

# Conditionally Active Biologics: Transforming Cancer Therapy

Corporate Presentation

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November 2022



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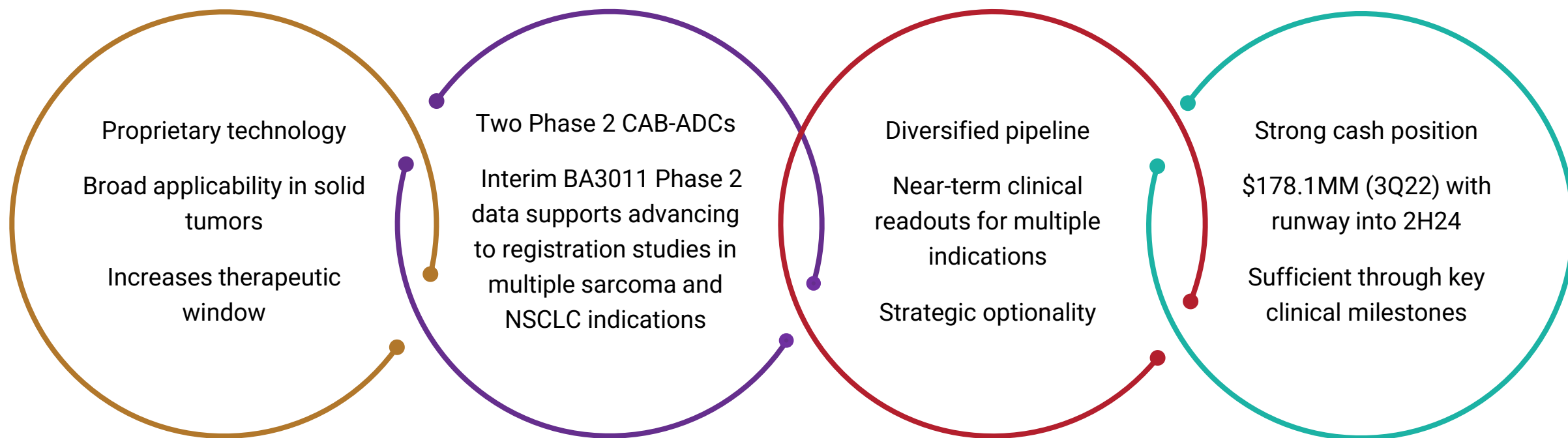
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# BioAtla<sup>®</sup> is a clinical stage company focused on transforming cancer therapy

with **Conditionally Active Biologics (CABs)**





# Leadership Team



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**William Boyle, Ph.D.**

Sr. Research Fellow



**Monica Sullivan**

Sr. VP, Intellectual Property & Contracts



**Susie Melody**

Sr. VP, Human Resources



# 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



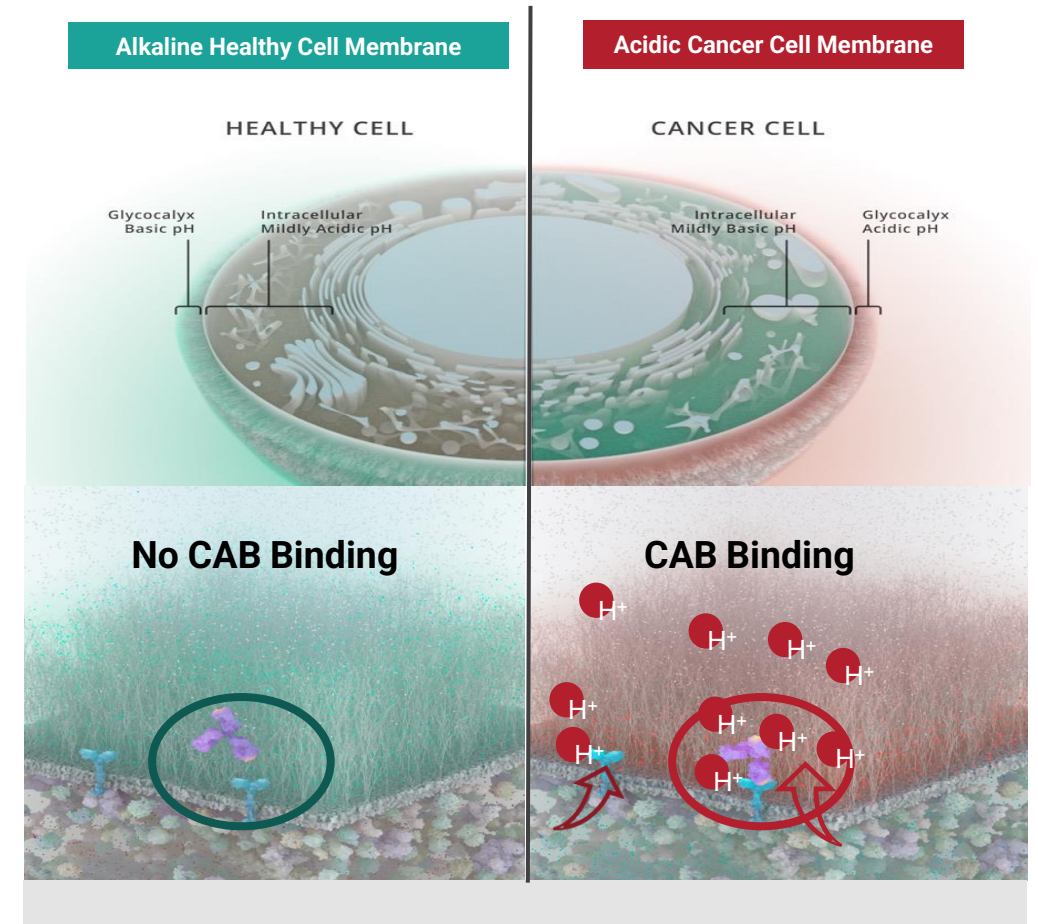
BioAtla invented CAB technology, creating antibodies that bind **only** to these unveiled sites on cancer cells



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



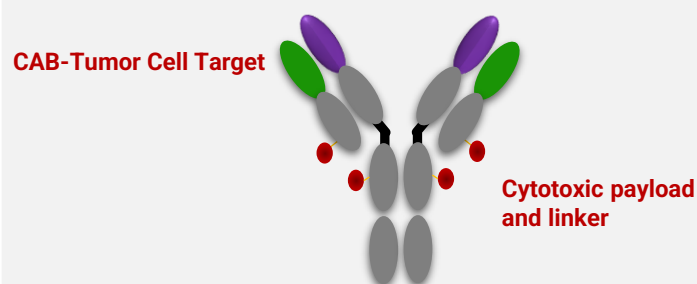
# Broad applicability of BioAtla's CAB platform across several antibody types

has the potential to treat multiple solid tumors

## ADCs

**Targets:** AXL, ROR2

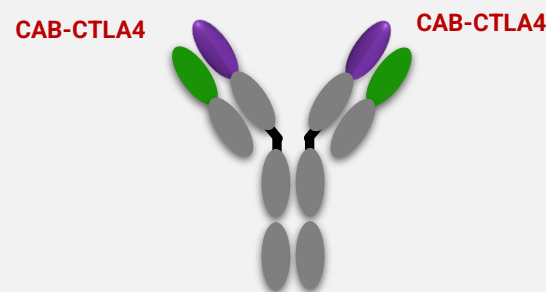
Widely expressed in a variety of tumor types, AXL and ROR2 overexpression correlates with poor prognosis, metastasis, and drug resistance to PD-1 and EGFR therapies



## Naked Antibodies IO

**Target:** CTLA-4

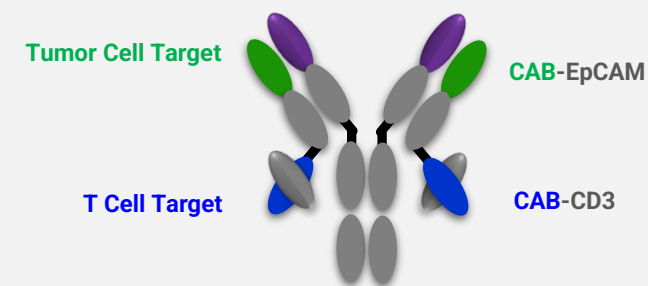
CTLA-4 blockade activates effector T cells, thereby enhancing anti-tumor immunity



## Bispecific TCE

**Target:** EpCAM & CD3

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



# 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	<b>BA3011</b> <i>Mecbotamab Vedotin</i>	AXL	STS & Bone Sarcoma NSCLC Ovarian Cancer*				<ul style="list-style-type: none"> <li>✓ Interim sarcoma results – achieved go criteria to advance multiple subtypes into Phase 2 part 2</li> <li>✓ Initial interim NSCLC results – achieved go criteria to advance to Phase 2 part 2</li> <li>✓ Ovarian IIT dosing</li> </ul>
	<b>BA3021</b> <i>Ozuriftamab Vedotin</i>	ROR2	NSCLC Melanoma SCCHN Ovarian Cancer*				<ul style="list-style-type: none"> <li>• Phase 2 interim NSCLC data and melanoma update 2H22</li> <li>• SCCHN trial dosing 4Q</li> <li>✓ Ovarian IIT dosing</li> </ul>
CAB-I/O	<b>BA3071</b>	CTLA-4	Multiple tumor types**				<ul style="list-style-type: none"> <li>✓ Phase 1 / 2 dosing</li> </ul>
CAB-Bispecific TCE	<b>BA3182</b>	EpCAM x CD3	Adenocarcinoma** Multiple tumor types**				<ul style="list-style-type: none"> <li>• IND submission and Phase 1 initiation 2H2022</li> </ul>
	<b>Additional programs</b>	Various	Multiple tumor types**				<ul style="list-style-type: none"> <li>• 2023 and beyond</li> </ul>

## CAB-AXL-ADC Platform

BA3011 Mecbotamab Vedotin: Sarcoma and NSCLC



# Potential market opportunity in sarcoma

## UPS

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

### Current Treatments

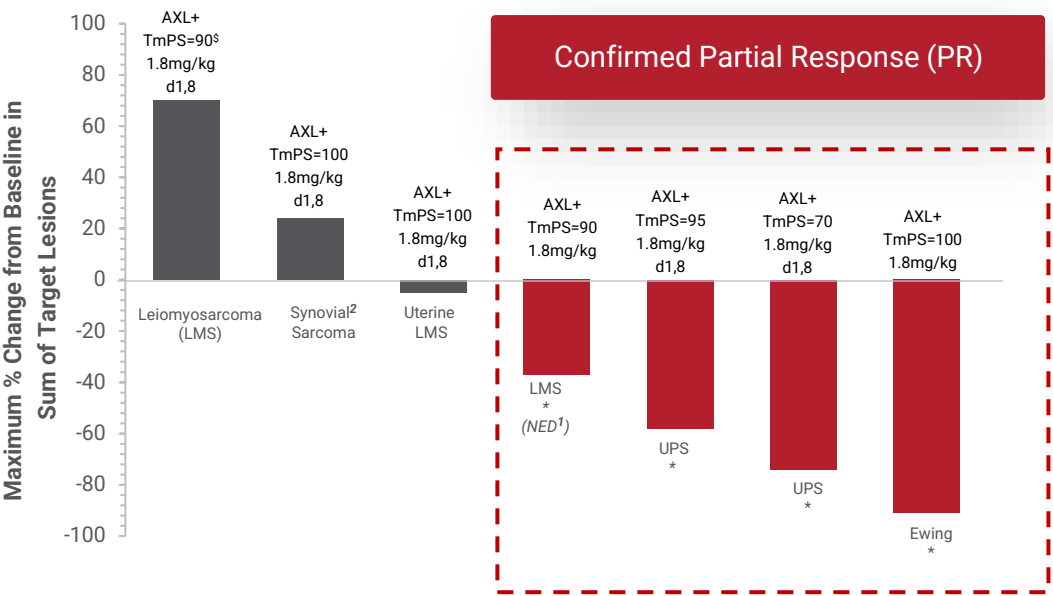
- Chemotherapy, chemoradiation or regional limb therapy for unresectable cases
- No approved targeted therapies for UPS
- Approved treatments for sarcoma ORR ~15%<sup>3</sup>

## Other Subtypes

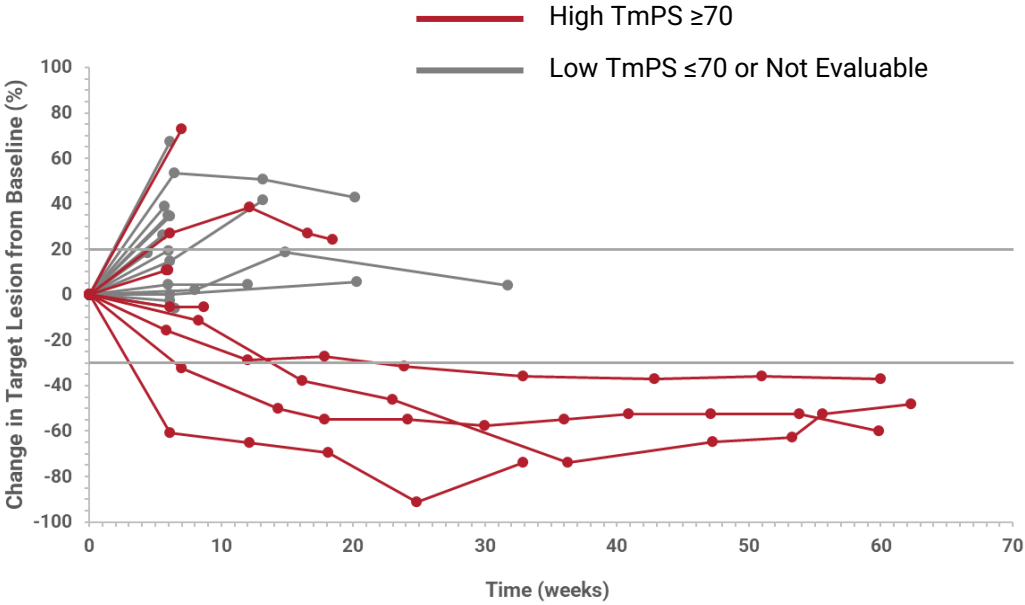
- 1 Osteosarcoma – most common malignant primary bone tumor (30% of all such malignancies)<sup>4</sup>
- 2 Liposarcoma – one of the largest soft tissue sarcoma subtypes (15% - 20% of all STS)<sup>5</sup>
- 3 Synovial sarcoma – smaller subtype, but high recurrence rate (~50% of patients)<sup>6</sup>
-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

# Encouraging Phase 1 results with Mecbotamab Vedotin (BA3011) in refractory sarcoma

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



## Evaluatable Patients in Phase 1 at All Doses



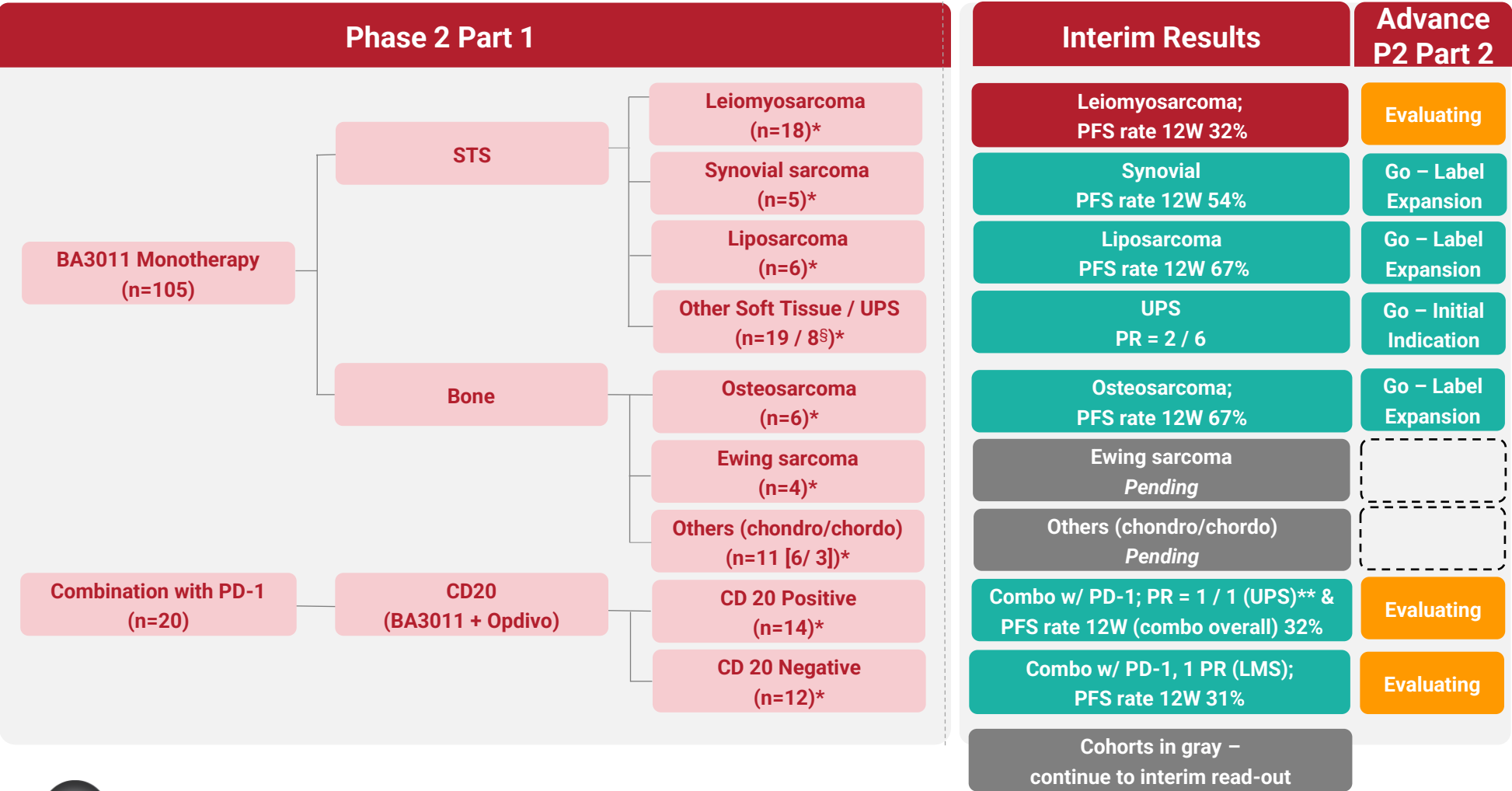
- PR was achieved in 4/7 high TmPS patients receiving the clinically-meaningful 1.8 mg/kg dose
- Antitumor activity correlates with higher levels of AXL tumor membrane expression in sarcoma patients



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

# 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:

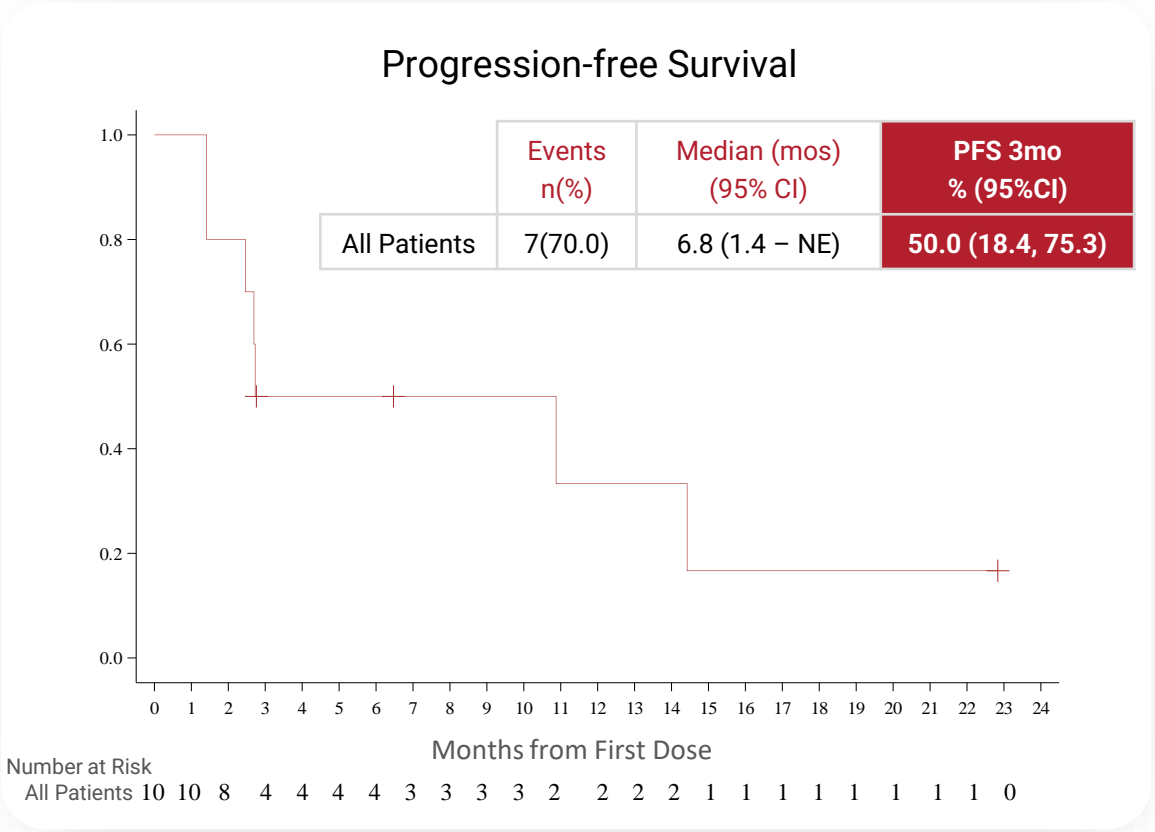
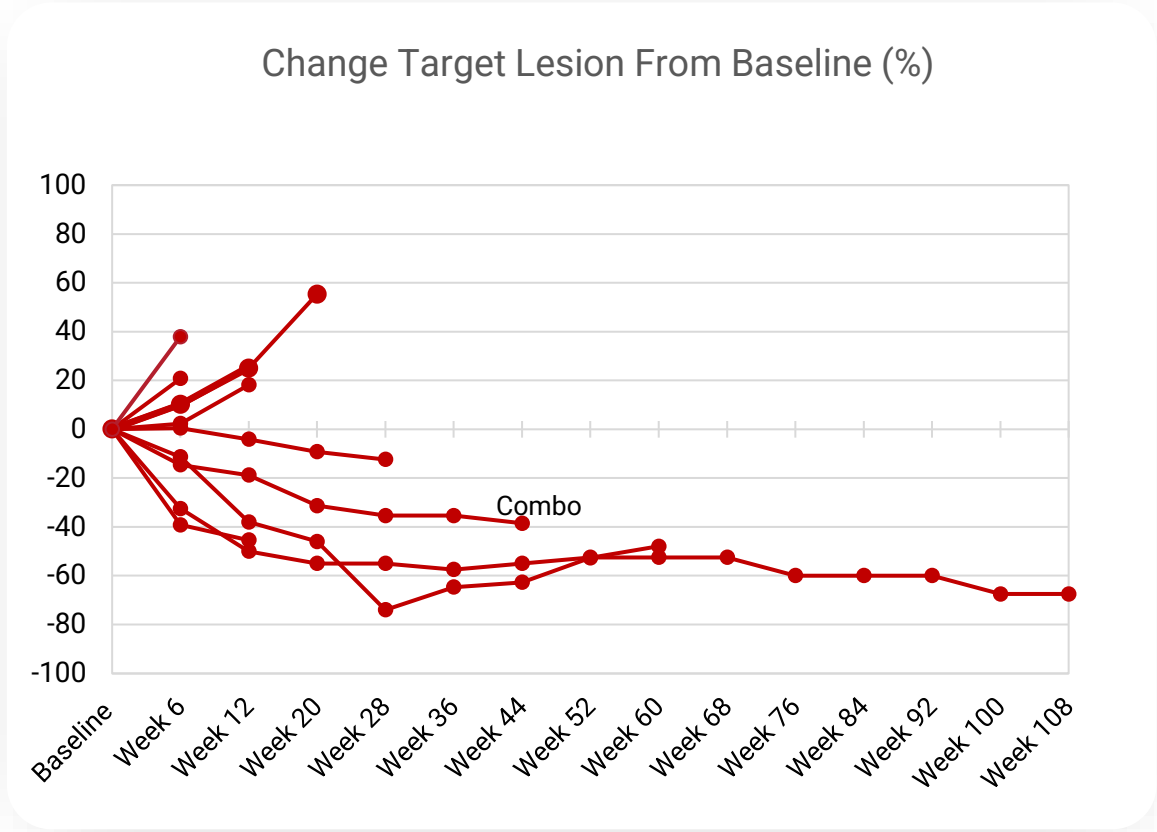
- UPS – clear guidance from FDA, moving into phase 2, part 2 as initial indication
- Osteosarcoma, liposarcoma and synovial – pursue registration post UPS approval



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%. \* As of data cut-off Oct 17, 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. §Of 8 enrolled, 6 efficacy evaluable; 2 on-going with 1 scan.

# Undifferentiated Pleomorphic Sarcoma (UPS):

## Phase 1 & 2 Change in Target Lesion and Progression Free Survival (1.8mg/kg; n=10)



- Combined Phase 1 & 2: enrolled = 10; efficacy evaluable = 8; on-going with 1 scan = 2
  - 4 / 8 patients achieved PRs, with an ORR of 50% and PFS rate at 3 months of 50%
  - Responses to BA3011 treatment are durable, with partial responders remaining on treatment for extended periods of time
- Interim results satisfied the pre-defined Go criteria of UPS cohort into part 2 of the Phase 2 study

# Continued promising safety and tolerability profile in Sarcoma

## Phase 2 at the RP2D 1.8 mg/kg Q2W

Characteristic	BA3011 (N=63)	BA3011 + Nivolumab (N=26)
Any Adverse Events (AEs)	60 ( 95%)	24 (92%)
Related AEs with CTCAE <sup>1</sup> Grade 3 or 4 <sup>2</sup>	17 ( 27%)	8 (30%)
Any related serious AEs <sup>2</sup>	5 ( 8%)	4 (15%)
Related AEs leading to death <sup>2</sup>	0	0
Related AEs leading to treatment discontinuation <sup>2</sup>	3 (5%) <sup>§</sup>	1 (4%) <sup>^</sup>

Constipation	Grade 1-2 (19%)
	Grade 3 (1%)
Peripheral Neuropathy	All Grade 1-2 (19%)
	Grade 3-4 (0%)
Diarrhea	Grade 1-2 (19%)
	Grade 3-4 (0%)

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

Interim data- Data cut-off of Oct 17, 2022

Note: <sup>1</sup>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. <sup>2</sup>As assessed by the investigator. Missing responses are counted as related.

<sup>§</sup>Grade 2 peripheral neuropathy; pancreatitis; <sup>^</sup>grade 2 Ileus

- 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



## UPS – Part 2 of the Phase 2 study (potentially registrational)

- Written feedback received from the FDA to the proposed part 2 of the Phase 2 study design, including selection of primary endpoint (ORR) and size of the study (n=80)
- FDA supportive of including a more intensive dosing arm
- Protocol being finalized post FDA written feedback
- Anticipate study enrollment commencement by year-end

# Potential market opportunity in metastatic NSCLC

>540K

people in the  
U.S. living with  
lung cancer<sup>1</sup>

~200K

newly diagnosed  
patients / year  
(U.S.) – **majority**  
advanced /  
metastatic<sup>2</sup>

2L+

despite advances  
in 1L care, **majority**  
of patients  
**progress**<sup>3</sup>

~75%

non-squamous  
cell represents  
**majority** of  
patients<sup>4</sup>

## Available Treatment:

1L: Chemo + ICI 50% ORR<sup>5</sup>

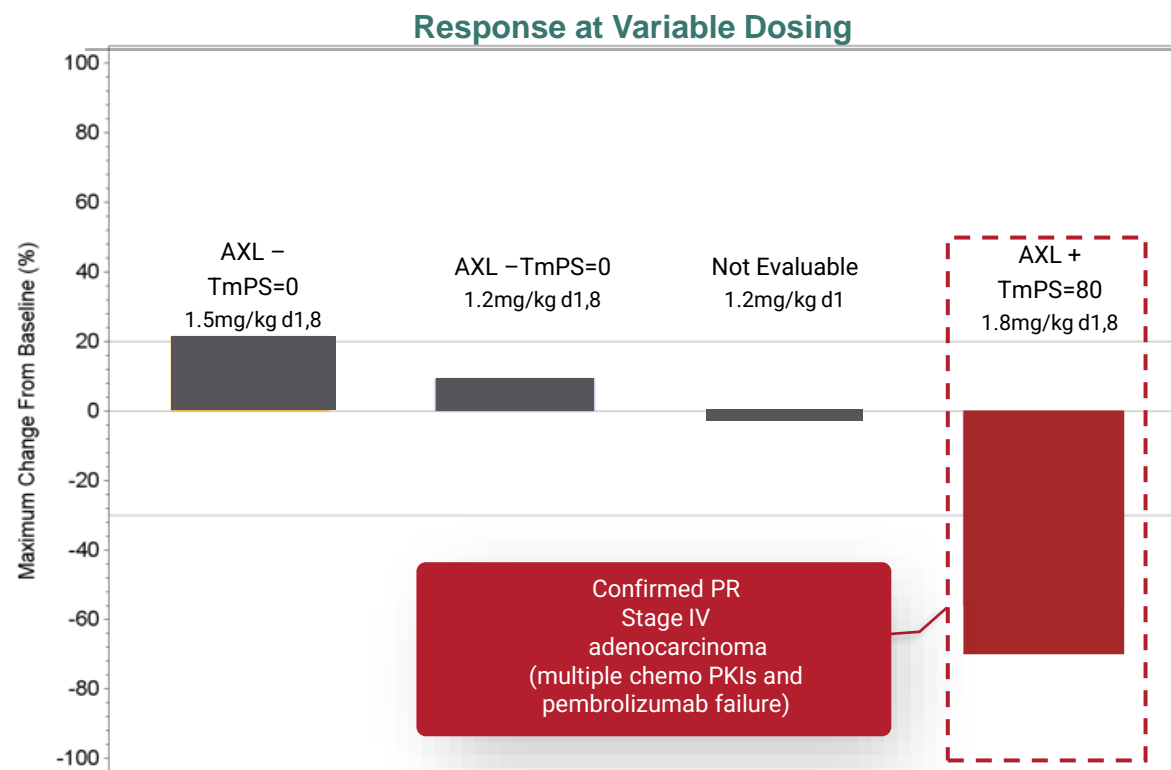
2L+: SOC 10% - 20% ORR<sup>6,7</sup>

- Target population: ~50K AXL+ addressable 2L+ patients/year in the U.S.<sup>8</sup>, based on AXL positivity rate of ~35%
- Internal success threshold: 2L+ ORR of ~15% - 20% (approvability bar based on precedent); 20%+ (commercially relevant) following BA3011 monotherapy

<sup>1</sup><https://www.lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/resource-library/lung-cancer-fact-sheet> <sup>2</sup><https://www.cancer.net/cancer-types/lung-cancer-non-small-cell/statistics>, <sup>3</sup>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, <sup>4</sup><https://thoracickey.com/carcinomas-of-the-lung-classification-and-genetics/#F1-72> <sup>5</sup>*Transl Lung Cancer Res* 2021;10(7):3093-3105. <sup>6</sup>*Ann Oncol.* 2017;28(11):2698–706. <sup>7</sup>DOI: 10.1200/JCO.22.00912 *Journal of Clinical Oncology* Published online June 03, 2022. <sup>8</sup>Clarivate, Disease Landscape and Forecast: NSCLC (2022).

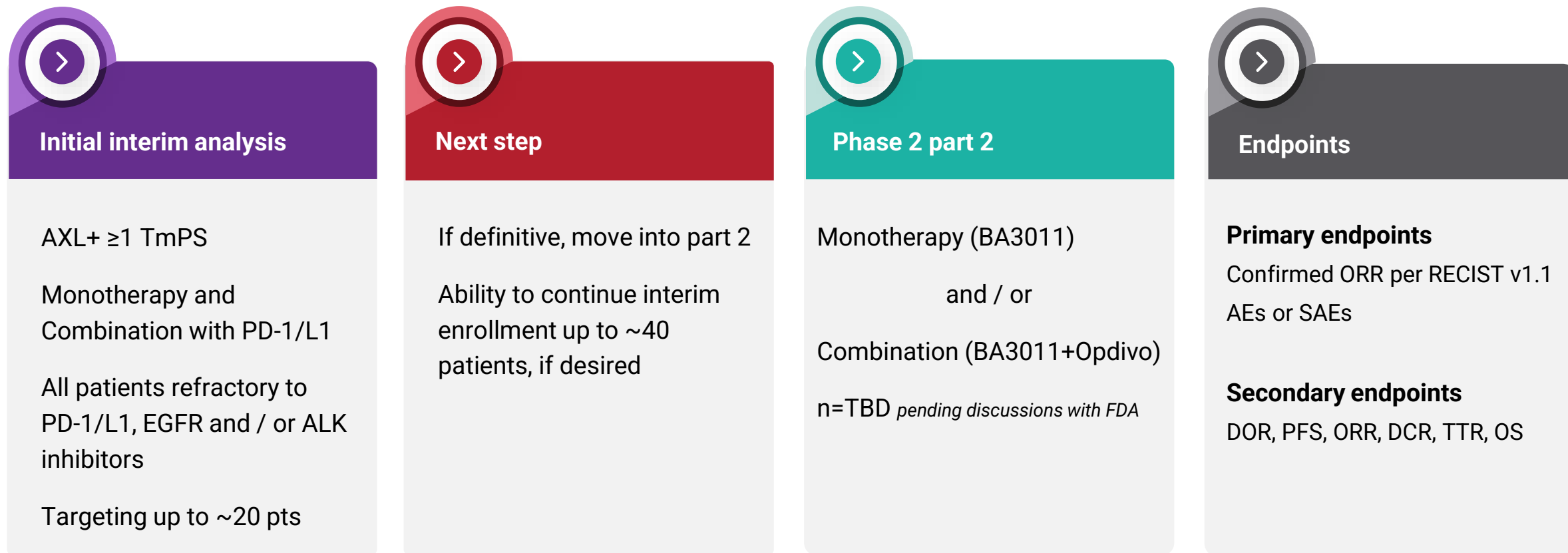
1L, first line; 2L+, second line or greater; NSCLC, non-small cell lung cancer; ORR, objective response rate (best objective response as confirmed complete response or partial response), SOC, standard of care (docetaxel, docetaxel + ramucirumab, gemcitabine, pemetrexed)

# Encouraging Phase 1 results with Mecbotamab Vedotin (BA3011) in refractory NSCLC patients



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

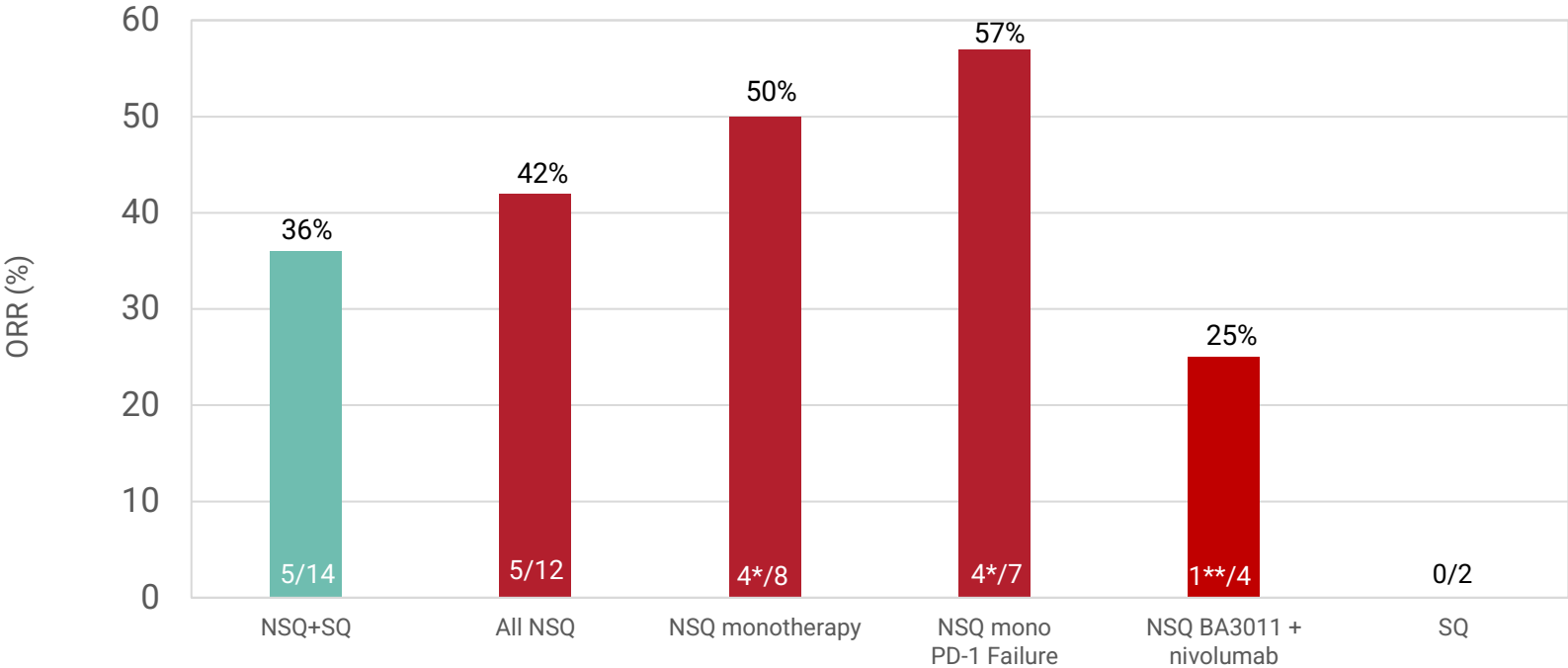
# Phase 2 study design with BA3011 (Mecbotamab Vedotin) in refractory NSCLC patients



# Phase 2 part 1 BA3011 NSCLC initial interim analysis confirms Phase 1 signal

supports advancing preparations for part 2 in refractory NSCLC

	# Patients
Enrolled	24
Dosed / 0 scan	6 (3 combo)
Not yet dosed	2
W/D consent	2
Efficacy evaluable	14

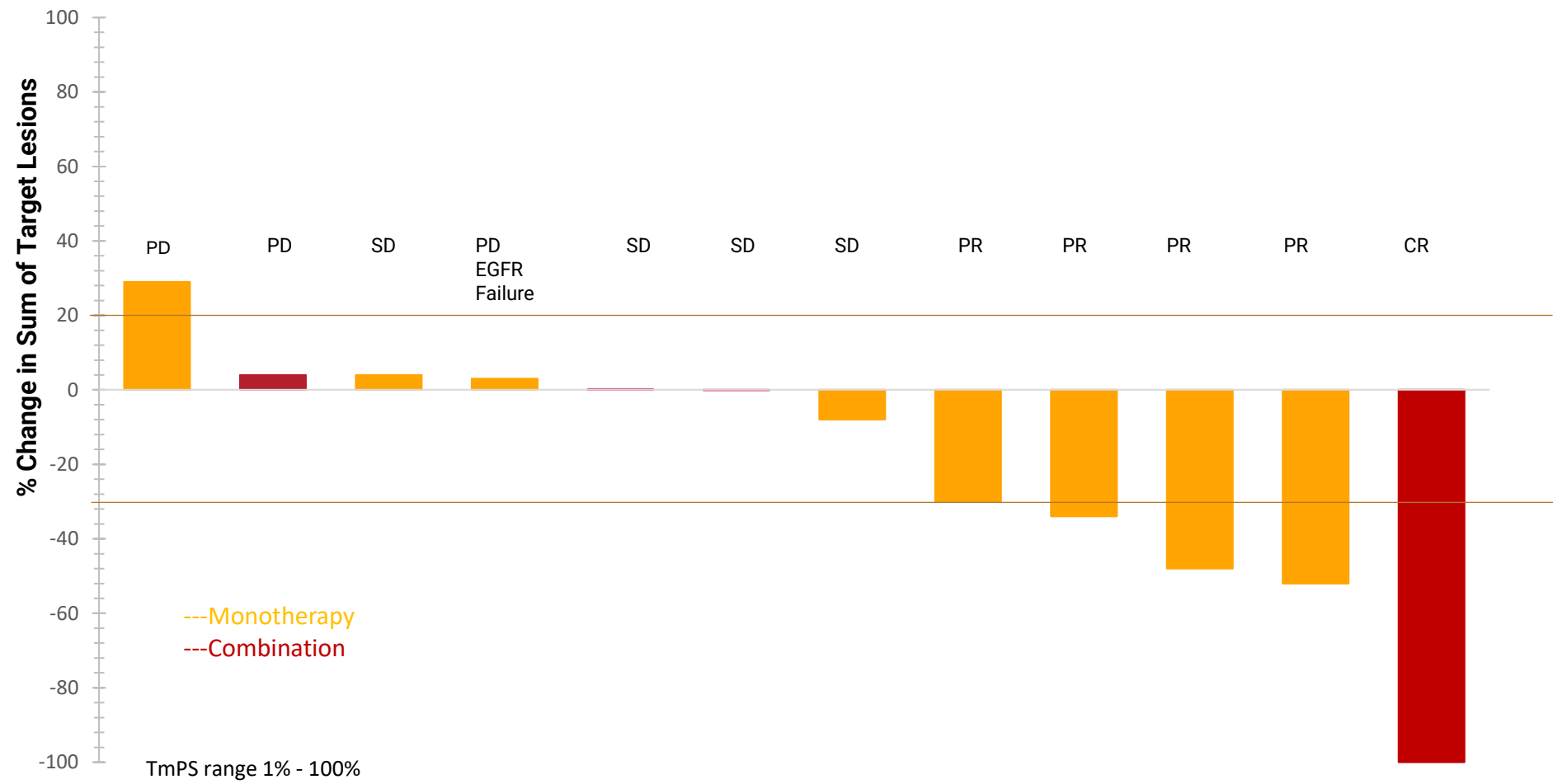


W/D – withdrew; NSQ – non-squamous; SQ – squamous  
Responses include 4 partial responses (\*) and one complete response (\*\*)



# BA3011: Best Response in Phase 2 Non-Squamous Patients

Non-Squamous patients - Phase 2 only 1.8mg/kg Q2W



Average prior lines of therapy = 3  
All patients were PD-1 failure with the exception of 1 NSQ patient who failed EGFR treatment



Interim data- Data cut-off of Oct 28, 2022

confidential

# Promising safety and tolerability profile emerging in NSCLC

## Phase 2 at the RP2D 1.8 mg/kg Q2W

Characteristic	BA3011 (N=13)	BA3011 + Opdivo (N=9)
Any Adverse Events (AEs)	11 (85%)	6 (67%)
Related AEs with CTCAE <sup>1</sup> Grade 3 or 4 <sup>2</sup>	4 (31%)	2 (22%)
Any related serious AEs <sup>2</sup>	2 (15%)*	2 (22%)^
Related AEs leading to death <sup>2</sup>	0	0
Related AEs leading to treatment discontinuation <sup>2</sup>	1 (8%)§	0

Constipation	Grade 1-2 (9%)
	Grade 3-4 (0%)
Peripheral Neuropathy	All Grade 1-2 (4.5%)
	Grade 3-4 (0%)
Diarrhea	Grade 1-2 (14%)
	Grade 3-4 (0%)

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

Interim data- Data cut-off of Oct 25, 2022

Note: <sup>1</sup>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. <sup>2</sup>As assessed by the investigator. Missing responses are counted as related.

\*Hyperglycemia & infusion reaction ^creatinine increase & Acute kidney injury; §Infusion reaction

- 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

## CAB-ROR2-ADC Platform

BA3021 Ozuriftamab Vedotin – NSCLC, Melanoma, SSCHN

# Potential market opportunity in metastatic NSCLC

>540K

people in the U.S. living with lung cancer<sup>1</sup>

~200K

newly diagnosed patients / year (U.S.) – majority advanced / metastatic<sup>2</sup>

2L+

despite advances in 1L care, majority of patients progress<sup>3</sup>

~75%

non-squamous cell represents majority of patients<sup>4</sup>

## Available Treatment:

1L: Chemo + ICI 50% ORR<sup>5</sup>

2L+: SOC 10% - 20% ORR<sup>6,7</sup>

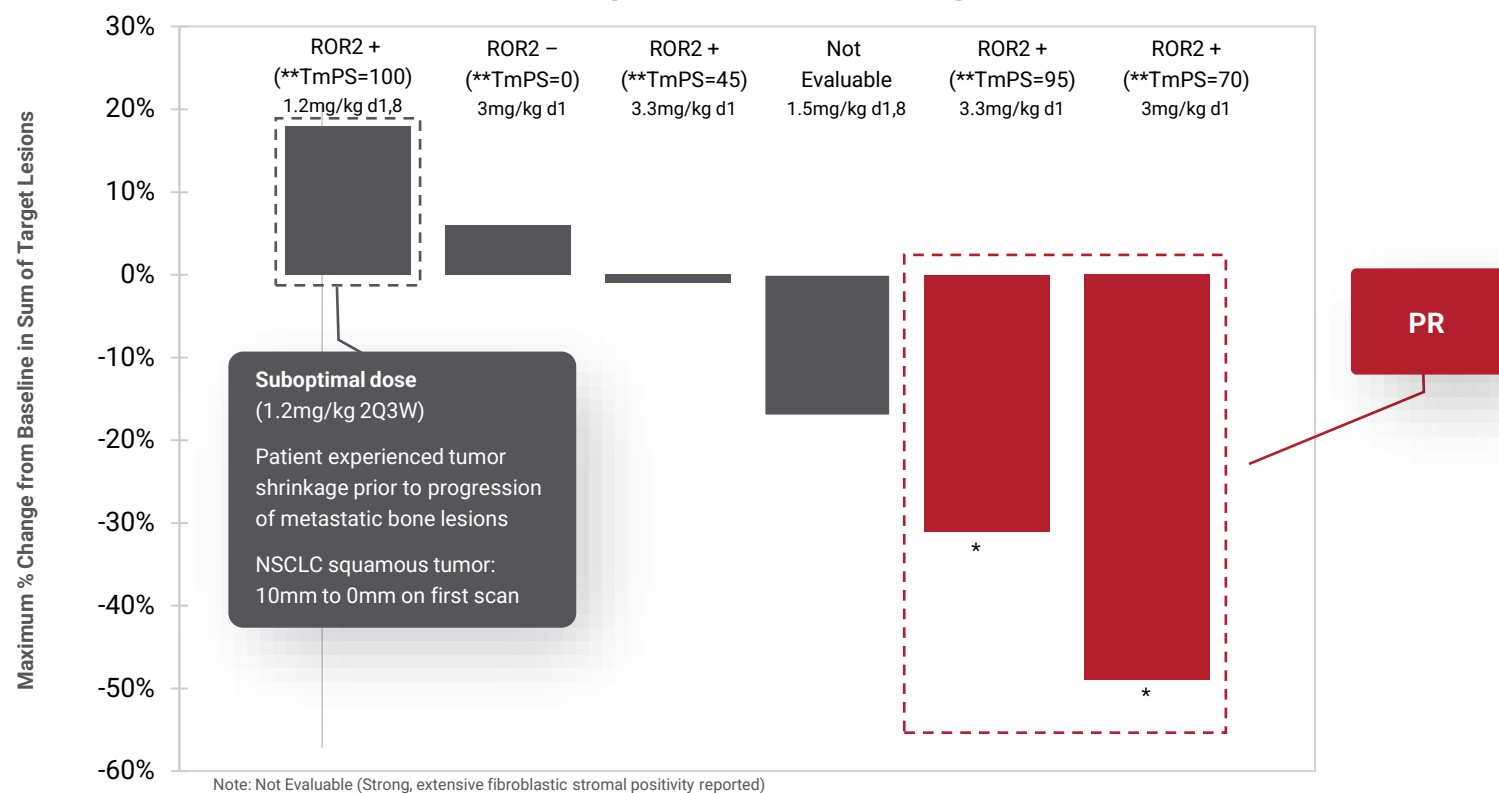
- Target population: ~40K ROR2+ addressable 2L+ patients/year in the U.S.<sup>8</sup>, based on ROR2 positivity rate of ~30%
- Internal success threshold: 2L+ ORR of ~15% - 20% (approvability bar based on precedent); 20%+ (commercially relevant) following BA3011 monotherapy

<sup>1</sup><https://www.lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/resource-library/lung-cancer-fact-sheet> <sup>2</sup><https://www.cancer.net/cancer-types/lung-cancer-non-small-cell/statistics>, <sup>3</sup>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, <sup>4</sup><https://thoracickey.com/carcinomas-of-the-lung-classification-and-genetics/#F1-72> <sup>5</sup>*Transl Lung Cancer Res* 2021;10(7):3093-3105. <sup>6</sup>*Ann Oncol.* 2017;28(11):2698–706. <sup>7</sup>DOI: 10.1200/JCO.22.00912 *Journal of Clinical Oncology* Published online June 03, 2022. <sup>8</sup>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, docetaxel + ramucirumab, gemcitabine, pemetrexed)

# Encouraging Phase 1 results with BA3021 (Ozuriftamab Vedotin) in refractory patients with NSCLC

## Response at Variable Dosing

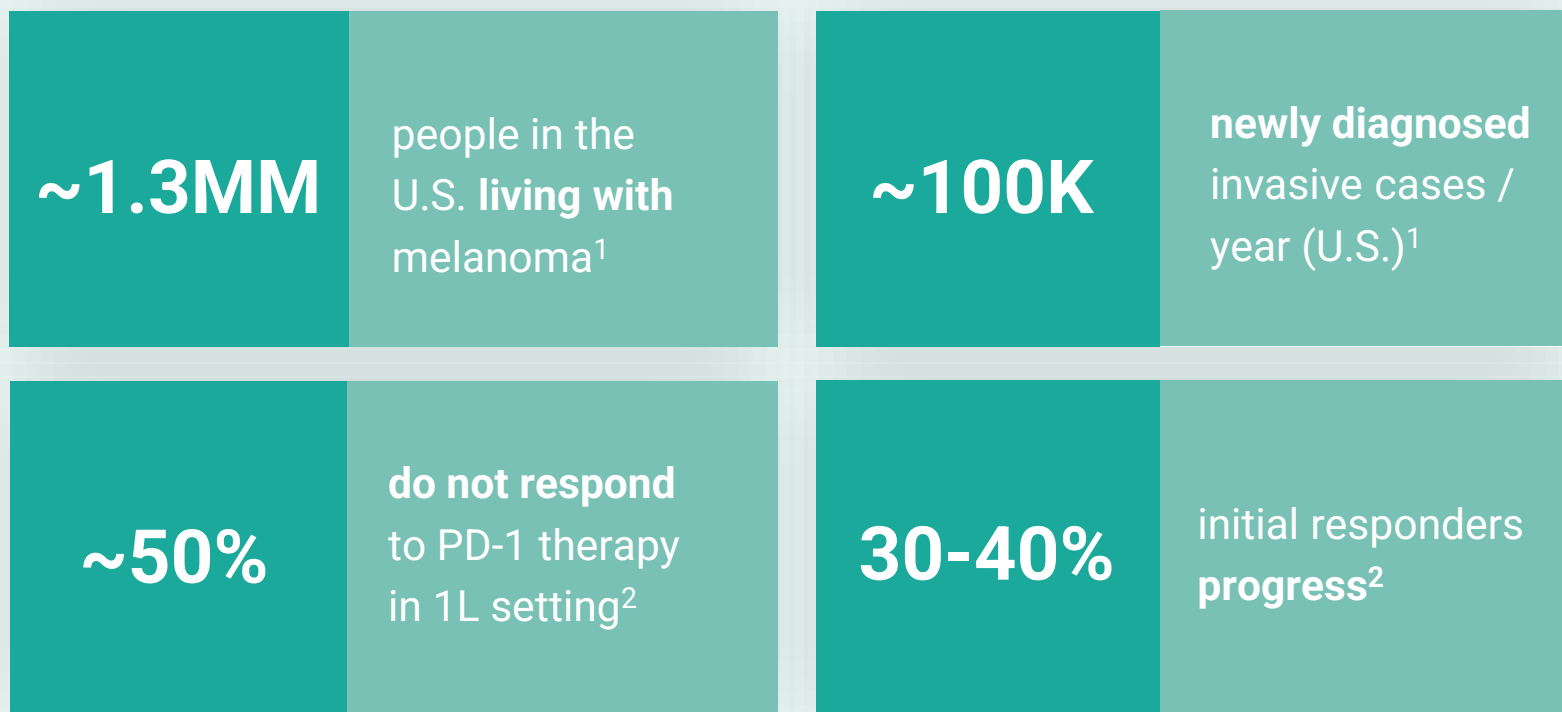


- Two out of three ROR2+ patients had a partial response following ozuriftamab vedotin treatment

\*\*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



## Available Treatment

1L: ICIs 33% - 50% ORR<sup>3</sup>; (BRAF / Mek inhibitors for BRAF+)

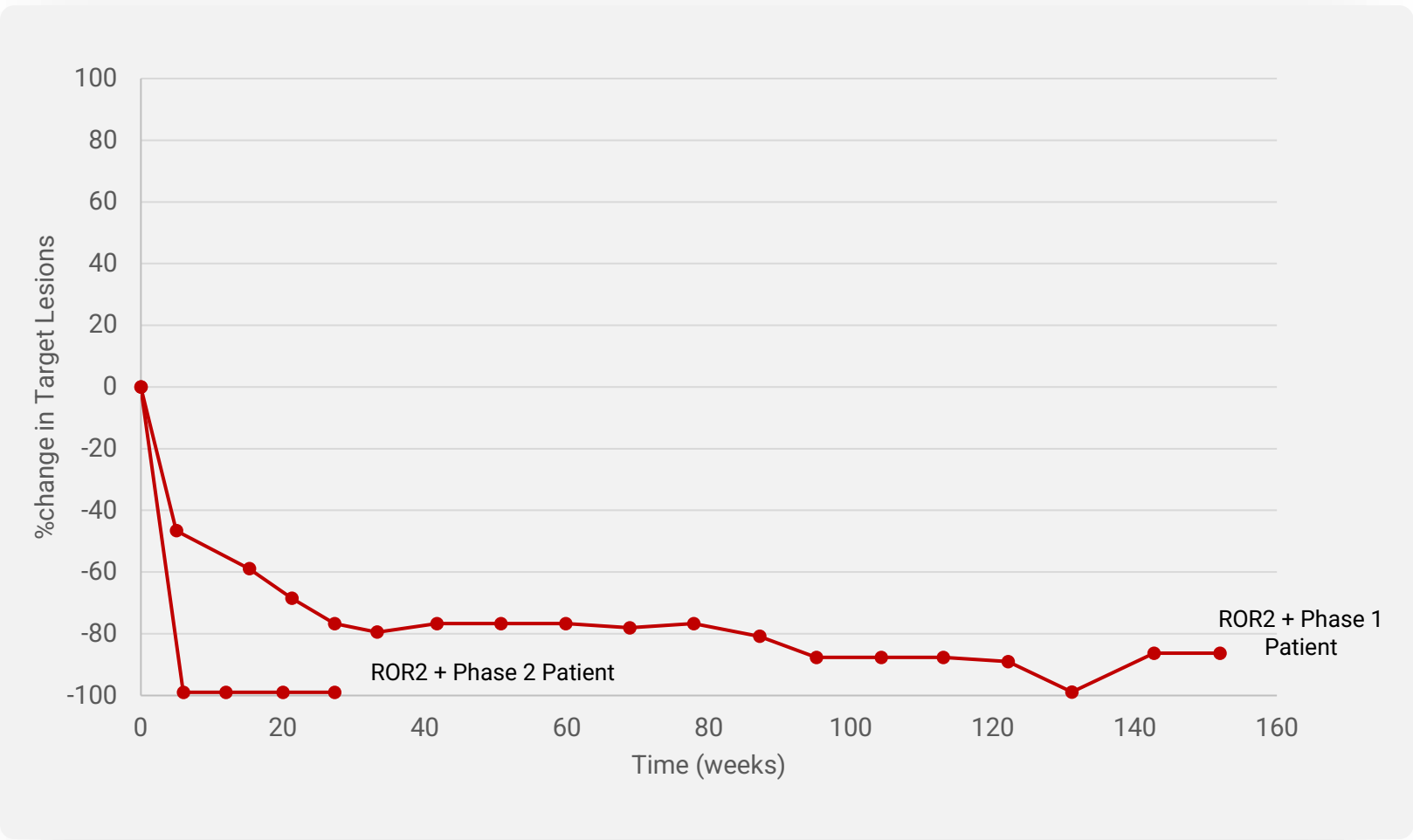
2L+: ICIs 9% - 28% ORR (mono – combo, respectively)<sup>4</sup>

- Target population: ~5K ROR2+ addressable 2L+ patients/year in the U.S.<sup>1</sup>, 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

<sup>1</sup>Clarivate, Disease Landscape and Forecast: Malignant Melanoma (2022). [www.cancer.net](http://www.cancer.net); [www.cancer.org](http://www.cancer.org); <sup>2</sup>Oncology (Williston Park). 33(4):141-8. <sup>3</sup>Keytruda USPI accessed June 2022; Opdivo USPI accessed June 2022. <sup>4</sup>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.

# Phase 1 & 2 Results in Stage IV Multi-Refractory Melanoma

Complete Response Observed in 2 out of 2 ROR2+ Patients



## Phase 1

### Patient Details:

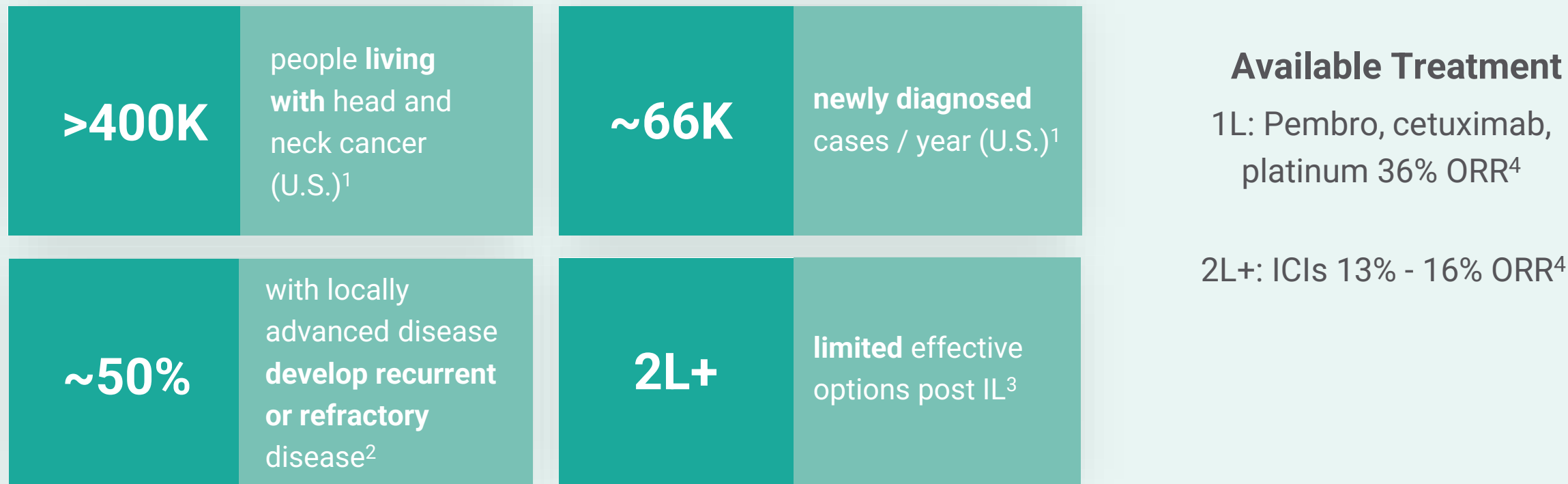
- ✓ Prior treatment failure: nivolumab followed by nivolumab + ipilimumab combination
- ✓ Clearance of pulmonary metastases followed by normalization of adenopathy
- ✓ Continued CR off-treatment for over 2 yrs

## Phase 2

### Patient Details:

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

# Potential market opportunity in SCCHN



- Target population: ~12K ROR2+ addressable 2L+ patients/year in the U.S.<sup>1</sup>, 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

<sup>1</sup>Clarivate, Disease Landscape and Forecast: SCCHN (2022). [www.cancer.net](http://www.cancer.net); <sup>2</sup>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; <sup>3</sup>Future Oncology, Jan. 2019. Vol. 15, No. 8; <sup>4</sup>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.

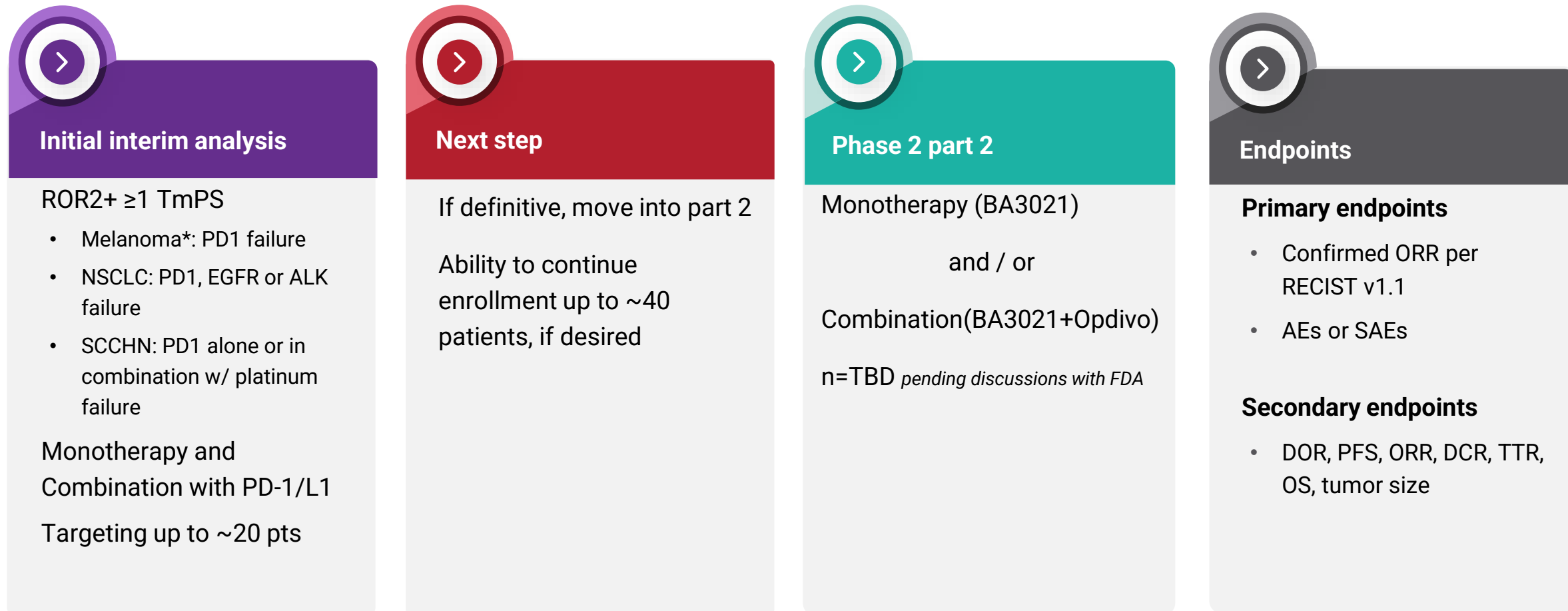
# Phase 1 results with BA3021 support advancing into Phase 2

in multiple indications

ROR2+ Tumor Types	Results
NSCLC	<ul style="list-style-type: none"><li>PR in 2 / 3 patients who previously experienced failure on PD-1 and who received Ph2 dose or higher</li></ul>
Melanoma	<ul style="list-style-type: none"><li>CR in 1 / 1 patient who previously experienced failure on PD-1</li><li>Clearance of pulmonary metastases followed by normalization of adenopathy</li><li>Continued CR off treatment for over 2 years</li></ul>
SCCHN	<ul style="list-style-type: none"><li>PR in 1 / 1 ROR2+ refractory to four prior lines of therapy including cetuximab and PD-1 (pembrolizumab)</li></ul>
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: NSCLC, Melanoma, and SCCHN



\*To date, CR on first scan (3 doses), n=1



## Naked Antibody IO Platform:

CTLA-4 (BA3071) – Basket Trial

# BA3071 (CAB-CTLA-4)

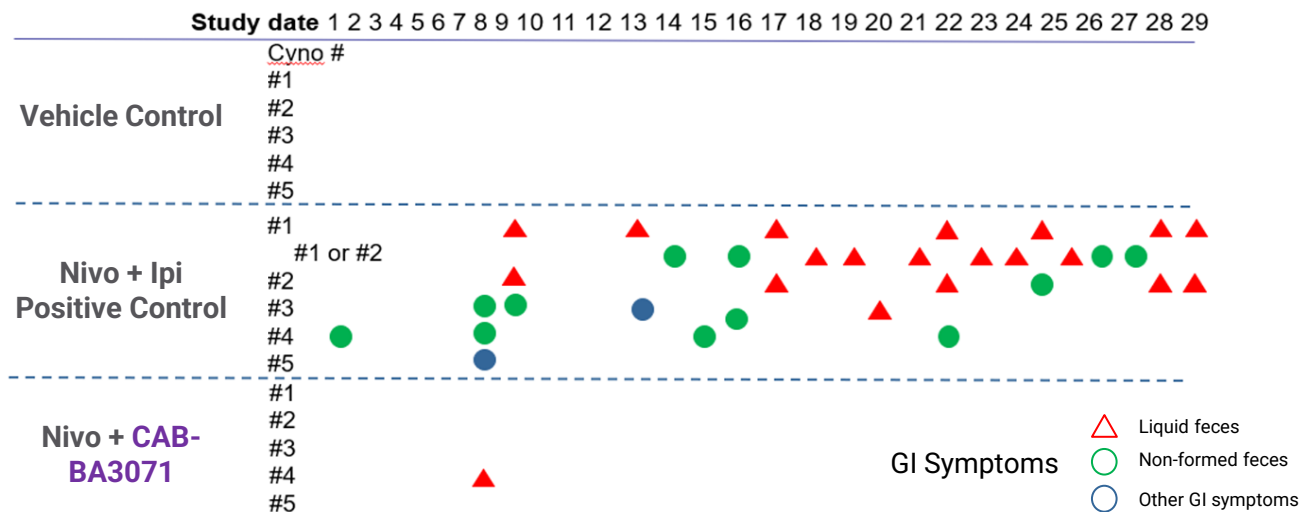
## Best-in-class and potential for disruption of the I/O Market

### 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

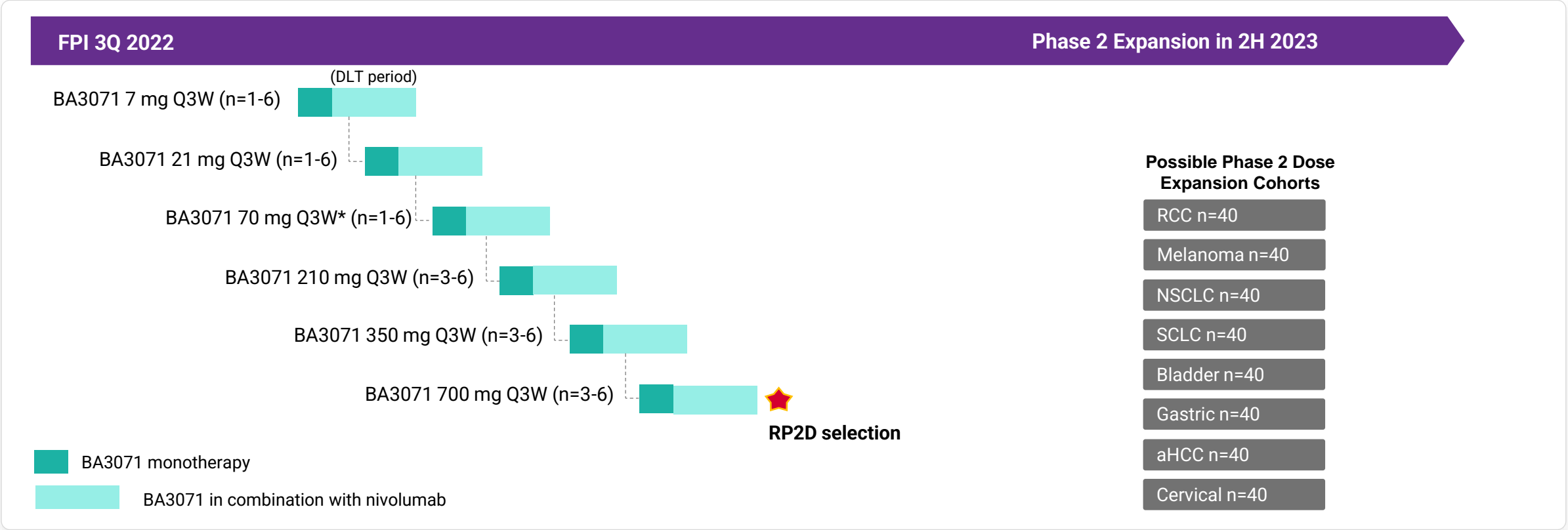
In NHP study, **BA3071** achieved similar exposure levels to Ipi analog with **significantly less** toxicity in combination with nivo\*\*

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



\*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  
AUC<sub>168</sub> = Area under the serum drug concentration-time curve from time zero to 168 hours; C<sub>max</sub> = 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

## Bispecific Platform

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

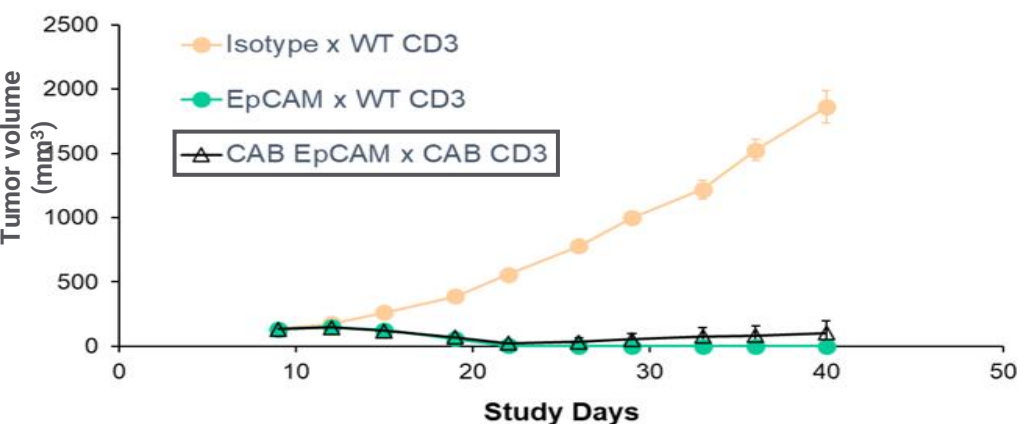
# BA3182 – CAB-EpCAM x CAB-CD3 Bispecific T-Cell Engager (TCE)

Significant opportunity for safe and effective EpCAM x CD3 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**

**\*0.025mg/kg = 2 ill**  
**\*0.05 mg/kg = 2 expired**

**CAB-EpCAM x CAB-CD3 (BA3182)**

**\*0.25mg/kg = 2 normal**  
**\*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*

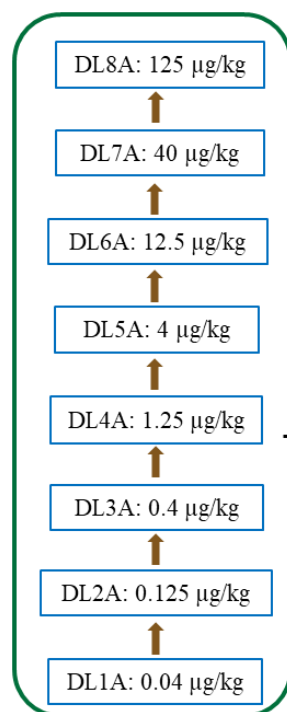
WT = wild type; \*from independent experiments  
MTD = Maximum Tolerated Dose  
TI = Therapeutic Index

# Phase 1/2 trial design for CAB-EpCAM x CAB-CD3 Bispecific TCE (BA3182)

## In advanced adenocarcinoma

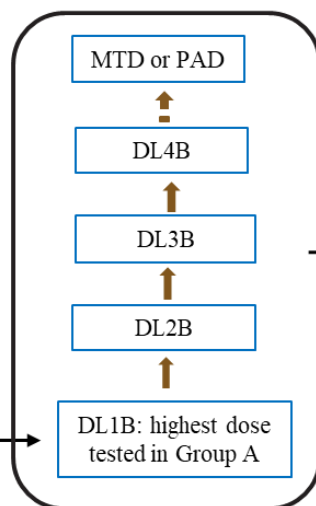
### Group A Accelerated Titration

Convert to standard titration when any grade  $\geq 2$  AE (except AE due to the underlying disease or an extraneous cause) or a DLT



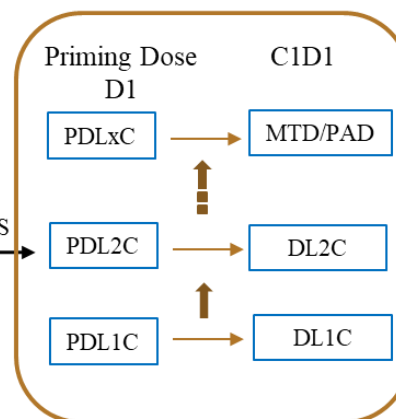
### Group B Standard Titration

Dose escalation using the Bayesian Optimal Interval (BOIN) design



### Group C Standard Titration with Priming

If one Grade  $\geq 2$  CRS is observed, initiate priming dose evaluation



- 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  $\geq 2$  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

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

### Part 2:

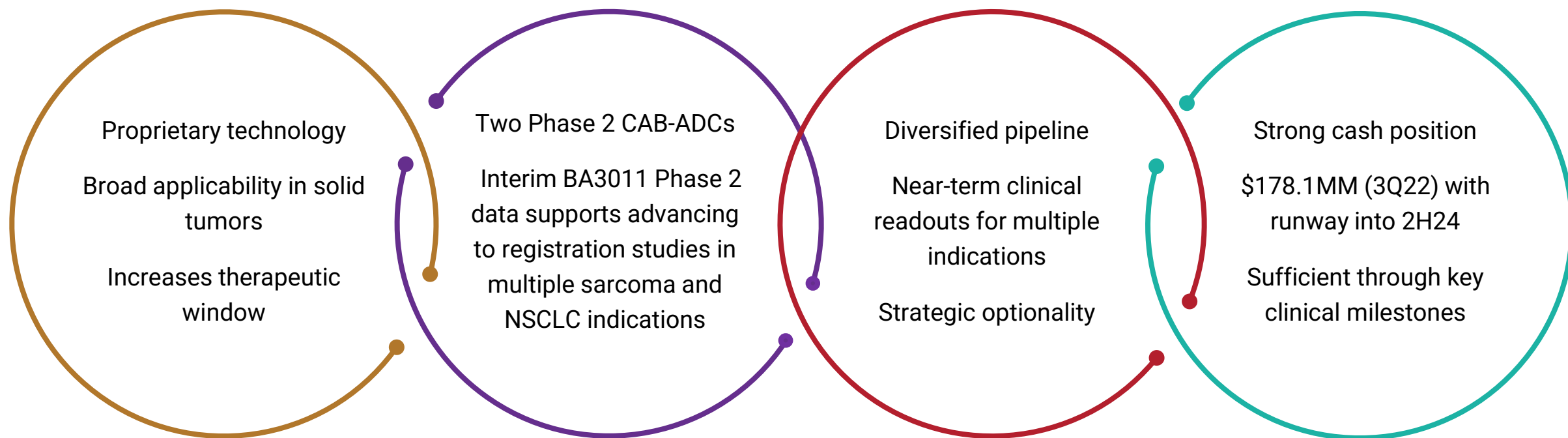
Open-label study to evaluate the efficacy and safety of BA3182 in patients with advanced adenocarcinoma who have a qualifying EpCAM-expressing tumor membrane percent score (TmPS) (to be determined based on Phase 1 data).

# A number of key upcoming milestones in 2022

Program	Indications	2022	
		1H	2H
<b>BA3011</b> <i>Mecbotamab Vedotin</i>	STS and bone sarcoma	✓ Phase 2 interim update	Phase 2 part 2 initiation ★
	NSCLC		✓ Phase 2 initial interim data Phase 2 interim data ★
	Ovarian*	✓ Phase 2 IIT dosing	
<b>BA3021</b> <i>Ozuriftamab Vedotin</i>	NSCLC		Phase 2 interim update ★
	Melanoma		Phase 2 interim update ★
	SCCHN		★ Phase 2 dosing
	Ovarian*	✓ Phase 2 IIT dosing	
<b>BA3071</b>	Multiple tumor types**		✓ Phase 1 / 2 dosing
<b>BA3182</b>	Adenocarcinoma** Multiple tumor types**		★ IND submission / Phase 1 initiation

# BioAtla<sup>®</sup> is a clinical stage company focused on transforming cancer therapy

with **Conditionally Active Biologics (CABs)**





## APPENDIX

# Board of Directors and Advisors



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Chairman, Chief Executive  
Officer & Co-founder  
Board of Director



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Board of Director



**Sylvia McBrinn**  
Board of Director



**Susan Moran, MD, MSCE**  
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**Lawrence Fong, MD**  
Cancer Immunotherapy  
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**Michael Manyak, MD**  
GlaxoSmithKline  
Scientific Advisor



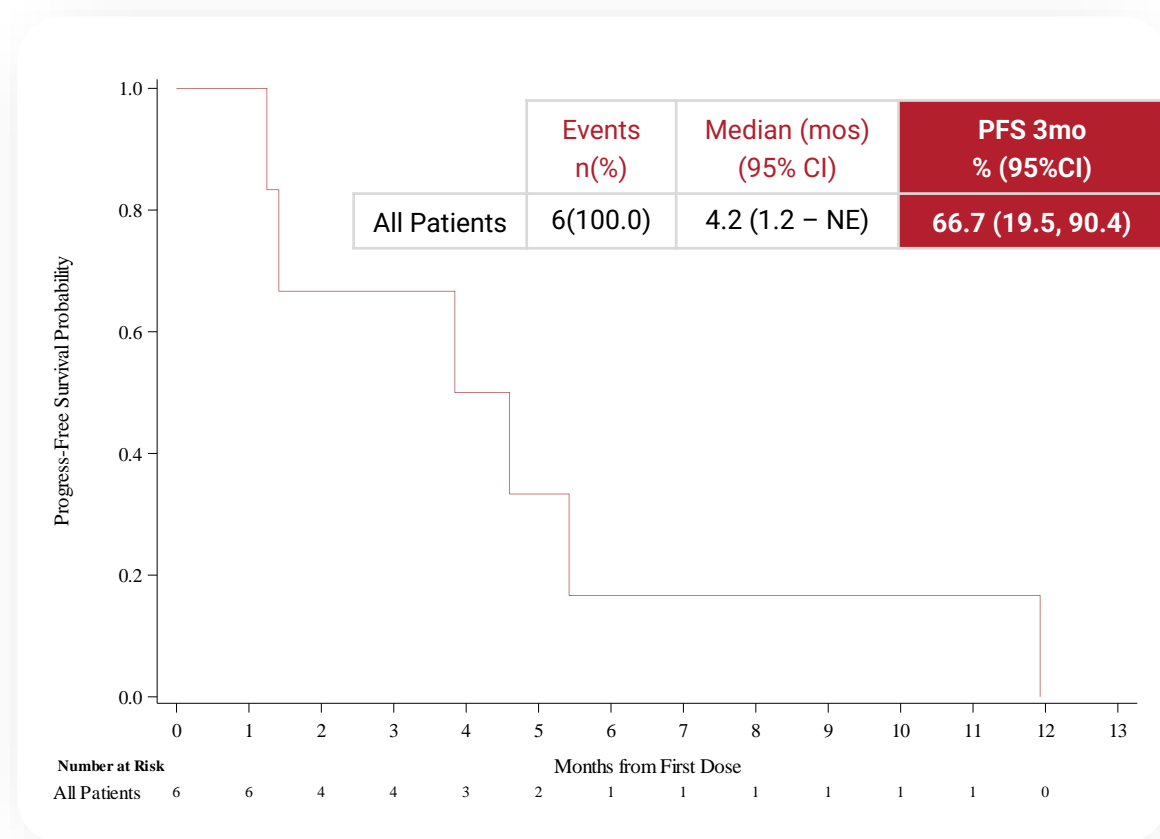
**Padmanee Sharma, MD, PhD**  
MD Anderson Cancer Center  
Scientific Advisor



**Geoffrey Wahl, PhD**  
Salk Institute  
Scientific Advisor

# Osteosarcoma:

## Phase 2 Change in Target Lesion and Progression Free Survival (1.8mg/kg; n=6)

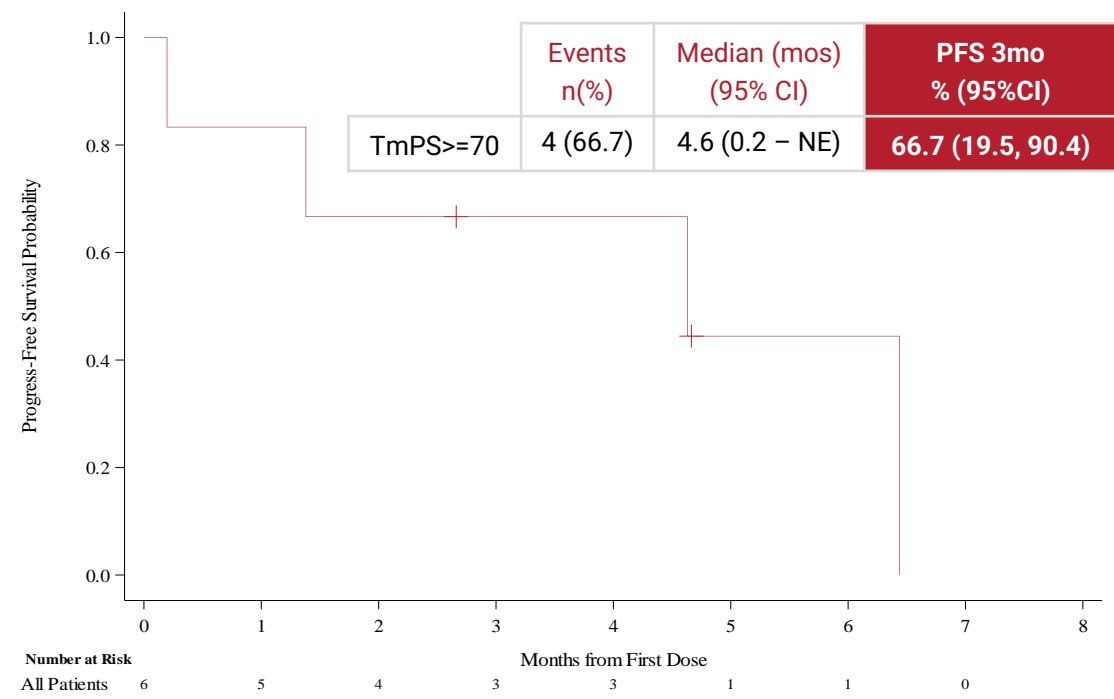


- Of 6 patients enrolled, PFS rate at 3 months was 66.7%
- Interim results satisfied the pre-defined Go criteria of osteosarcoma cohort into part 2 of the Phase 2 study

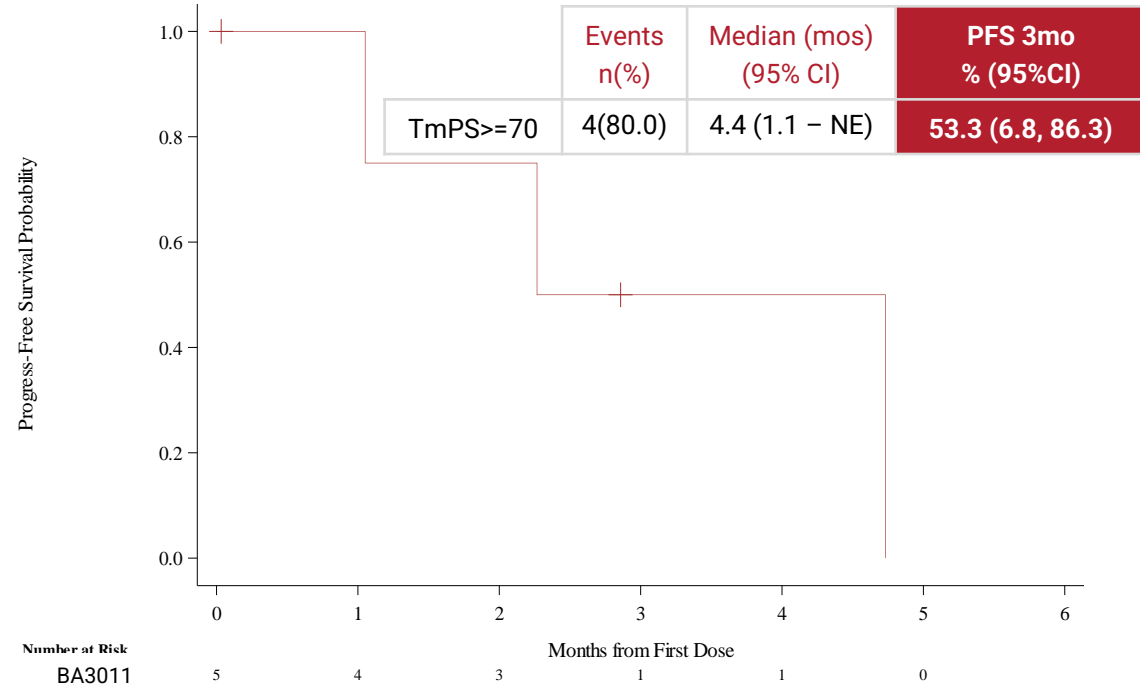
# Liposarcoma and Synovial sarcoma:

## Phase 2 Progression Free Survival

**Liposarcoma**  
BA3011 1.8mg/kg Q2W  
n=6



**Synovial Sarcoma**  
BA3011 1.8mg/kg Q2W  
n=5



- Interim results satisfied the pre-defined Go criteria of liposarcoma and synovial sarcoma cohorts into part 2 of the Phase 2 study.