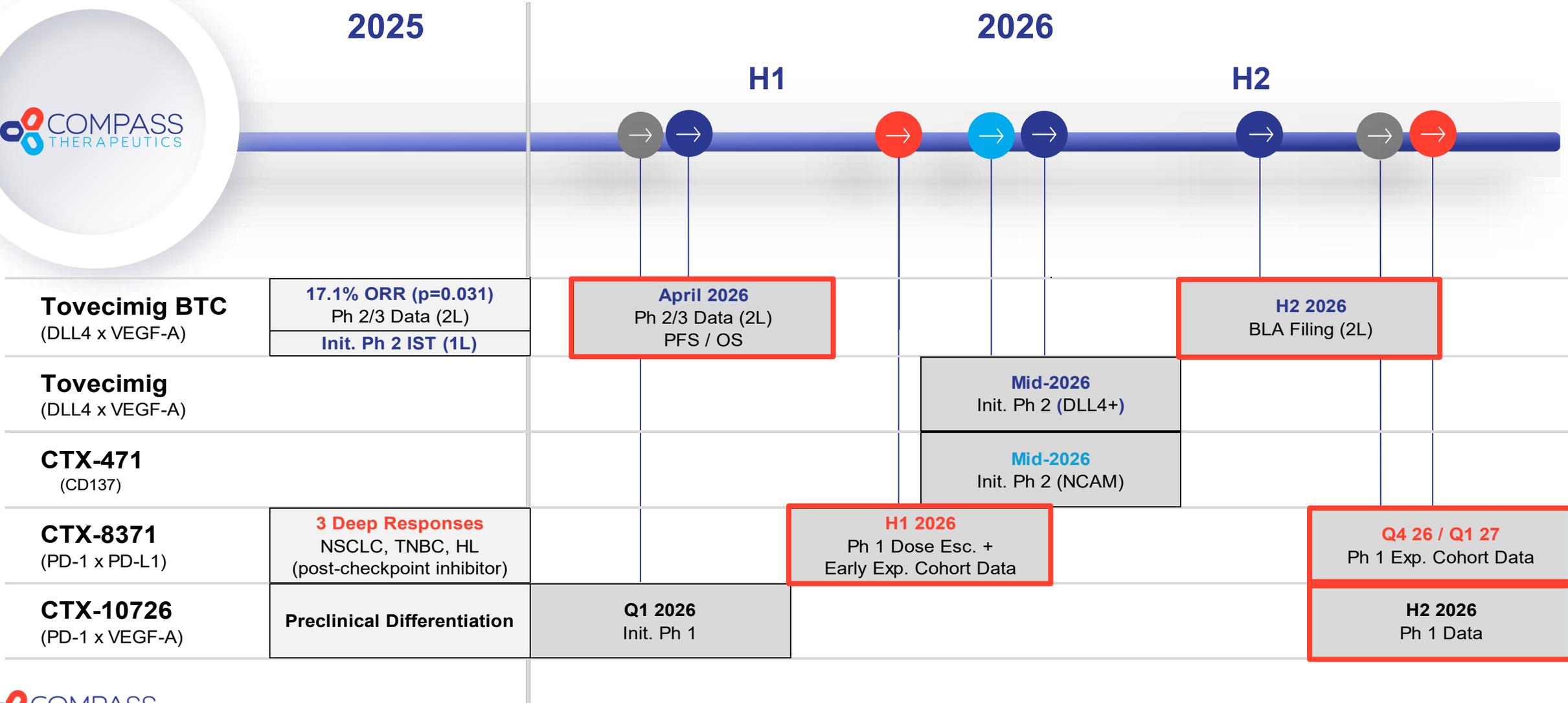
- Data compares anti-PD-1 arms of pembrolizumab and CTX-10726
- No human VEGF-A in this experiment

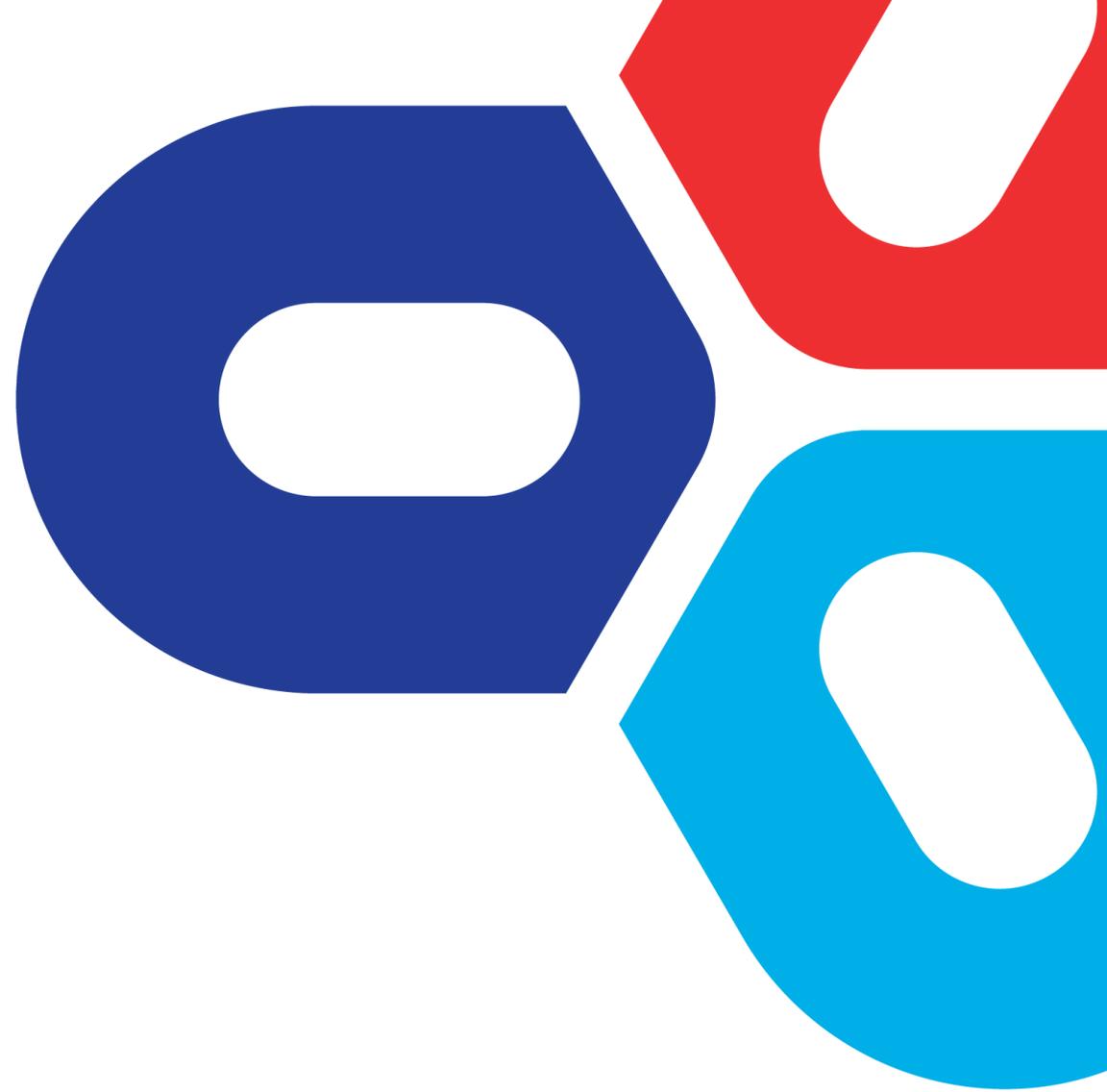
CTX-10726: Superior Anti-Tumor Effect in Preclinical Studies

Human NSCLC (HCC827) Xenografts
Treated with human PBMCs and indicated antibodies
Testing both PD-1 and VEGF-A targeting



Key Anticipated Milestones





Compass Therapeutics

Website: [compasstherapeutics.com](https://www.compasstherapeutics.com)
Nasdaq: CMPX