ELEVATION ONCOLOGY

Corporate Presentation

May 2024

Forward Looking Statements

These slides contain forward-looking statements and information relating to Elevation Oncology, Inc. within the meaning of, and made pursuant to the safe harbor provisions of, the Private Securities Litigation Reform Act of 1995. You should not place undue reliance on forward-looking statements, as these statements are based upon our current expectations, forecasts, and assumptions and are subject to significant risks and uncertainties. Any statements contained herein or provided orally that are not statements of historical fact may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "believe," "may," "will," "potentially," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "expect," "predict," "potential" and similar expressions that convey uncertainty of future events or outcomes, although not all forward-looking statements contain these words. Forward-looking statements include all statements other than statements of historical fact contained in this presentation, including information concerning our future financial performance, business plans and objectives, timing and success of our planned development activities, our ability to obtain regulatory approval, the potential therapeutic benefits and economic value of our product candidates, potential growth opportunities, competitive position, industry environment and potential market opportunities.

Forward-looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. These factors, together with those that are described in under the heading "Risk Factors" contained in documents we file with the U.S. Securities and Exchange Commission from time to time, may cause our actual results, performance or achievements to differ materially and adversely from those anticipated or implied by our forward-looking statements. Statements, including forward-looking statements, speak only to the date they are provided (unless an earlier date is indicated). We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus to conform these statements to actual results or to changes in our expectations, except as required by law. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. Accordingly, readers are cautioned not to place undue reliance on these forward-looking statements.

Leveraging ADC Expertise to Advance Selective Cancer Therapies

- **Growing pipeline of differentiated ADCs** with broad therapeutical potential, including programs targeting Claudin 18.2 and HER3
- **Experienced management team with expertise in ADC and oncology drug discovery and development**
  Proven track record to discover and develop novel cancer therapies for patients with significant unmet medical needs
- **Strong cash position to fund operations into 2026**

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EO-3021:

A potential best-in-class anti-Claudin 18.2 ADC for a significant, global unmet medical need[1]

✓ Differentiation supported by initial clinical data:

Phase 1 data presented by partner CSPC at ASCO 2023, demonstrating 47.1% ORR in gastric cancer and well-tolerated safety profile[2]

✓ Advancing robust clinical development program:

Phase 1 clinical trial evaluating single-agent EO-3021 ongoing, with initial safety and efficacy data expected by mid-3Q 2024

Expanding efforts to evaluate EO-3021 in combination with immunotherapy and targeted agents

✓ Opportunity to address significant global market:

Claudin 18.2 is overexpressed in several types of cancers, including gastric, esophageal, pancreatic, ovarian, and lung[3-6]

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ADC = antibody-drug conjugate. Phase 1 clinical trial: NCT05980416. [1]Elevation Oncology has licensed the exclusive rights to develop and commercialize EO 3021 in all global territories outside Greater China from CSPC Pharmaceutical Group Limited. [2]Wang Y, et al. ASCO 2023. [3]Sahin, et al. Clin Cancer Res. 2008 1;14(23):7624-34. [4]Wöll et al. Int J Cancer. 2014; 134(3). [5]Tanaka, et al. J Histochem Cytochem. 2011; 59(10): 942–952. [6]Micke, et al. Int J Cancer. 2014;135(9):2206-14.

Leveraging ADC Expertise to Advance a Novel Selective Cancer Therapy Pipeline

TARGET	DRUG CANDIDATE	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	MILESTONE	RIGHTS
Claudin 18.2	EO-3021 Monotherapy					**By mid-3Q 2024:** Initial safety and efficacy data from Phase 1 trial **1H 2025:** Additional data from Phase 1 trial	Worldwide[1] (Outside Greater China)
	EO-3021 in Combination					**1H 2024:** Details on planned Phase 1 combination study	
HER3	HER3-ADC					**2H 2024:** Development candidate nomination	Worldwide

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[1]Elevation Oncology has licensed the exclusive rights to develop and commercialize EO-3021 in all global territories outside Greater China from CSPC Pharmaceutical Group Limited.

Claudin 18.2 is a Compelling ADC Therapeutic Target

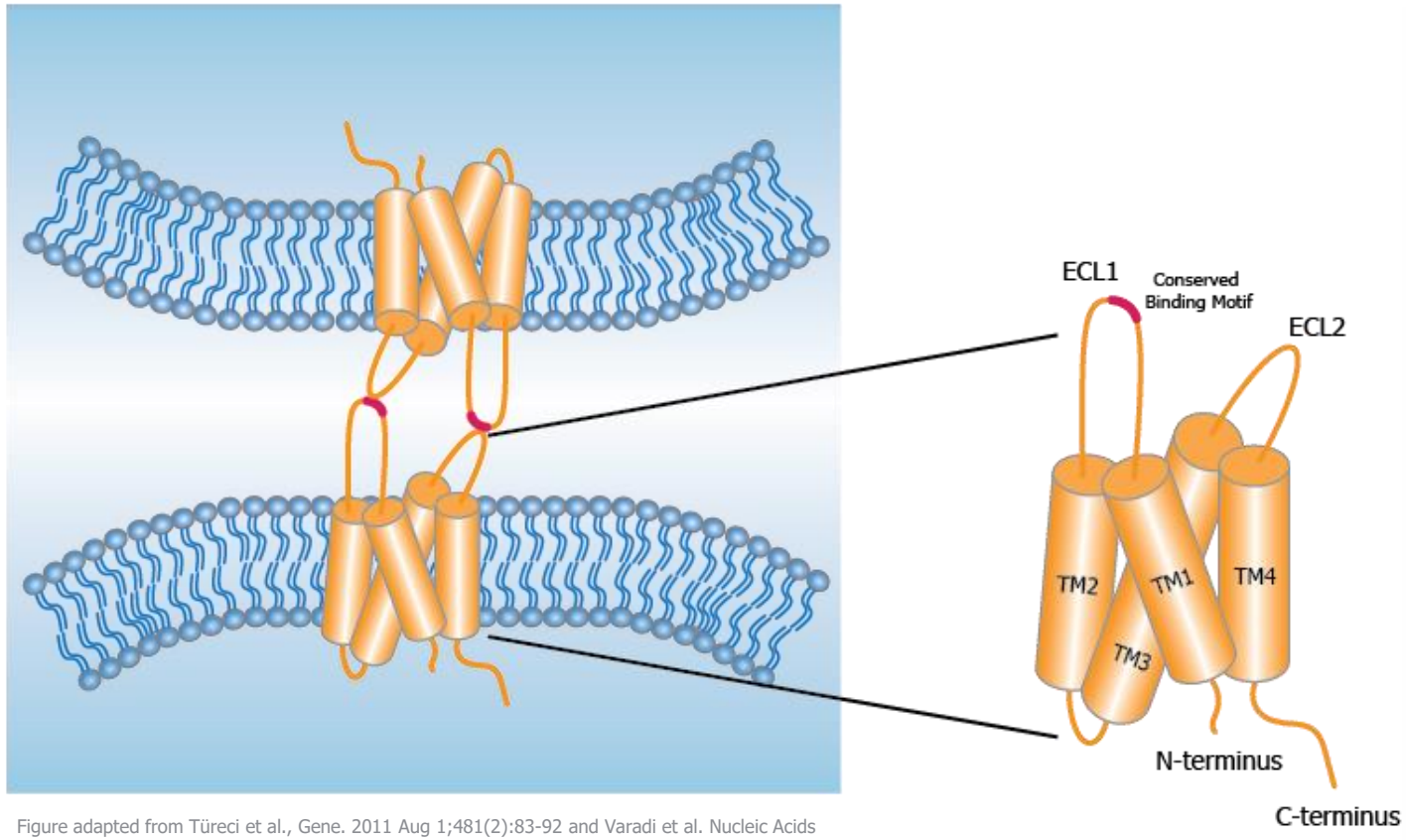
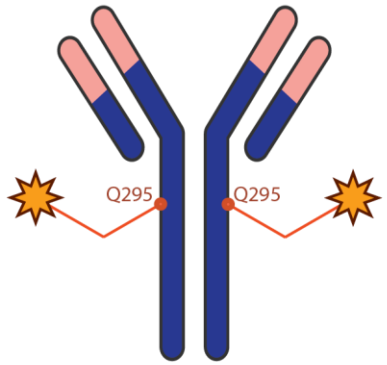


Figure adapted from Türeci et al., Gene. 2011 Aug 1;481(2):83-92 and Varadi et al. Nucleic Acids Res. Jan 2022;50(D1):D439–D444

- Claudin 18.2 is part of a family of tight junction membrane proteins[1]
- Expression in normal tissues is restricted to the gastric mucosa[2,3]
- Overexpressed in several types of cancers including gastric, pancreatic, esophageal, ovarian, and lung[4-7]
- Claudin 18.2 expression typically has minimal overlap with HER2 or PD-L1 expression[8-10]
- There are no approved therapies targeting Claudin 18.2[11]

[1]Gunzel & Lu. 2013. Physiol Rev. Apr; 93(2): 525-569. [2]Sahin, et al. Clin Cancer Res. 2008 1;14(23):7624-34. [3]Türeci et al. Gene. 2011 Aug 1;481(2):83-92. [4]Sahin, et al. Clin Cancer Res. 2008 1;14(23):7624-34. [5]Wöll et al. Int J Cancer. 2014; 134(3). [6]Tanaka, et al. J Histochem Cytochem. 2011; 59(10): 942–952. [7]Micke, et al. Int J Cancer. 2014;135(9):2206-14. [8]Pellino A, et al. J Pers Med (Epub) 10-26-2021. [9]Moran et al., Annals of Oncology (2018) 29 (suppl_8): viii14-viii57. [10]Schuler MH et al. J Clin Oncol. 2017. 35:15_suppl 4038-4038. [11]Cao et al., Biomark Res. 2022 May 31;10(1):38.

EO-3021: A Differentiated and Potential Best-in-Class **ADC** Targeting Claudin 18.2



- **Fully human** IgG1 selective for CLDN18.2, no binding to CLDN18.1
- Site-specific conjugation at glutamine (Q295) increases ADC stability
- Drug-to-antibody ratio **(DAR) of 2**
- Minimized free MMAE compared to cysteine conjugation

Dan, M. et al. AACR 2023.

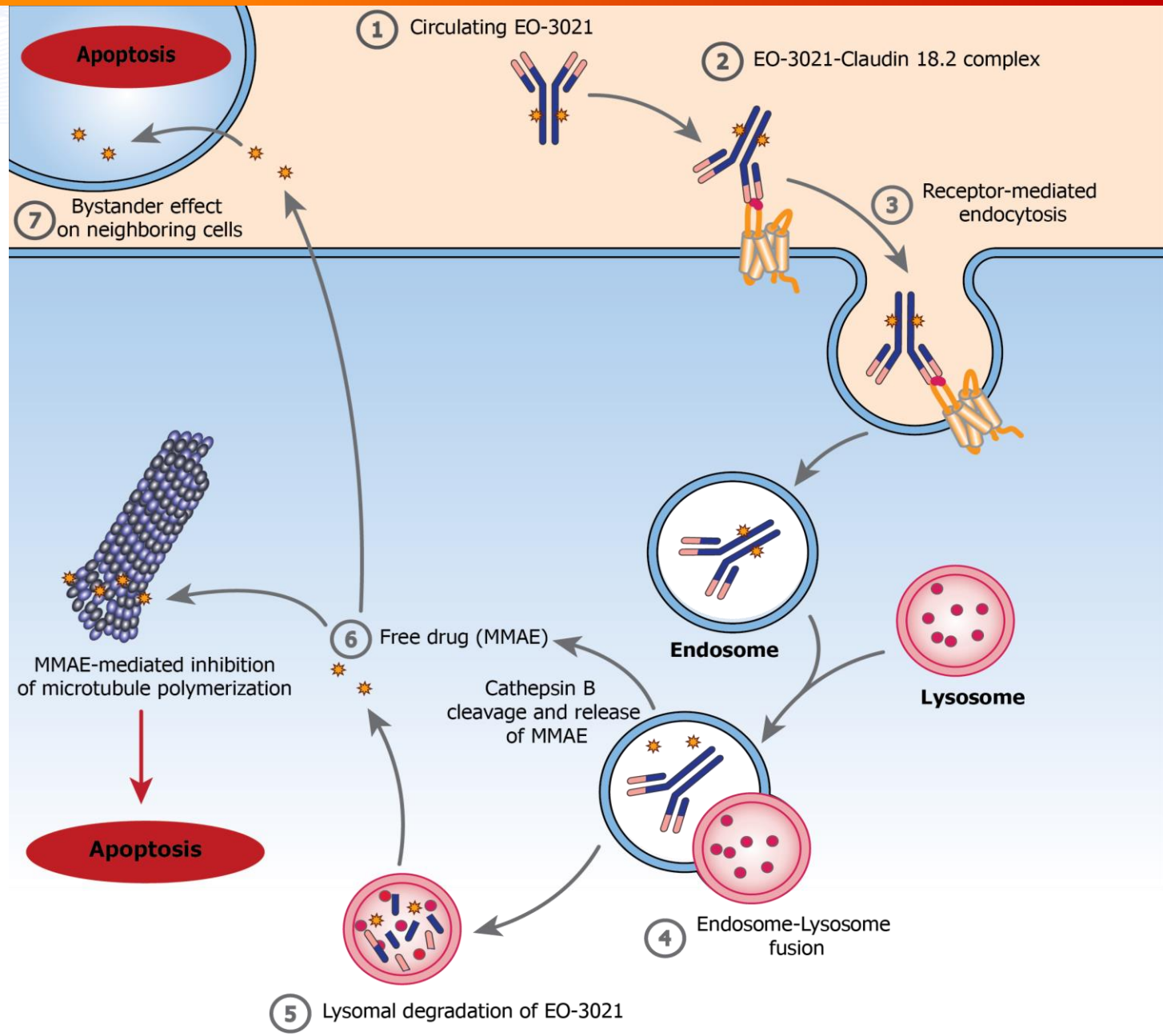


Figure adapted from Tong et al., Molecules. 2021; 26(19):5847.

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Global Opportunity for the Treatment of Patients with Tumors Expressing Claudin 18.2

Cancer Type	Estimated New Cancer Cases: US Incidence[1]	Estimated New Cancer Cases: Global Incidence[2]	Claudin 18.2 Expression per Disease Type (IHC*)
Gastric	**26,500**	**1,090,000**	**77%[3] (adenocarcinoma)**
Esophageal	**21,500**	**604,000**	**78%[3] (adenocarcinoma)**
Pancreatic	**64,000**	**496,000**	**59-80%[3-5] (PDAC)**
Ovarian	**20,000**	**314,000**	**24%[3] (mucinous)**
Lung	**238,000**	**2,207,000**	**6%[6] (adenocarcinoma)**

- Overexpressed in several high unmet need cancers, including gastric, esophageal, pancreatic, ovarian, and lung, among others[3-6]
- Prevalence is highest in gastric, esophageal, and pancreatic adenocarcinomas (≥70%)[3-5]
- Elevation Oncology's license to EO-3021 is for global territories outside Greater China

*Any level of expression (e.g., ≥1% cells with any staining intensity of CLDN18.2)
Abbreviations: US: United States; IHC: Immunohistochemistry; PDAC: Pancreatic ductal adenocarcinoma

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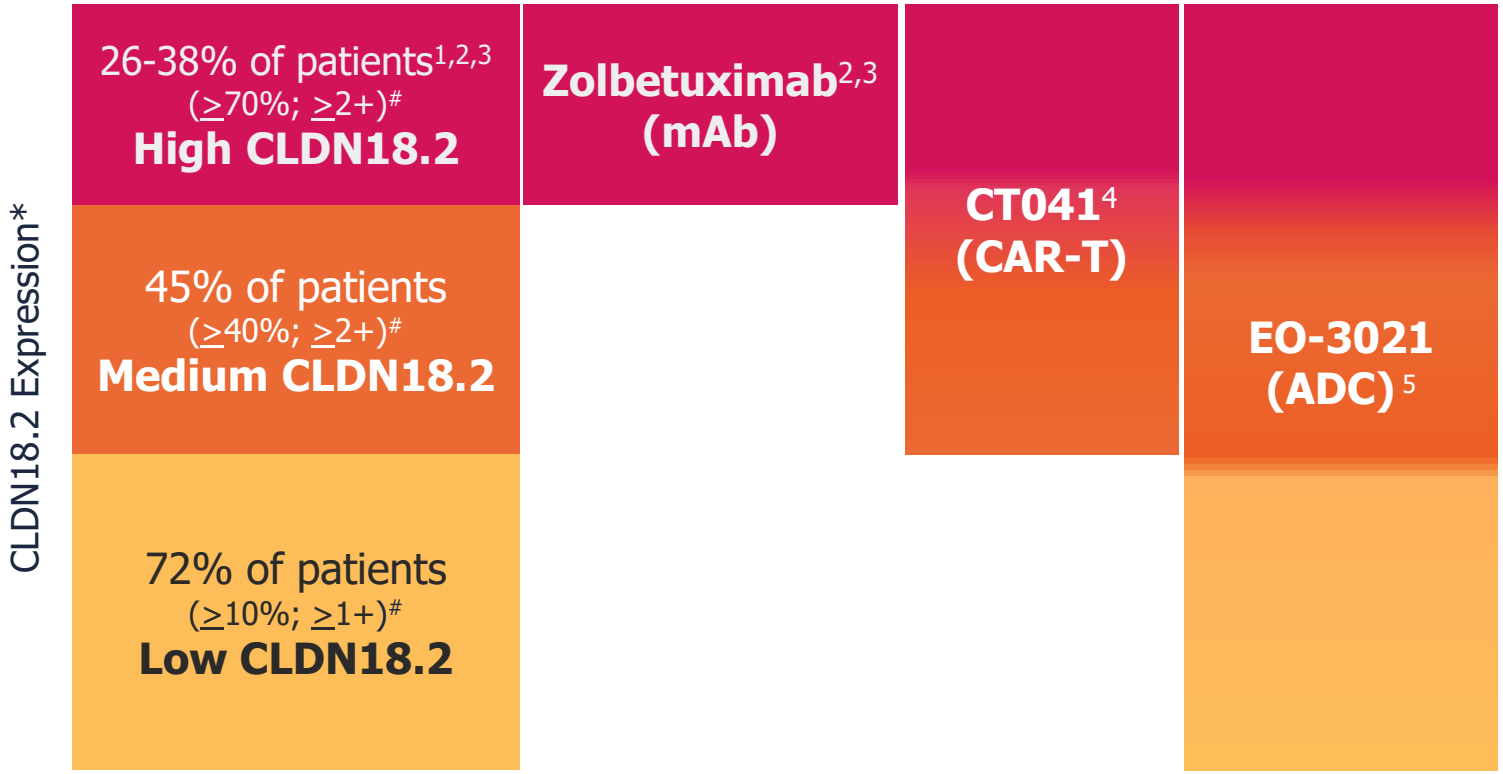
[1]Siegel RL, et al. CA: A Cancer Journal for Clinicians. 2023; 73:1. [2]Sung H. et al. CA: A Cancer Journal for Clinicians. 2020; 71:3. [3]Sahin, et al. Clin Cancer Res. 2008 1;14(23):7624-34. [4]Wöll et al. Int J Cancer. 2014; 134(3). [5]Tanaka, et al. J Histochem Cytochem. 2011; 59(10): 942–952. [6]Micke, et al. Int J Cancer. 2014;135(9):2206-14.

Potential for Broader Target Population Using Anti-Claudin 18.2 ADC Compared with Other Modalities



*in gastric/gastroesophageal junction adenocarcinomas
#Indicates % of tumor cells expressing CLDN18.2; CLDN18.2 IHC staining intensity

- mAb and CAR-T approaches may need majority of cells with medium-to-high expression of CLDN18.2 for anti-tumor activity[2,3,4]
- An ADC approach can potentially target tumors with varying levels of CLDN18.2 expression
- EO-3021 could potentially capture a broader patient population and greater commercial opportunity when compared to mAb and CAR-T approaches

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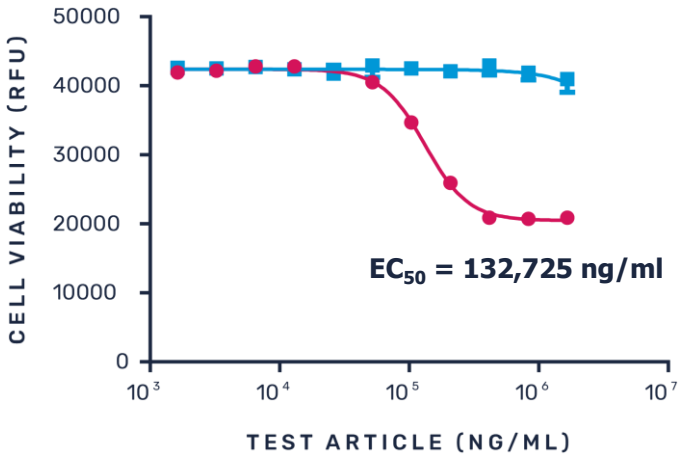
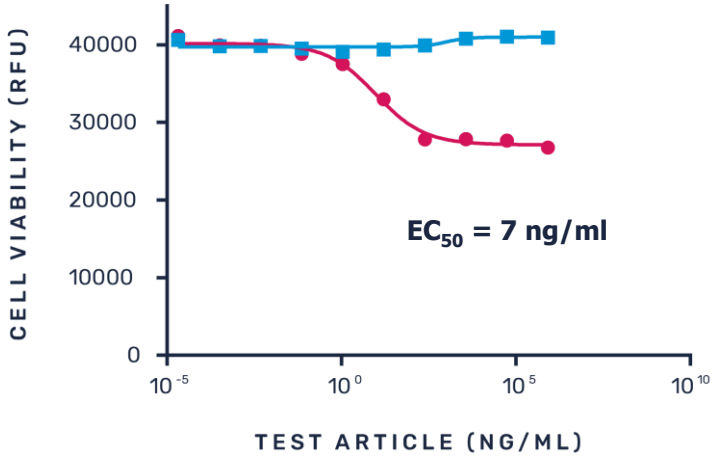
[1]Mao LL, et al. SITC 2022 Abstract #105. [2]Sahin U et al. Ann Oncol 2021. [3]Shitara, K. ASCO GI 2023. [4]Qi CS, et al. ASCO 2022 Abstract #4017. [5]Wang Y, et al. ASCO 2023.

EO-3021 *in vitro* Activity in Cell Lines Expressing Claudin 18.2

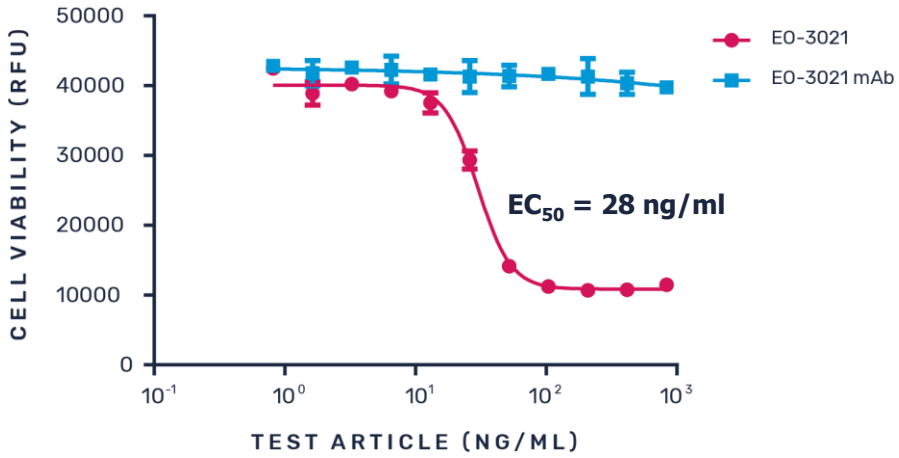
Pancreatic Cancer[1]
PATU8988S
CLDN18.2 Low



Gastric Cancer[1]
NCI-N87-18.2
CLDN18.2 Medium
HER2 Amplified



Pancreatic Cancer[1]
BxPC3-18.2
CLDN18.2 High



Approximately 15% of CLDN18.2 expressing gastric cancers co-express HER2[2-4]

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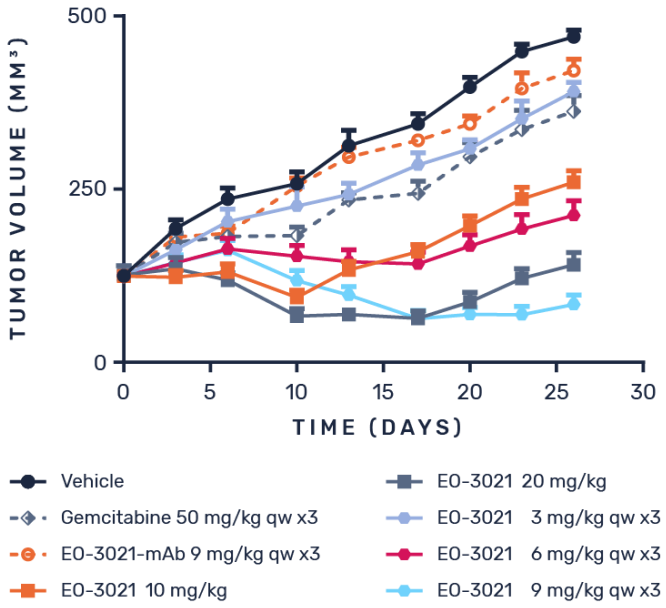
[1]Dan, M, et al. AACR 2023. [2]Schuler MH et al. J Clin Oncol. 2017. 35:15_suppl 4038-4038. [3]Pellino A, et al. J Pers Med (Epub) 10-26-2021. [4]Moran et al., Annals of Oncology (2018) 29 (suppl_8): viii14-viii57.

Single Dose of **EO-3021 Confers Tumor Regression** in CLDN18.2 Expressing Models

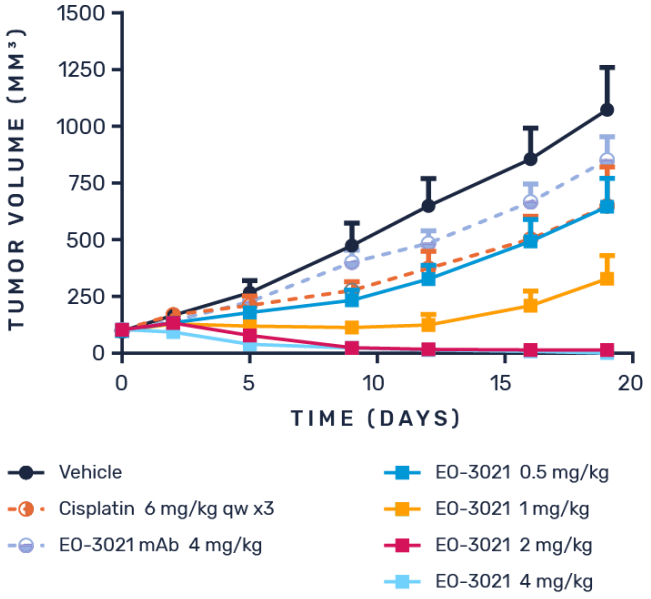
Pancreatic Xenograft Model[1]

PATU8988S
CLDN18.2 Low



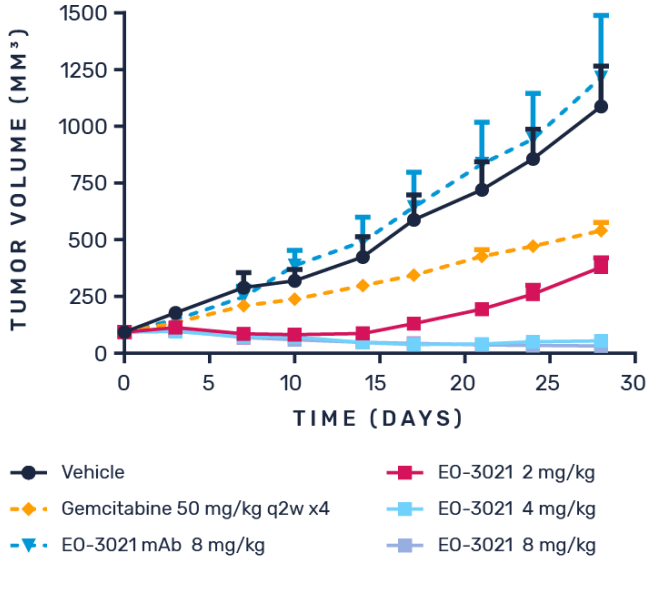
Gastric Xenograft Model[1]

NUGC4-18.2
CLDN18.2 Medium, HER2 Amplified



Pancreatic Xenograft Model[1]

BxPC3-18.2
CLDN18.2 High



Nu/nu mice were administered single dose of Tx, unless otherwise indicated. Dosing initiated on day 0.

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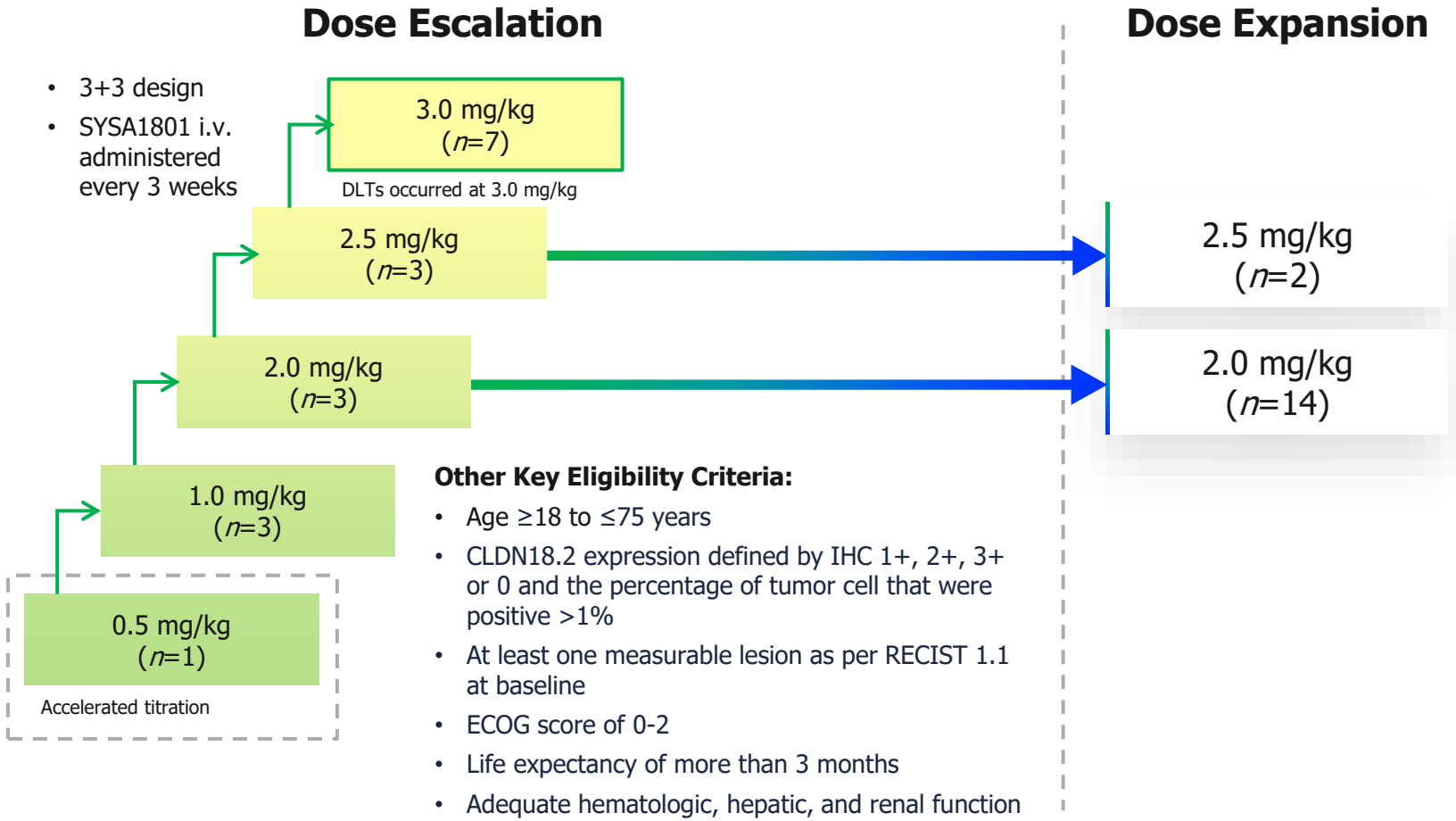
[1]Dan, M. et al. AACR 2023.

Phase 1 Study of SYSA1801 (EO-3021) in CLDN18.2 Positive Solid Tumors[1]: CSPC Sponsored Study in China

(NCT05009966)



- Open-label, multi-center, Phase I study
- Patients with histologically confirmed resistant/refractory solid tumors that express CLDN18.2 who progressed on or were intolerant to standard treatment, or had no standard treatment were recruited.
- Study Outcomes:
  - Primary endpoint:
    - Safety[2]
  - Secondary endpoints:
    - Pharmacokinetics profiles
    - Efficacy[3]

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[1]Wang Y, et al. ASCO 2023. [2]Adverse events were graded according to CTCAE 5.0. [3]Efficacy measured per RECIST 1.1.

SYSA1801 (EO-3021): Patient **Demographics and Disease** Characteristics[1]

CHARACTERISTICS		DOSE LEVELS					TOTAL (N=33)
		0.5 mg/kg (N=1)	1.0 mg/kg (N=3)	2.0 mg/kg (N=17)	2.5 mg/kg (N=5)	3.0 mg/kg (N=7)	
Age	Median (range)	48.0 (48, 48)	62.0 (47, 69)	61.0 (29, 71)	49.0 (42, 64)	47.0 (22, 67)	59.0 (22, 71)
Sex; n (%)	Male	1 (100.0)	1 (33.3)	12 (70.6)	2 (40.0)	4 (57.1)	20 (60.6)
Disease Type; n (%)	Gastric Cancer	1 (100.0)	2 (66.7)	13 (76.5)	5 (100.0)	5 (71.4)	26 (78.8)
	Pancreatic Cancer	0 (0.0)	1 (33.3)	4 (23.5)	0 (0.0)	2 (28.6)	7 (21.2)
ECOG PS; n (%)	0	0 (0.0)	0 (0.0)	5 (29.4)	0 (0.0)	0 (0.0)	5 (15.2)
	1	1 (100.0)	3 (100.0)	12 (70.6)	5 (100.0)	7 (100.0)	28 (84.8)
Prior Lines of Therapy; n (%)	1-2 Lines	1 (100.0)	3 (100.0)	12 (70.6)	3 (60.0)	3 (42.9)	22 (66.7)
	≥3 Lines	0 (0.0)	0 (0.0)	5 (29.4)	2 (40.0)	4 (57.1)	11 (33.3)
Metastasis	Yes	1 (100.0)	3 (100.0)	17 (100.0)	5 (100.0)	7 (100.0)	33 (100.0)
	No	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Numbers of Metastatic Organs; n (%)	≤2	0 (0.0)	3 (100.0)	13 (76.5)	3 (60.0)	5 (71.4)	24 (72.7)
	≥3	1 (100.0)	0 (0.0)	4 (23.5)	2 (40.0)	2 (28.6)	9 (27.3)

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[1]Wang Y, et al. ASCO 2023.

SYSA1801 (EO-3021): **Safety and Tolerability Profile**

Treatment-related adverse events occurring in >20% of patients[1]

	DOSE LEVELS					TOTAL (N=33)
	0.5 mg/kg (N=1)	1.0 mg/kg (N=3)	2.0 mg/kg (N=17)	2.5 mg/kg (N=5)	3.0 mg/kg (N=7)	
Nausea	0 (0.0)	1 (33.3)	7 (41.2)	0 (0.0)	6 (85.7)	14 (42.4)
≥ Grade 3	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	3 (42.9)	3 (9.1)
Vomiting	0 (0.0)	2 (66.7)	5 (29.4)	0 (0.0)	5 (71.4)	12 (36.4)
≥ Grade 3	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (28.6)	2 (6.1)
Dry Eye Syndrome	1 (100.0)	2 (66.7)	3 (17.6)	0 (0.0)	1 (14.3)	7 (21.2)
≥ Grade 3	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Anemia	0 (0.0)	2 (66.7)	3 (17.6)	0 (0.0)	2 (28.6)	7 (21.2)
≥ Grade 3	0 (0.0)	0 (0.0)	1 (5.9)	0 (0.0)	0 (0.0)	1 (3.0)

- Two DLTs (grade-3 nausea and vomiting) occurred at the 3.0 mg/kg dose
- TRAEs of any grade occurred in 25 patients (75.8%), in which 8 (24.2%) were ≥ grade 3
- No treatment-related death

Site-specific conjugation potentially enables stability of linker and payload for an improved safety profile

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[1]Wang Y, et al. ASCO 2023.

SYSA1801 (EO-3021): **Anti-tumor Activity** with **Confirmed Responses** in Gastric Cancer[1]

Patients with gastric cancer

- 47.1% ORR (8 of 17) (95% CI 0.23, 0.72)
- 64.7% DCR

All evaluable

- 38.1% ORR (8 of 21) in all evaluable patients (95% CI 0.18, 0.62)
- 57.1% DCR

Abbreviations: ORR = objective response rate; PD = progressive disease; SD = stable disease; PR = partial response; cPR = confirmed partial response; DCR = disease control rate

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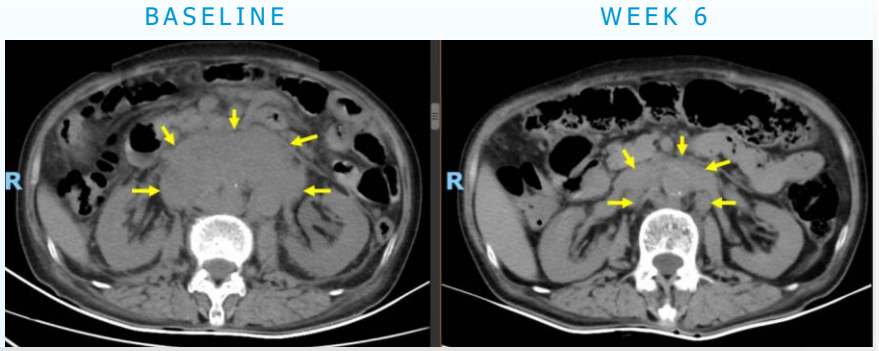
[1]Wang Y, et al. ASCO 2023.

SYSA1801 (EO-3021) Activity in Patients with Gastric Cancer

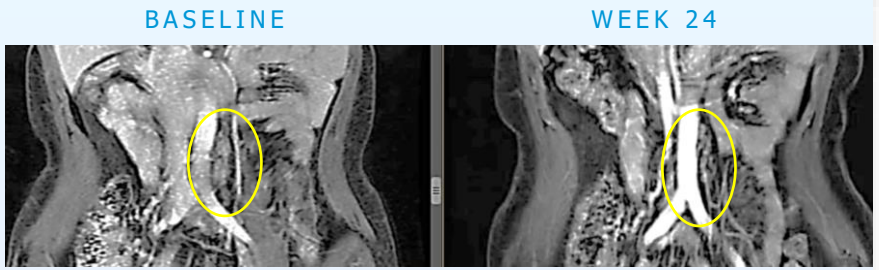
- **Patient:** 64-year-old female with gastric cancer
- **CLDN 18.2 IHC:** 3+ 35%, 2+ 15%, 1+ 10%
- **Prior Therapy:** Previously treated with 3 lines of therapy
- **SYSA1801 (EO-3021) treatment:** 2.0 mg/kg IV Q3W (ongoing)

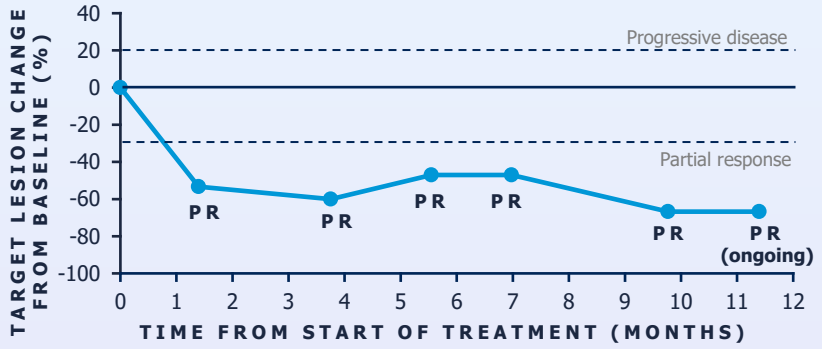
Wang Y, et al. ASCO 2023.



- **Patient:** 47-year-old female with gastric cancer
- **Metastases:** lymph nodes
- **Prior therapy:** XELOX (oxaliplatin + capecitabine) with immunotherapy
- **SYSA1801 (EO-3021) treatment:** 1.0 mg/kg IV Q3W x 12 cycles (ongoing)
- **Target Lesion:** Retroperitoneal lymph node
- **RECIST v1.1:** Best overall response of confirmed partial response (66.7% maximal tumor reduction)
- **Duration of response:** ~11 months (ongoing)

Dornan D, et al. Presented at: AACR 2023 Annual Meeting: April 14-19, 2023; Orlando, FL. Presentation ND11





Images courtesy of Peking University Cancer Hospital & Institute

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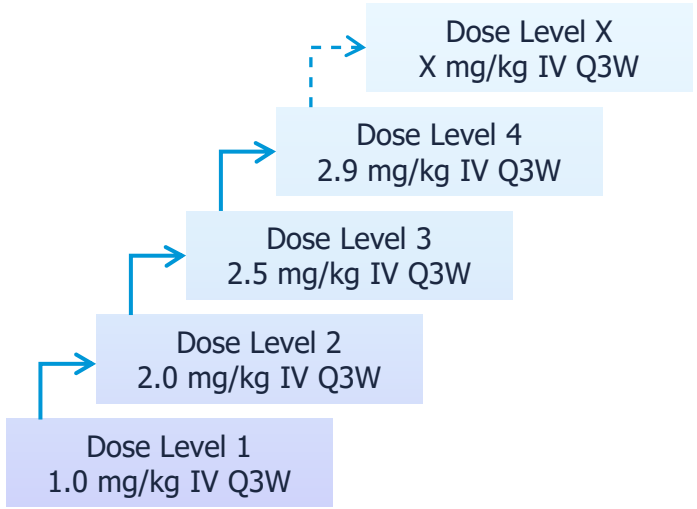
Clinical Trial: Phase I (NCT05009966).

Phase 1 Dose Escalation and Expansion Study of EO-3021 in Solid Tumors Likely to Express CLDN18.2

(NCT05980416)

Part A: Dose Escalation



- Advanced unresectable or metastatic gastric cancer/GEJ, pancreatic cancer, esophageal cancer
- Bayesian Optimal Interval (BOIN) design with 3 + 3 lead in
- Approximately 30 patients total in dose escalation with optional backfill slots for additional patients
- Expression of CLDN18.2 is not required; tumor samples will be collected for retrospective assessment of CLDN18.2 by IHC

MTD/RP2D

Part B: Expansion

Gastric/GEJ

- Progressed on or after standard therapy, or are intolerable for available standard therapy
- Provision of tumor tissue (archived and fresh biopsy, if medically feasible) for retrospective biomarker assessment of CLDN18.2 expression by IHC

Primary Objectives

- Safety and tolerability of EO-3021 (Part A)
- Preliminary anti-tumor activity of EO-3021 (Part B)

Secondary Objectives

- Association of tumor CLDN18.2 expression by IHC and objective response

Milestones

- ✓ Study initiated in August 2023
- ✓ Expanded study globally; dosed first patient in Japan in February 2024
- Initial safety and efficacy data from ongoing Phase 1 trial by mid-3Q 2024
- Additional data from ongoing Phase 1 trial expected in 1H 2025

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Expanding to Evaluate EO-3021 in Combination Therapy

Opportunity to **deliver better treatment options to patients** in first and second-line settings

Safety profile suggests EO-3021 is **readily combinable**:

- Site-specific conjugation differentiates EO-3021: stability of linker-payload enable improved safety profile
- Limited MMAE-related toxicities observed in preclinical studies and CSPC's Phase 1 clinical trial of SYSA1801 (EO-3021)

Milestones

- Detail on planned Phase 1 combination study in 1H 2024

Strong rationale to combine with **existing standards of care**:

Immunotherapy is becoming mainstay of 1L gastric cancer treatment

- Combination with CLDN18.2 ADC could drive further benefit:
  - ADCs with MMAE payload are known to induce immunogenic cell death[1]
  - Evidence suggests treatment with anti-Claudin 18.2 mAb upregulates PD-L1[2]

Chemotherapy + targeted agent is standard-of-care for 2L gastric cancer treatment

- Systemic chemotherapy is highly toxic; opportunity to pair EO-3021 with a targeted agent to potentially deliver improved tolerability and outcomes

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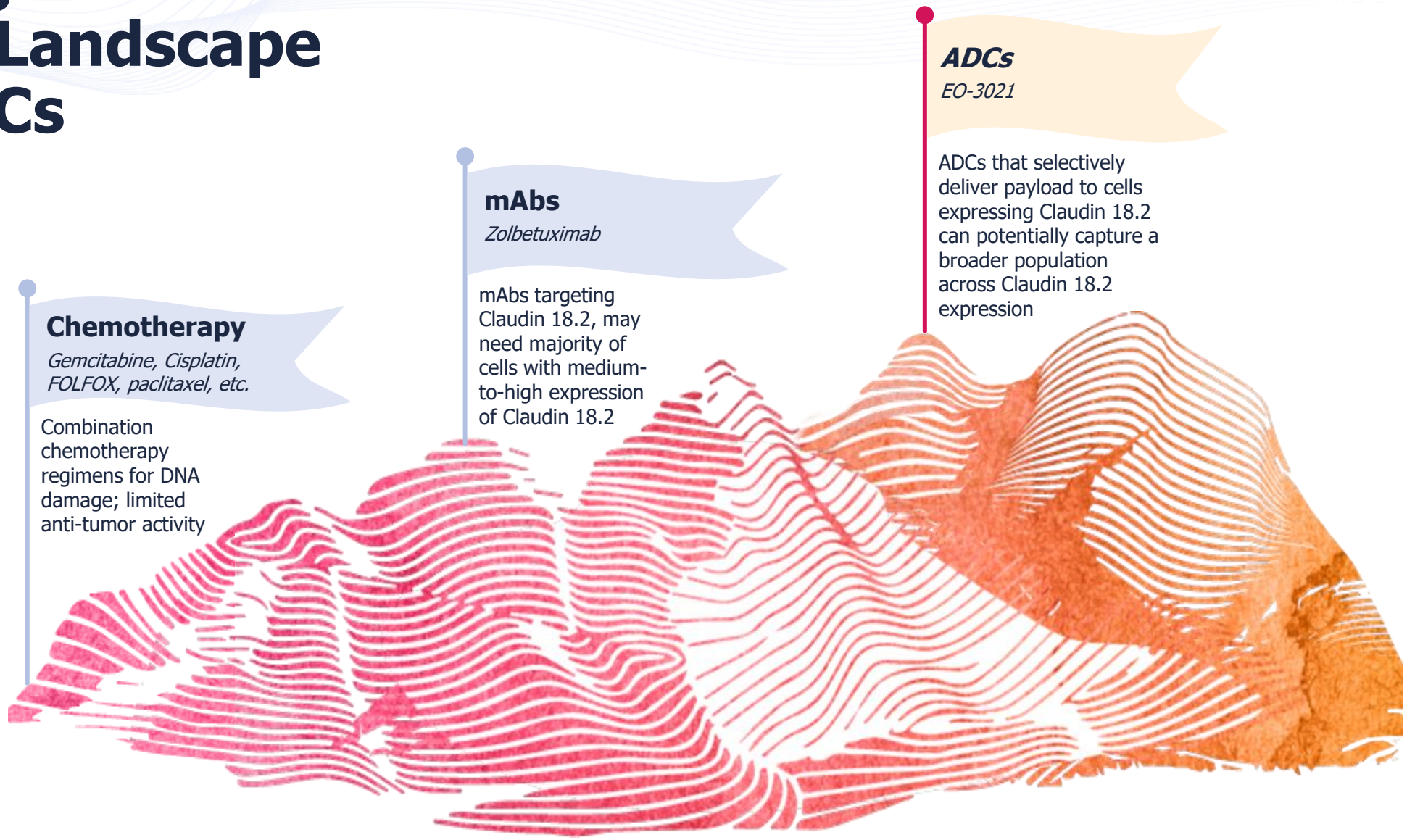
[1]Bauzon Met al., Maytansine-bearing antibody-drug conjugates induce in vitro hallmarks of immunogenic cell death selectively in antigen-positive target cells - PMC (nih.gov). Oncoimmunology. 2019 Jan 22;8(4):e1565859. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6422391/.
[2]Qian X, et al. Ann Oncol. 2023; 34:S873.

An Evolving Claudin 18.2 Treatment Landscape Toward ADCs

As with other targets in oncology, **the Claudin 18.2 landscape is moving toward an ADC-based approach**



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KEY MILESTONES

EO-3021

2H 2023
Initiate Phase 1 trial in the US

1H 2024
Details on planned Phase 1 combination study

By mid-3Q 2024
Initial safety and efficacy data from Phase 1 trial

1H 2025
Additional data from Phase 1 trial

HER3-ADC

2H 2024
Nominate development candidate

FINANCIAL

$104.1M cash and cash equivalents as of 3/31/2024

$14.5M in net proceeds raised through ATM facility in 2Q 2024

Cash runway to fund operations into 2026[1]

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[1]Elevation Oncology expects its existing cash, cash equivalents and marketable securities as of March 31, 2024, together with the $14.5 million in net proceeds raised under its ATM facility in 2Q 2024, to be sufficient to fund its current operations into 2026.
ATM = at-the-market

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THANK YOU