

# DRIVEN BY SCIENCE FOCUSED ON LIFE

October 2024

### Forward looking statements

Certain statements included in this presentation (this "Presentation") that are not historical facts are forward-looking statements for purposes of the safe harbor provisions under the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements are sometimes accompanied by words such as "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "should," "would," "plan," "predict," "potential," "seem," "seek," "future," "outlook" and similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, our expectations regarding a U.S. NDA and timing of its submission, the potential for taletrectinib to become a new therapeutic option for ROS1-positive NSCLC, taletrectinib's and safusidenib's best-in-class therapeutic potential, statements regarding Nuvation Bio's expected timing of becoming a commercial organization, potential therapeutic benefit of Nuvation Bio's product candidates and advancement of clinical studies for such product candidates, sufficiency of Nuvation Bio's current cash balance to support operations in the near term, clinical study design, or the potential of the DDC platform. These statements are based on various assumptions, whether or not identified in this Presentation, and on the current expectations of the management team of Nuvation Bio and are not predictions of actual performance. These forward-looking statements are subject to a number of risks and uncertainties that may cause actual results to differ from those anticipated by the forward-looking statements, including but not limited to the challenges associated with conducting drug discovery and initiating or conducting clinical studies due to, among other things, difficulties or delays in the regulatory process, enrolling subjects or manufacturing or acquiring necessary products; the emergence or worsening of adverse events or other undesirable side effects; risks associated with preliminary and interim data, which may not be representative of more mature data; and competitive developments. Risks and uncertainties facing Nuvation Bio are described more fully in its Form 10-Q filed with the SEC on August 5, 2024 under the heading "Risk Factors," and other documents that Nuvation Bio has filed or will file with the SEC. You are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this Presentation. Nuvation Bio disclaims any obligation or undertaking to update, supplement or revise any forward-looking statements contained in this Presentation.



### Nuvation Bio is tackling some of the greatest unmet needs in oncology



**Late clinical-stage, global oncology company** with multiple candidates in development aimed at improving validated mechanisms that have encountered safety liabilities or limitations in efficacy



Taletrectinib<sup>1</sup> is a next-generation, potentially best-in-class ROS1 inhibitor differentiated by response rate, duration of response, and tolerability; planned NDA submission (line agnostic) in Q4 2024



**Safusidenib** is a potentially best-in-class, brain penetrant, **mIDH1** inhibitor in **Phase 2 development** for the treatment of patients with **diffuse IDH1-mutant glioma**; **pivotal study** being planned



NUV-1511, the Company's first clinical-stage drug-drug conjugate (DDC), is being evaluated in a Phase 1/2 study; NUV-868 is a BD2-selective BET inhibitor that has completed Phase 1 and Phase 1b studies



Robust cash balance of \$577 million and positive pivotal data from TRUST-I & TRUST-II studies of taletrectinib position Nuvation Bio to potentially become a commercial stage organization in 2025

## Nuvation Bio is developing a broad pipeline of differentiated and novel therapeutic candidates

Program	Potential Indication(s)	Current Stage of Development				Audicinate d Beilesten au G. Dennyt Hadataa	
		Preclinical	Phase 1	Phase 2	Pivotal	Anticipated Milestones & Recent Updates	
Taletrectinib <sup>1</sup> (ROS1)	Advanced ROS1-positive NSCLC	Completing two	Phase 2 pivotal stu	udies (TRUST-I & TF	RUST-II)	<ul> <li>Most mature and pooled data from pivotal TRUST-I &amp; TRUST-II studies presented at ESMO in September 2024</li> <li>Planned NDA submission to U.S. FDA in Q4 2024</li> <li>China NDAs under priority review by China's NMPA<sup>5</sup></li> </ul>	
Safusidenib <sup>2</sup> (mIDH1)	Diffuse IDH1-mutant glioma					<ul> <li>Phase 2 study ongoing</li> <li>Pivotal study being planned</li> </ul>	
NUV-1511 (DDC)	Advanced solid tumors <sup>3</sup>					Phase 1/2 dose escalation study ongoing	
NUV-868 (BET)	Currently under internal evaluation <sup>4</sup>					Completed Phase 1 monotherapy and Phase 1b combination studies in advanced solid tumors	



BET: Bromodomain and Extra-Terminal motif; ESMO: European Society of Medical Oncology Congress; mIDH1: mutant isocitrate dehydrogenase 1; ROS1: c-ros oncogene 1; 1. Taletrectinib has been granted Orphan Drug Designation from the U.S. FDA for the treatment of patients with ROS1-positive NSCLC and other NSCLC indications, and Breakthrough Therapy Designations by both the U.S. FDA and China's NMPA for the treatment of patients with advanced or metastatic ROS1-positive NSCLC; worldwide development and commercial rights in-licensed from Daiichi Sankyo; rights to taletrectinib have been out-licensed in China and Japan. 2. Worldwide development and commercial rights in-licensed from Daiichi Sankyo, excluding Japan where Daiichi Sankyo retains development and commercial rights. 3. Includes patients with advanced solid tumors who previously received and progressed on or after treatment with Enhertu® and/or Trodelvy® per approved U.S. FDA labeling, human epidermal growth factor receptor 2-negative (HER2-) metastatic castration-resistant prostate cancer (mCRPC), advanced pancreatic cancer, and platinum-resistant ovarian cancer. 4. Nuvation Bio has decided not to initiate a Phase 2 study of NUV-868 as a monotherapy or in combination with olaparib or enzalutamide in the advanced solid tumor indications that were part of the Phase 1 and Phase 1b study designs. The Company is evaluating next steps for the NUV-868 program, including further development in combination with approved products for indications in which BD2-selective BET inhibitors may improve outcomes for patients. 5. Based on results of the TRUST-I clinical study, under priority review for the treatment of adult patients with locally advanced or metastatic ROS1-positive NSCLC who either have or have not previously been treated with ROS1 tyrosine kinase inhibitors (TKIs).

## Taletrectinib | ROS1i

Advanced ROS1positive NSCLC Planned NDA submission in Q4 2024





## Taletrectinib is a next-generation, potentially best-in-class ROS1 inhibitor differentiated by response rate, duration, and tolerability



### **Commercial opportunity**

- Planned NDA submission (line agnostic) to U.S. FDA in Q4 2024
- Breakthrough Therapy Designations in 1L & 2L (U.S. and China)<sup>1,2</sup>
- Sizeable population of patients with ROS1-positive NSCLC



### **Differentiated profile**

- Potentially best-in-class efficacy and safety profile
- Durable responses and prolonged progression-free survival<sup>3</sup>
- Highly brain penetrant and active against common mutations



### **Strong partnerships**

- In-licensed from Daiichi Sankyo
- Maintain global rights except in China and Japan where rights have been out-licensed<sup>4</sup>



## The ROS1-positive NSCLC market represents a sizeable commercial opportunity

### **Key takeaways**

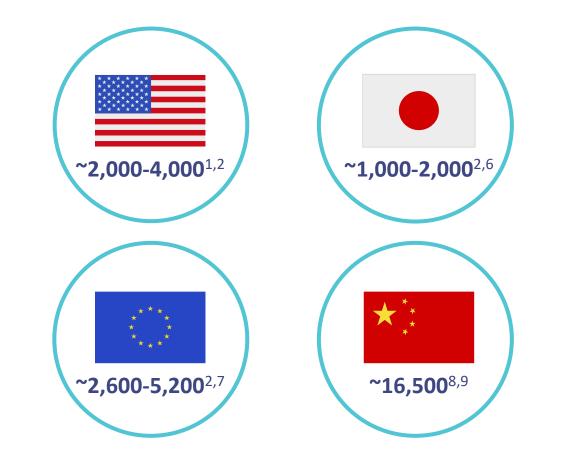
- NSCLC accounts for ~80-85%¹ of all lung cancers
- ROS1-positive lung cancer represents ~2%<sup>2</sup> of new NSCLC cases
- There are currently three therapies approved in the U.S. to treat patients with ROS1-positive NSCLC:

1<sup>st</sup> generation

- Crizotinib (Pfizer, approved 2016<sup>3</sup>)
- Entrectinib (Roche, approved 2019<sup>4</sup>)

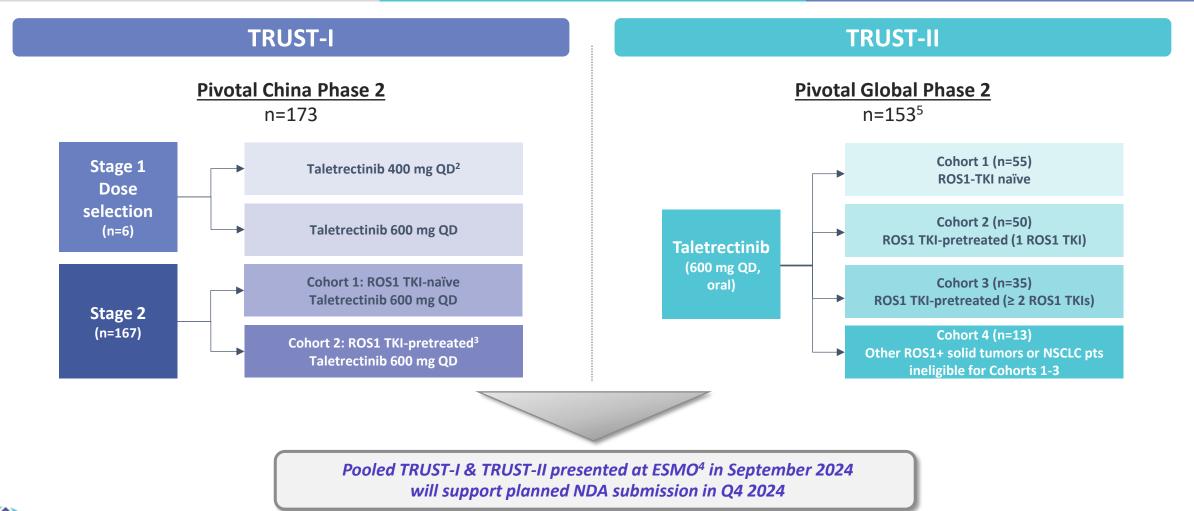
2<sup>nd</sup> generation  Repotrectinib (Bristol-Myers Squibb, approved 2023<sup>5</sup>)

### **Estimated diagnosed patient population**





## Taletrectinib has been evaluated in two pivotal registrational studies that include >300 patients in total, with results supporting BTDs<sup>1</sup> in U.S. & China





## Pooled pivotal TRUST-I & TRUST-II data included 337 patients<sup>1</sup> with advanced ROS1-positive NSCLC, 273 of which form the response evaluable population

### Key eligibility criteria

- Locally advanced or metastatic NSCLC
- Age ≥18 years<sup>2</sup>
- ECOG PS 0-1
- ROS1 fusion in tumor tissue
- At least one measurable lesion per RECIST v1.1

### Response evaluable population

**ROS1 TKI-naïve (n=160)** Taletrectinib 600 mg QD<sup>3</sup>

ROS1 TKI-pretreated (n=113)<sup>4</sup>
Taletrectinib 600 mg QD

### **Endpoints**

#### **Primary:**

IRC-assessed cORR per RECIST v1.1

#### **Secondary:**

- IC-ORR
- DOR, PFS
- Safety

Response evaluable population	TKI-naïve (n=160)	TKI-pretreated (n=113)	Overall (n=273) <sup>5</sup>
Median age, years (range)	57 (26-82)	53 (27-79)	56 (26-82)
Female, n (%)	89 (56)	67 (59)	156 (57)
Never smoker	105 (66)	77 (68)	182 (67)
Region: Western / Asian, n (%)	21 (13) / 139 (87)	26 (23) / 87 (77)	47 (17) / 226 (83)
ECOG PS: 0 / 1, n (%)	41 (26) / 119 (74)	40 (35) / 73 (65)	81 (30) / 192 (70)
Stage IV disease	146 (91)	110 (97)	256 (94)
Prior anticancer chemotherapy, n (%)	32 (20)	42 (37)	74 (27)
Brain metastasis at baseline (IRC assessed), n (%)	37 (23)	55 (49)	92 (34)
Prior ROS 1 TKI received: crizotinib / entrectinib, n (%)	-	103 (91) / 10 (9)	-



## Taletrectinib is well-positioned against approved ROS1 TKIs in the first line setting (TKI-naïve patients) based on both response rate and durability

	Taletrectinib <sup>2</sup>	Repotrectinib <sup>3</sup>	Entrectinib <sup>4</sup>	Crizotinib <sup>5</sup>
Study	Pooled TRUST-I & TRUST-II	TRIDENT-1	ALKA-372-001, STARTRK-1, STARTRK-2	PROFILE 1001
n	160	71	168	53
cORR	89%	79%	68%	72%
Median DOR	44 months	34 months	21 months	25 months
Median PFS	46 months	36 months	16 months	19 months
IC-cORR <sup>1</sup>	77% (13/17)	89% (8/9)	80% (20/25)	N/A



## Progression-free survival of taletrectinib exceeds XTANDI & TAGRISSO in metastatic disease

Program

XTANDI
(enzalutamide)

PREVAIL¹: 20 months

TAGRISSO
(osimertinib)

PREVAIL¹: 19 months



Pooled TRUST-I & TRUST-II<sup>3</sup>: 46 months



## Taletrectinib's response rate and duration in TKI-pretreated patients compares favorably to other ROS1 TKIs

Study

n

**cORR** 

Median DOR

Median PFS

G2032R cORR

> ICcORR<sup>1</sup>

Taletrectinib<sup>2</sup>

Pooled TRUST-I & TRUST-II

113

**56%** 

17 months

10 months

62% (8/13)

66% (21/32)

Repotrectinib<sup>3</sup>

TRIDENT-1

56

38%

15 months

9 months

59% (10/17)

38% (5/13)

Zidesamtinib<sup>4</sup>

ARROS-1

Crizotinib & entrectinib

Repotrectinib

**17** 

3

53%

0%

N/A

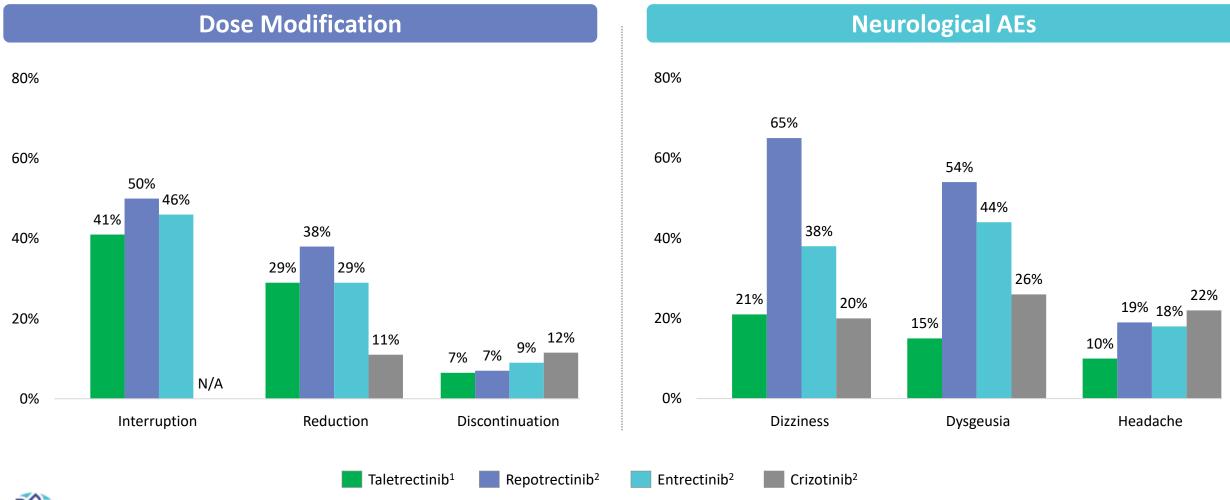
N/A

62% (16/26)

50% (4/8)



## Taletrectinib data show an encouraging safety profile relative to approved ROS1 TKIs, including improved dose modification and low rates of neuro AEs





## Nuvation Bio's planned NDA submission in Q4 2024 will, upon regulatory approval, enable a U.S. launch of taletrectinib in 2025

Upon regulatory approval, Nuvation Bio is positioned to commercialize a novel targeted therapy for patients with advanced ROS1-positive NSCLC in need of better treatment options

#### **Currently granted:**

Breakthrough Therapy
Designations in 1L & 2L from
U.S. FDA and China's NMPA<sup>1</sup>;
Priority review of two NDAs for
taletrectinib by China's NMPA<sup>2</sup>

#### U.S. launch to be led by:

David Hung, M.D., who successfully developed and commercialized XTANDI®, with current annual worldwide sales of ~\$6 billion<sup>3</sup>

#### License agreements to provide:

Royalties from Innovent
Biologics' commercial launch in
China and Nippon Kayaku's
commercial launch in Japan



## Safusidenib | mIDH1i

Diffuse IDH1-mutant glioma

Phase 2 study ongoing





## Safusidenib is a potentially best-in-class, brain penetrant, mIDH1 inhibitor in Phase 2 development for the treatment of patients with diffuse IDH1-mutant glioma



#### **Unmet need**

 People diagnosed with glioma are in need of better treatment options



### **Validated target**

- Vorasidenib<sup>1</sup> approved to treat glioma in Aug. '24<sup>2</sup>
- 15% royalty on future
   U.S. sales of vorasidenib
   acquired for \$905M<sup>3</sup>



### **Differentiated profile**

- Encouraging early data<sup>4</sup>
- Potential in broad population
- Limited competition



### **Global rights**

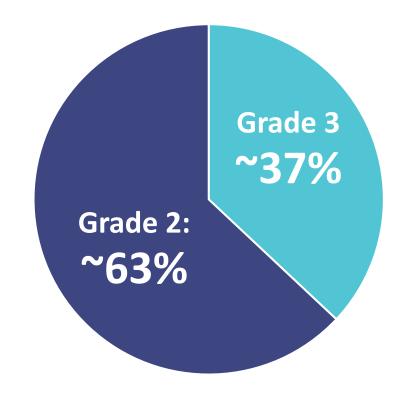
- In-licensed from Daiichi Sankyo
- Daiichi Sankyo retains rights in Japan<sup>5</sup>



## The diffuse IDH1-mutant glioma market represents a sizeable commercial opportunity

~13.3K - 18.3K

people living with diffuse IDH1-mutant glioma in the U.S.



Diffuse IDH1-mutant glioma patients are in need of better treatment options



### Safusidenib clinical study data set approaches 100 patients

### **Sponsor: Daiichi Sankyo**

**J101 - Phase 1** 

Japan
Grades 2-4 IDH1-mutant glioma
n=47

**J201 – Phase 2** 

Japan
Grade 2 IDH1-mutant glioma
n=27

**Sponsor: Nuvation Bio** 

**G203 – Phase 2** 

Global

Diffuse IDH1-mutant glioma

Part 1: Dose evaluation (n=25)

Part 2: Design under discussion



## Royalty Pharma's acquisition of rights to Agios Pharmaceuticals' royalty on U.S. net sales of vorasidenib validates safusidenib's market potential

### Transaction highlights<sup>1</sup>

- On May 28, 2024, Royalty Pharma announced it acquired an interest in Agios Pharmaceuticals' royalty on U.S. net sales of Servier's vorasidenib
- Royalty Pharma paid Agios \$905 million in cash upon FDA approval of vorasidenib for a 15% royalty on annual U.S. net sales up to \$1 billion
- Royalty Pharma will receive a 12% royalty and Agios will retain a 3% royalty on potential U.S. net sales >\$1 billion
- Agios retained rights to a \$200 million milestone payment from Servier upon FDA approval of vorasidenib

### Implications to safusidenib



Transaction anticipates >\$1 billion in peak U.S. net sales for vorasidenib<sup>1</sup>



Safusidenib showed a 17% response rate in enhancing gliomas<sup>2</sup>



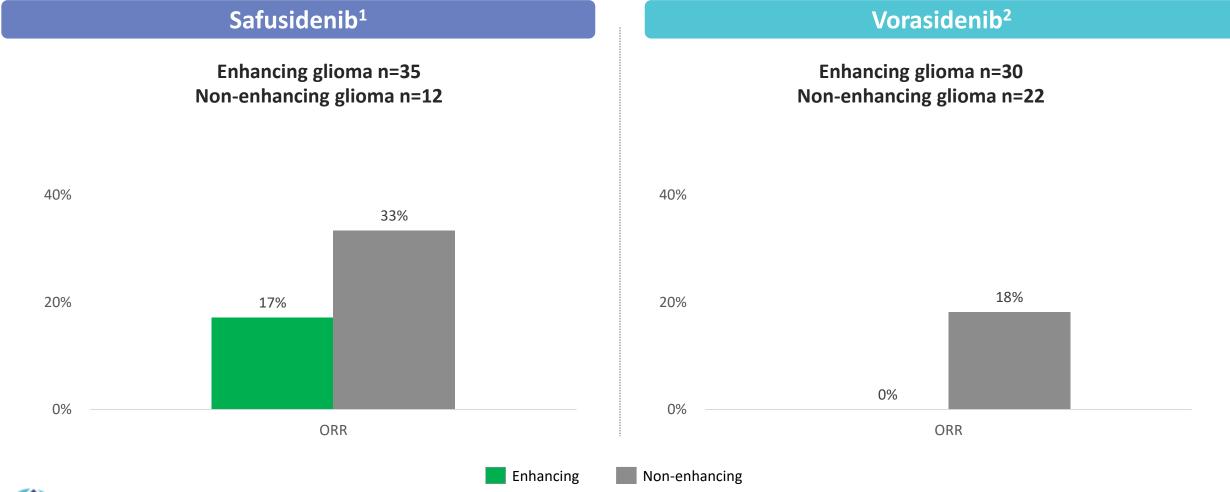
Vorasidenib showed a 0% response rate in enhancing gliomas<sup>3</sup>



Safusidenib may potentially address an important vorasidenib unmet need



## Safusidenib generated encouraging efficacy signals in IDH1-mutant enhancing and non-enhancing glioma relative to vorasidenib





## NUV-1511 | DDC

Advanced solid tumors

Phase 1/2 study ongoing





## Nuvation Bio's drug-drug conjugate (DDC) platform is a potentially revolutionary advance beyond ADCs

### **Antibody-drug conjugates**

- Improves therapeutic index vs. untargeted warhead
- IV delivery
- Limited to cell-surface targets
- Complex and expensive CMC





- Tissue-selective targeting improves therapeutic index vs. untargeted warhead
  - ✓ Oral or IV delivery

**Drug-drug** 

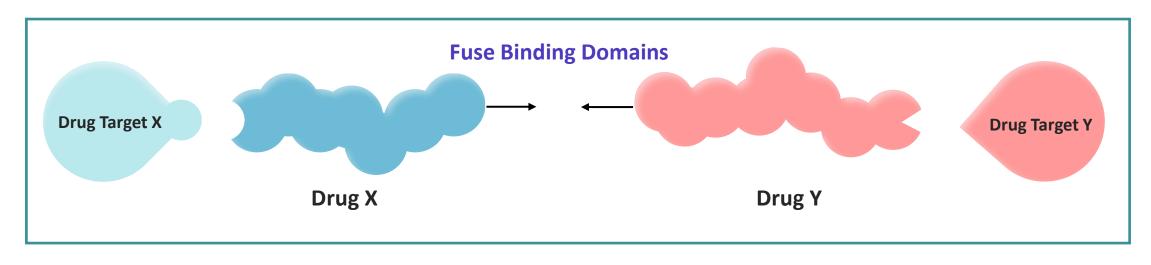
conjugates

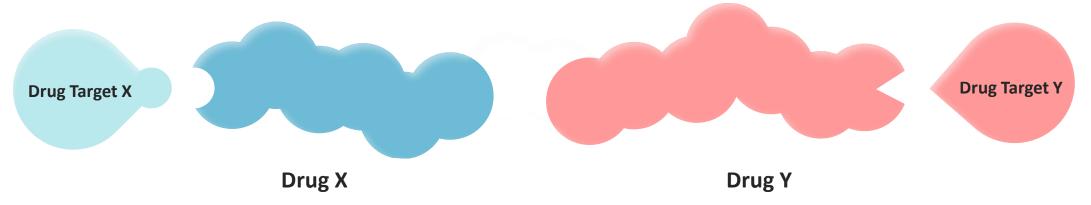
- ✓ Binds intracellular and cell membrane targets
- ✓ Highly cell permeable
- Simpler and less expensive to manufacture



### DDCs are designed to bind TWO different targets simultaneously

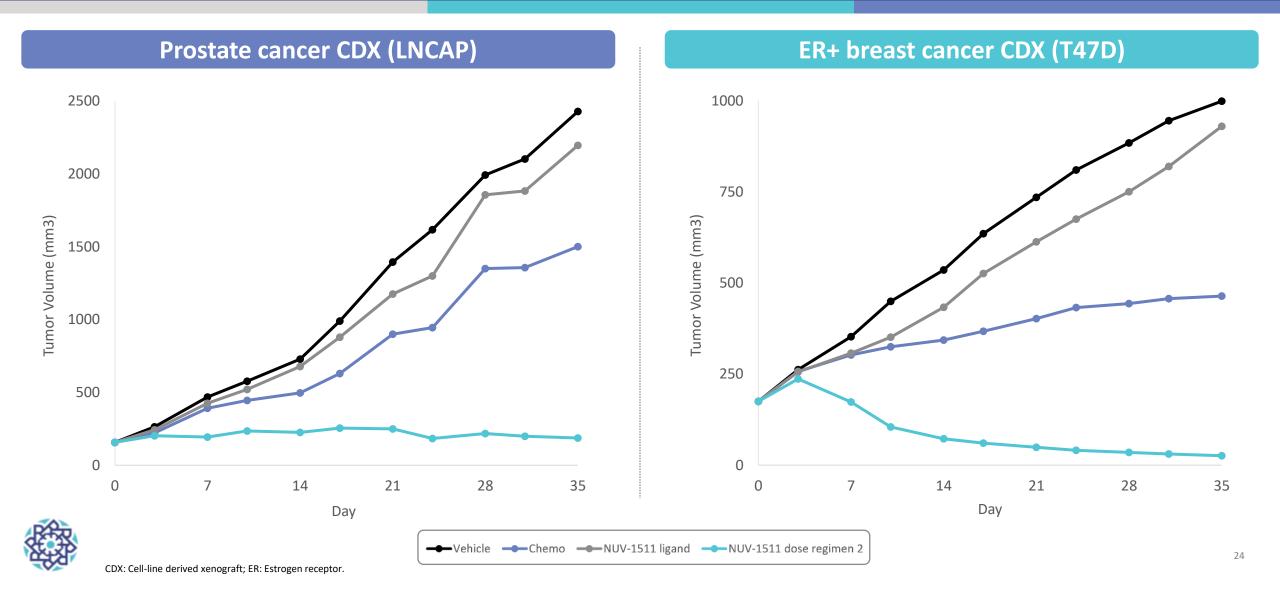
### Two separate drugs with two separate targets





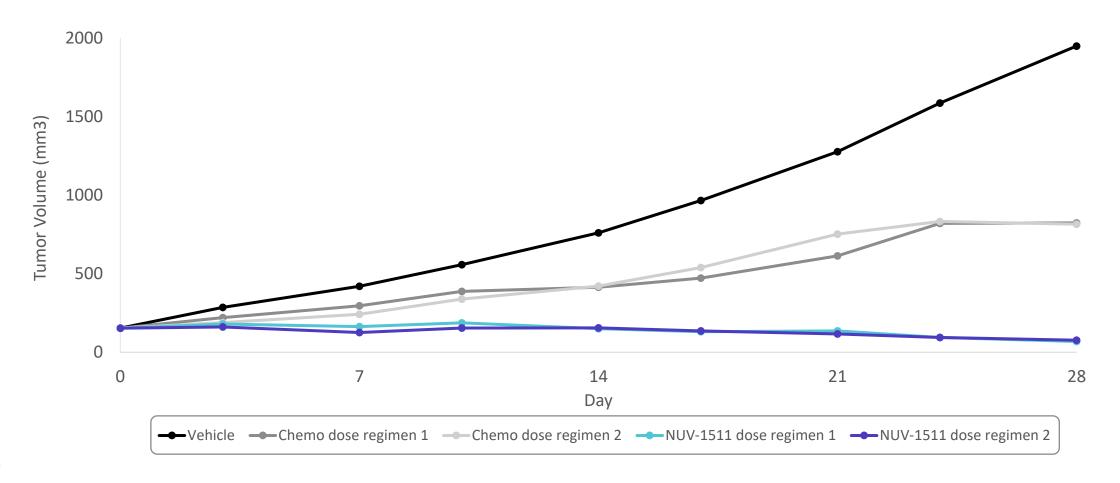


## NUV-1511, a DDC derivative of a widely used chemotherapy agent, suppresses prostate and breast cancer growth in xenografts



## Intermittent dosing of NUV-1511 leads to sustained tumor inhibition for weeks

### **Prostate cancer CDX (LNCAP)**





## NUV-1511 is initially being evaluated in five indications for which there is a significant unmet need or large market potential

### Nuvation Bio initiated a Phase 1/2 study evaluating NUV-1511 for the treatment of patients with:

- Advanced solid tumors who previously received and progressed on or after treatment with Enhertu® and/or Trodelvy® per approved U.S. FDA labeling
- 2 Human epidermal growth factor receptor 2-negative (HER2-) metastatic breast cancer
- 3 Metastatic castration-resistant prostate cancer
- 4 Platinum-resistant ovarian cancer
- 5 Advanced pancreatic cancer



## **NUV-868 | BETI**

Advanced solid tumors

Completed Phase 1 and Phase 1b studies

Future indications

Currently evaluating next steps for program





### First generation BET inhibitors have been toxic and poorly effective

### NUV-868 is the most selective BD2 vs BD1 BET inhibitor in development

- BET proteins regulate the expression of many oncogenes, including cMYC – an oncogene that has not been targetable directly with a drug
- Non-selective BD1/2-inhibitors have been associated with tolerability issues, many apparently due to BD1 inhibition<sup>1</sup>
- NUV-868 inhibits BD2 almost 1,500 times more potently than BD1, which may improve efficacy and tolerability

	BRD4 Affinity <sup>2</sup>				
	BD2 (nM)	BD1 (nM)	Selectivity		
NUV-868*	2	2920	1460x		
ABBV-744 <sup>3</sup>	1.05	340	324x		
Pelabresib <sup>3</sup>	17	85	5-6x		
ABBV-075 <sup>1</sup>	3	11	3.7x		
MK-8628/OTX-015 <sup>5</sup>	17	26	1.5x		
BI-894999 <sup>6</sup>	41	5	0.1x		
ZEN-3694 <sup>7</sup>	Non-selective				

LESS BD2 SELECTIVE

MORE BD2 SELECTIVE

\*high plasma protein binding, > 1% free fraction



### Committed team tackling the greatest unmet needs in oncology



#### **Experienced biotech leadership team**

 Founded by Dr. David Hung, previously the founder and CEO of Medivation, who successfully developed and commercialized XTANDI®



## Broad pipeline across multiple stages of development

- Taletrectinib | ROS1 inhibitor: Pooled pivotal data presented in September 2024
- Safusidenib | mIDH1 inhibitor: Phase 2 study ongoing
- NUV-1511 | Drug-drug conjugate:
   Phase 1 dose escalation study ongoing
- NUV-868 | BD2-selective BET inhibitor: Completed Phase 1 and Phase 1b studies



## Potentially best-in-class candidates leveraging and improving validated mechanisms

Potential for better efficacy and tolerability



## Strong cash position to support operations in near term

\$577.2 million as of June 30, 2024



## Potential to become a commercial stage organization in 2025

- Planned NDA submission to U.S. FDA in Q4 2024
- Taletrectinib has been granted Breakthrough Therapy Designations in the U.S. and China



## **Appendix**

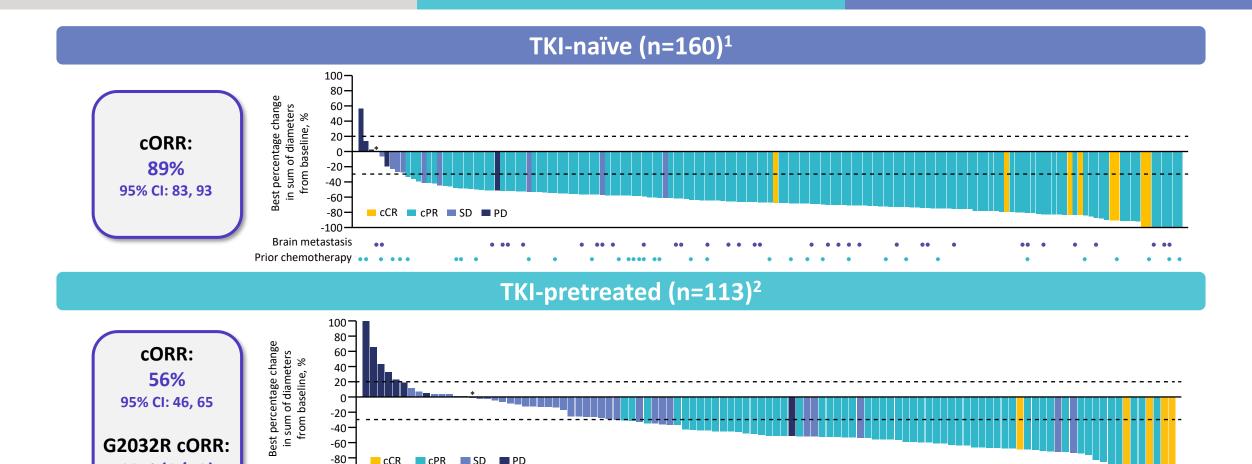


## Taletrectinib (ROS1i)

Summary of data from pooled TRUST-I & TRUST-II studies



## RECIST responses were observed in 89% of taletrectinib-treated patients who were TKI-naïve and 56% of those who were TKI-pretreated





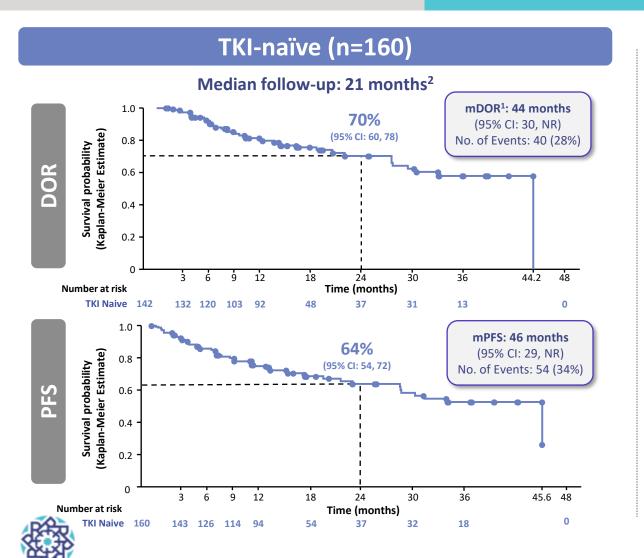
62% (8/13)

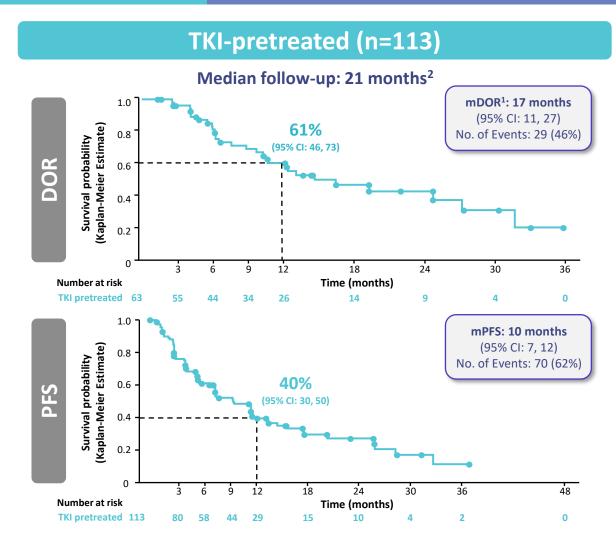
95% CI: 32, 86

-100

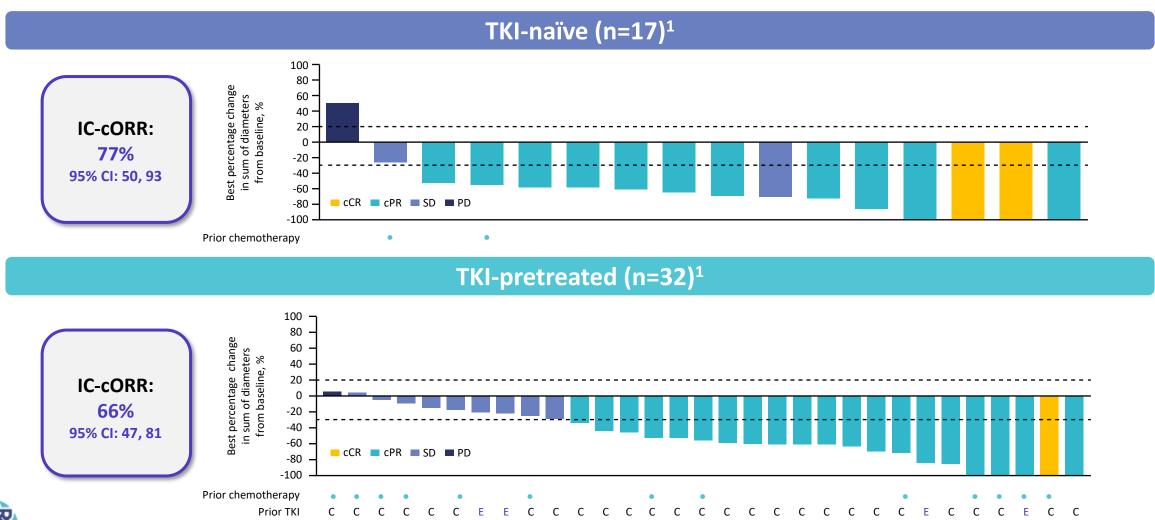
Brain metastasis Prior chemotherapy G2032R mutation

## Median duration of response and median progression free survival in TKI-naïve patients were 44 and 46 months





## Intracranial RECIST responses were observed in 77% and 66% of taletrectinib-treated patients who were TKI-naïve and TKI-pretreated





### RECIST responses were consistent across multiple subgroups of taletrectinibtreated patients who were TKI-naïve and TKI-pretreated



## Taletrectinib's safety profile was favorable with low incidence of neurologic TEAEs; only 7% of patients had a TEAE leading to treatment discontinuation

TEAE: n (%)	Any grade	Grade 1	Grade 2	Grade ≥3¹
Increased AST	243 (72)	161 (48)	56 (17)	26 (8)
Increased ALT	229 (68)	135 (40)	60 (18)	34 (10)
Diarrhea	213 (63)	168 (50)	38 (11)	7 (2)
Nausea	159 (47)	123 (36)	31 (9)	5 (2)
Vomiting	146 (43)	114 (34)	27 (8)	5 (2)
Anemia	126 (37)	75 (22)	39 (12)	12 (4)
Constipation	71 (21)	61 (18)	10 (3)	0
Dizziness	71 (21)	64 (19)	6 (2)	1 (1)
QT prolongation	65 (19)	44 (13)	9 (3)	12 (4)
Increased blood creatinine	61 (18)	50 (15)	11 (3)	0
Increased blood bilirubin	59 (18)	43 (13)	12 (4)	4 (1)
Increased blood CPK	56 (17)	36 (11)	13 (4)	7 (2)
Decreased neutrophil count	56 (17)	28 (8)	14 (4)	14 (4)
Decreased appetite	53 (16)	38 (11)	14 (4)	1 (1)
Decreased WBC count	53 (16)	31 (9)	17 (5)	5 (2)

#### Commentary

- Includes 337 patients with ROS1+ NSCLC who received ≥1 dose of taletrectinib 600 mg
- Median duration of exposure was 11 months
- Most common TEAEs were elevated liver enzymes and gastrointestinal events
- Neurologic TEAEs were low (dizziness: 21%; dysgeusia: 15%) and mostly grade 1
- 41% of patients had a TEAE leading to dose interruption
- 29% of patients had a TEAE leading to a dose reduction

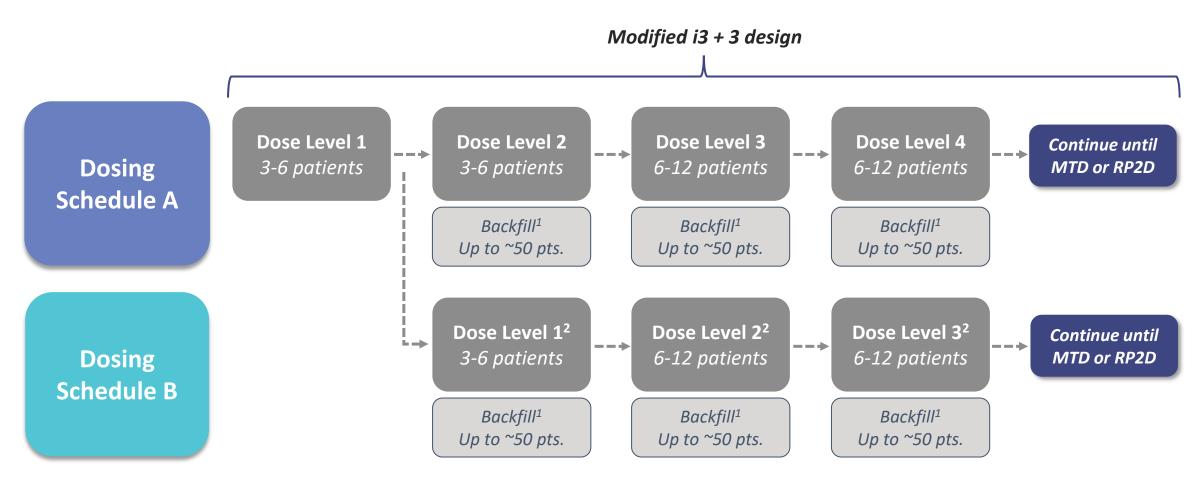


## **NUV-1511 (DDC)**

Phase 1 study protocol



## NUV-1511 Phase 1 study protocol provides flexibility to explore two dosing schedules while efficiently determining a RP2D





## **NUV-868 (BETi)**

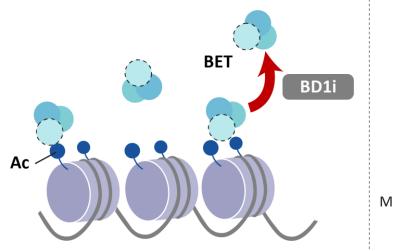
**BD2** inhibition

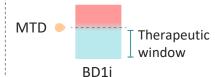


## BD2 selectivity blocks the ability of cancer cells to induce resistance pathways and, by avoiding BD1 inhibition, increases tolerability

#### **BD1** inhibition

- Regulates steady state gene expression
- <u>Displaces</u> BET proteins already associated with histones
- Toxicity minimizes the therapeutic window





#### **BD2** inhibition

- Regulates rapid gene induction
- <u>Prevents</u> BET proteins from becoming associated with histones
- Effective in models of cancer and inflammatory diseases
- BD2 selectivity increases the therapeutic window

