Conditionally **A**ctive **B**iologics: Transforming Cancer Therapy

Corporate Presentation

May 2023

bioatla

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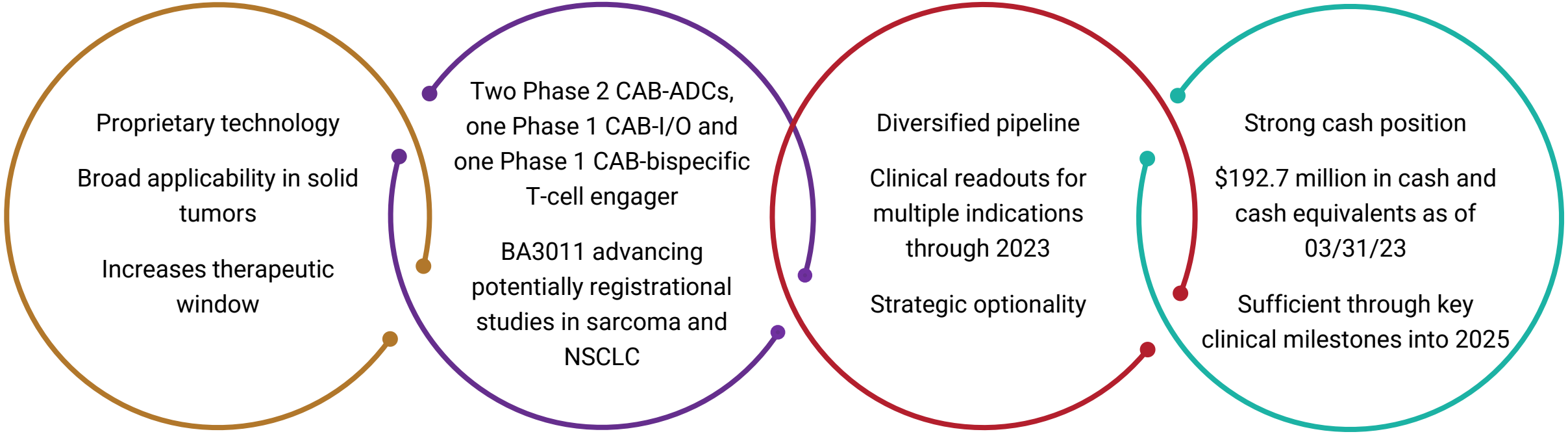
BioAtla© is a clinical stage company focused on transforming cancer therapy

with **C**onditionally **A**ctive **B**iologics (CABs)



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Selective and targeted CAB technology widens therapeutic window,

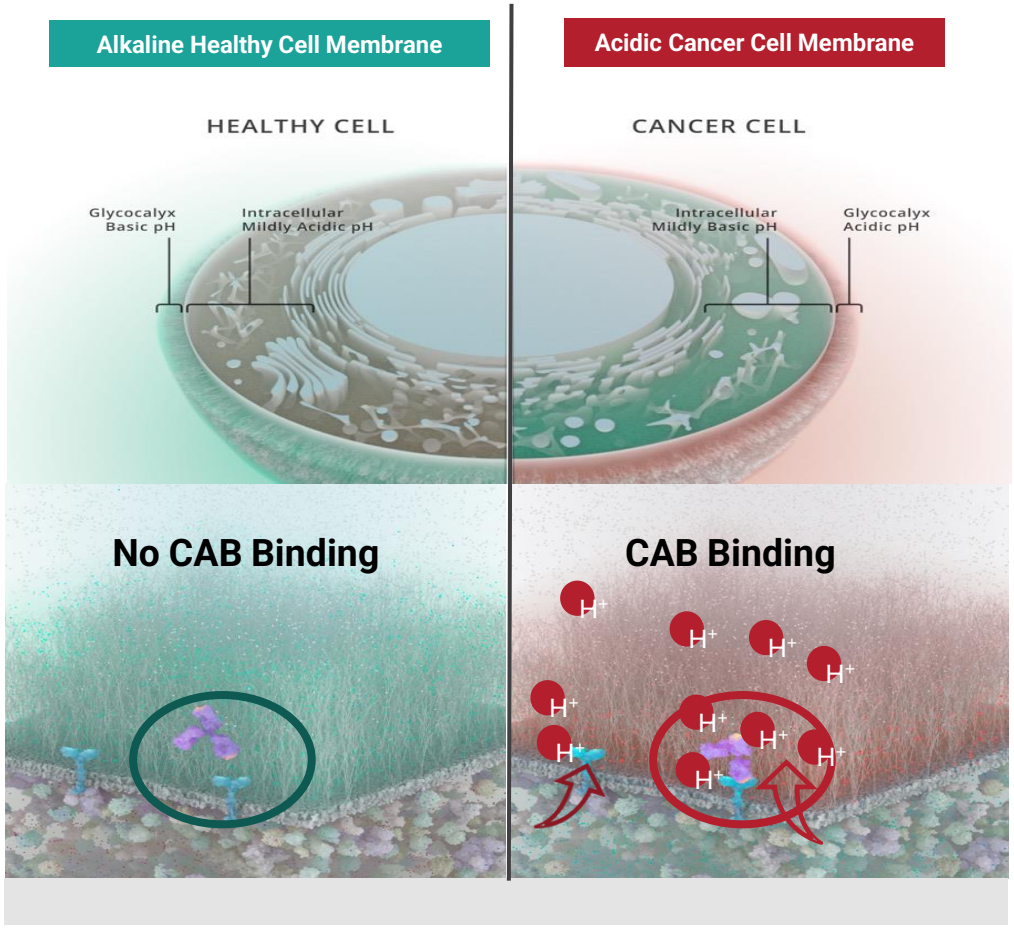
thus has the potential to enhance clinical outcomes in multiple tumor types

BioAtla discovered that acidic pH at the cancer cell surface unveils binding sites that are shielded at normal pH of healthy cells

BioAtla invented CAB technology, creating antibodies that bind ***only*** to these unveiled sites on cancer cells

CAB binding region is not masked or caged and thus different from prodrugs that require irreversible enzymatic cleavage to become activated

CAB antibodies have the potential for increased efficacy with improved safety relative to traditional antibodies



Chang, H.W., Frey, G., Liu, H., Xing, C., Steinman, L, Boyle, B.J., & Short, J.M. (2021) PNAS 118(9): 1-10, Suppl. 1-19.

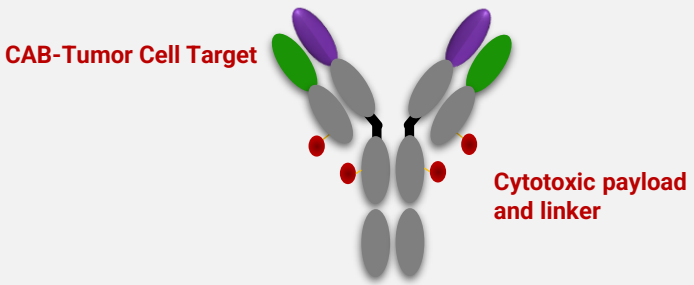
Broad applicability of BioAtla's CAB platform across several antibody types

has the potential to treat multiple solid tumors

ADCs

Targets: AXL, ROR2

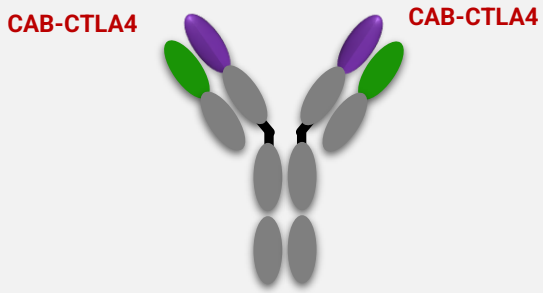
Widely expressed in a variety of tumor types, AXL and ROR2 overexpression correlates with poor prognosis, metastasis, and drug resistance to PD-1 and EGFR therapies



Naked Antibodies I/O

Target: CTLA-4

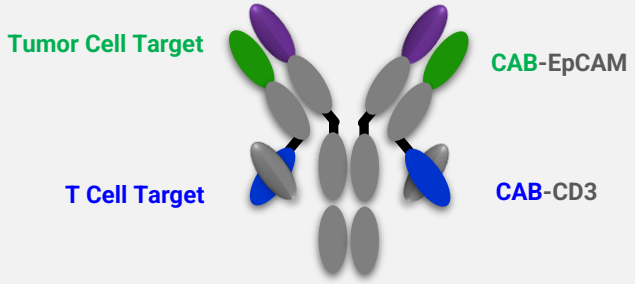
CTLA-4 blockade activates effector T cells, thereby enhancing anti-tumor immunity



Bispecific TCE

Target: EpCAM & CD3

Bispecific antibodies bridge cancer cells and cytotoxic T lymphocytes, activating T cells and promoting cancer cell lysis



ADC – antibody drug conjugate; IO – immuno-oncology; TCE – T-cell engager

Focused pipeline with broad applicability of differentiated CAB assets designed to deliver near-term value

	CAB Program	Target	Indications	IND Enabling Pre-Clinical	Phase 1 Clinical	Phase 2 Clinical	Anticipated Milestones
CAB-ADCs	**BA3011** *Mecbotamab Vedotin*	AXL	STS & Bone Sarcoma NSCLC Ovarian Cancer*				✓ Submitted Exposure-Response analysis to medical meeting (1H) ✓ Enrolling more frequent dosing regimens in NSCLC as part of Phase 2, part 1 (1H) ✓ Initiated UPS Phase 2, part 2 potentially registrational study (1H) • Request FDA feedback re: Phase 2, part 2 NSCLC potentially registrational study design (1H) • Receive FDA feedback re: Phase 2, part 2 NSCLC (2H) • Initiate Phase 2, part 2 NSCLC potentially registrational study (2H) • Phase 2 IIT interim data ovarian (2H)
	BA3021 *Ozuriftamab Vedotin*	ROR2	NSCLC SCCHN Melanoma Ovarian Cancer*				✓ FPI SCCHN Phase 2 (1H) ✓ Initiated NSCLC Phase 2 more frequent, dose intensive regimens (1H) • Prioritize registration indications (2H) • Phase 2 IIT interim data ovarian (2H)
CAB-I/O	**BA3071**	CTLA-4	Multiple tumor types**				• Phase 1 data (2H) • Initiate Phase 2 (2H)
CAB-Bispecific TCE	**BA3182**	EpCAM x CD3	Adenocarcinoma** Multiple tumor types**				✓ Phase 1 IND clearance (1H) ✓ Initiate Phase 1 (1H)
CAB	**Additional programs**	Various	Multiple tumor types**				• Additional INDs, 2023 / 2024

IIT, investigator-initiated trial; IND, investigational new drug; NSCLC, Non-small Cell Lung Cancer; SCCHN, Squamous Cell Carcinoma of the Head and Neck; STS, Soft Tissue Sarcoma; FPI, First Patient In.

*Phase 2 investigator-initiated trial for Ovarian Cancer
** Indications based upon tumor target expression

CAB-AXL-ADC Platform

BA3011 Mecbotamab Vedotin: Sarcoma and NSCLC

Potential market opportunity in sarcoma

UPS

1. 2nd most common Soft Tissue Sarcoma (STS) subtype (~15% of all STS)[1]
2. High-grade aggressive subtype with high recurrence rates[1]
3. 3k – 4k AXL+ addressable patients per year in the U.S.[1,2]

Current Treatments

- Chemotherapy, chemoradiation or regional limb therapy for unresectable cases
- No approved therapies specifically for UPS
- Approved treatments for sarcoma ORR ~15%[3]

Other Subtypes

1. Osteosarcoma – most common malignant primary bone tumor (30% of all such malignancies)[4]
2. Liposarcoma – one of the largest soft tissue sarcoma subtypes (15% - 20% of all STS)[5]
3. Synovial sarcoma – smaller subtype, but high recurrence rate (~50% of patients)[6]
4. Limited effective treatment options across all sarcoma subtypes

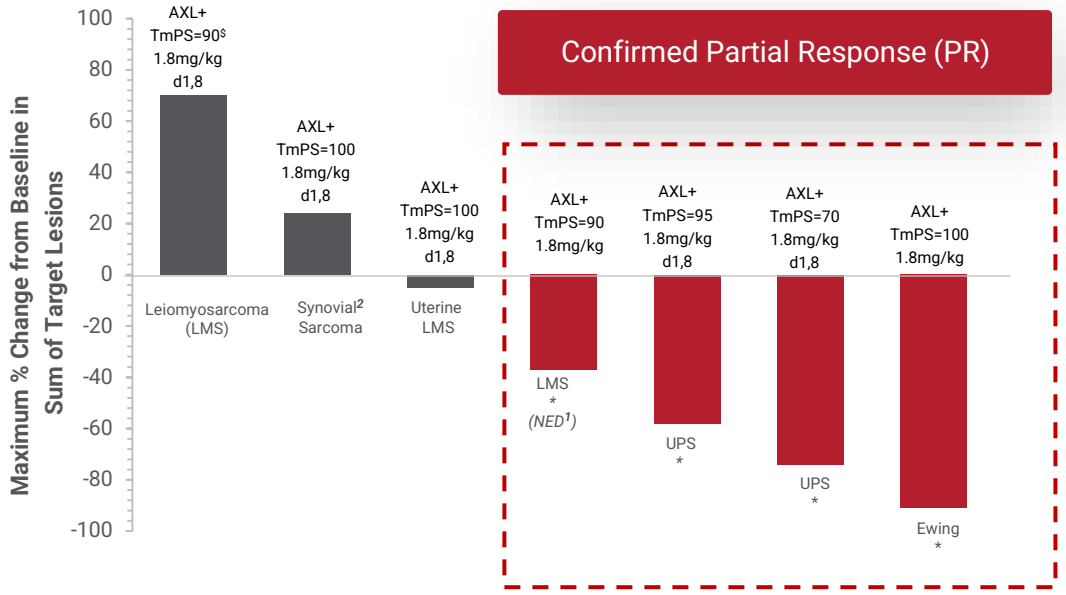
[1]Undifferentiated Pleomorphic Sarcoma - StatPearls - NCBI Bookshelf (nih.gov); Annals of Oncology 30: 1143–1153, 2019; [2]Company estimates; [3]Product USPIs; [4]https://www.cancernetwork.com/view/bone-sarcomas. [5]https://rarediseases.org/rare-diseases/liposarcoma/; [6]https://www.sciencedirect.com/science/article/pii/S0923753419386727

ORR, objective response rate (best objective response as confirmed complete response or partial response); STS, soft tissue sarcoma; UPS, undifferentiated pleomorphic sarcoma.

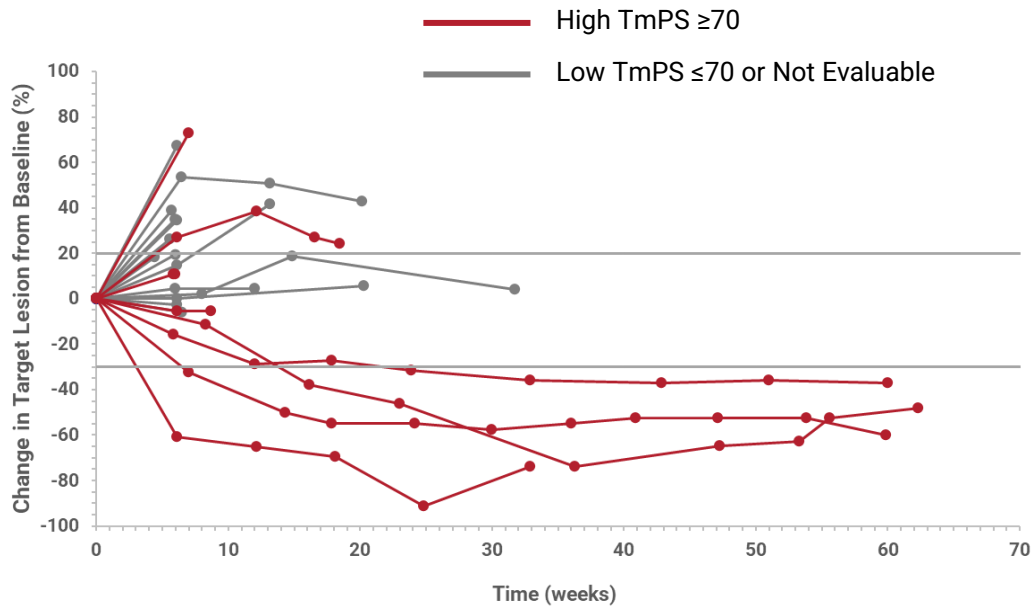
Encouraging Phase 1 results with Mecbotamab Vedotin (BA3011)

in refractory sarcoma

Confirmed TmPS* ≥70; 1.8mg/kg Q3W or 2Q3W



Evaluable Patients in Phase 1 at All Doses



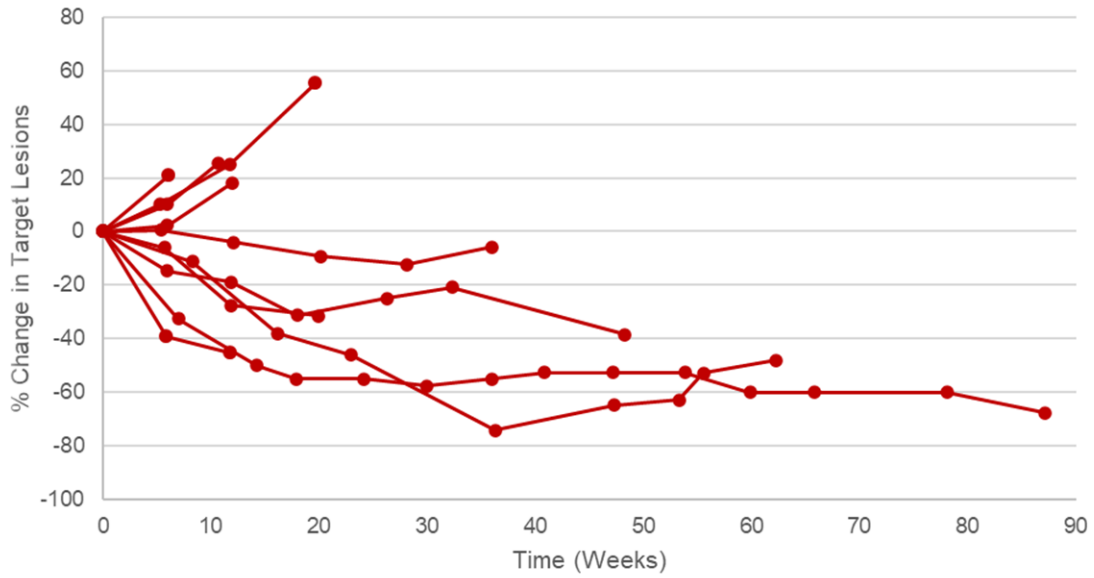
- PR was achieved in 4/7 high TmPS patients receiving the clinically-meaningful 1.8 mg/kg dose Q3W and 2Q3W
- Antitumor activity correlates with higher levels of AXL tumor membrane expression in sarcoma patients

All patients: Multiple cycles of antineoplastic agents received prior to starting treatment with BA3011
*AXL Tumor membrane Percent Score or TmPS = % Score ≥1+; $Tissue biopsy from resection, over 1 year old prior to trial entry
[1]NED = No evidence of disease; [2]Synovial sarcoma patient delayed treatment due to unrelated SAE led to progression

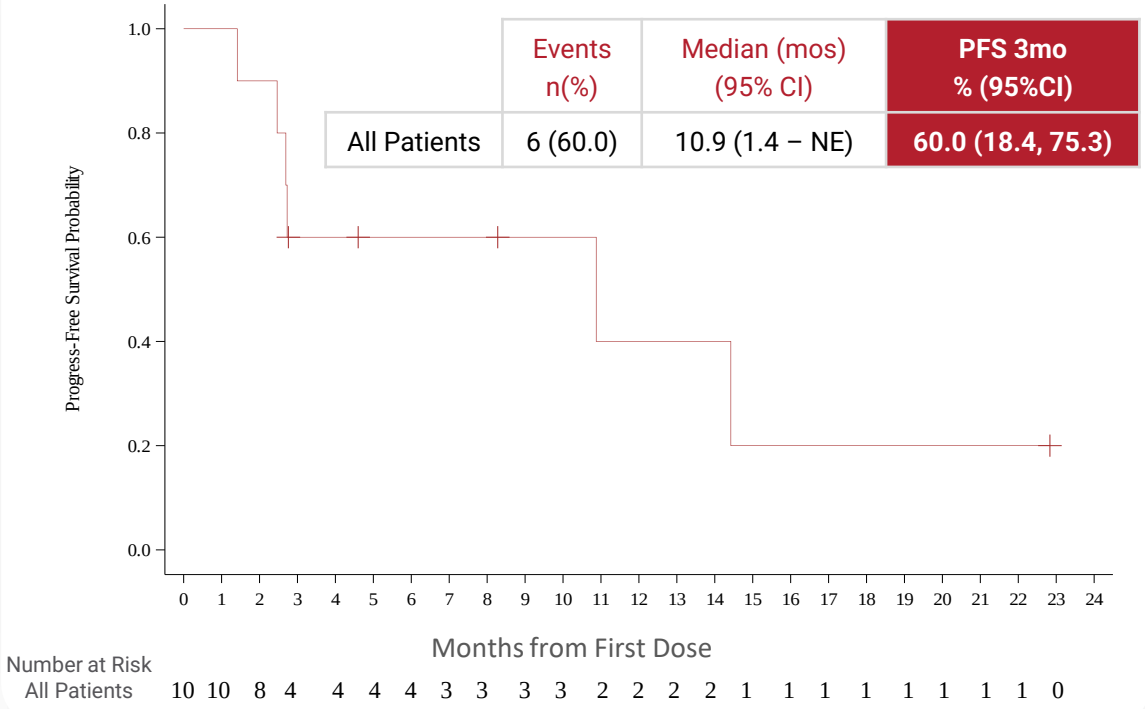
Undifferentiated Pleomorphic Sarcoma (UPS): ORR 50%, Median PFS 10.9 months

Phase 1 & Phase 2, part 1 change in target lesion and progression free survival (1.8mg/kg; n=10)

Change Target Lesion From Baseline (%)



Progression-free Survival



- Combined Phase 1 & 2: efficacy evaluable = 10 TmPS ≥ 50%
  - 5 / 10 patients achieved PRs, with an ORR of 50% and PFS rate at 3 months of 60%
  - Responses to BA3011 treatment are durable, with DOR currently exceeding 8 months
- Interim results satisfied the pre-defined Go criteria of UPS cohort into part 2 of the Phase 2 study
- Average prior lines of systemic therapy = 3

- Phase 3 randomized study of pazopanib versus placebo in metastatic soft-tissue sarcoma ("other" cohort that included UPS), progressing despite previous chemotherapy, reported a median PFS of 4.6 months for pazopanib and 1.0 months for placebo.*
- Single-arm SARC028 study of pembrolizumab in advanced UPS, reported median PFS of 3.0 months**
- Limitations of cross trial comparison should be taken into account when comparing studies

Interim data- Data cut-off of Jan 18, 2023
*Votrient package insert, accessed March 2023. **DOI: 10.1200/JCO.2019.37.15_suppl.11015 Journal of Clinical Oncology 37, no. 15_suppl (May 20, 2019) 11015-11015.
TmPS, tumor membrane percent score; ORR, objective response rate; PFS, progression free survival; DOR, duration of response.

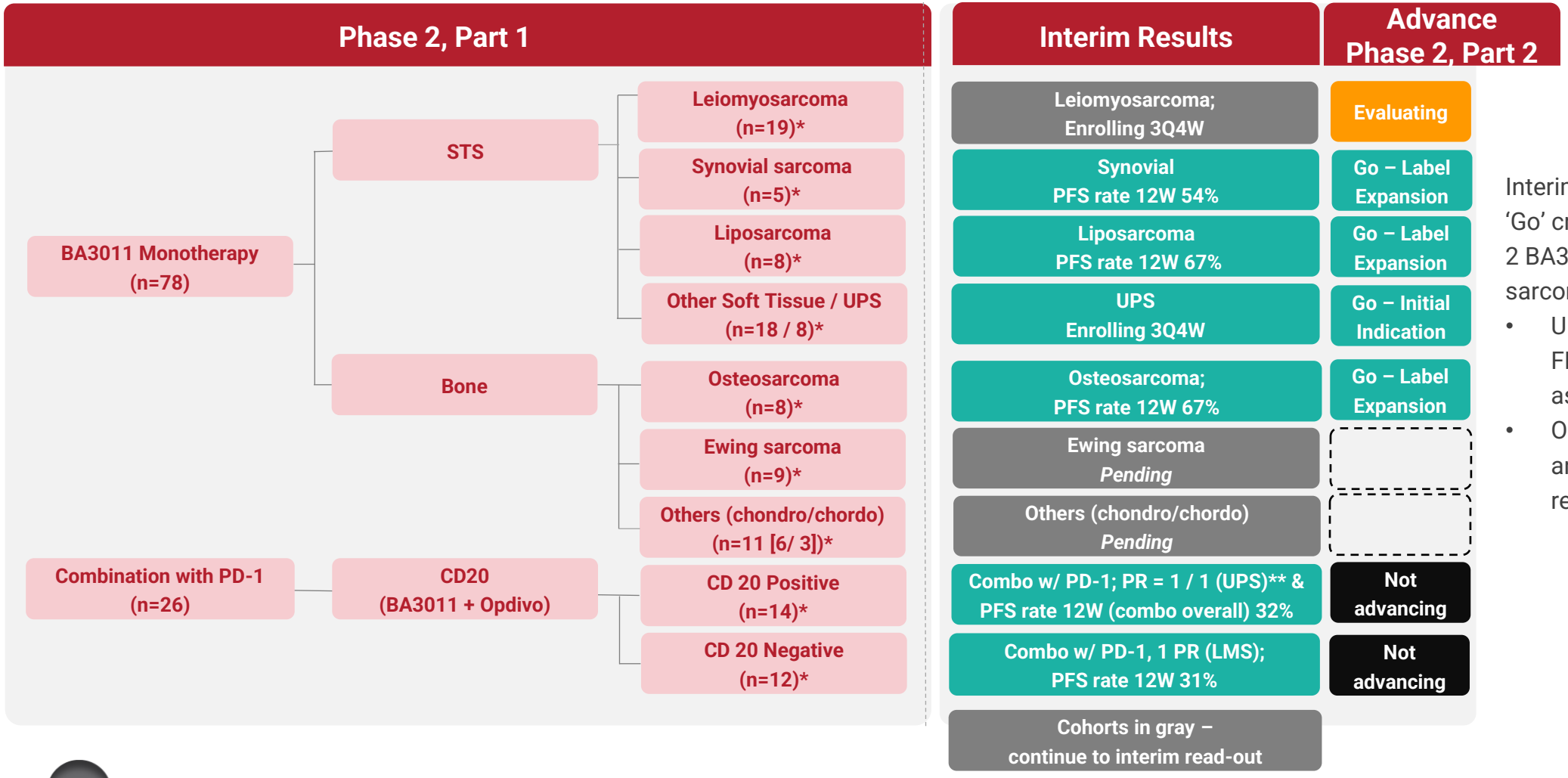
Sarcoma update

- Initiated UPS Phase 2, part 2 potentially registrational study
  - Based on safety and exposure-response of our CAB-ADCs, we believe that we can further maximize benefit while maintaining an acceptable and differentiated safety profile with more frequent dosing
  - Enrolling total of ~80 AXL-expressing UPS patients in Phase 2, part 2
    - FDA supportive of investigating a more frequent dosing regimen (3Q4W 44% and 2Q3W 38% increased exposure over Q2W)
    - First 40 patients with a TmPS >=50% will be randomized 1:1 to 3Q4W or 2Q3W dosing regimen
    - Additional 40 patients will be enrolled at the selected dose
  - Primary efficacy endpoint is objective response rate (ORR) per RECIST v1.1
    - Primary efficacy analysis will be based on ~60 patients treated at the selected dosing regimen
  - Prior systemic regimens limited to ≤3
- Currently studying 3Q4W dosing regimen in LMS / UPS Phase 2, part 1 cohorts (combined n = ~10 - 15)
  - First 6 patients cleared DLT period using the more frequent dosing (3Q4W) – completed Q1’23

UPS = Undifferentiated Pleomorphic Sarcoma; LMS = Leiomyosarcoma

Phase 2, part 1 topline interim analysis results confirm Phase 1 signal

following BA3011 in refractory sarcoma subtypes



Interim results satisfied pre-defined 'Go' criteria into part 2 of the Phase 2 BA3011 study in multiple sarcoma subtypes:

- UPS – clear guidance from FDA, enrolling phase 2, part 2 as initial indication
- Osteosarcoma, liposarcoma and synovial – pursue registration post UPS approval

Pre-defined criteria for each subgroup up to 10 patients: 'No Go' if 0 CR/PR and PFS rate at 3 months <40%; 'Go' if ≥1 CR/PR or PFS rate at 3 months ≥40%. * enrollment as of Feb 28, 2022; Cohorts in gray continuing enrollment until sufficient sample size is achieved. **Included in UPS cohort. BA3011 dose 1.8 mg/kg Q2W.
PFS, progression-free survival; PR, partial response; UPS, undifferentiated pleomorphic sarcoma.

Continued promising safety and tolerability profile in sarcoma

Phase 2 at the RP2D 1.8 mg/kg Q2W

Characteristic	BA3011 (N=73)	BA3011 + Opdivo (N=26)
Any Adverse Events (AEs)	69 (94%)	24 (92%)
Related AEs with CTCAE[1] Grade 3 or 4[2]	20 (27%)	10 (39%)
Any related serious AEs[2]	5 (7%)	5 (19%)
Related AEs leading to death[2]	0	0
Related AEs leading to treatment discontinuation[2]	4 (5%)§	1 (4%)^

Constipation	Grade 1-2 (21%)
	Grade 3 (1%)
Peripheral Neuropathy	All Grade 1-2 (16%)
	Grade 3-4 (0%)
Diarrhea	Grade 1-2 (16%)
	Grade 3-4 (0%)

Low-grade constipation observed is consistent with baseline levels seen in advanced cancer patients

- No treatment-related deaths
- Few treatment-related SAEs, consistent with MMAE-based toxicity, including reversible myelosuppression, transient liver enzyme elevation, metabolic disturbances
- Very few related AEs leading to treatment discontinuation
- No clinically meaningful on-target toxicity observed over background
- Differentiated profile due to avoiding on-target off-tumor toxicity

Interim data- Data cut-off of Jan 18, 2023

[1]CTCAE: Common Terminology Criteria for Adverse Events. The NCI Common Terminology Criteria for Adverse Events is a descriptive terminology which is utilized for Adverse Event (AE) reporting. A grading (severity) scale is provided for each AE term. [2]As assessed by the investigator. Missing responses are counted as related. §Grade 2 peripheral neuropathy; pancreatitis; ^grade 2 Ileus

Potential market opportunity in metastatic NSCLC

>540K	people in the U.S. living with lung cancer[1]
~200K	newly diagnosed patients / year (U.S.) – **majority** advanced / metastatic[2]
~75 - 80%	non-squamous represents **majority** of NSCLC patients[3]
2L+	despite advances in 1L care, **majority** of patients **progress**[4]

Available Treatment:

1L: Chemo + ICI 50% ORR[5]

2L+: SOC 14% - 23% ORR[6];
median PFS 4.5 months[6]

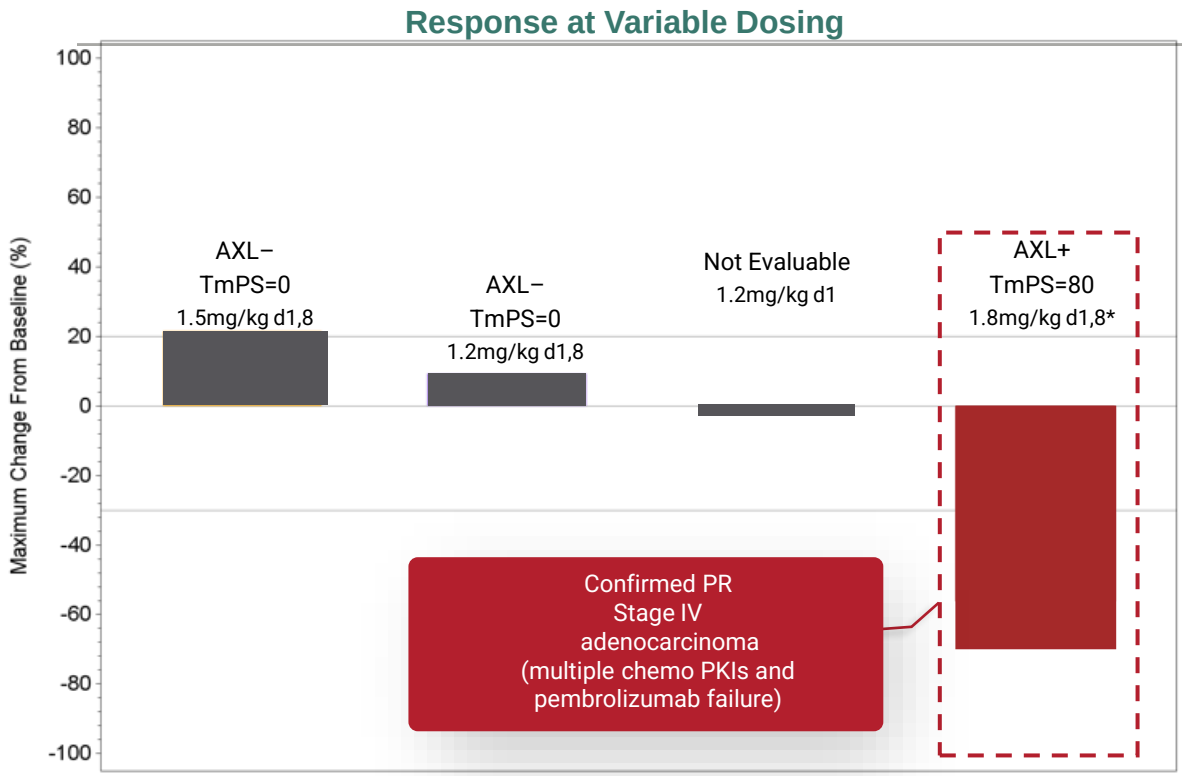
- **Target population: ~50K AXL+ addressable 2L+ patients/year in the U.S.[7], based on AXL positivity rate of ~35%**
- **Internal success threshold: 2L+ ORR of ~20% (approvability bar based on precedent); 25%+ (commercially relevant) following BA3011 monotherapy**

[1]https://www.lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/resource-library/lung-cancer-fact-sheet [2]https://www.cancer.net/cancer-types/lung-cancer-non-small-cell/statistics, [3]https://thoracickey.com/carcinomas-of-the-lung-classification-and-genetics/#F1-72, [4]Wang F, Wang S and Zhou Q (2020) The Resistance Mechanisms of Lung Cancer Immunotherapy. *Front. Oncol.* 10:568059. doi: 10.3389/fonc.2020.568059, [5]*Transl Lung Cancer Res* 2021;10(7):3093-3105. [6]Cyramza package insert (accessed March 2023) [7]Clarivate, Disease Landscape and Forecast: NSCLC (2022).

1L, first line; 2L+, second line or greater; NSCLC, non-small cell lung cancer; ORR, objective response rate (best objective response as confirmed complete response or partial response), SOC, standard of care (docetaxel alone, docetaxel + ramucirumab)

Encouraging Phase 1 results with Mecbotamab Vedotin (BA3011)

in refractory NSCLC patients



- A partial response was achieved in the AXL+ NSCLC patient refractory to multiple chemo PKIs and pembrolizumab failure

*1.8mg/kg d1,8 = 2Q3W dosing regimen

Phase 2 study design with BA3011 (Mecbotamab Vedotin)

in refractory NSCLC patients

Interim analysis

AXL+ ≥1 TmPS

Monotherapy and in Combination with PD-1/L1

All patients refractory to PD-1/L1, EGFR and / or ALK inhibitors

Use to determine TmPS cut-off and P2, part 2 dose

Next step

Applying exposure-response learnings

Request FDA feedback re: Phase 2, part 2

Complete interim analysis* and select Phase 2, part 2 conditions

Following FDA feedback, initiate Phase 2, part 2 (potentially registrational trial)

*To be presented at a medical meeting.

Phase 2, part 2

Monotherapy (BA3011), PD-1 failure NSQ NSCLC

Potentially registrational Phase 2, part 2 patient number TBD pending discussion with FDA

Endpoints

Primary endpoints

Confirmed ORR per RECIST v1.1

AEs or SAEs

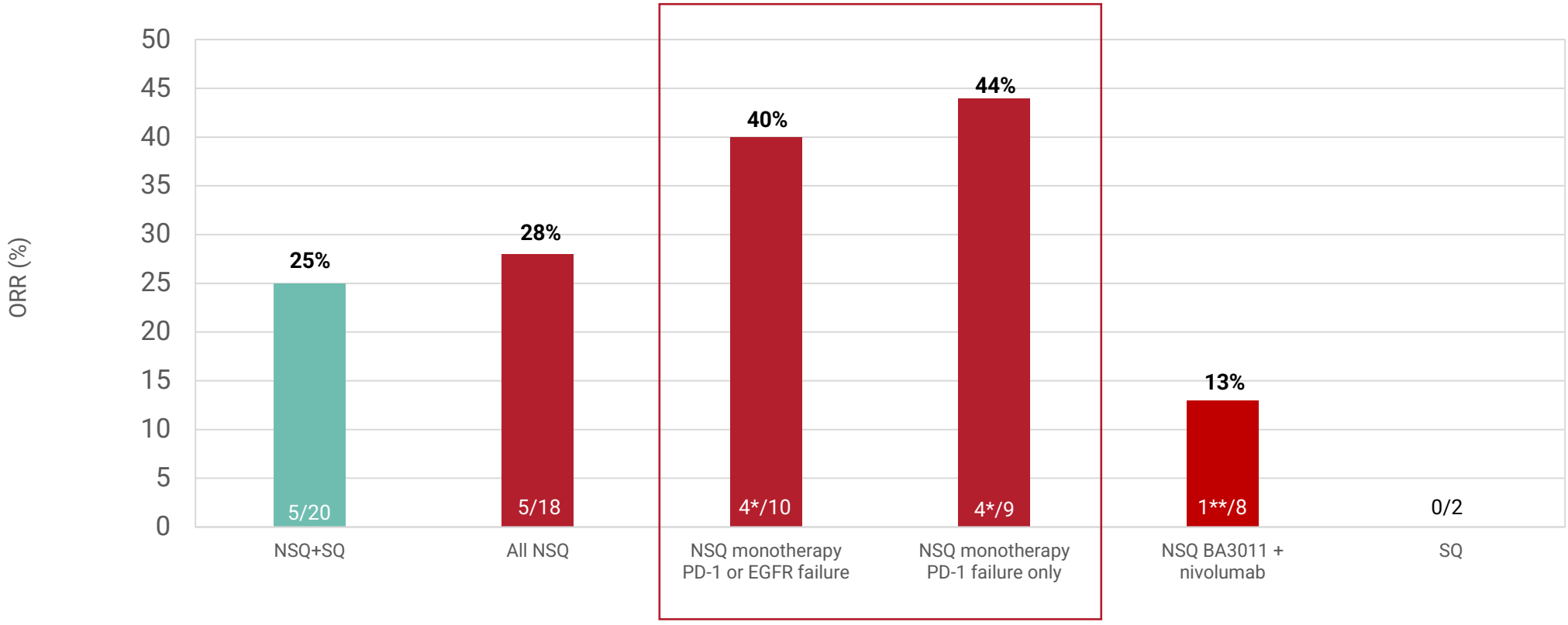
Secondary endpoints

DOR, PFS, ORR, DCR, TTR, OS

NSQ, nonsquamous; AE, adverse event; BOR, best overall response; DCR, disease control rate; DOR, duration of response; ORR, objective response rate; OS, overall survival; PFS, progression-free survival; SAE, serious adverse event; TTR, time to response.

Phase 2, part 1 BA3011 NSCLC initial interim analysis

supports advancing preparations for part 2 potentially registrational study in PD-1 failure NSCLC

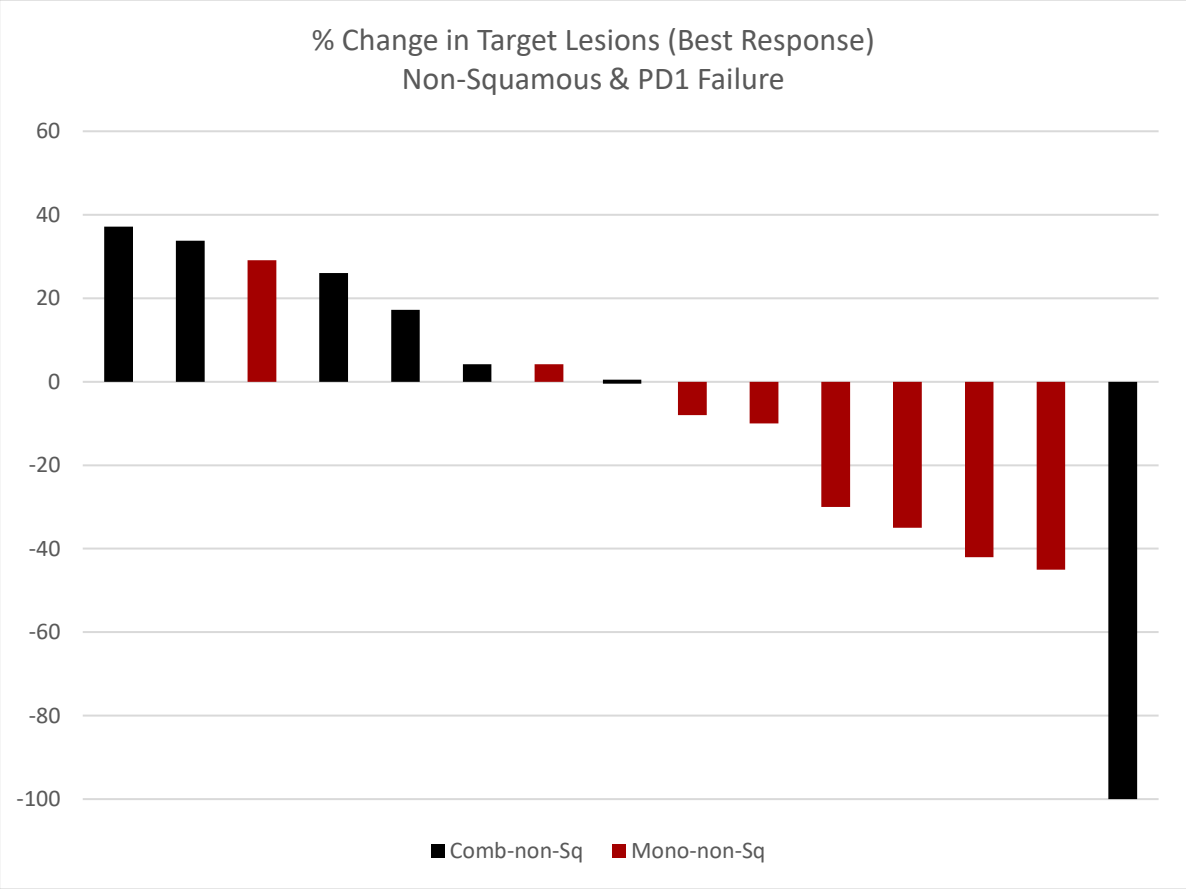


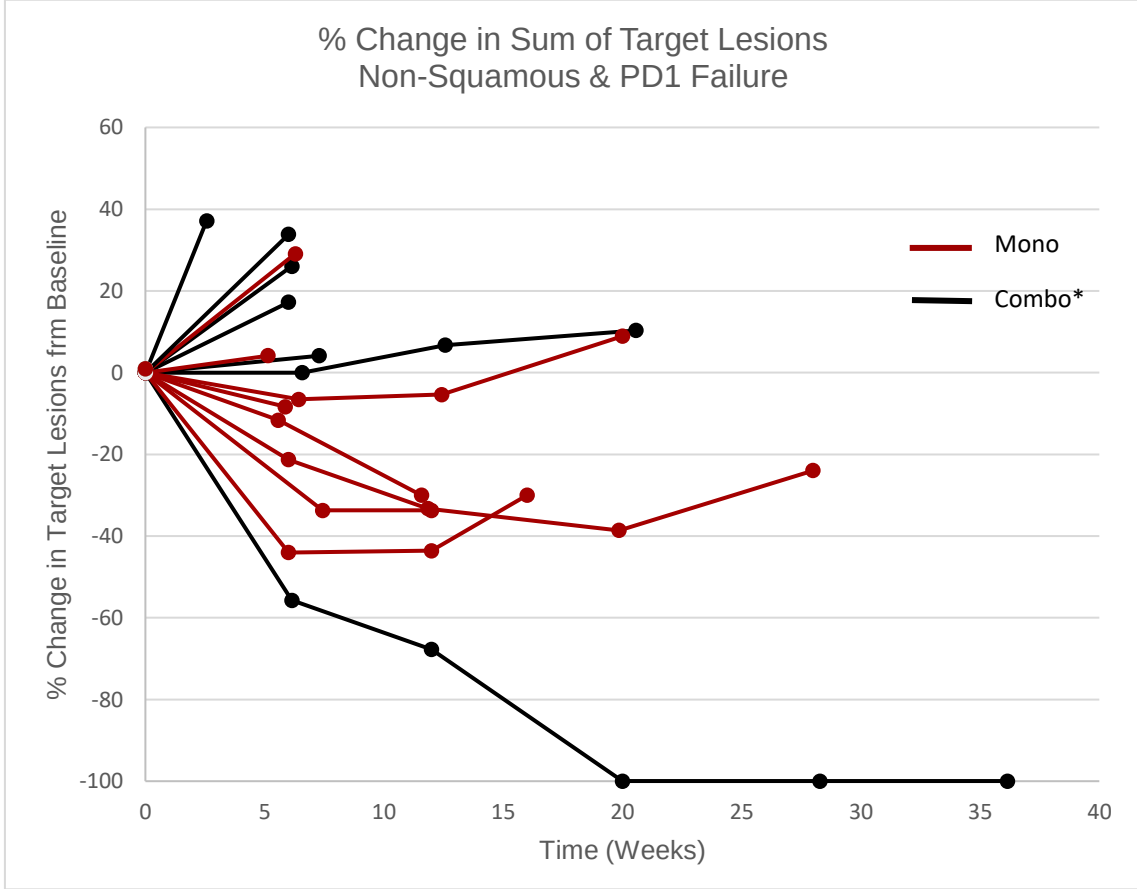
Responses include 4 partial responses (*) and one complete response (**)

Interim data- Data cut-off of Jan 4, 2023
Average prior lines of therapy = 3
NSQ – non-squamous; SQ – squamous

Change from baseline in sum of target lesions

Non-Squamous / PD-1 Failure





Interim data- Data cut-off of Jan 4, 2023
Graphs represent patients who have had the opportunity to be followed for 12 weeks or more

*Combo patients: 5 out of 7 patients discontinued due to either AEs related to nivolumab leading to treatment interruption and withdrawal (discontinued after 1 cycle; n=3) or worsening of existing brain metastasis (n=2).

Promising safety and tolerability profile continues to emerge in NSCLC

Phase 2 at the RP2D 1.8 mg/kg Q2W

Characteristic	BA3011 (N=18)	BA3011 + Opdivo (N=9)
Any Adverse Events (AEs)	17 (94%)	9 (100%)
Related AEs with CTCAE[1] Grade 3 or 4[2]	5 (28%)	2 (22%)
Any related serious AEs[2]	2 (11%)*	3 (33%)^
Related AEs leading to death[2]	0	0
Related AEs leading to treatment discontinuation[2]	2 (11%)§	0

Constipation	All Grade 1-2 (11%)
Peripheral Neuropathy	All Grade 1-2 (15%)
Diarrhea	All Grade 1-2 (15%)

No grade 3 – 4 AEs related to constipation, peripheral neuropathy or diarrhea observed. Low-grade constipation observed is consistent with baseline levels seen in advanced cancer patients.

- No treatment-related deaths
- Few treatment-related SAEs
- Few AEs leading to treatment discontinuation
- No clinically meaningful on-target toxicity observed over background
- Differentiated profile due to avoiding on-target off-tumor toxicity

Interim data- Data cut-off of Dec 21, 2022

[1]CTCAE: Common Terminology Criteria for Adverse Events. The NCI Common Terminology Criteria for Adverse Events is a descriptive terminology which is utilized for Adverse Event (AE) reporting. A grading (severity) scale is provided for each AE term. [2]As assessed by the investigator. Missing responses are counted as related. *DKA & infusion reaction ^creatinine increase, diplopia (subsequently deemed unrelated to BA3011 post data transfer) & acute kidney injury; § DKA & infusion reaction

BA3011 Phase 2, part 1 NSCLC

Key Takeaways

- Impressive response in monotherapy NSQ PD-1 failure population
- Promising durability of response
- Emerging safety profile continues to be differentiated
- Preparing for FDA interactions in 1H; while awaiting FDA feedback, evaluating more frequent, dose-intensive regimen similar to sarcoma
- NSQ PD-1 failure population represents a significant unmet need and commercial opportunity

NSQ = nonsquamous

Dosing regimens under evaluation for CAB-AXL-ADC

BA3011 Mecbotamab Vedotin

		Dose			
		Day1	Day 8	Day 15	Day 22
	Q2W				
All cycles (28 days)		1.8 mg/kg	no drug	1.8 mg/kg	no drug
	2Q3W				
All cycles (21 days)		1.8 mg/kg	1.8 mg/kg	no drug	–
	3Q4W				
Cycle 1 (21 days)		1.8 mg/kg	1.2 mg/kg	1.2 mg/kg	–
Cycle 2 (28 days) and subsequent cycles		1.2 mg/kg	1.2 mg/kg	1.2 mg/kg	no drug

Source: Form 10-K

Summary of Dosing Regimens for Phase 2 Clinical Studies with CAB-AXL-ADC

BA3011 Mecbotamab Vedotin

Indication	Dose	Patient #
Soft tissue and bone sarcoma	Q2W monotherapy and combo w/ nivolumab	~15 per cohort
LMS	3Q4W monotherapy	N ~ 15
UPS	2Q3W monotherapy	N ~ 20
	3Q4W monotherapy	N ~ 20
NSCLC	Q2W monotherapy	N ~ 20
	Q2W in combo w/ nivolumab	N ~ 20
	2Q3W monotherapy	N ~ 20
	3Q4W monotherapy	N ~ 20
Ovarian*	Q2W in combo w/ durvalumab	N ~ 20

*Investigator-initiated trial.
LMS, leiomyosarcoma; UPS, undifferentiated pleomorphic sarcoma; NSCLC, non small cell lung cancer.

CAB-ROR2-ADC Platform

BA3021 Ozuriftamab Vedotin – NSCLC, Melanoma, SCCHN

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2L+	despite advances in 1L care, **majority** of patients **progress**[4]

Available Treatment:

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2L+: SOC 14% - 23% ORR[6];
median PFS 4.5 months[6]

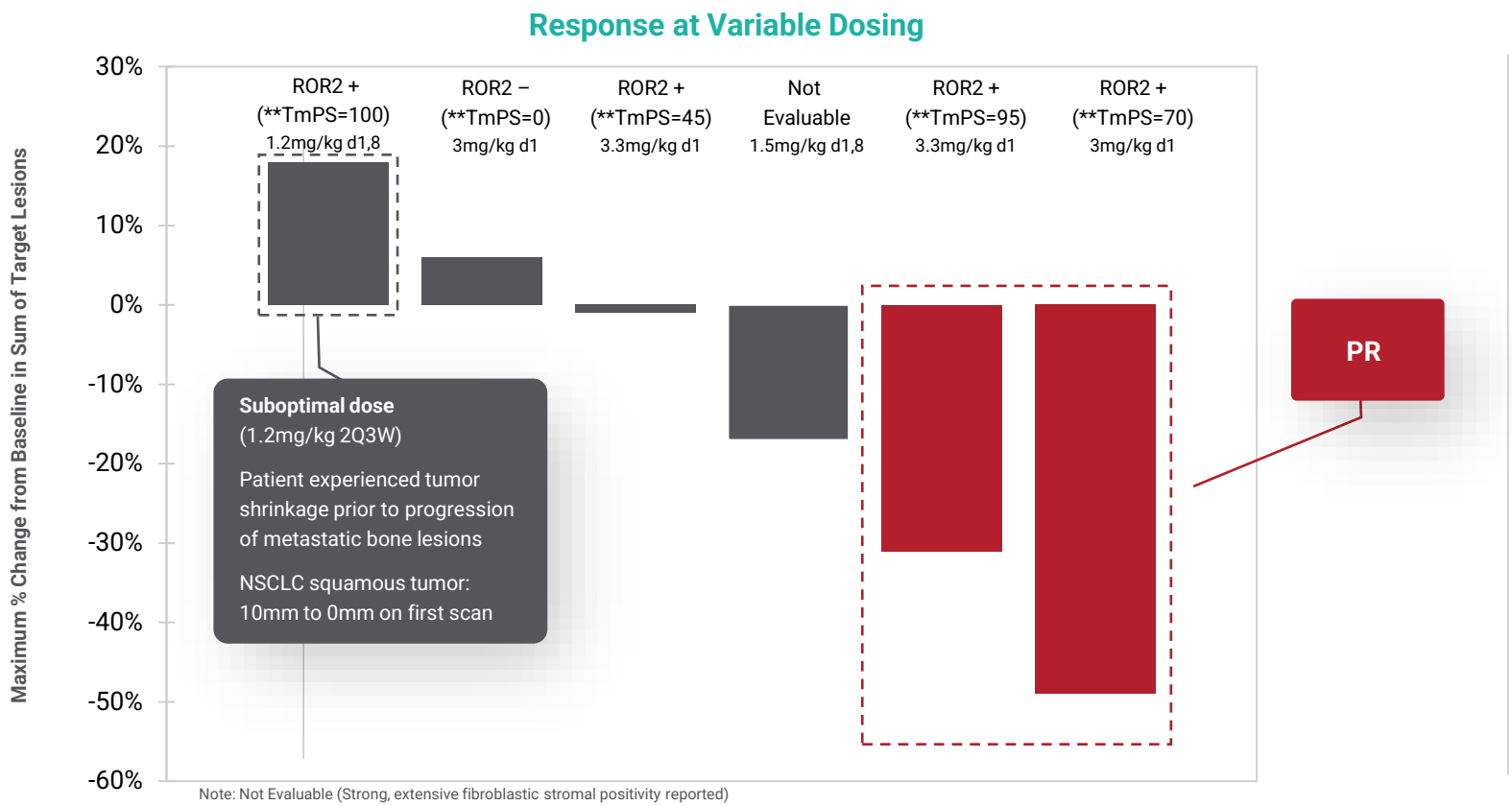
- **Target population: ~25K ROR2+ addressable 2L+ patients/year in the U.S.[7], based on ROR2 positivity rate of ~20%**
- **Internal success threshold: 2L+ ORR of 20% (approvability bar based on precedent); 25%+ (commercially relevant) following BA3021 monotherapy**

[1]https://www.lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/resource-library/lung-cancer-fact-sheet [2]https://www.cancer.net/cancer-types/lung-cancer-non-small-cell/statistics, [3]https://thoracickey.com/carcinomas-of-the-lung-classification-and-genetics/#F1-72, [4]Wang F, Wang S and Zhou Q (2020) The Resistance Mechanisms of Lung Cancer Immunotherapy. *Front. Oncol.* 10:568059. doi: 10.3389/fonc.2020.568059, [5]*Transl Lung Cancer Res* 2021;10(7):3093-3105. [6]Cyramza package insert (accessed March 2023) [7]Clarivate, Disease Landscape and Forecast: NSCLC (2022).

1L, first line; 2L+, second line or greater; NSCLC, non-small cell lung cancer; ORR, objective response rate (best objective response as confirmed complete response or partial response), SOC, standard of care (docetaxel alone, docetaxel + ramucirumab)

Encouraging Phase 1 results with BA3021 (Ozuriftamab Vedotin)

in refractory patients with NSCLC



- Two out of three ROR2+ patients had a partial response following ozuriftamab vedotin treatment

**Suboptimal dose 1.2 mg/kg 2Q3W. Tumor shrinkage occurred prior to progression of metastatic bone lesions. NSCLC squamous tumor 10mm to 0mm on first scan.

Potential market opportunity in metastatic melanoma

~1.3MM	people in the U.S. **living with** melanoma[1]
~100K	**newly diagnosed** invasive cases / year (U.S.)[1]
~50%	**do not respond** to PD-1 therapy in 1L setting[2]
30-40%	initial responders **progress**[2]

Available Treatment

1L: ICIs 33% - 50% ORR[3]; (BRAF / Mek inhibitors for BRAF+)

2L+: ICIs 9% - 28% ORR (mono – combo, respectively)[4]

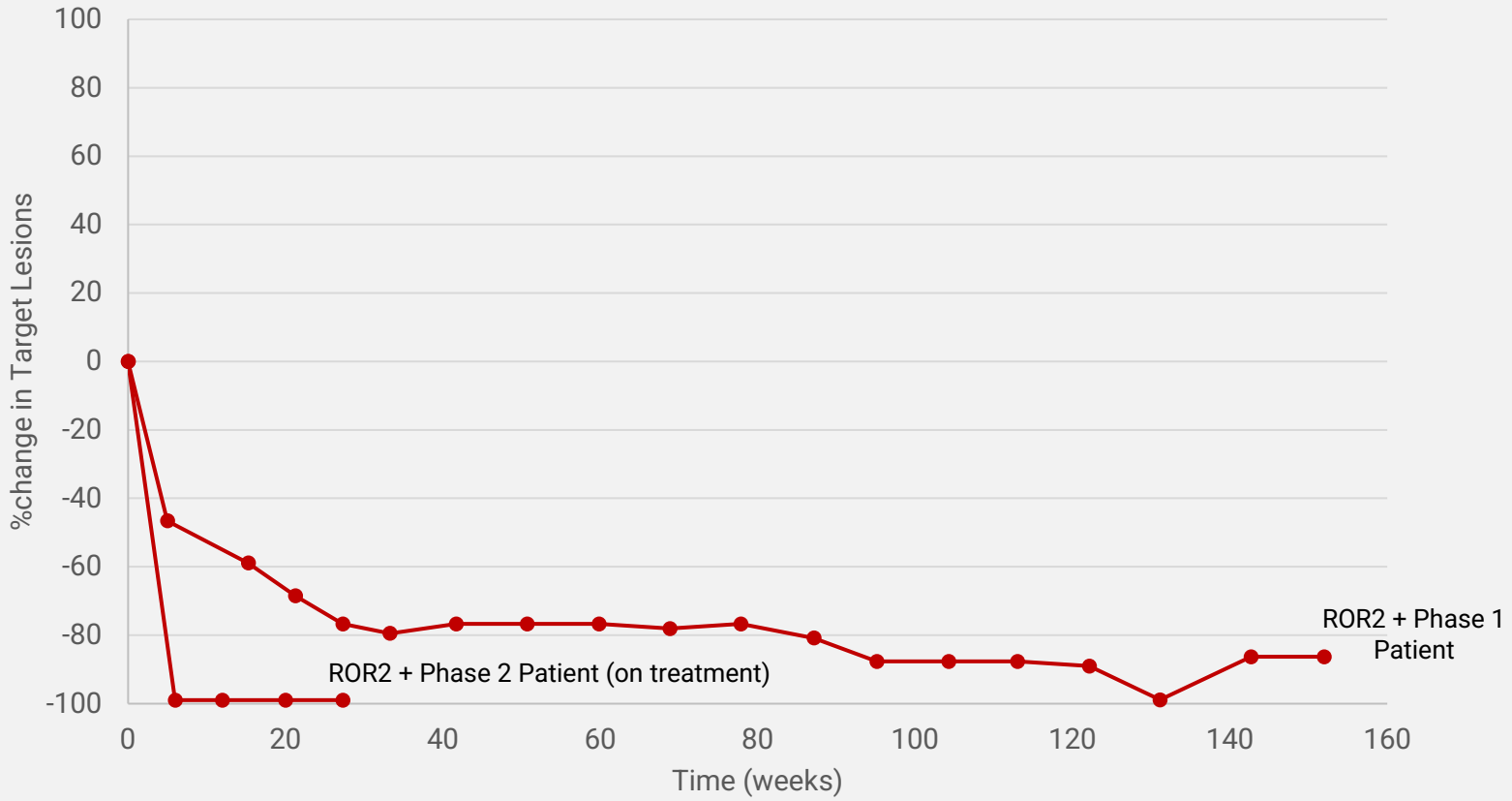
- **Target population: ~5K ROR2+ addressable 2L+ patients/year in the U.S.[1], based on a ROR2 positivity rate of ~10%**
- **Internal success threshold: 2L+ ORR of ~20% (approvability bar based on precedent); 25%+ (commercially relevant) following BA3011 monotherapy**

[1]Clarivate, Disease Landscape and Forecast: Malignant Melanoma (2022). www.cancer.net; www.cancer.org; [2]Oncology (Williston Park). 33(4):141-8. [3]Keytruda USPI accessed June 2022; Opdivo USPI accessed June 2022. [4]VanderWalde A, Moon J, Bellasea S, et al. Ipilimumab plus nivolumab versus ipilimumab alone in patients with metastatic or unresectable melanoma that did not respond to anti-PD-1 therapy. Presented at: 2022 AACR Annual Meeting; April 8-13, 2022; New Orleans, LA. Abstract CT013.

1L, first line; 2L+, second line or greater; ICIs – Immune checkpoint inhibitors.

Phase 1 & 2 results in stage IV multi-refractory melanoma

complete response observed in 2 out of 2 ROR2+ evaluable patients



Phase 1

Patient Details:

- ✓ Prior treatment failure: nivolumab followed by nivolumab + ipilimumab combination
- ✓ Clearance of pulmonary metastases followed by normalization of adenopathy
- ✓ Continued CR off-treatment for over 2 yrs

Phase 2

Patient Details:

- ✓ Prior treatment failure: nivolumab followed by dacarbazine
- ✓ Complete Response on 1st scan (3 doses)

Data on file.

Potential market opportunity in SCCHN

>400K	people **living with** head and neck cancer (U.S.)[1]
~66K	**newly diagnosed** cases / year (U.S.)[1]
~50%	with locally advanced disease **develop recurrent or refractory** disease[2]
2L+	**limited** effective options post IL[3]

Available Treatment

1L: Pembro, cetuximab, platinum 36% ORR[4]

2L+: ICIs 13% - 16% ORR[4]

- **Target population: ~12K ROR2+ addressable 2L+ patients/year in the U.S.[1], based on a ROR2 positivity rate of ~60%**
- **Internal success threshold: 2L+ ORR of ~15% (approvability bar based on precedent); 15%+ (commercially relevant) following BA3011 monotherapy**

[1]Clarivate, Disease Landscape and Forecast: SCCHN (2022). www.cancer.net; [2]Argiris A, et al.(2017) Evidence-Based Treatment Options in Recurrent and/or Metastatic Squamous Cell Carcinoma of the Head and Neck. *Front. Oncol.* 7:72; [3]Future Oncology, Jan. 2019. Vol. 15, No. 8; [4]Ketruda USPI accessed June 2022; Opdivo USPI access June 2022.

SCCHN, squamous cell carcinoma of the head and neck; 1L, first line; 2L, second line; 2L+, second line or greater; ICIs – Immune checkpoint inhibitors.

Phase 1 results with BA3021 support advancing into Phase 2

in multiple indications

ROR2+ Tumor Types	Results
NSCLC	▪ PR in 2 / 3 patients who previously experienced failure on PD-1 and who received Phase 2 dose or higher
Melanoma	▪ CR in 1 / 1 patient who previously experienced failure on PD-1 ▪ Clearance of pulmonary metastases followed by normalization of adenopathy ▪ Continued CR off treatment for over 2 years
SCCHN	▪ PR in 1 / 1 ROR2+ refractory to four prior lines of therapy including cetuximab and PD-1 (pembrolizumab)
Promising safety and tolerability profile across multiple tumor types	

No ROR2 ADC or small molecules in the clinic to date, suggesting CAB-ROR2-ADC is a first-in-class therapy across multiple tumor types

Phase 2 study design with BA3021 (Ozuriftamab Vedotin) in refractory patients

for each indication: Melanoma, NSCLC and SCCHN

Phase 2 – Melanoma / NSCLC

Total patients (n = 100)

- Melanoma: PD1 failure – (n = 40) Q2W
- NSCLC: PD1, EGFR or ALK failure – (n = 60) Q2W or 3Q4W

Monotherapy and Combination with PD-1/L1

Use to determine TmPS cut-off and potential registrational study design

Phase 2 – SCCHN

Total patients (n = 40)

- SCCHN: Prior treatment with a PD-1/L1 inhibitor either administered alone (n = 20) or in combination with Platinum (n = 20) – Q2W

Monotherapy

Use to determine TmPS cut-off and potential registrational study design

Dosing regimens under evaluation for CAB-ROR2-ADC

BA3021 Ozuriftamab Vedotin

		Dose			
		Day1	Day 8	Day 15	Day 22
	Q2W				
All cycles (28 days)		1.8 mg/kg	no drug	1.8 mg/kg	no drug
	2Q3W				
All cycles (21 days)		1.8 mg/kg	1.8 mg/kg	no drug	–
	3Q4W				
Cycle 1 (21 days)		2.0 mg/kg	1.3 mg/kg	1.3 mg/kg	–
Cycle 2 (28 days) and subsequent cycles		1.3 mg/kg	1.3 mg/kg	1.3 mg/kg	no drug

Source: Form 10-K

Summary of Dosing Regimens for Phase 2 Clinical Studies with CAB-ROR2-ADC

BA3021 Ozuriftamab Vedotin

Indication	Dose	Patient #
NSCLC	Q2W monotherapy	N ~ 20
	Q2W in combo w/ nivolumab	N ~ 20
	3Q4W monotherapy	N ~ 20
Melanoma	Q2W monotherapy	N ~ 20
	Q2W in combo w/ nivolumab	N ~ 20
Head and Neck	Q2W monotherapy	N ~ 40
Ovarian*	Q2W in combo w/ durvalumab	N ~ 20

*Investigator-initiated trial.
NSCLC = non small cell lung cancer

Naked Antibody I/O Platform:

CTLA-4 (BA3071) – Basket Trial

BA3071 (CAB-CTLA-4)

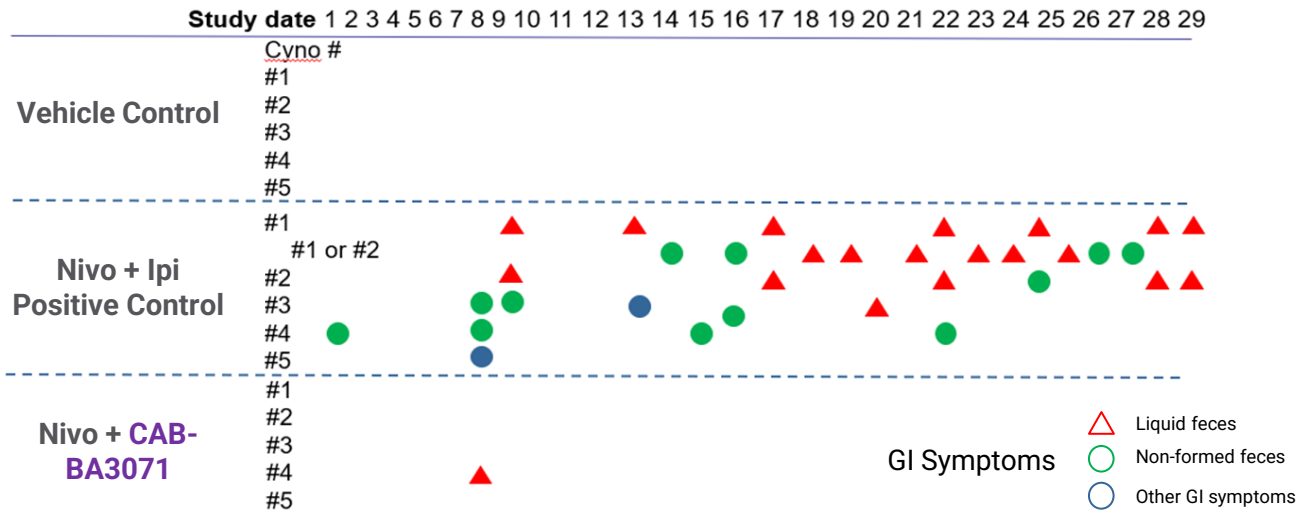
Best-in-class and potential for disruption of the I/O Market

Research demonstrates challenges and opportunity in combining two Immune Checkpoint Inhibitors*

- Improves efficacy, but increases adverse events
- Greater % of patients discontinue therapy relative to monotherapy

Clinical Endpoint	Nivolumab (PD-1)	Nivolumab (PD-1) + Ipilimumab (CTLA4)
Progression Free Survival	6.9 months	**11.5 months**
Grade 3 or 4 Adverse Events	16.3%	**55.0%**
Discontinued Treatment	7.7%	**36.4%**

In NHP study, BA3071 achieved similar exposure levels to Ipi analog with significantly less toxicity in combination with nivo**

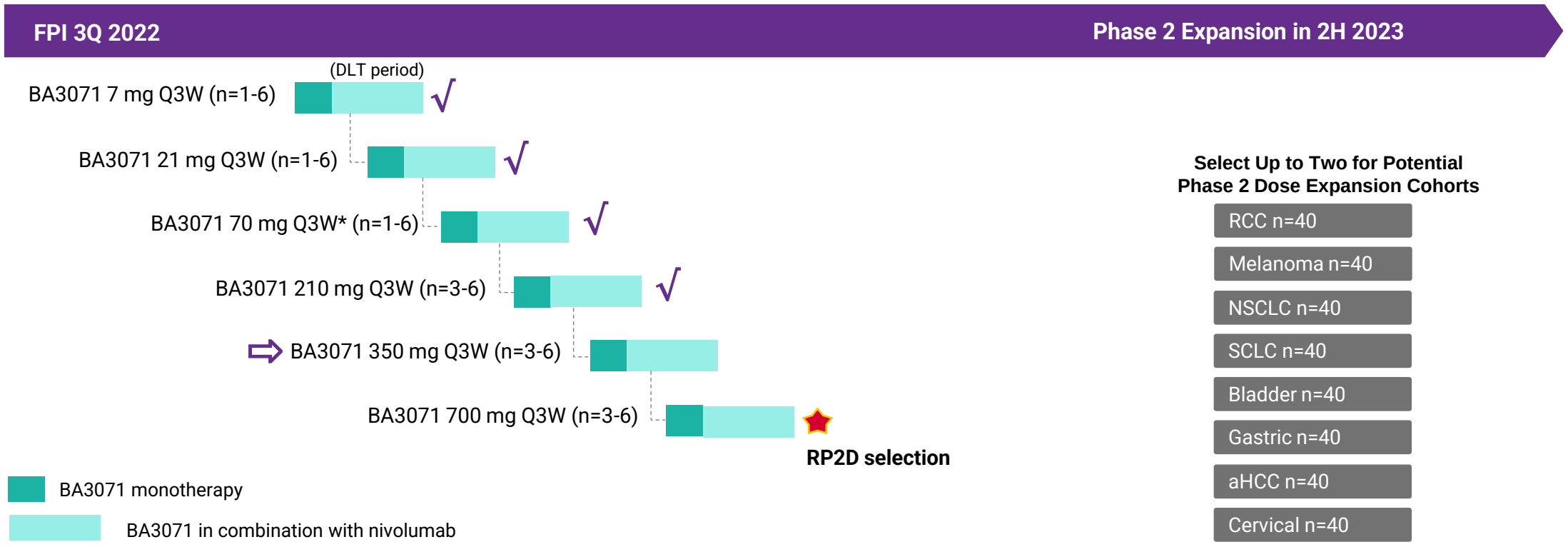


*Larkin et al., New Eng. J. Med.,373: 23-34, 2015; **Chang et al., PNAS 118 (9): 1-10, 2021
Nivo: 20mg/kg QW (12X human dose); Ipi or CAB-CTLA: 15mg/kg QW (45 – 60X human dose)
Once weekly for four weeks exposure to Nivo + Ipi or CAB CTLA4

AUC168 = Area under the serum drug concentration-time curve from time zero to 168 hours; Cmax = Highest drug concentration observed in serum

Phase 1/2 trial design for CAB-CTLA-4 Naked Antibody (BA3071)

in tumors known to be responsive to CTLA-4 treatment



Objectives

- Determine Phase 2 dose and MTD
- Characterize safety and clinical activity of BA3071 monotherapy and in combination with a PD-1 inhibitor (Nivolumab)
- Characterize PK, ADA and biomarkers

*Dose equivalent to approved ipilimumab dose (1 mg/kg); Status as of May 4, 2023

Bispecific Platform

CAB-EpCAM x CAB-CD3 (BA3182) – Adenocarcinoma

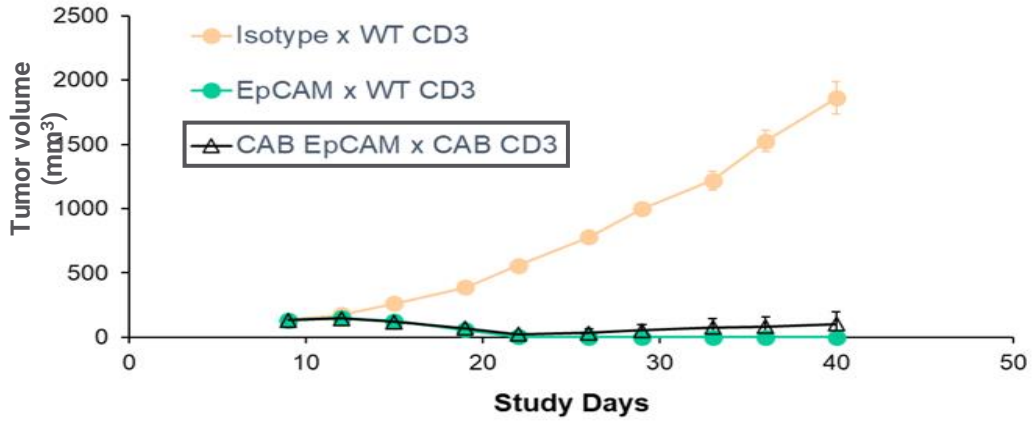
BA3182 – CAB-EpCAMxCAB-CD3 bispecific T-Cell Engager (TCE)

significant opportunity for safe and effective EpCAMxCD3 bispecific

- EpCAM expressed on normal epithelial cells and overexpressed in a wide range of tumors (adenocarcinoma)
- CD3-bispecifics have demonstrated beneficial effects but hampered by dose-limiting toxicity, namely, cytokine release syndrome (CRS)

- BA3182 exhibits efficient tumor shrinkage with superior safety profile
- In non-GLP and GLP tox studies in NHP, dual selection results in high selectivity
  - 160-fold TI increase
  - MTD not reached (5mg/kg highest dose studied=NOAEL)
  - No Cytokine release observed or other EpCAM or CD3 known related toxicities

Tumor shrinkage



MiXeno Model with HCT116 = Colorectal Cancer Cell Line

1mg/kg twice/week in mice (equivalent to 0.25mg/kg in non-human primates)

Safety Profile

WT-EpCAM x WT-CD3	CAB-EpCAM x CAB-CD3 (BA3182)
***0.025mg/kg** = 2 ill	***0.25mg/kg** = 2 normal
***0.05 mg/kg** = 2 expired	***1.0 mg/kg** = 2 normal
	***2.5 mg/kg** = 2 normal
	***2.5 mg/kg** = 10 normal
	***5.0 mg/kg** = 10 normal

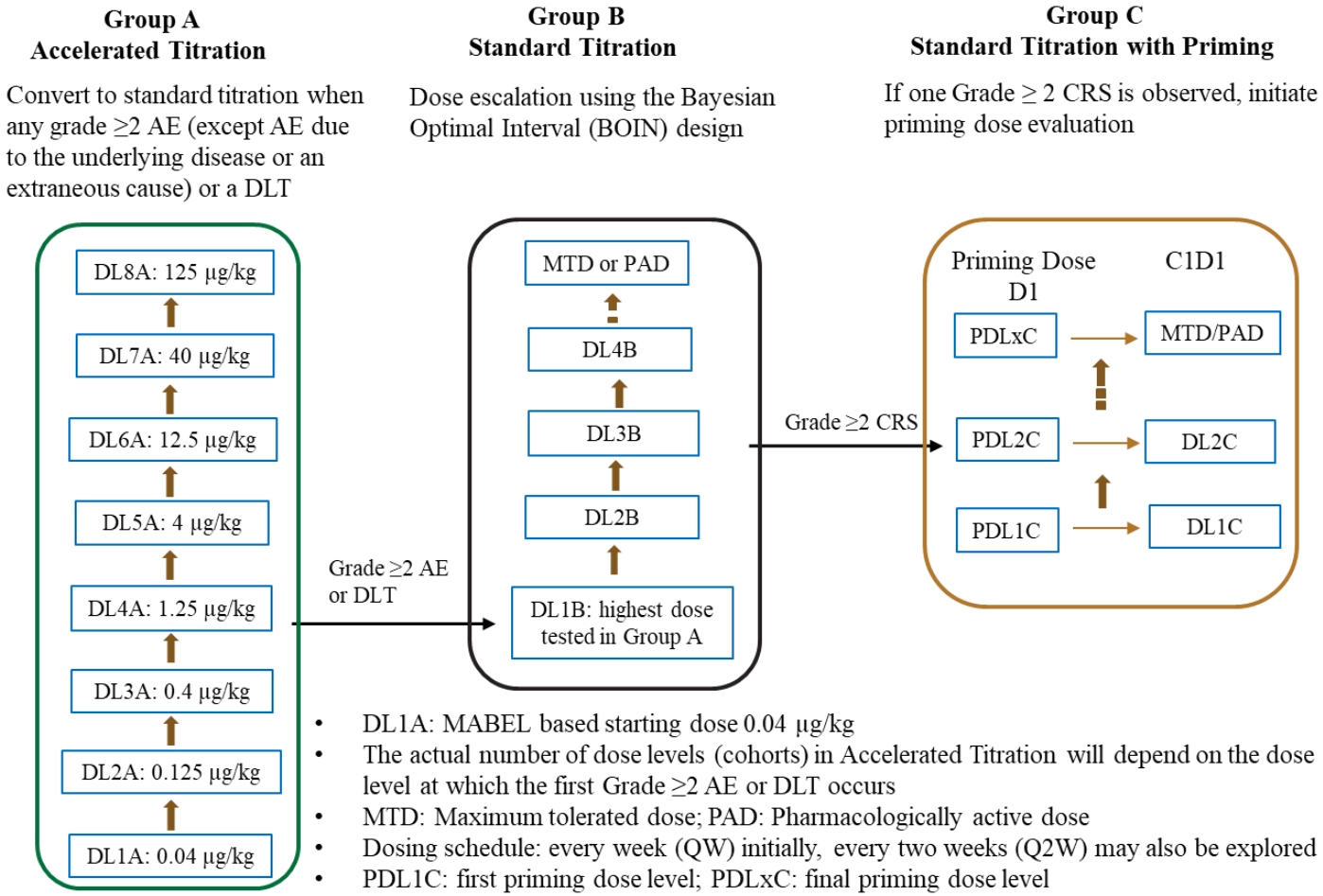
**Single Dose – non-GLP Toxicity Study*

**QW x 4 weeks – GLP Toxicity Study*

WT = wild type; *from independent experiments
MTD = Maximum Tolerated Dose
TI = Therapeutic Index

FDA cleared IND for CAB-EpCAMxCAB-CD3 bispecific TCE (BA3182)

Phase 1/2 trial design in advanced adenocarcinoma



- DL1A: MABEL based starting dose 0.04 µg/kg
- The actual number of dose levels (cohorts) in Accelerated Titration will depend on the dose level at which the first Grade ≥2 AE or DLT occurs
- MTD: Maximum tolerated dose; PAD: Pharmacologically active dose
- Dosing schedule: every week (QW) initially, every two weeks (Q2W) may also be explored
- PDL1C: first priming dose level; PDLxC: final priming dose level

Part 1:

Up to 128 patients with advanced adenocarcinoma

- Up to 8 patients in the accelerated titration
- Up to 60 in each of the 2-treatment schedules for 10 planned standard titration dose levels

Part 2:

Open-label study to evaluate the efficacy and safety of BA3182 in patients with advanced adenocarcinoma who have a qualifying EpCAM-expressing tumor membrane percent score (TmPS) (to be determined based on Part 1 data).

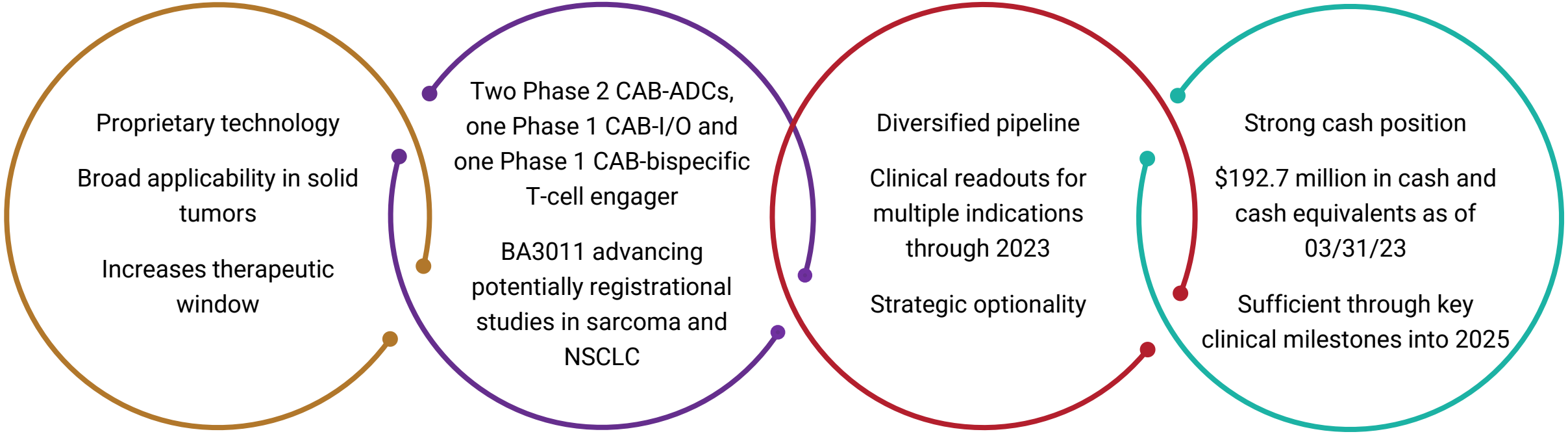
Many key milestones and catalysts throughout 2023

2023	
1H	2H
✓ Submit BA3011 Exposure-Response analysis to medical meeting	• Receive FDA feedback re: BA3011 NSCLC Phase 2, part 2 potentially registrational study design
✓ FPI BA3021 SCCHN Phase 2	• Initiate BA3011 NSCLC Phase 2, part 2 potentially registrational study
✓ Initiate BA3182 Phase 1 study	• Prioritize BA3021 registration indications
✓ Enrolling more frequent dosing regimens in BA3011 NSCLC Phase 2, part 1	• BA3071 Phase 1 data
• FPI BA3011 UPS Phase 2, part 2 potentially registrational study	• Initiate BA3071 Phase 2 study
• Request FDA feedback re: BA3011 NSCLC Phase 2, part 2 potentially registrational study design	• BA3011 Phase 2, part 1 LMS data
• FPI BA3021 NSCLC Phase 2 more frequent dosing regimens	• BA3011 Phase 2 IIT* interim data (n=10) in platinum-resistant ovarian cancer
	• BA3021 Phase 2 IIT* interim data (n=10) in platinum-resistant ovarian cancer

*Phase 2 Investigator-initiated trial combination with PD-1 (n=20) in platinum failure patients.
FPI, First Patient In; LMS, Leiomyosarcoma

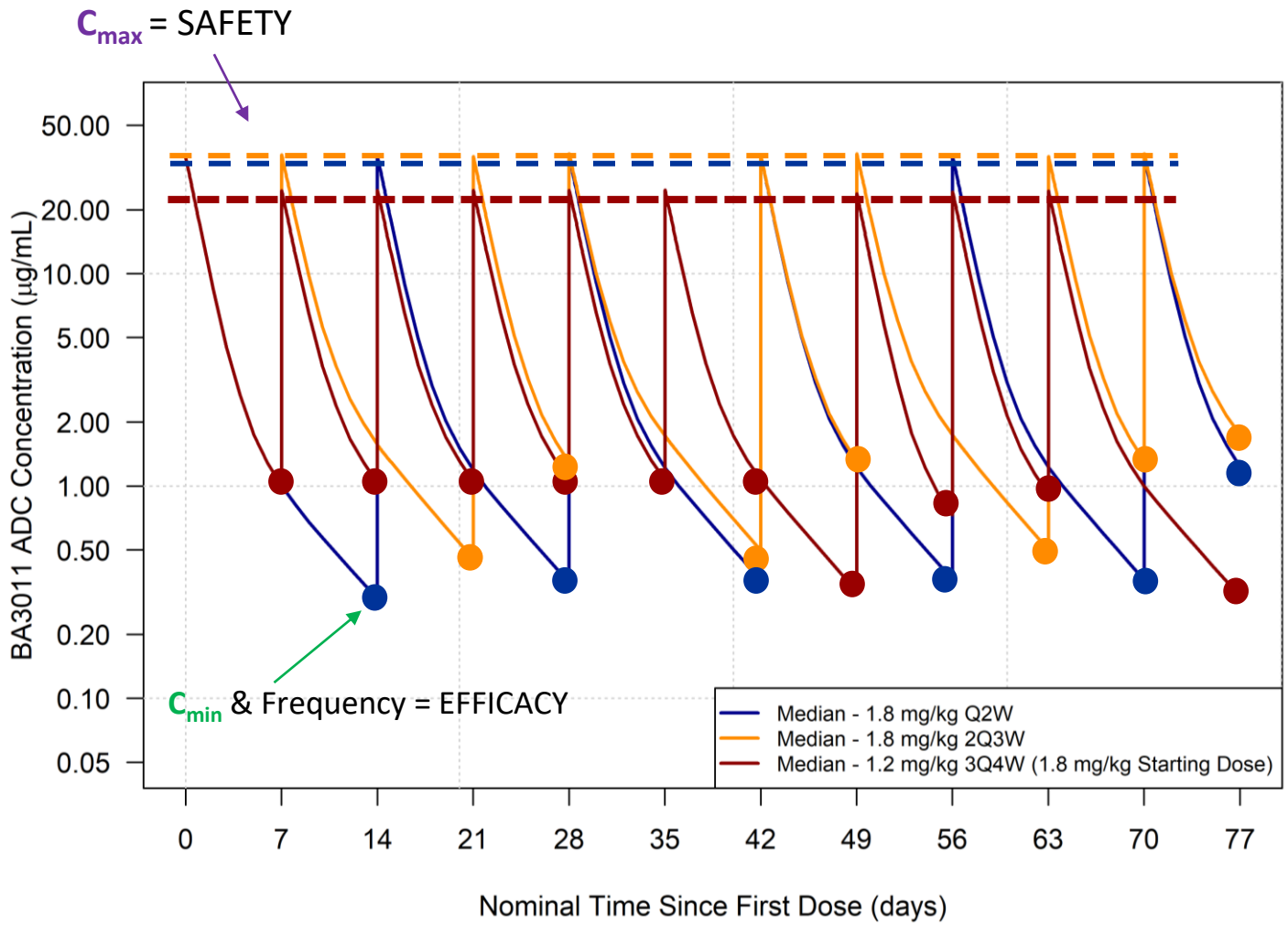
BioAtla© is a clinical stage company focused on transforming cancer therapy

with **C**onditionally **A**ctive **B**iologics (CABs)



Appendix

BA3011 ADC Concentration vs Time Profiles from Different Dosing Regimens



ADC = antibody-drug conjugate; 2QW = every two weeks; 2Q3W = twice every 3 weeks; 3Q4W = three times every 4 weeks
Cmax: maximum concentration, Cmin: minimum concentration