

# First-in-Human Phase 1 Study of a Dual-Conditionally Active Biologic (CAB) EpCAM x CD3 Bispecific T-cell Engager (TCE), BA3182, in Patients with Treatment Refractory Metastatic Adenocarcinoma

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Presented by: Jennifer B. Valerin, MD, PhD

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# DECLARATION OF INTERESTS

Consulting: Tempus

Speaker bureau: Incyte, AstraZeneca

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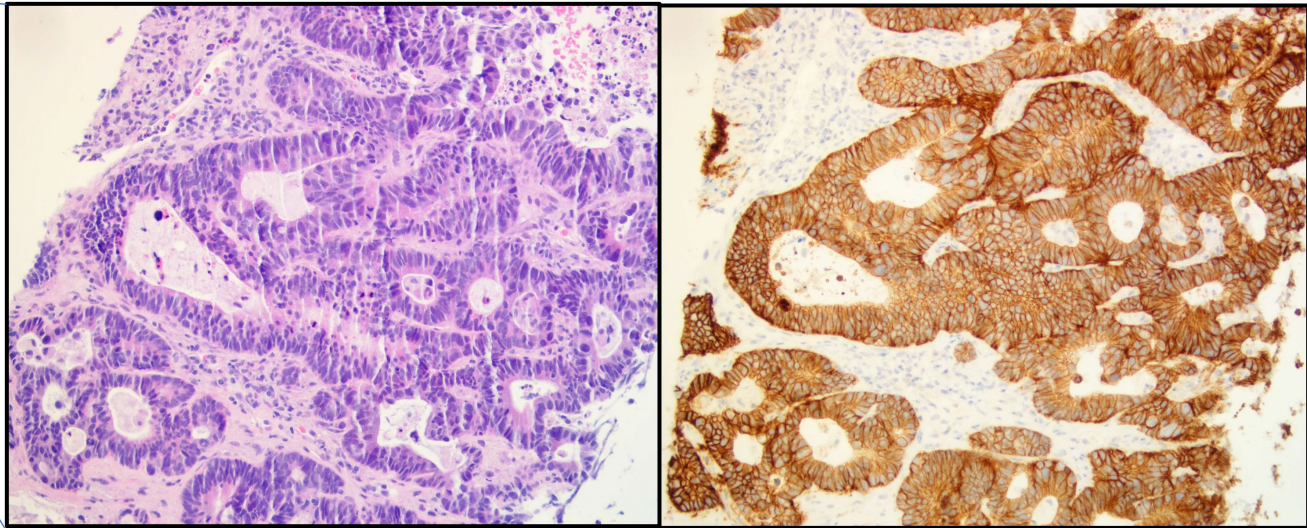
# Why EpCAM (epithelial cell adhesion molecule) as a target?

Targeting EpCAM has potential to serve over 1M pts

	Estimated Number of New Cancer Cases in 2025	EpCAM Expression (TIS 1 to 12) <sup>2</sup>
Breast Cancer	319,750	81%
Prostate Cancer	313,780	99%
Lung Cancer	226,650	93% NSCLC 80% SCLC
Colon Cancer	154,270	100%
Pancreatic Cancer	67,440	99%
Thyroid Cancer	44,020	97%
Ovarian	20,890	92%
Gallbladder & other biliary	12,610	97%

## Challenges of targeting EpCAM

- All epithelia tissue express EpCAM
- Broad expression associated with on-target, off-tumor toxicities



H&E Stain

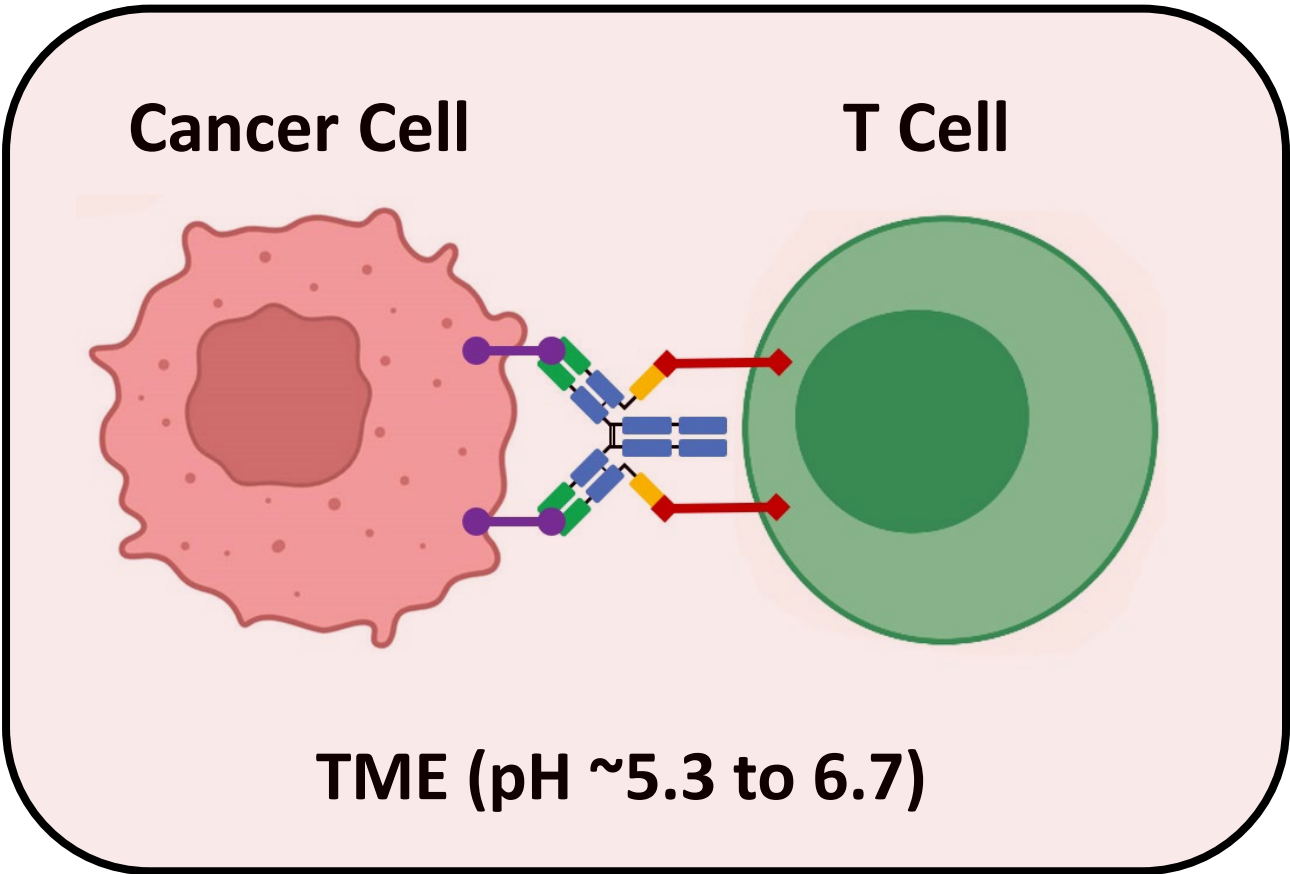
EpCAM IHC

Biopsy from ongoing Phase 1 dose escalation

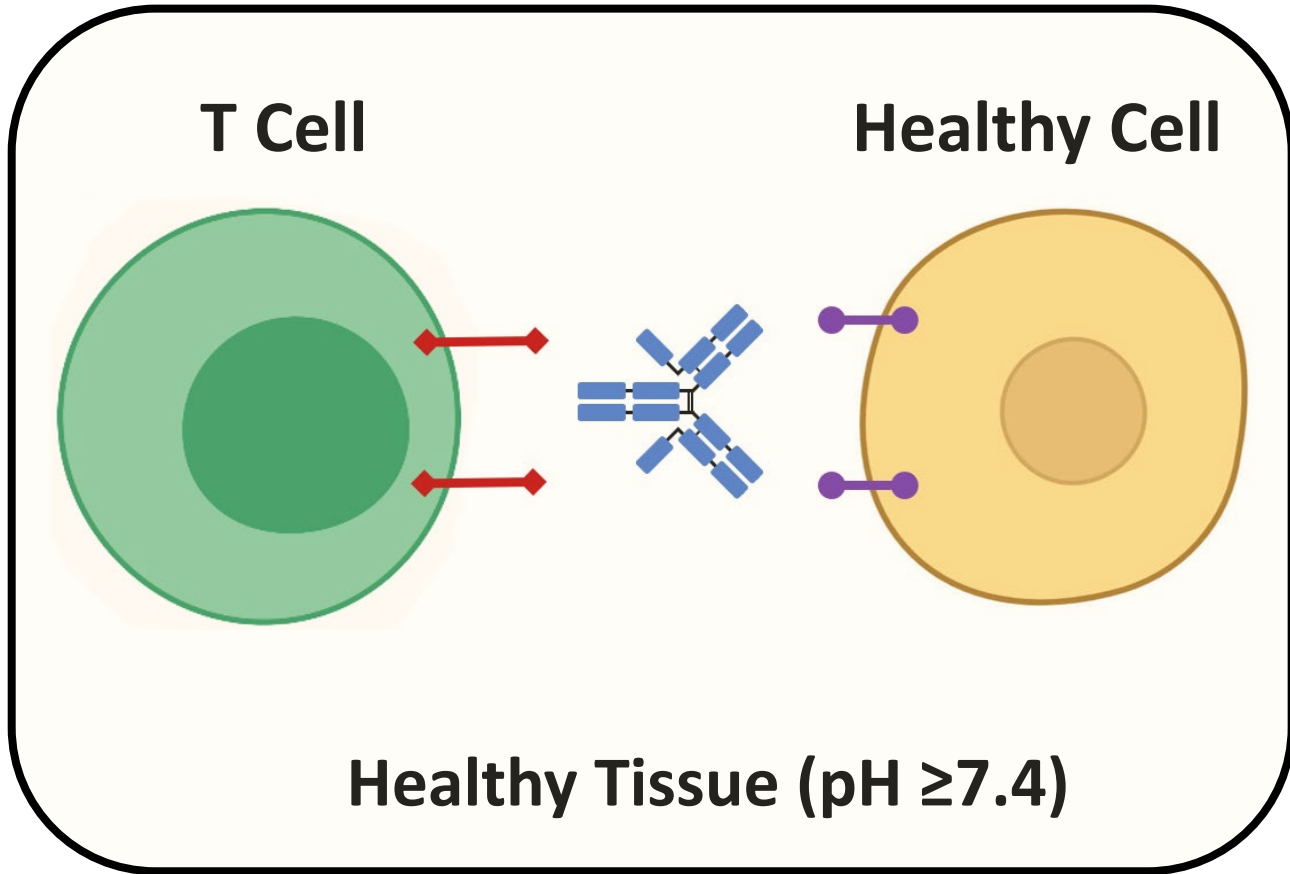
<sup>1</sup>Siegel RL, Kratzer TB, Giaquinto AN, Sung H, Jemal A. Cancer statistics, 2025. *CA Cancer J Clin.* 2025. <sup>2</sup>G. Spizzo, et al. *J Clin Pathol* 2011;64:415e420.

# Specificity of Dual-CAB EpCAM x CD3 Bispecific T-cell Engager BA3182 in cancer cells vs normal tissue environment

Dual-conditional binding technology drives maximal binding in acidic TME



No binding in healthy tissue, reducing CRS and on-target, off-tumor toxicities



TCR/CD3      EpCAM



# BA3182 Phase 1 Dose Escalation: Design and Current Status

*Now focusing enrollment among colorectal carcinoma; dose escalation actively continues*

## Primary objectives:

Characterize safety, tolerability, and define recommended phase 2 dose

## Secondary objectives:

Characterize antitumor activity, pharmacokinetics, and immunogenicity

## Treatment schedule:

0, 1, or 2 priming doses prior to treatment dose  
Ongoing weekly dosing continues after DLT observation interval concludes

## Disposition:

**39 pts treated per protocol as of 20 June 2025 data cutoff:**

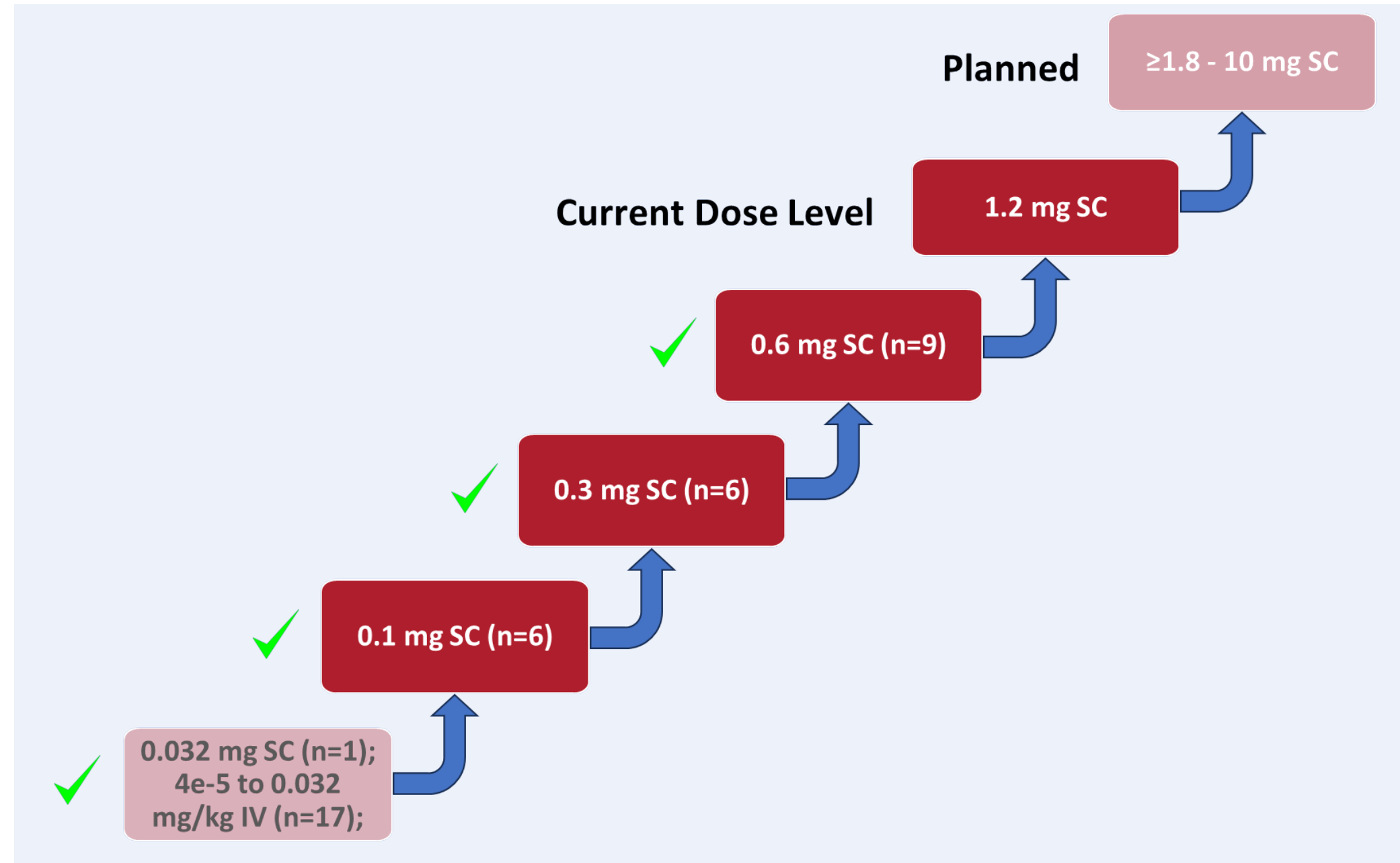
Intravenous (IV), weight-based dosing (N=18)\*

**Subcutaneous (SC), flat dosing (N=22)**

\*Starodub AN, Selfridge JE, Conces ML, et al. *Preliminary results from a first-in-human Phase 1 study of a dual-conditionally binding CAB-EpCAM x CAB-CD3 bispecific T-cell engager, BA3182, in patients with treatment refractory metastatic adenocarcinoma*. Poster presented at: European Society for Medical Oncology Gastrointestinal Cancers Congress (ESMO GI); July 2–5, 2025; Barcelona, Spain.

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### Treatment notes:

Prophylactic acetaminophen and diphenhydramine delivered prior to all doses; starting at 0.00018 mg/kg dose level prophylactic tocilizumab (Q2W x 3 doses) given at day 1 full dose; Evaluating no tocilizumab prophylaxis with 0.3 mg dose level.

0, 1, or 2 smaller priming doses (0.00012 mg/kg, 0.0001 mg, 0.003 mg, 0.1 mg, or 0.3 mg) delivered 4-7 days prior to weekly larger treatment doses

Ongoing weekly treatment dosing continues after DLT observation interval concludes

# Patient Demographics

*Patients dosed SC per protocol as of June 20, 2025: N=22*

Patient Characteristic	N=22
Age, mean (SD), y	58 (10)
Male	9 (50)
Female	9 (50)
ECOG performance	
0	13 (59)
1	9 (41)
Number of prior lines of therapy, median	3

Tumor	N=22
Adenoid Cystic Carcinoma	1 (5)
Cholangiocarcinoma	1 (5)
Colon/Rectum	11 (50)
Gallbladder	1 (5)
Ovarian	1 (5)
Pancreas	6 (27)

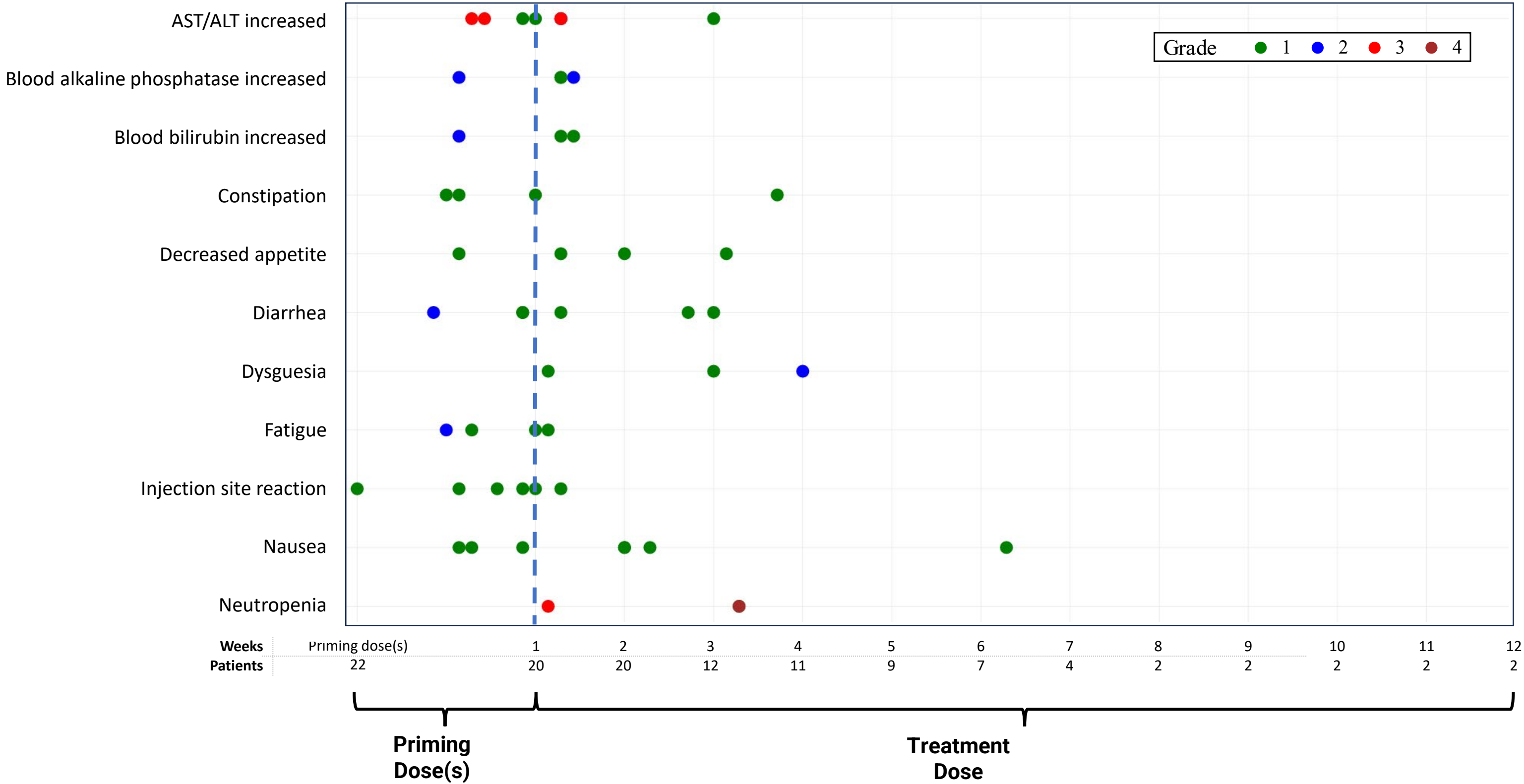
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Data cut as of 13Jun25

# Safety of subcutaneous dosing (N=22)

*Most frequent related AE events of any grade (>10% of patients) in patients receiving subcutaneous BA3182*



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# Safety of subcutaneous dosing (N=22)

*Adverse events, including CRS, were generally low-grade, transient and readily manageable*

Characteristic	N=22	Characteristic	Any	G3+
Any Adverse Events (AEs) (n, %)	20 (91)	ALT increase (n, %)	8 (36)	3 (14)
Related AEs of CTCAE <sup>1</sup> Grade 3 (n, %)	6 (32)	AST increase (n, %)	7 (32)	3 (14)
Related AEs of CTCAE <sup>1</sup> Grade 4 <sup>2</sup> (n, %)	1 (5)	Nausea (n, %)	7 (32)	0
Any related serious AEs <sup>2</sup> (n, %)	3 (14)	Diarrhea (n, %)	6 (27)	0
Related AEs leading to death <sup>2</sup> (n, %)	0	Injection site reaction (n, %)	6 (27)	0
Related AEs leading to treatment discontinuation <sup>2</sup> (n, %)	0	Constipation (n, %)	4 (18)	0
		Decreased appetite (n, %)	4 (18)	0
		Fatigue (n, %)	4 (18)	0
		Alk Phos increased (n, %)	4 (18)	0
		Non-febrile neutropenia (n, %)	3 (14)	2 (9)
		Bilirubin increased (n, %)	3 (14)	0
		Dysgeusia (n, %)	3 (14)	0

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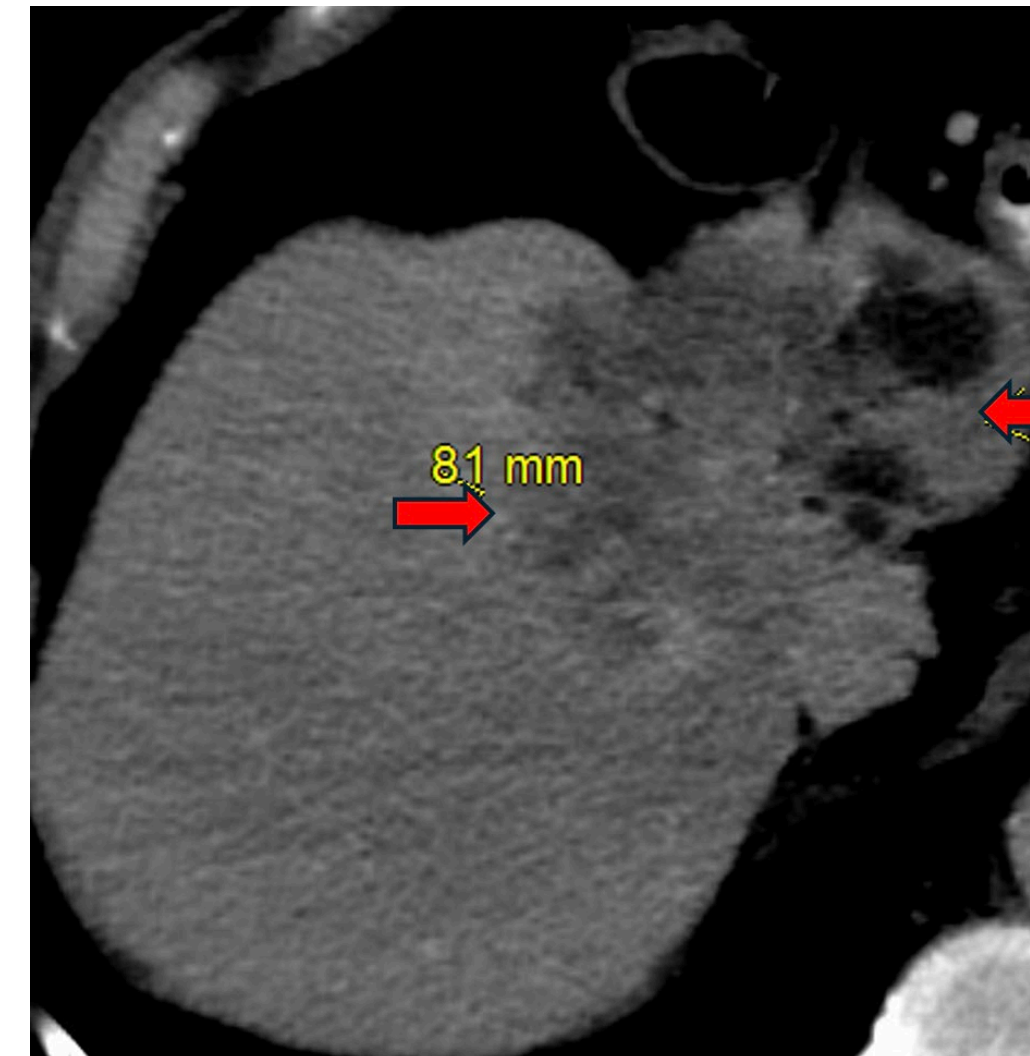


# 71-year-old male with intrahepatic cholangiocarcinoma with 13% tumor reduction from BA3182 at 0.1 mg QW

*Previously treated on clinical trial with gemcitabine, cisplatin, durvalumab, and investigational agent*



Baseline



Tumor assessment – Week 12

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# CONCLUSIONS

- BA3182 is designed to conditionally bind EpCAM and CD3 targets at low pH thus restricting beneficial cytolytic immune synapses to the tumor microenvironment while avoiding damage to normal EpCAM-expressing tissues
- Adverse events including CRS were generally low-grade, transient, and readily manageable, suggesting the therapeutic window targeting EpCAM may be meaningfully widened
- Preliminary evidence of prolonged tumor control and tumor reductions have both been achieved with BA3182 among heavily pretreated patients and dose escalation actively continues

## PRELIMINARY ASSESSMENT OF ANTI-TUMOR ACTIVITY AMONG THOSE WITH AVAILABLE SCANS

- Six patients achieved objective tumor size reductions: CRC (-8%, 10%), breast (-11%), cholangiocarcinoma (-13%), NSCLC (-25%), and pancreatic (-5%)
- Prolonged progression-free intervals observed in 2 CRC pts: 11 mo and 16 mo