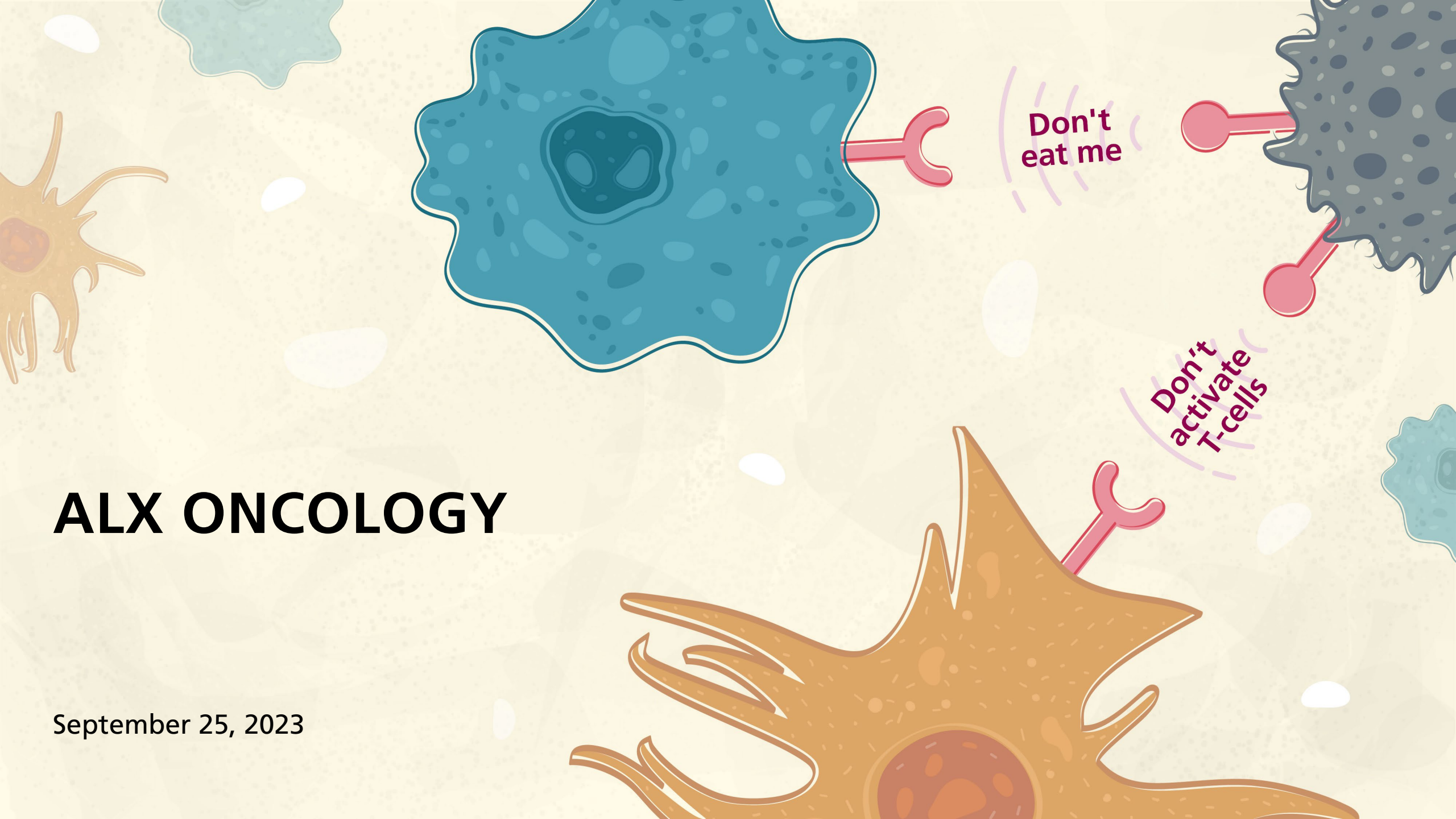


ALX ONCOLOGY

September 25, 2023

FORWARD-LOOKING STATEMENTS

Certain information set forth in this presentation contains "forward-looking information", under applicable laws collectively referred to herein as forward-looking statements. Except for statements of historical fact, information contained herein constitutes forward-looking statements and includes, but is not limited to the (i) cost and timing of our product development activities and clinical trials; (ii) completion of the Company's clinical trials that are currently underway, in development or otherwise under consideration; (iii) our expectations about the timing of achieving regulatory approval and the cost of our development programs; (iv) projected financial performance of the Company; (v) the expected development of the Company's business, projects, collaborations and joint ventures; (vi) execution of the Company's vision and growth strategy, including with respect to future M&A activity and global growth; (vii) sources and availability of third-party financing for the Company's research and development; (viii) future liquidity, working capital, and capital requirements; and (ix) industry trends. These and other risks are described more fully in ALX Oncology's filings with the Securities and Exchange Commission ("SEC"), including ALX Oncology's Annual Report on Form 10-K and other documents ALX Oncology files with the SEC from time to time.

Although forward-looking statements contained in this presentation are based upon what management of the Company believes are reasonable assumptions, there can be no assurance that forward-looking statements will prove to be accurate. Actual results and future events could differ materially from those anticipated in such statements. The Company undertakes no obligation to update forward-looking statements if circumstances or management's estimates or opinions should change except as required by applicable securities laws.

This presentation concerns product candidates that are under clinical investigation, and which have not yet been approved for marketing by the U.S. Food and Drug Administration. These product candidates are currently limited by federal law to investigational use, and no representation is made as to their safety or effectiveness for the purposes for which they are being investigated.

This presentation also contains estimates and other statistical data made by independent parties and by ALX Oncology relating to market size and growth and other industry data. 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 ALX Oncology's future performance and the future performance of the markets in which it operates are necessarily subject to a high degree of uncertainty and risk.

ALX ONCOLOGY: THE CD47 LEADER

First-in-class anti-CD47 molecule (evorpacept) designed for use in combination

Designed to avoid toxicities and maximize efficacy when combined with anticancer antibodies and checkpoint inhibitors

Multiple clinical studies highlight differentiated safety and efficacy validating mechanisms in both anticancer antibodies and checkpoint inhibitors

Data from Ph1b studies in multiple indications suggest evorpacept may be the only CD47 drug with activity in solid tumors

Significant upcoming catalysts including data from three randomized Ph2 studies

Anticipating data from ASPEN-06, expected to be the first randomized controlled trial (RCT) in the CD47 space in solid tumors in Q4 2023, and from ASPEN-03 and ASPEN-04, expected to be the first two RCTs with a checkpoint inhibitor in 2024

Pursuing additional studies to expand evorpacept indications and building a strong pipeline

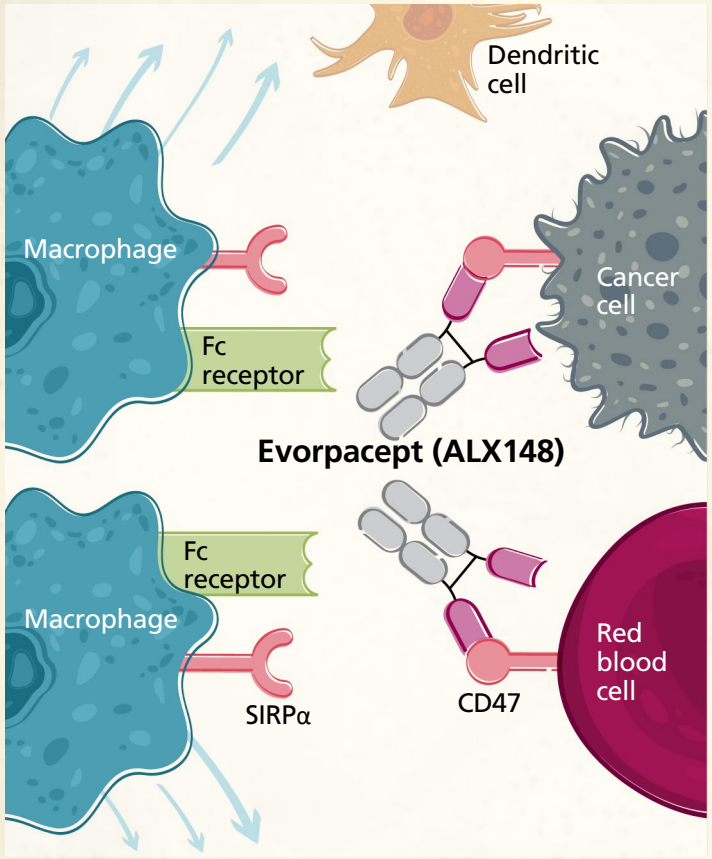
Several Ph1 studies to test combinations in breast, urothelial, multiple myeloma and NHL

Strong balance sheet with cash through mid-2025

Cash position of approximately $225M as of Q2 2023 with potential access to additional $90M through debt facility

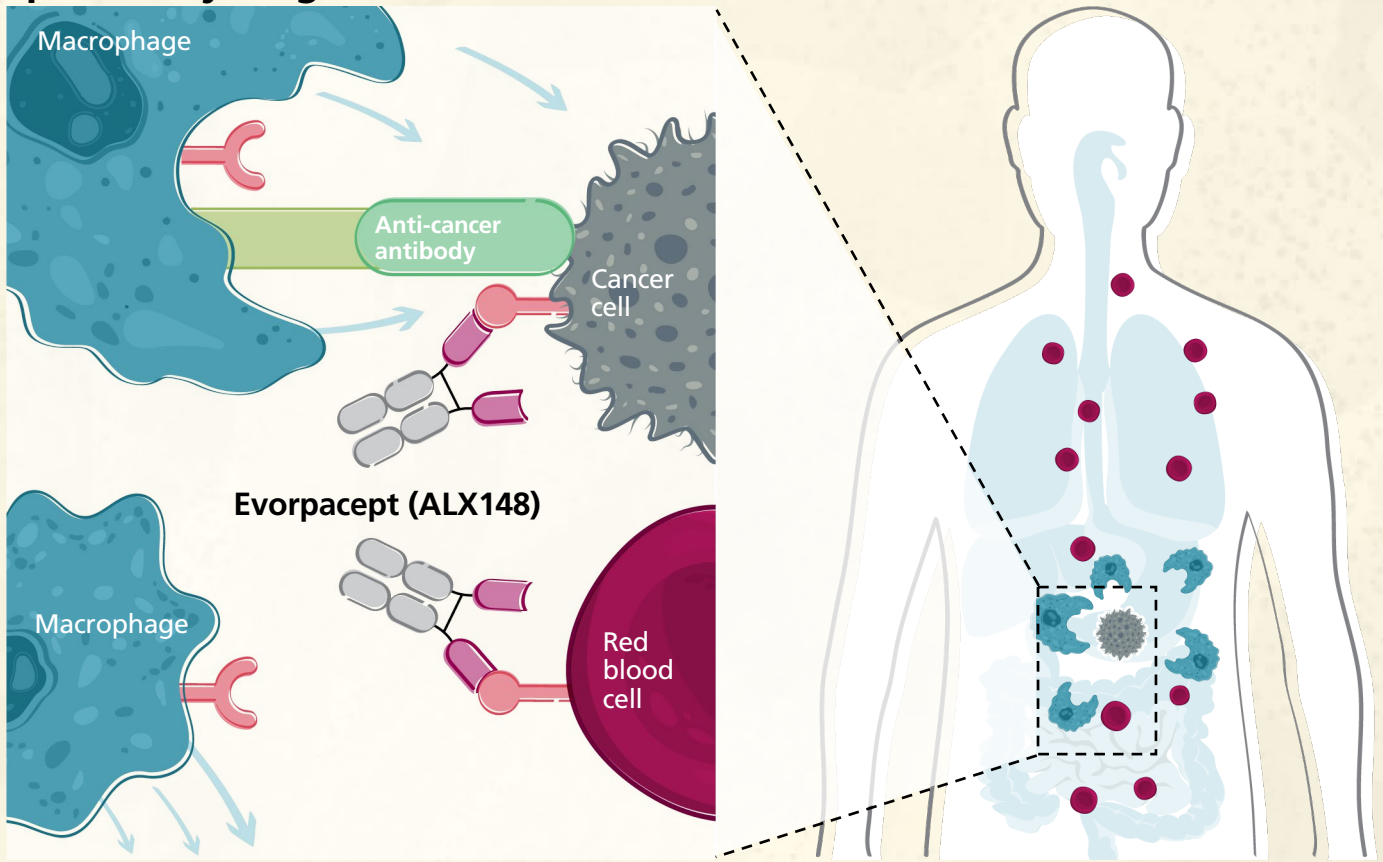
EVORPACEPT: A FIRST-IN-CLASS APPROACH TO TARGETING CD47

Complete CD47 blockade without targeting blood cells



Evorpacept, with an inactive Fc, binds and blocks CD47-SIRPa interaction while sparing normal cells, minimizing toxicity.

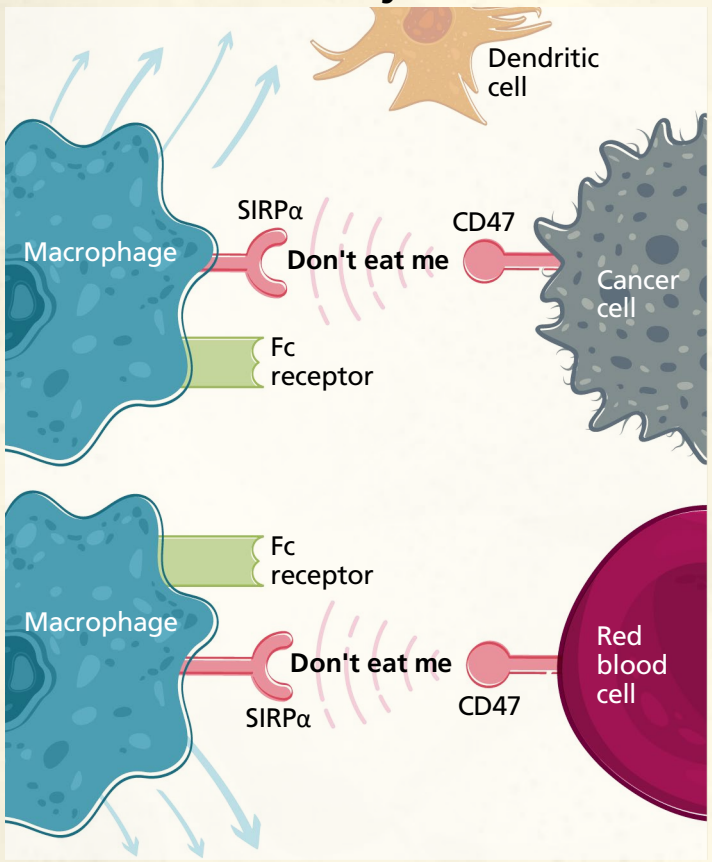
Combined with cancer therapy to specifically targets cancer cells



Evorpacept is combined to improve the efficacy of anti-cancer antibodies and checkpoint inhibitors.

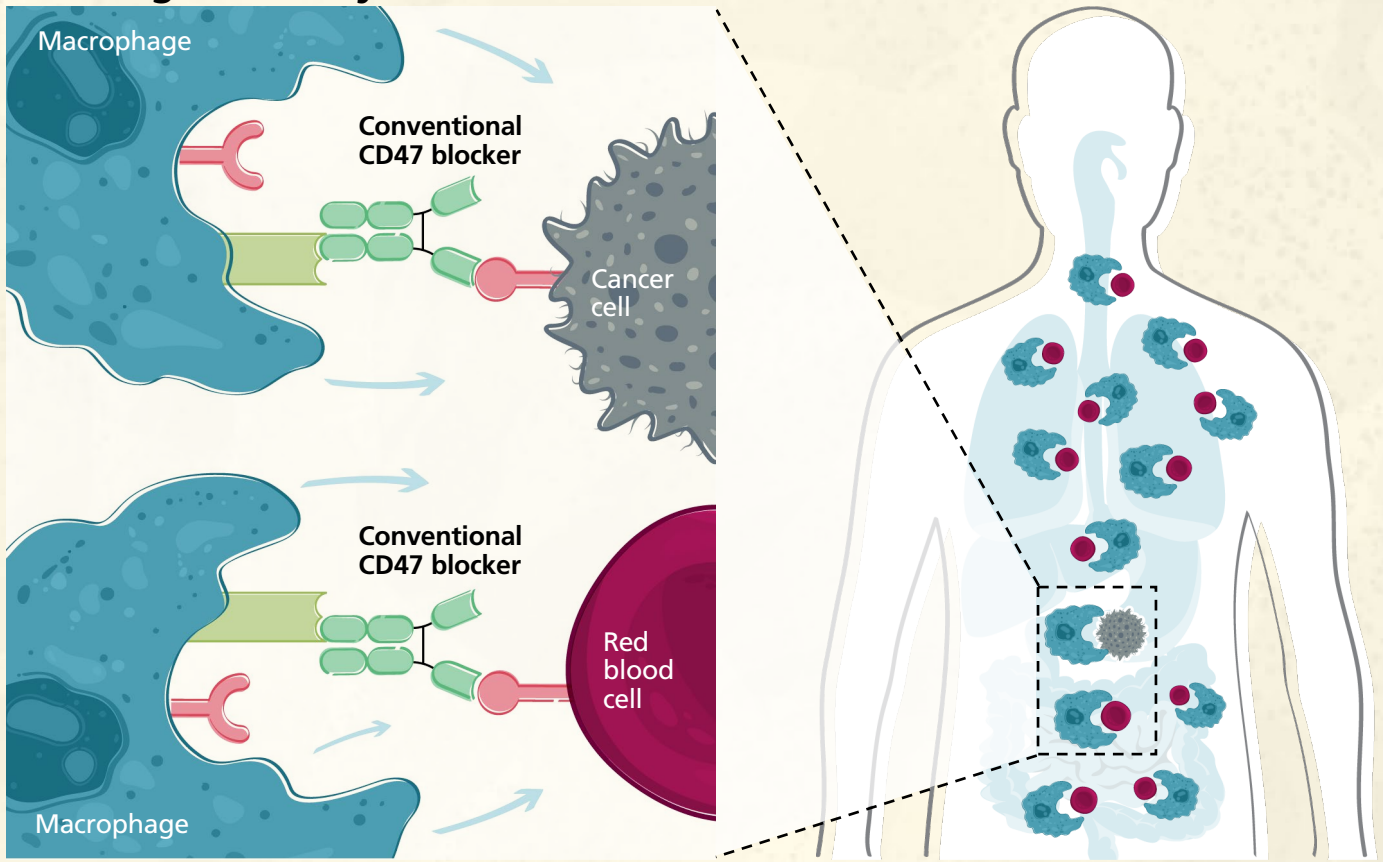
CONVENTIONAL CD47 TARGETING IS MORE TOXIC AND LESS EFFICACIOUS

Cancer cells use CD47 to hide from the immune system



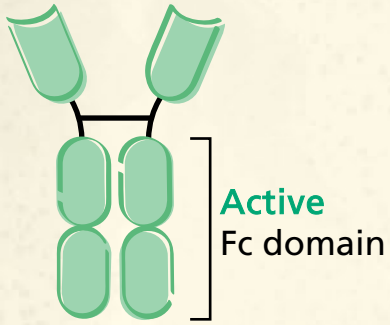
CD47 is a potent 'do not eat me' signal that enables cancer cells to evade detection by the innate immune system. CD47 is also expressed in normal tissues.

Indiscriminate CD47 inhibition will target healthy cells



Systemically administered CD47 blocker with an active Fc in the same molecule activates immune response and causes cytopenia.

CD47 BLOCKER DEVELOPMENT: EVORPACEPT IS UNIQUE WITH AN INACTIVE FC DOMAIN



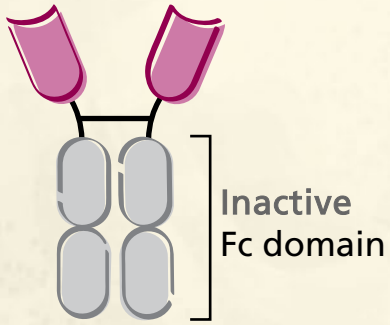
CD47 blocker designed for monotherapy but developed only in combinations

FIH — Lemzo-parlimab

FIH — TTI-622

FIH — TTI-621

FIH — Magrolimab

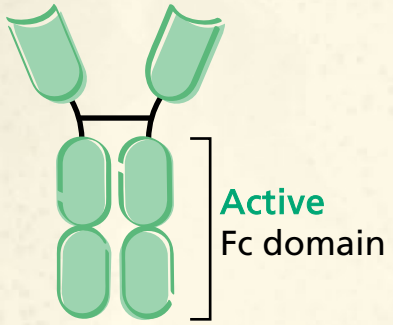


CD47 blocker designed for combinations, no known safety concerns, better efficacy in combinations

evorpacept (ALX148)

2017
First in human (FIH)

CD47 BLOCKER DEVELOPMENT: EVORPACEPT IS WELL TOLERATED WITHOUT HEMATOLOGIC TOXICITY SIGNAL



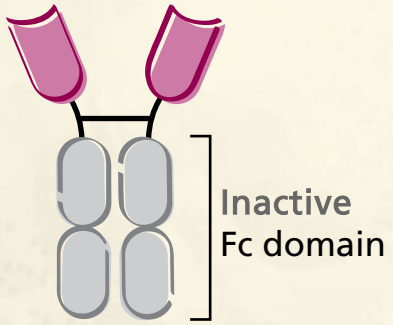
CD47 blocker designed for monotherapy but developed only in combinations

Hematologic toxicity signal
Lemzo-parlimab

Hematologic toxicity signal
TTI-622

Hematologic toxicity signal
TTI-621

Hematologic toxicity signal
Magrolimab



CD47 blocker designed for combinations, no known safety concerns, better efficacy in combinations

evorpacept + Keytruda

evorpacept + Herceptin

evorpacept + Rituxan

Active in combinations with anti-cancer antibodies and checkpoint inhibitors

evorpacept (ALX148)

Dosed up to 60 mg/kg with no hematologic toxicity signal

EVORPACEPT DEMONSTRATED CONSISTENT TOLERABILITY AND INCREASED EFFICACY: ONLY CD47 BLOCKER WITH POSITIVE SOLID TUMOR DATA

Active
Fc domain

CD47 blocker designed for monotherapy but developed only in combinations

Hematologic toxicity signal — Lemzo-parlimab

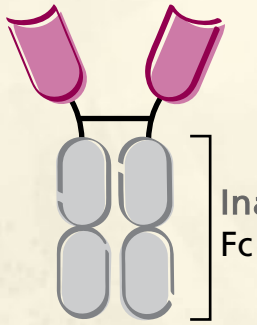
Hematologic toxicity signal — TTI-622

Hematologic toxicity signal — TTI-621

Hematologic toxicity signal — Magrolimab

Phase 3 failure in MDS

August 2023



Inactive
Fc domain

CD47 blocker designed for combinations, no known safety concerns, better efficacy in combinations

First-in-human 2017

evorpacept + Keytruda

evorpacept + Herceptin

evorpacept + Rituxan

Phase 1 proof of principle combination trials

Today

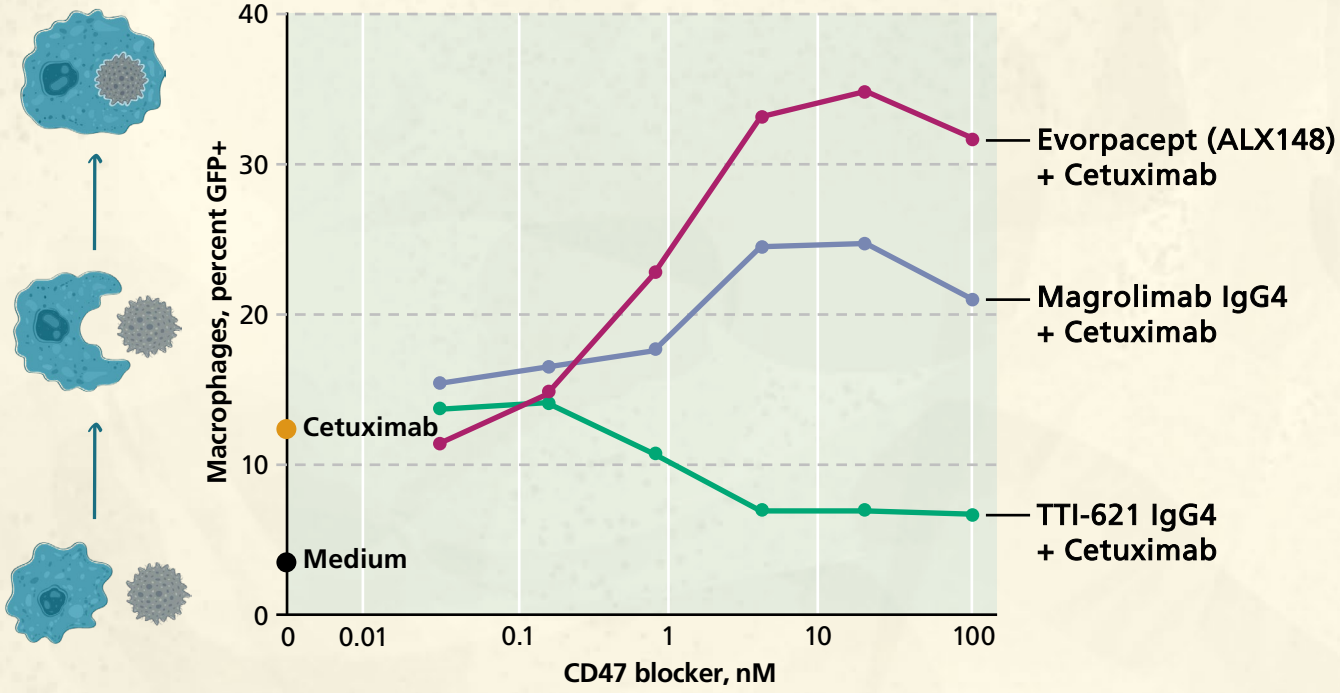
evorpacept (ALX148)

Currently in randomized Phase 2 studies with anti-cancer antibodies and checkpoint inhibitors

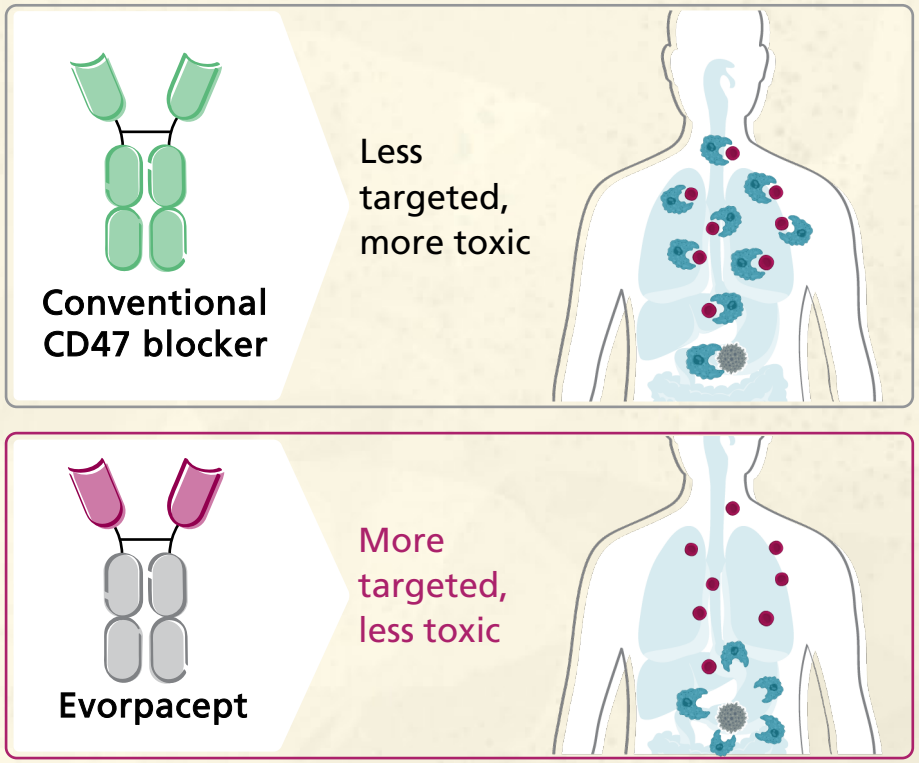
CONSISTENT ACTIVITY PROFILE BASED ON MOLECULE DESIGN

Promising data in vitro… translated to differentiated clinical data in vivo

Evorpacept demonstrates superior phagocytosis in combinations



Clinical experience from over 400 patients dosed with evorpacept



EVORPACEPT IS A HIGHLY DIFFERENTIATED CD47 BLOCKER

Name	evorpacept	magrolimab	TTI-621	TTI-622	lemzoparlimab
Solid Tumor Proof of Principle	✓ (gastric, HNSCC)[1]	✗ (CRC, ovarian, bladder)[2,3,4]	✗	✗	✗
Hematologic toxicity signal	**No**	Yes	Yes	Yes	Yes
Molecule Structure	High-affinity SIRPα-Fc fusion protein	CD47 mAb	Wild Type SIRPα-Fc fusion protein	Wild Type SIRPα-Fc fusion protein	CD47 mAb
Affinity	**0.1 nM**	8 nM	500 nM[5]	500 nM[5]	0.5 nM
Fc Effector Function	**None**	Medium (IgG4)	High (IgG1)	Medium (IgG4)	Medium (IgG4)

1 Lee, et al, SITC 2021; 2 Fisher, et al, ASCO-GI 2020 – 2 PRs in 74 evaluable CRC patients with cetuximab; 3 Lakhani, et al, ASCO-SITC 2020; 4 Drakaki, et al, Clin. Can. Res. 2023; 5 ALX in-house characterization;

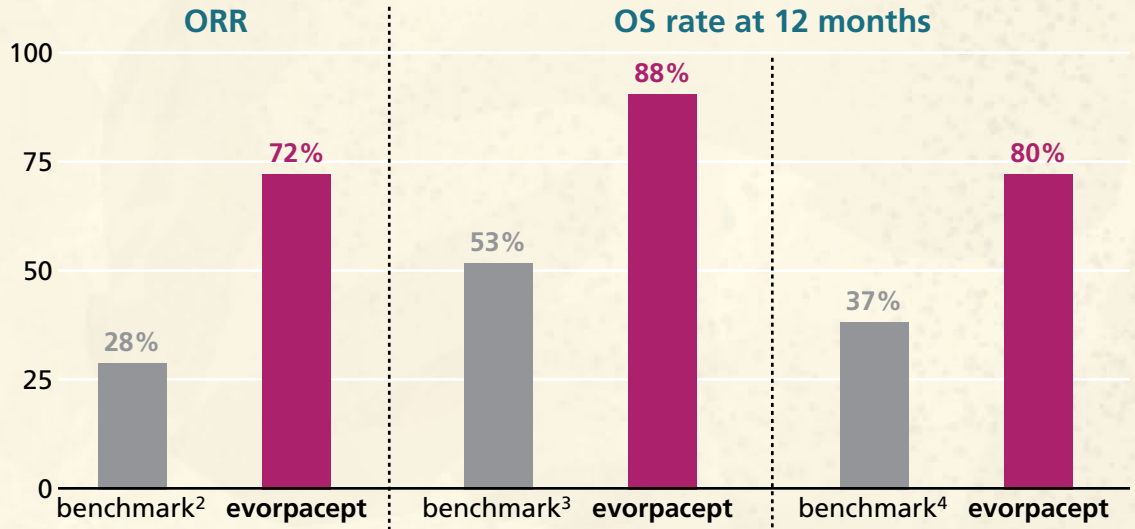
EVORPACEPT DEMONSTRATES CONSISTENT TOLERABILITY AND INCREASED EFFICACY

>400 patients dosed | **No dose** dependent **cytopenias** | **Well tolerated** in combinations

Treatment related adverse events[1]

	≥Grade 3	≥Grade 3	≥Grade 3
Platelets decreased	-	-	**2 (3.8%)**
ALT increased	-	-	**1 (1.9%)**
Anemia	-	**1 (7.7%)**	**1 (1.9%)**
Neutropenia / neutrophil count decrease	-	-	**1 (1.9%)**
Lymphocyte count decreased	**1 (5.6%)**	-	-
Hypersensitivity	-	**1 (7.7%)**	-
N=83	evorpacept + Herceptin+ Cyramza + chemo N=18	evorpacept + Keytruda+ chemo N=13	evorpacept + Keytruda N=52

Survival-based endpoints in solid tumors (ASPEN-01 cohorts)



≥2L HER2+ GC
evorpacept + Herceptin + Cyramza + paclitaxel N=18

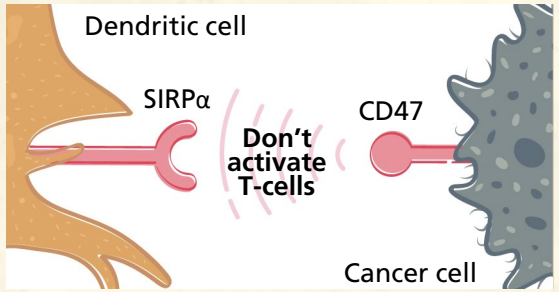
1L HNSCC
evorpacept + Keytruda + 5FU + platinum N=13

≥2L HNSCC (CPI-Naïve)
evorpacept + Keytruda N=10

1 For evorpacept plus Keytruda ≥Gr3 frequencies are reported from treatment related adverse events (TRAEs) occurring in >1 subject in all histologies at 10 & 15 mg/kg QW; safety data as of April 1, 2020. For evorpacept plus Keytruda and chemotherapy or plus Herceptin, Cyramza, and chemotherapy ≥Gr3 frequencies are reported from all TRAEs; safety data as of September 01, 2021. Activity data as of September 1, 2021. ORR = Objective Response Rate, mOS = median overall survival.
2. Wilke, Lancet Oncology, 2014; 3. Burtness, Lancet, 2019; 4. Cohen, Lancet, 2018.

OUR TWO MECHANISMS OF ACTION: PROOF OF PRINCIPLE IN MULTIPLE ONGOING TRIALS

"Don't activate T cells"



Clinical proof of principle:

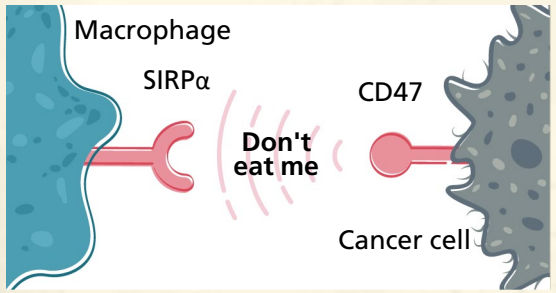
Ph1b HNSCC → Randomized Ph2 HNSCC

$22B US sales in class

Checkpoint inhibitors (CPI):

KEYTRUDA → PD(L)1

"Don't eat me"



Clinical proof of principle:

Ph1b NHL → Ph1b GC → Randomized Ph2 GC

$10B US sales across classes

Anti-cancer antibodies:

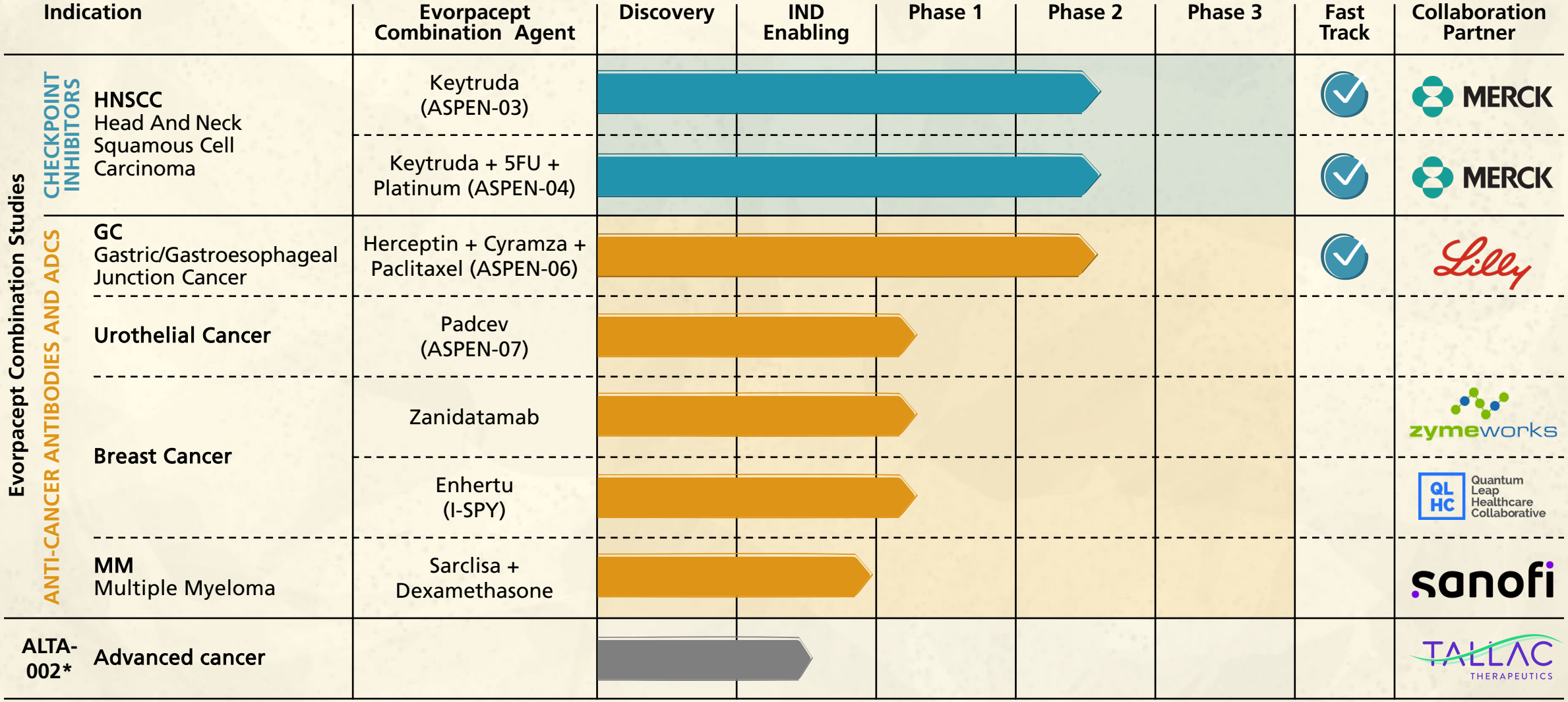
Herceptin trastuzumab	HER2
CYRAMZA ramucirumab injection	VEGF
Zanidatamab	HER2
SARCLISA	CD38
ERBITUX CETUXIMAB	EGFR
Rituxan Rituximab	CD20

Antibody drug conjugates (ADCs):

PADCEV	Nectin-4
ENHERTU	HER2

US sales based on Clarivate | DRG Disease Landscape & Forecast US sales estimates for 2022 for cumulative total sales across compound classes.

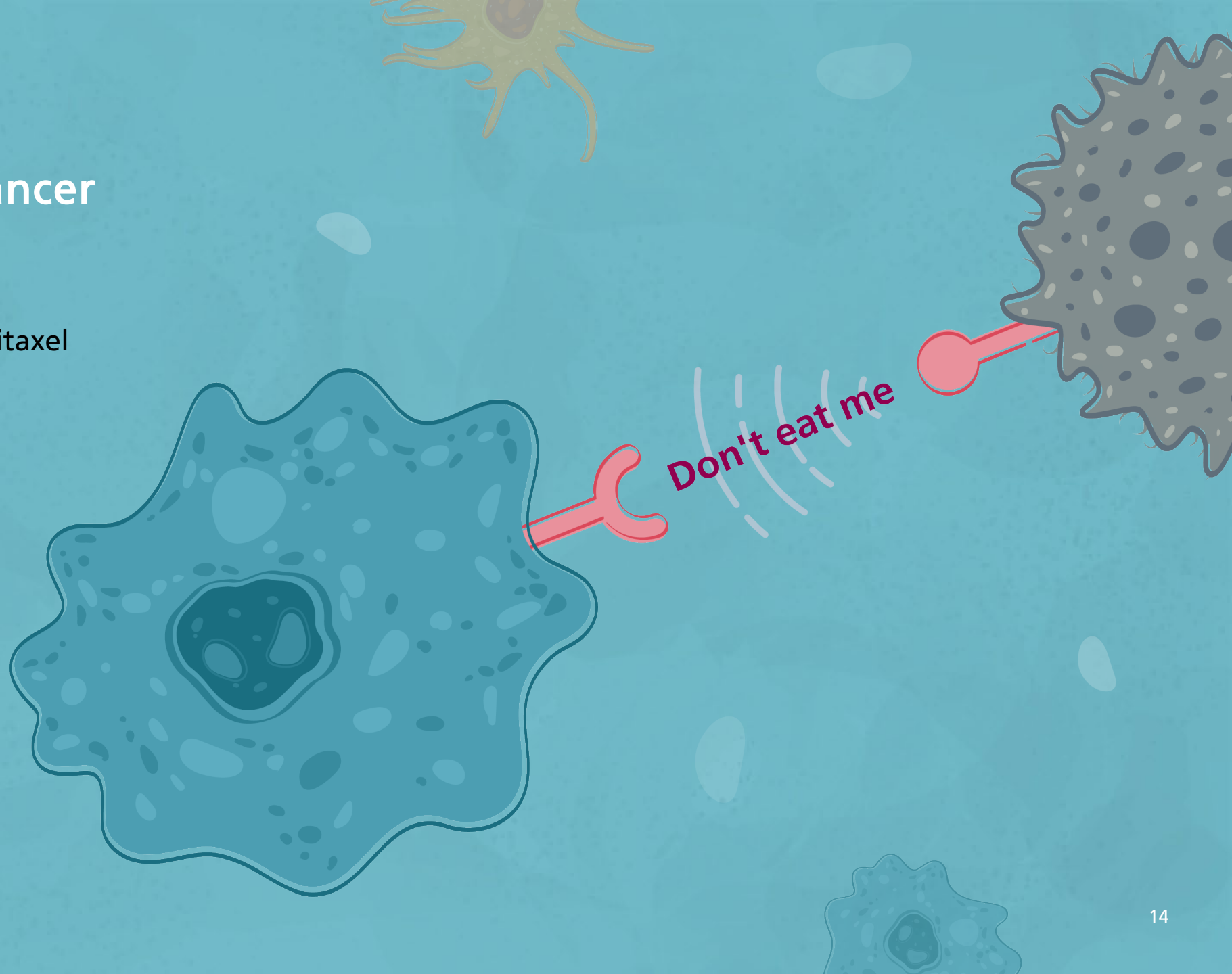
OUR PIPELINE FOCUSES EXCLUSIVELY ON THE TWO MAIN MECHANISMS OF ACTION



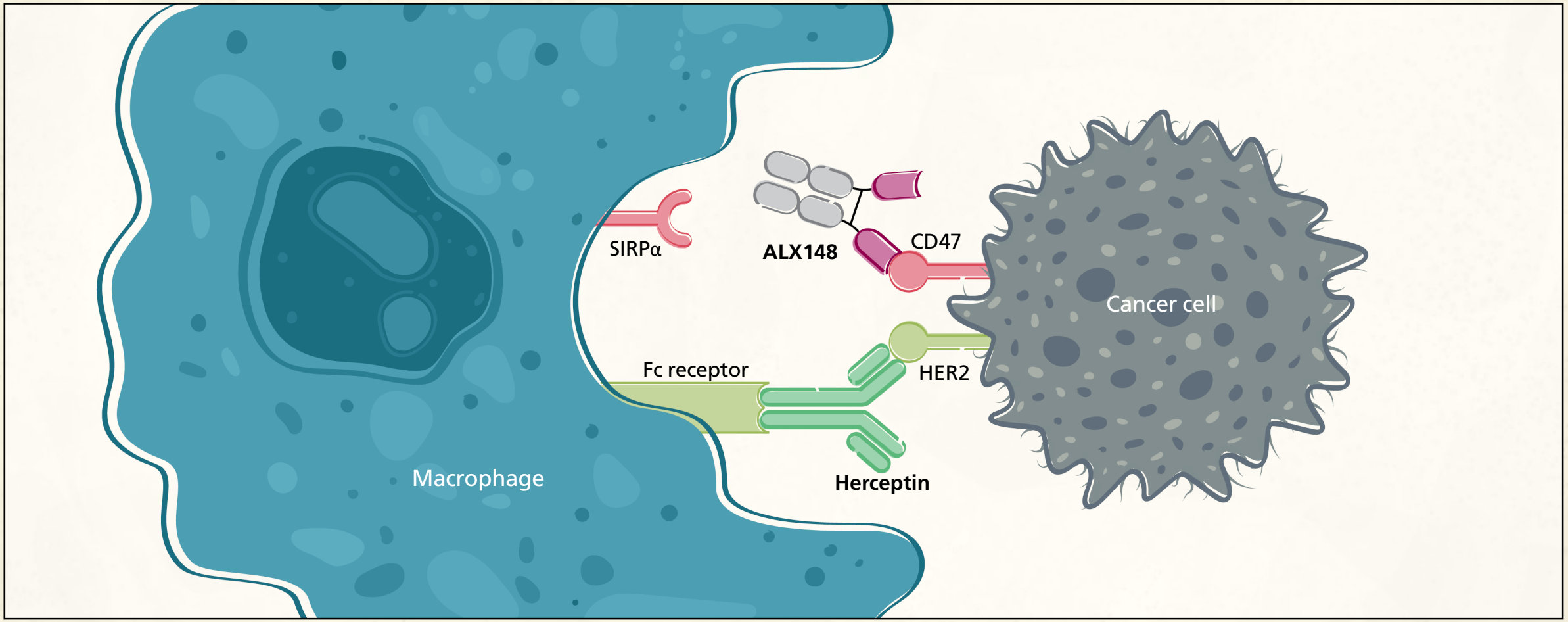
*SIRPα Toll-like receptor agonist antibody conjugate (TRAAC)

HER2+ gastric/GEJ cancer

- **ASPEN-06:**
  Evorpacept (ALX148)
  + Herceptin + Cyramza + paclitaxel



GC TRIAL: EVORPACEPT + HERCEPTIN MECHANISM OF ACTION



Evorpacept increases antibody dependent cellular phagocytosis in combination with Herceptin

CLINICAL ACTIVITY OF HISTORICAL BENCHMARKS IN PATIENTS WITH HER2 POSITIVE GASTRIC CANCER

Population	N	ORR	DOR (m) [95% CI]	PFS (m) [95% CI]	OS (m) [95% CI]
≥2L Gastric ramucirumab/paclitaxel RAINBOW[1]	330	28%	4.4 [IQR 2.8–7.5]	4.4 [4.2-5.3]	9.6 [8.5-10.8]
≥2L Gastric trastuzumab/ram/paclitaxel[2]	50	54%	6.7 [1.6-11.9]	7.1 [4.8-9.4]	13.6 [9.4-17.7]
2L Gastric trastuzumab-deruxtecan DESTINY 02[3]	79	42%	8.1 [5.9-NE]	5.6 [4.2-8.3]	12.1 [9.4-15.4]
≥3L Gastric trastuzumab-deruxtecan DESTINY 01[4]	126	41%	11.3 [5.6-NE]	5.6 [4.3-6.9]	12.5 [9.6-14.3]

[1]Wilke et al, Lancet October 2014, [2]Kim et al., Journal of Clinical Oncology June 2023, [3]Van Cutsem et al Lancet Oncology June 2023, [4]Enhertu product insert, and Shitara et al, NEJM June 18, 2020; NE could not be estimated; NR not reached

ASPEN-01 PHASE 1B ≥2 LINE GC TRIAL: EVORPACEPT + HERCEPTIN + CYRAMZA + PACLITAXEL

Phase 1b higher dose + chemo trial:

Patients:

R/R HER2 positive GC, 2L or greater; Progressed on prior Herceptin and fluoropyrimidine or platinum.

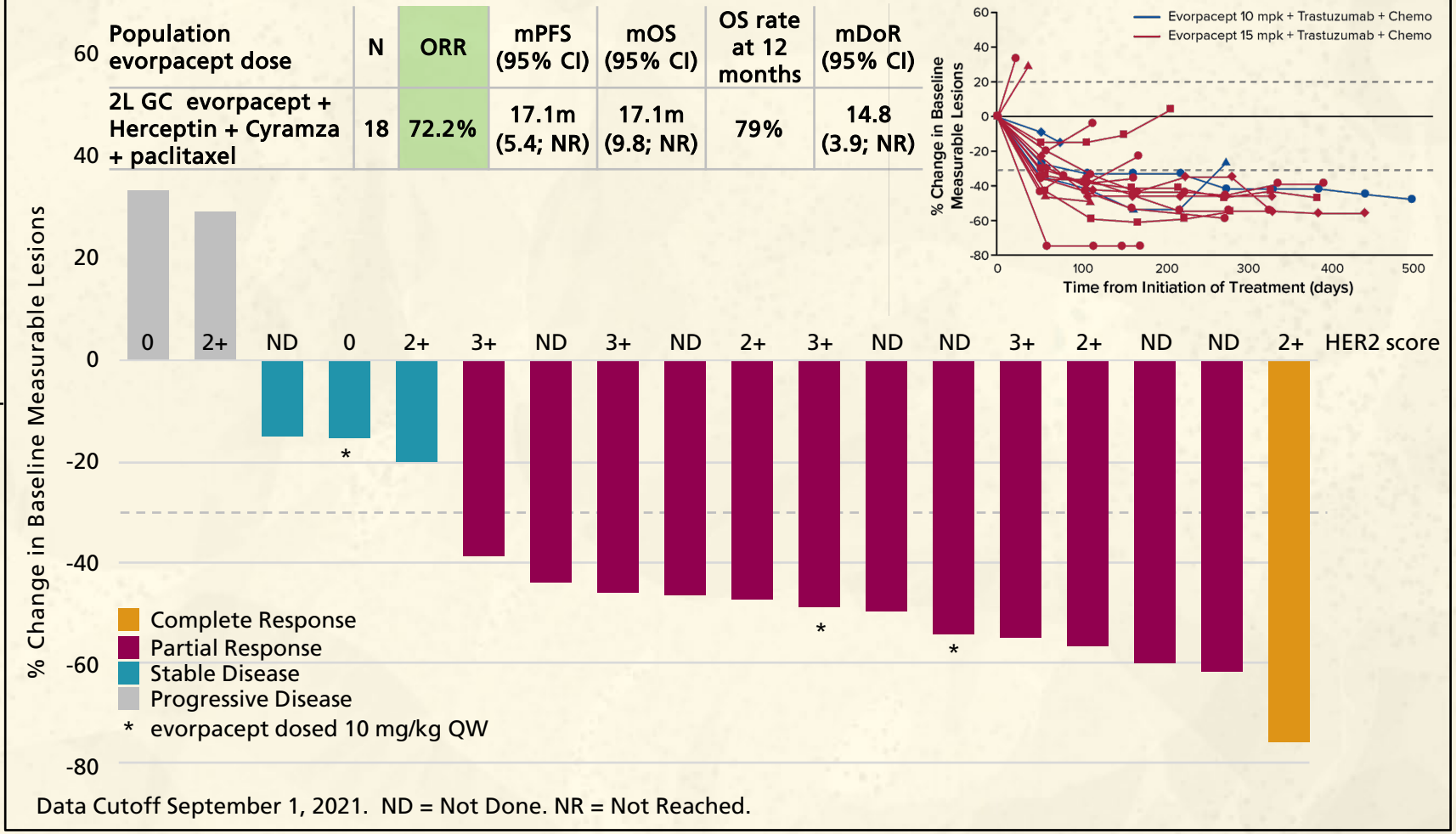
Treatment:

evorpacept 10 and 15 mg/kg (QW)
+ **Herceptin**
+ **Cyramza**
+ **paclitaxel**

Endpoint:

- safety of combination
- anti-cancer activity

Population evorpacept dose	N	ORR	mPFS (95% CI)	mOS (95% CI)	OS rate at 12 months	mDoR (95% CI)
2L GC evorpacept + Herceptin + Cyramza + paclitaxel	18	72.2%	17.1m (5.4; NR)	17.1m (9.8; NR)	79%	14.8 (3.9; NR)



Data Cutoff September 1, 2021. ND = Not Done. NR = Not Reached.

Data as of February 1, 2022. (95% CI). mOS not reached (CI: 9.84-NC) with median follow up of 18.7 months (CI: 9.28-21.7). NC = not calculable,

SECOND AND THIRD LINE GC: RANDOMIZED PHASE 2 AND 3 CLINICAL TRIAL, ASPEN-06

Randomized Phase 2: Ongoing

Patients: N≈122

2L or greater HER2 positive GC with prior HER2 targeted therapy

Treatment: 1:1 randomization

evorpacept 30 mg/kg (Q2W) + Herceptin + Cyramza + paclitaxel

vs.

+ Herceptin + Cyramza + paclitaxel

Endpoint:

- Anticancer activity: including ORR, DOR, PFS, OS

Randomized Planned Phase 3:

Patients:

2L or greater HER2 positive GC with prior HER2 targeted therapy

Treatment:

evorpacept 30 mg/kg (Q2W) + Herceptin + Cyramza + paclitaxel

vs.

+ Cyramza + paclitaxel

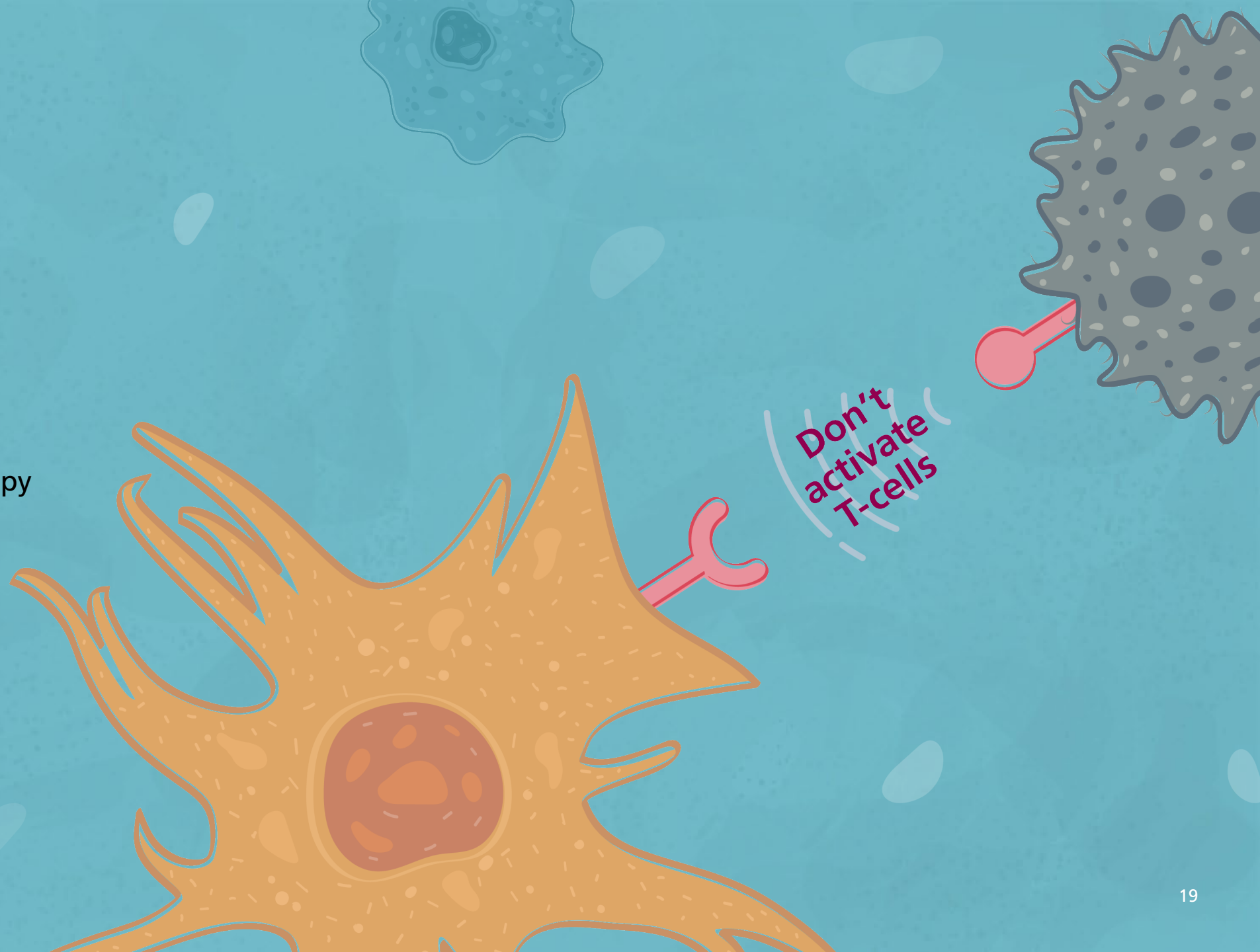
Endpoint:

- Anticancer activity: including OS, PFS, ORR, DOR

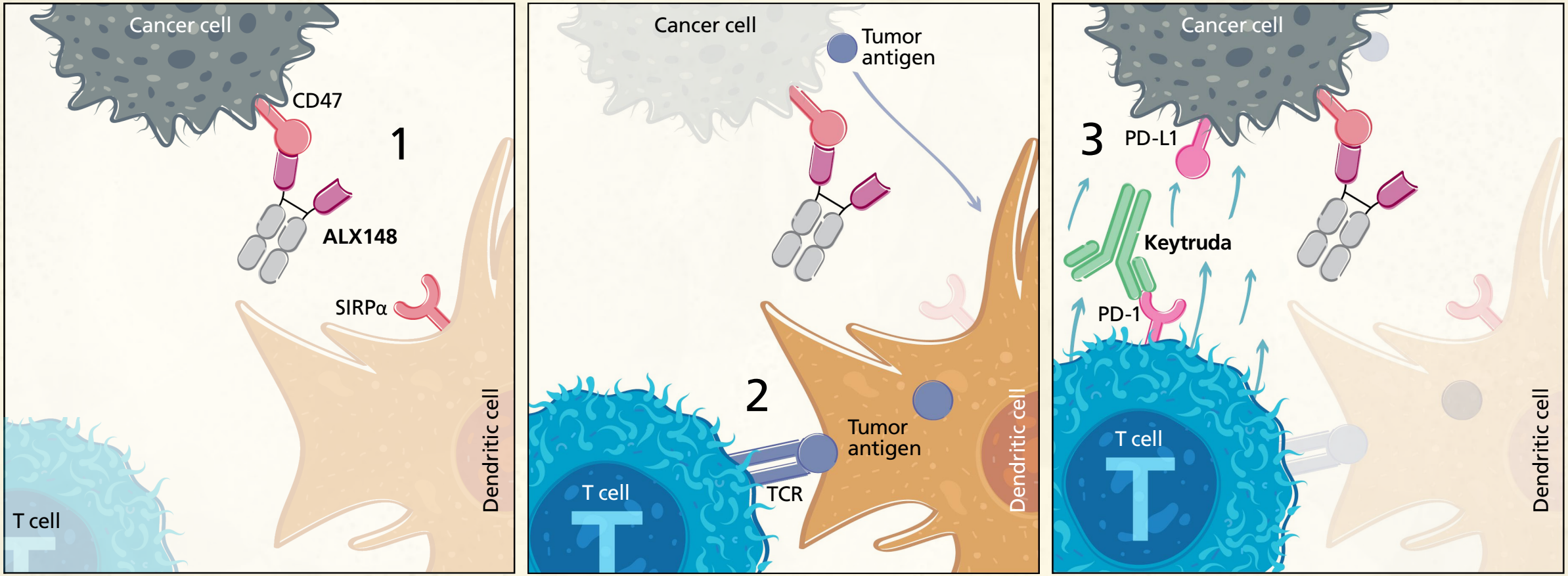
Dosing schedules: Herceptin and Cyramza Q2W, paclitaxel on days 1, 8, and 15 of a 28-day cycle

1L HNSCC

- **ASPEN-03:**
  Evorpacept (ALX148)
  + Keytruda
- **ASPEN-04:**
  Evorpacept (ALX148)
  + Keytruda + chemotherapy



HNSCC TRIAL: EVORPACEPT + KEYTRUDA MECHANISM OF ACTION



1 Blocking cancer cell ability to inhibit DC - "don't activate T-cells".

2 T-cell activation.

3 Immune response stimulation with CPI.

Evorpacept activates dendritic cells and enhances cross-priming of T cells

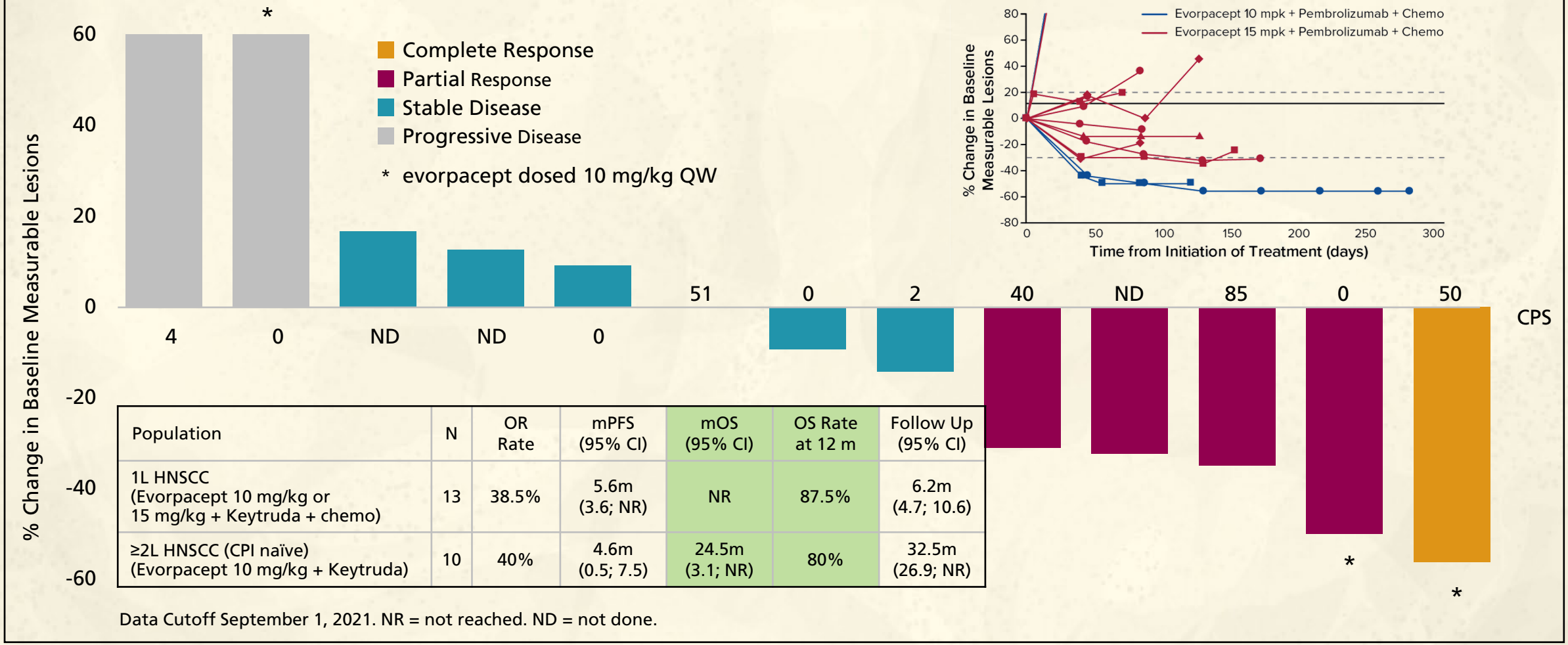
OS RATE AT 12 MONTHS AND MEDIAN OS PREDICTIVE OF CLINICAL BENEFIT

	Population	N	ORR (%)	PFS (m) [95% CI]	OS Rate at 12 m	OS (m) [95% CI]	Follow Up (m) [95% CI]
1L	**KEYNOTE-048: 1L HNSCC** pembrolizumab + 5FU/platinum	281	36%	4.9 [4.7–6.0]	53%	**13.0 [10.9–14.7]**	13 [6.4–26.6]
1L	**KEYNOTE-048: 1L HNSCC** cetuximab + 5FU/platinum	278	36%	5.1 [4.9–6.0]	44%	**10.7 [9.3–11.7]**	10.7 [6.6–19.7]
2L	**KEYNOTE-040: 2L HNSCC (CPI naïve)** Pembrolizumab	247	14.6%	2.1 [2.1–2.3]	37%	**8.4 [6.4–9.4]**	8.4 [3.3–14.5]
2L	**KEYNOTE-040: 2L HNSCC (CPI naïve)** Phys Choice: methotrexate, docetaxel, or cetuximab	248	10.1%	2.3 [2.1–2.8]	26.5%	**6.9 [5.9–8.0]**	7.1 [3.7-12.4]

Burtness et al. Lancet 2019; Cohen et al. Lancet 2018

ASPEN-01 PHASE 1B HNSCC: EVORPACEPT + KEYTRUDA + 5FU/ PLATINUM FIRST LINE CHECKPOINT NAIVE

Evorpacept + Keytruda + 5FU/platinum in 1L HNSCC



Population	N	OR Rate	mPFS (95% CI)	mOS (95% CI)	OS Rate at 12 m	Follow Up (95% CI)
1L HNSCC (Evorpacept 10 mg/kg or 15 mg/kg + Keytruda + chemo)	13	38.5%	5.6m (3.6; NR)	NR	87.5%	6.2m (4.7; 10.6)
≥2L HNSCC (CPI naïve) (Evorpacept 10 mg/kg + Keytruda)	10	40%	4.6m (0.5; 7.5)	24.5m (3.1; NR)	80%	32.5m (26.9; NR)

Data Cutoff September 1, 2021. NR = not reached. ND = not done.

Data as of February 1, 2022. NC = not calculable, (95% CI)
1L HNSCC: mOS not reached (CI: 5.99-NC) with median follow up of 15.8 months (CI: 5.0-17.8)
≥2L HNSCC (CPI-Naïve): mOS of 24.6 months (CI: 3.13-NC) with median follow-up of 35.3 months (CI: 27.0-41.0)

FIRST LINE HEAD & NECK CANCER: PHASE 2 DEVELOPMENT PLAN, ASPEN-03 AND ASPEN-04

ASPEN-03 Phase 2 trial: Open for Accrual

evorpacept + Keytruda → 2:1

- N≈118: **evorpacept** 45 mg/kg (Q3W) + **Keytruda**
- N≈59: **Keytruda**

(Safety lead-in prior to randomization)

Co-Primary Endpoints:
- 12-month OS rate
- ORR

ASPEN-04 Phase 2 trial: Open for Accrual

evorpacept + Keytruda + chemo → 2:1

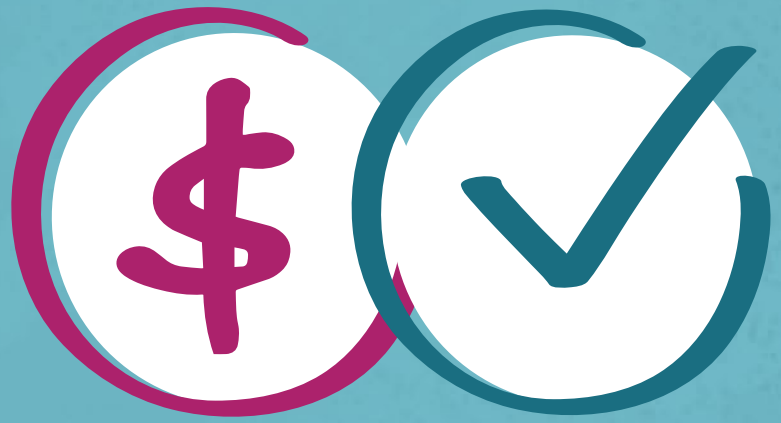
- N≈108: **evorpacept** 45 mg/kg (Q3W) + **Keytruda** + **5FU** + **cisplatin or carboplatin**
- N≈54: + **Keytruda** + **5FU** + **cisplatin or carboplatin**

(Safety lead-in prior to randomization)

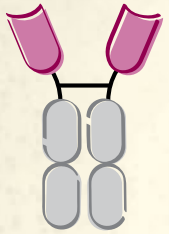
Co-Primary Endpoints:
- 12-month OS rate
- ORR

Dosing schedules: Keytruda and chemotherapy Q3W

Milestones and financial information



UPCOMING MILESTONES

	2023	2024
 Evorpacept	**Gastric Cancer (Phase 2)** ASPEN-06 Randomized gastric/GEJ cancer trial data update in Q4 2023	**Head & Neck Cancer (Phase 2)** ASPEN-03 Completion of randomized HNSCC trial with pembrolizumab
	Urothelial Carcinoma (Phase 1) ASPEN-07 Initiate dosing of urothelial carcinoma with enfortumab vedotin-ejfv trial in 1H 2023 (dosed February 2023)	**Head & Neck Cancer (Phase 2)** ASPEN-04 Completion of randomized HNSCC trial with pembrolizumab and chemo
	Continue Supporting Ongoing Clinical Collaborations • Multiple myeloma (Sanofi) • Breast cancer (I-SPY, Zymeworks) • NHL, CRC, Ovarian (Investigator Sponsored Trials)	**Gastric Cancer (Phase 3)** ASPEN-06 Initiation of randomized gastric trial
Early clinical and research pipeline	**ADC pipeline** Identify clinical development candidates in 2H 2023	**ALTA-002 (Phase 1) initiation** File IND in 1Q 2024

FINANCIAL INFORMATION

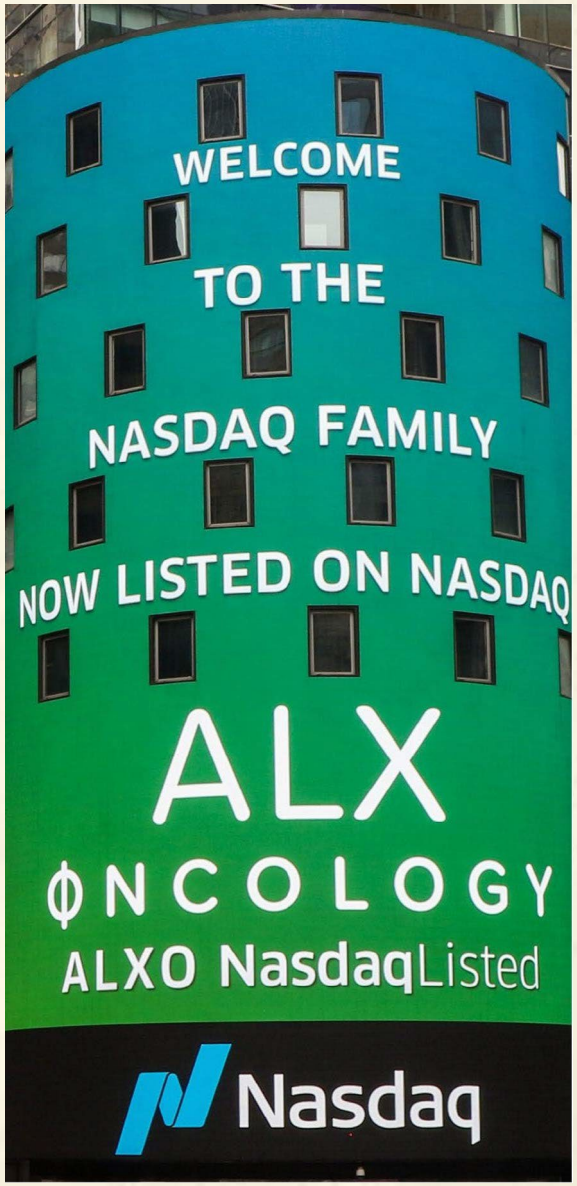
Approximately $545M in net proceeds raised to date including:

$170 million IPO in July 2020 and $195 million follow on in December 2020

$90M of $100M loan facility potentially available with $10M drawn to date

Cash, cash equivalents and investments balance as of June 30, 2023 of approximately $225M

Expected cash runway through mid-2025



ALX ONCOLOGY: THE CD47 LEADER

First-in-class anti-CD47 molecule (evorpacept) designed for use in combination

Designed to avoid toxicities and maximize efficacy when combined with anticancer antibodies and checkpoint inhibitors

Multiple clinical studies highlight differentiated safety and efficacy validating mechanisms in both anticancer antibodies and checkpoint inhibitors

Data from Ph1b studies in multiple indications suggest evorpacept may be the only CD47 drug with activity in solid tumors

Significant upcoming catalysts including data from three randomized Ph2 studies

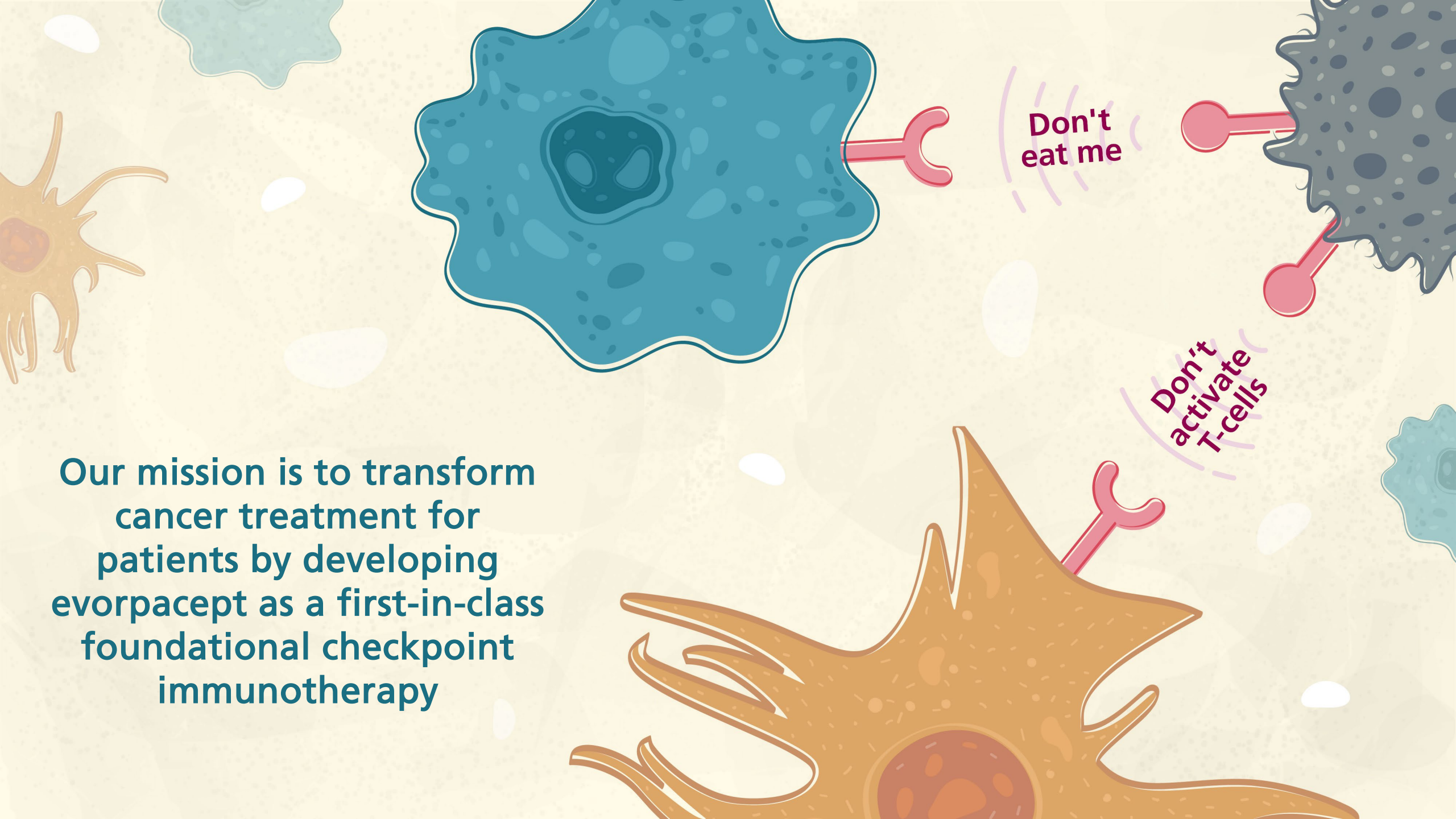
Anticipating data from ASPEN-06, expected to be the first randomized controlled trial (RCT) in the CD47 space in solid tumors in Q4 2023, and from ASPEN-03 and ASPEN-04, expected to be the first two RCTs with a checkpoint inhibitor in 2024

Pursuing additional studies to expand evorpacept indications and building a strong pipeline

Several Ph1 studies to test combinations in breast, urothelial, multiple myeloma and NHL

Strong balance sheet with cash through mid-2025

Cash position of approximately $225M as of Q2 2023 with potential access to additional $90M through debt facility



Our mission is to transform cancer treatment for patients by developing evorpacept as a first-in-class foundational checkpoint immunotherapy