

**Corporate Presentation** 

NASDAQ: CRIS



### Cautionary Note Regarding Forward Looking Statements

This presentation contains certain forward-looking statements about Curis, Inc. ("we," "us," or the "Company") within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Words such as "expect(s)," "believe(s)," "will," "may," "anticipate(s)," "focus(es)," "plans," "mission," "strategy," "potential," "estimate(s)", "intend," "project," "seek," "should," "would" and similar expressions are intended to identify forward-looking statements. Forward-looking statements are statements that are not historical facts, reflect management's expectations as of the date of this presentation, and involve important risks and uncertainties. Forward-looking statements herein include, but are not limited to, statements with respect to the timing and results of future clinical and pre-clinical milestones; the timing of future preclinical studies and clinical trials and results of these studies and trials; the clinical and therapeutic potential of our drug candidates; and management's ability to successfully achieve its goals. These forward-looking statements are based on our current expectations and may differ materially from actual results due to a variety of important factors including, without limitation, risks relating to: whether any of our drug candidates will advance further in the clinical development process and whether and when, if at all, they will receive approval from the U.S. Food and Drug Administration or equivalent foreign regulatory agencies; whether historical preclinical results will be predictive of future clinical trial results; whether historical clinical trial results will be predictive of future trial results; whether any of our drug candidate discovery and development efforts will be successful; whether any of our drug candidates will be successfully marketed if approved; our ability to achieve the benefits contemplated by our collaboration agreements; management's ability to successfully achieve its goals; the sufficiency of our cash resources; our ability to raise additional capital to fund our operations on terms acceptable to us or the use of proceeds of any offering of securities or other financing; general economic conditions; competition; and the other risk factors contained in our periodic and interim reports filed with the Securities and Exchange Commission which are available on the SEC website at www.sec.gov. You are cautioned not to place undue reliance on these forwardlooking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events, except as required by law.

# **Corporate Overview**

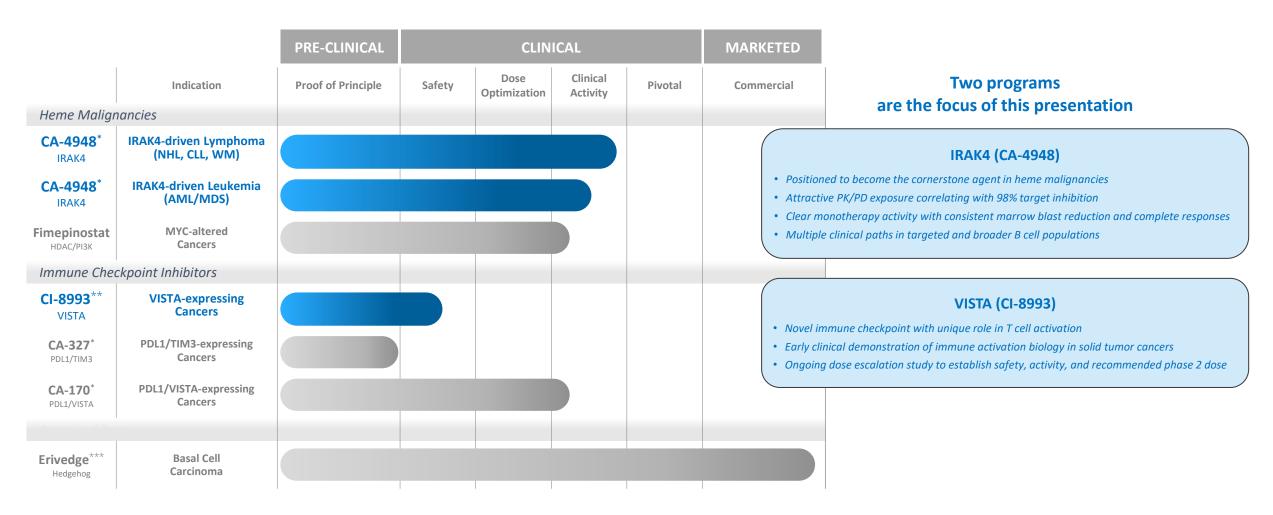
Curis seeks to develop novel, first-in-class, cancer therapeutics that we believe have significant potential in areas of unmet patient need Cash and investments of approximately \$150M as of September 30, 2021; cash runway into 2024				
CA-4948: CI-8993:	first-in-class inhibitor of IRAK4 in oncology There are no drugs currently approved for IRAK4 inhibition in oncology first-in-class antagonist of VISTA There are no drugs currently approved for VISTA inhibition			
Jan 2022: Jan 2022: 2022: 2022:	Report safety data in CI-8993 (VISTA) Report updated data for CA-4948 in AML/MDS monotherapy Discuss potential for rapid approval path for CA-4948 with FDA Report initial data of CA-4948 in combination with ibrutinib in NHL			
	that we Cash and invest CA-4948: CI-8993: Jan 2022: Jan 2022: 2022:			

CURIS

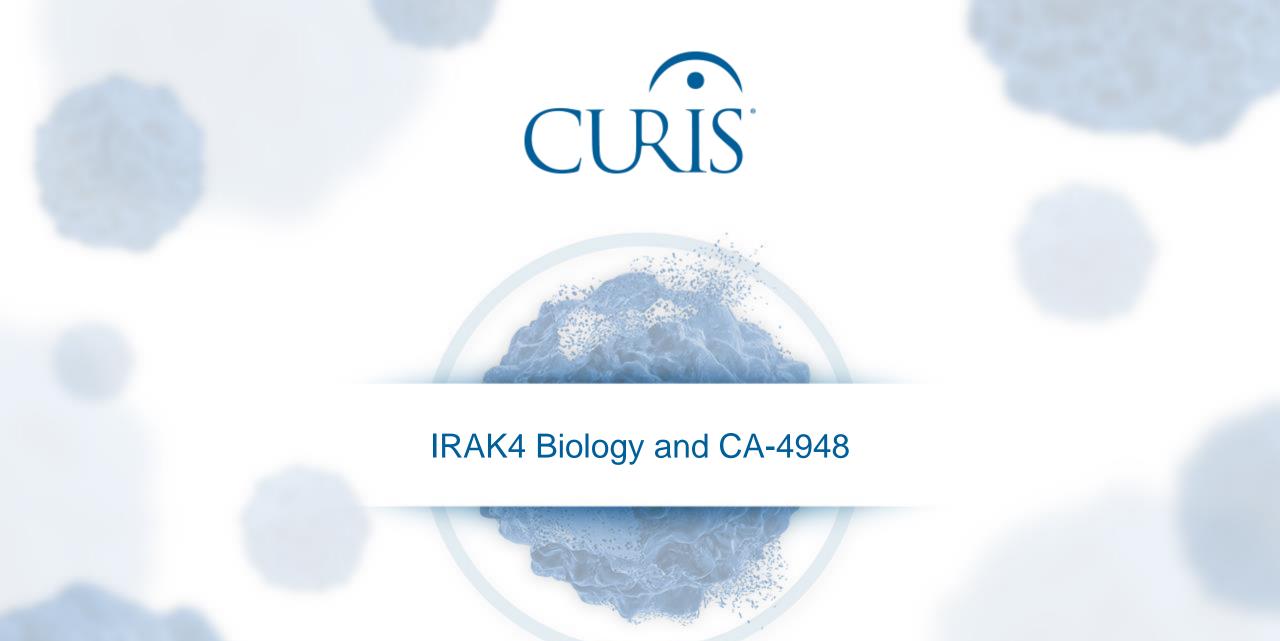
## Pipeline



### Curis develops novel, first-in-class cancer drugs



INTERPORT \* IP licensed from Aurigene
 ImmuNext \*\* Exclusive option to license IP from ImmuNext
 Genenech \*\*\* IP licensed to Genentech (Curis receives royalty income)

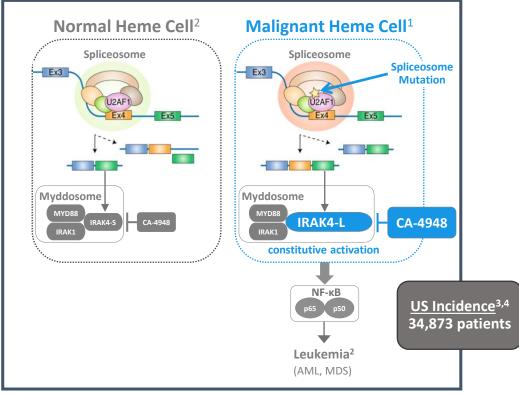


# **IRAK4 Biology and CA-4948**

*IRAK4* is a novel and important target across multiple heme malignancies

#### IRAK4 in AML/MDS

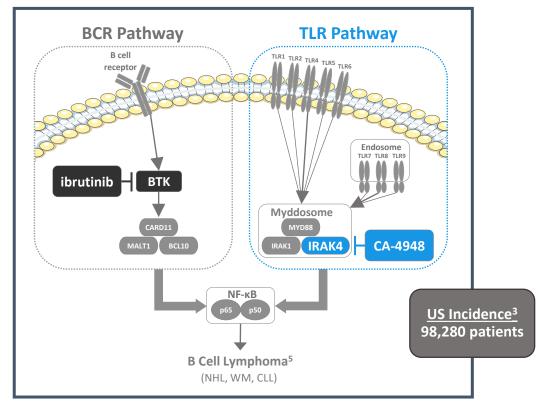
*Spliceosome mutation drives overexpression of IRAK4-L (which causes constitutive activation of the myddosome)* 



- 1) Guillamot et al. Nat Cell Biol 2019
- 2) Smith et al. Nat Cell Biol 2019
- 3) American Cancer Society, Cancer Facts & Figures 2020
- 4) Leukemia & Lymphoma Society, Facts and Statistics Overview
- 5) IMBRUVICA Package Insert. Rev 08/2018

#### **IRAK4 in B Cell Cancers**

TLR Pathway is dependent upon IRAK4 for function (the 2<sup>nd</sup> pathway driving NF-кВ overactivity)



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### CA-4948 Targeted Design

CA-4948 is the most advanced IRAK4 inhibitor in clinical development for cancer

and several additional key oncogenic targets FLT3 **IRAK4** CLK1,2,4 -Haspin 90-100% 80-89% 60-79% 40-59% 20-39% • 0-19% % Inhibition at 0.1 nM Illustration reproduced courtesy of Cell Signaling Technology

CA-4948 inhibits IRAK4

### CA-4948 binding affinity

IRAK1         12,000           IRAK2         >20,000           IRAK3         8,500	
IRAK3 8.500	
IRAK4 23	
DYRK1A 25	
FLT3 (D835H) 5	
FLT3 (D835V) 44	
FLT3 (ITD) 8	
FLT3 (K663Q) 47	
FLT3 (N841I) 16	
Haspin (GSG2) 32	
CLK1 10	
CLK2 20	
CLK3 >20,000	
CLK4 14	
RET (V804L) 3,000	
TrkA 130	

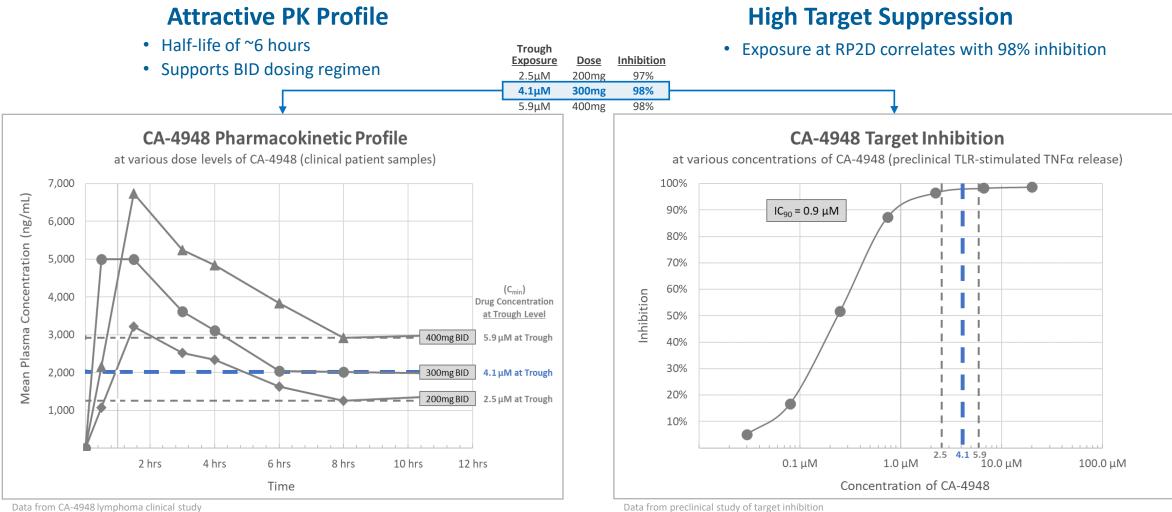
DiscoverX Kinase Panel

(378 kinases screened)

In Nov 2020, the NCI selected CA-4948, Curis's first-in-class IRAK4 inhibitor, and entered into an agreement ("CRADA") with Curis to conduct both clinical and non-clinical studies of CA-4948 in oncology

## CA-4948 PK/PD

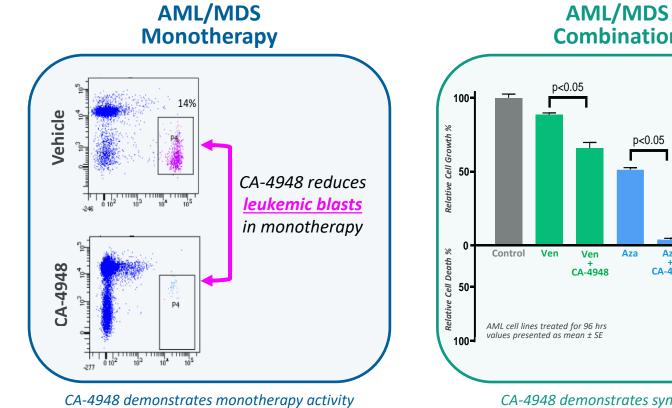
### Attractive PK profile supports BID dosing and high target suppression



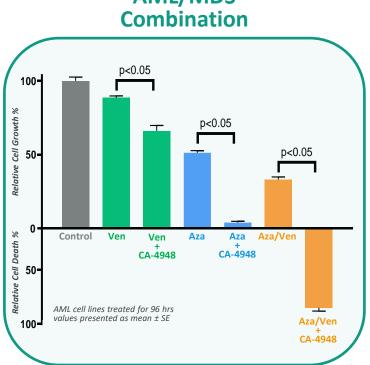
Data from CA-4948 lymphoma clinical study

# CA-4948 Preclinical Data

Clear anti-cancer activity suggests broad potential across heme malignancies

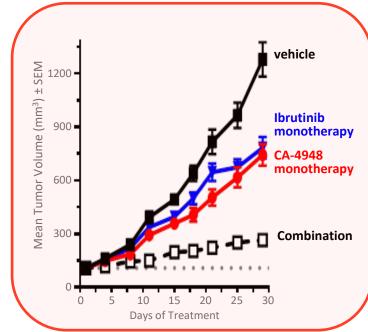


in patient-derived xenografts<sup>1</sup>



CA-4948 demonstrates synergy with both azacitidine and venetoclax in THP-1 model<sup>2</sup>



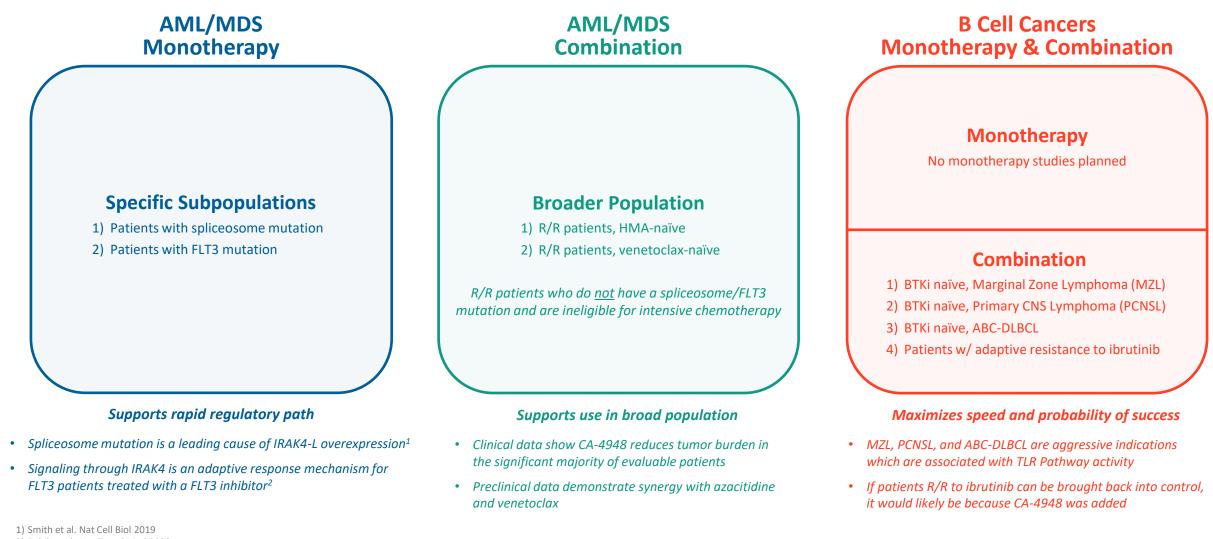


CA-4948 demonstrates monotherapy and combination activity in OCI-Ly10 model<sup>3</sup>

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# CA-4948 Clinical Plan

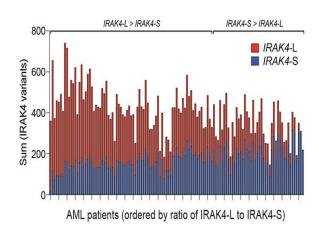
### Planned clinical studies for AML/MDS and B cell cancers







Disease Driver	% of Patient <u>Population</u>
IRAK4-L	> 50% <sup>1</sup>
FLT3	25-30% <sup>2</sup>
TET2	10-20% <sup>3</sup>
IDH2	9-13% <sup>4</sup>
IDH1	6-10% <sup>4</sup>
CEBPA	~10% <sup>3</sup>



Smith et al. Nat Cell Biol 2019
 Saygin, et al. J Hematol Oncol. 2017 Apr 18
 DiNardo, Cortes. Hematology Am Soc Hematol Educ Program. 2016
 DiNardo et al. N Engl J Med 2018
 Rabik et al. Ann Transl Med 2020

#### **Rationale for Monotherapy**

- IRAK4 / FLT3 is the largest targeted market in AML/MDS<sup>1,2</sup>
- Spliceosome mutation is a leading cause of IRAK4-L overexpression<sup>1</sup>
- Signaling through IRAK4 is an adaptive response mechanism for FLT3 patients treated with a FLT3 inhibitor<sup>5</sup>

#### **Rationale for Combination**

- Nearly all patients express some level of IRAK4-L<sup>1</sup>
- Clinical data show CA-4948 reduces tumor burden in the significant majority of evaluable patients
- Preclinical data demonstrate clear synergy with azacitidine and venetoclax
  - IRAK4 stimulates NF-κB and ultimately an array of anti-apoptotic factors (beyond BCL2), which prevent the effectiveness of anti-leukemic drugs
  - Blocking this effect with CA-4948 synergistically enhances the anti-cancer efficacy of those agents in preclinical models

### Study design and patient characteristics

# >90% of patients enrolled had intermediate or worse cytogenetic risk

### Phase 1/2 Study

- Open-label, single arm
- Dose escalation and expansion

### **Study Objectives**

- 1°: Determine maximum tolerated dose Determine recommended Phase 2 dose
- 2°: Pharmacokinetic (PK) profile Preliminary anti-cancer activity

#### **Study Population**

- Relapsed/Refractory AML or High-Risk MDS
- ECOG performance Status of  $\leq 2$
- Age ≥ 18 years

#### Dosing

- Oral, Twice Daily (BID) Dosing
- 28-day cycles
- 3+3 escalation

```
(200 \text{mg} \rightarrow 300 \text{mg} \rightarrow 400 \text{mg} \rightarrow 500 \text{mg})
3 patients 6 patients 10 patients 3 patients
```

Baseli	ine Patient Characteristics	Patients (n=22)			
Female n (%) : Male	e n (%)	5 (23) : 17 (77)			
Median Age		74 yrs			
ECOG: n 0/1/2		7 / 11 / 4			
Cytogenetic Risk <sup>3</sup>	AML (favorable, intermediate, adverse)	1 (10) , 2 (20) , 7 (70)			
n (%)	hrMDS (good, intermediate, poor, very poor)	1 (9) , 4 (36) , 3 (27) , 3 (27)			
Diagnosis	AML	11 (50)			
n (%)	AML	11 (50)			
Median platelets (10 <sup>3</sup> /mm <sup>3</sup> ) (range)		33 (7, 275)			
Median ANC (10 <sup>3</sup> /mm <sup>3</sup> ) (range)		1.2 (0.1, 14.8)			
Median lines of prior therapy (range)		2 (1-4)			
	Azacitidine	14 (64)			
Prior Therapy n (%)	Decitabine	7 (32)			
	Cytarabine	3 (14)			
	Venetoclax	10 (45)			
Relevant Mutations	FLT3	1			
	SF3B1	2			
	U2AF1	2			

Data cut-off: 30Apr2021



Preliminary safety data suggest differentiated profile

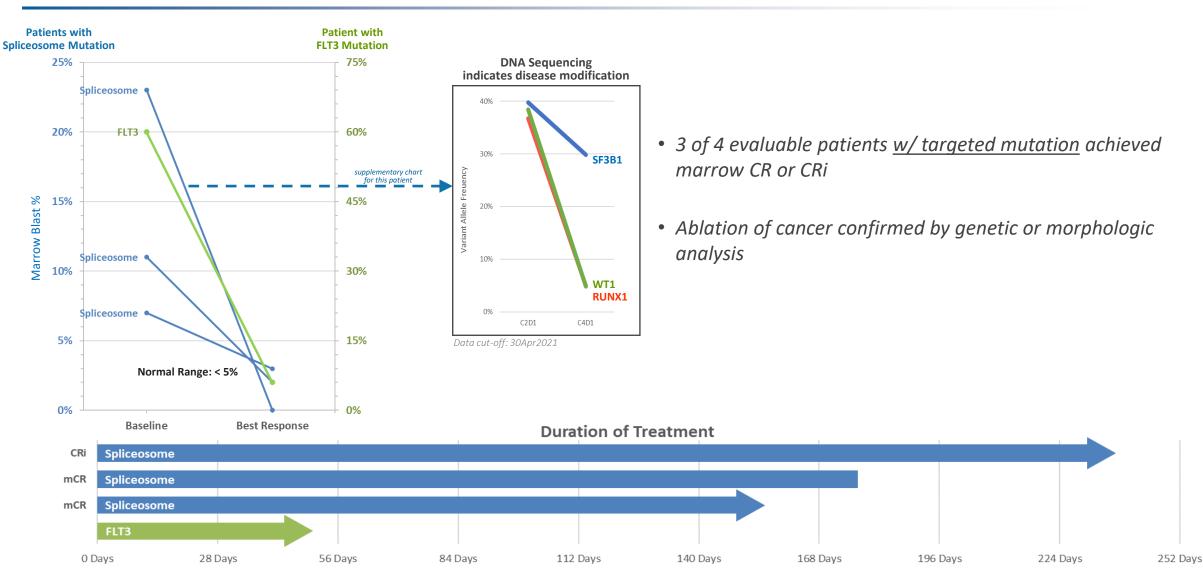
#### Predictable and manageable safety profile

- MTD not exceeded until 500mg BID
- No dose-limiting toxicities related to myelosuppression
- No overlap in dose-limiting toxicities with azacitidine and venetoclax, which are planned for combination with CA-4948
- Dose-limiting side effect at higher doses consists of uncomplicated rhabdomyolysis (elevated CPK and muscle soreness), was manageable, quickly and easily detected, readily reversible, and did not limit further treatment at a reduced dose level

# Preliminary Clinical Data: Specific Population in Monotherapy



Clear efficacy highlights potential for rapid regulatory path in spliceosome and FLT3

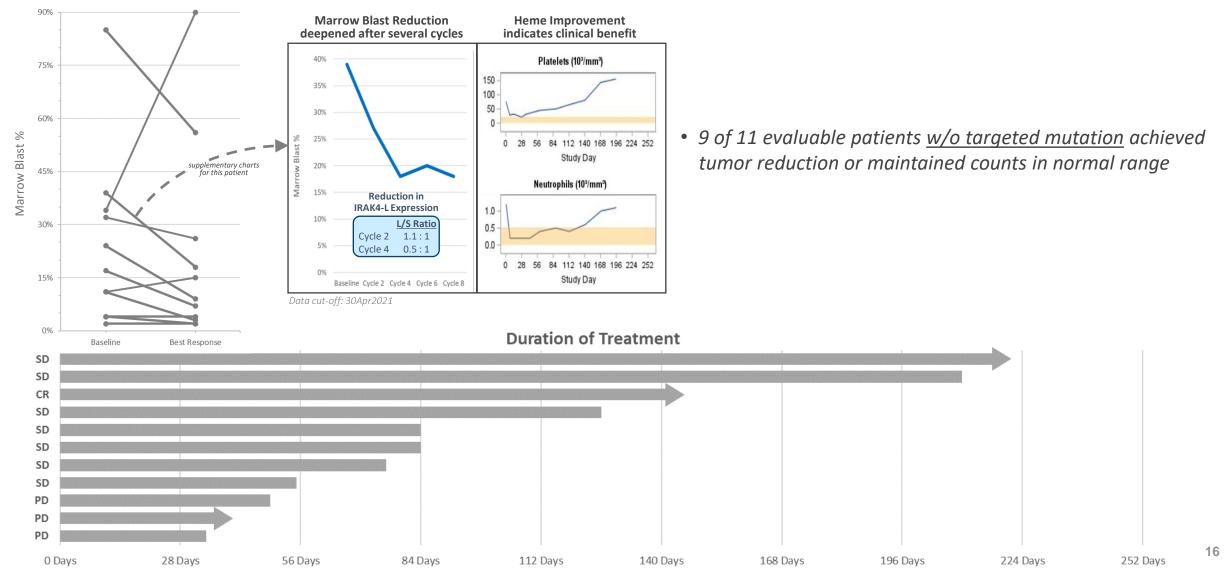


# Preliminary Clinical Data: Broader Population in Combination



Efficacy supports differentiated profile even in patients without spliceosome/FLT3 mutation

#### **Unselected Patients**





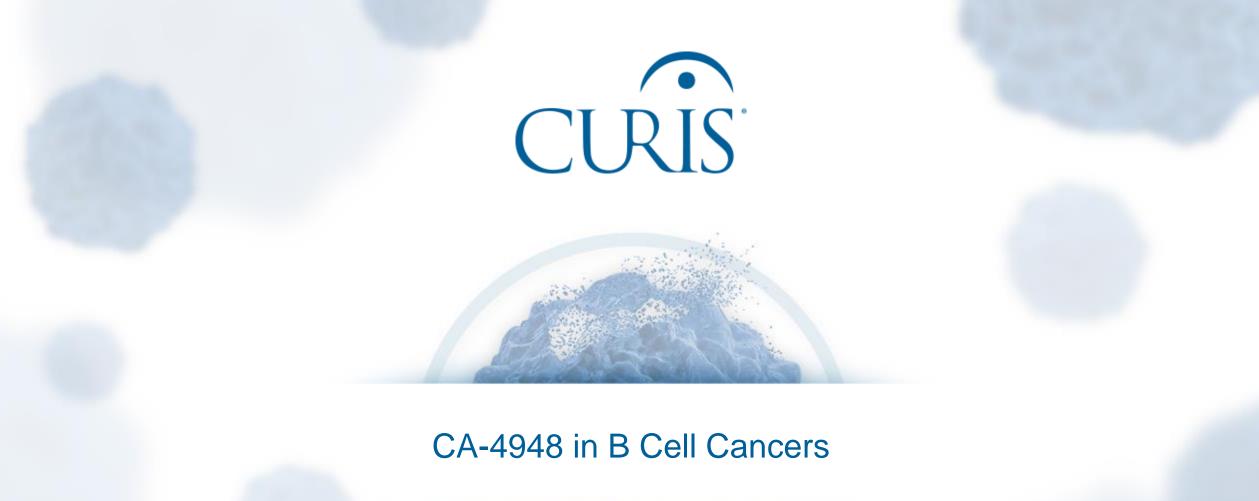
### Multiple regulatory paths based on clear biologic activity and durable responses

- Preliminary clinical data show clear biologic activity with deepening, durable responses
  - In population targeted for monotherapy,
     3 of 4 patients achieved marrow CR or CRi
  - Ablation of cancer confirmed by genetic or morphologic analysis
- Multiple paths to rapid regulatory approval in targeted subpopulations
- Clear anti-cancer activity in broader population suggests expanded opportunity in combination therapy

### **Next Steps in Expansion**

- Monotherapy: Spliceosome mutation
- Monotherapy: FLT3 mutation
- Combination: CA-4948 + azacitidine
- Combination: CA-4948 + venetoclax

Plan to discuss potential for rapid approval path with FDA in 2022





### *Monotherapy Phase 1/2 study design and patient characteristics*

### **Study Objectives**

- 1°: Determine maximum tolerated dose Determine recommended Phase 2 dose
- 2°: Pharmacokinetic (PK) profile Preliminary anti-cancer activity

### **Study Population**

- Relapsed/Refractory B-cell NHL, including WM/LPL
- ECOG performance Status of  $\leq 1$ •
- Age  $\geq$  18 years

### Dosing

- Oral, Once Daily (QD) and Twice Daily (BID) Dosing
- 21-day cycles
- 3+3 escalation

 $(50 \text{mg} \rightarrow 100 \text{mg} \rightarrow 200 \text{mg} \rightarrow 300 \text{mg} \rightarrow 400 \text{mg} \text{BID})$ 

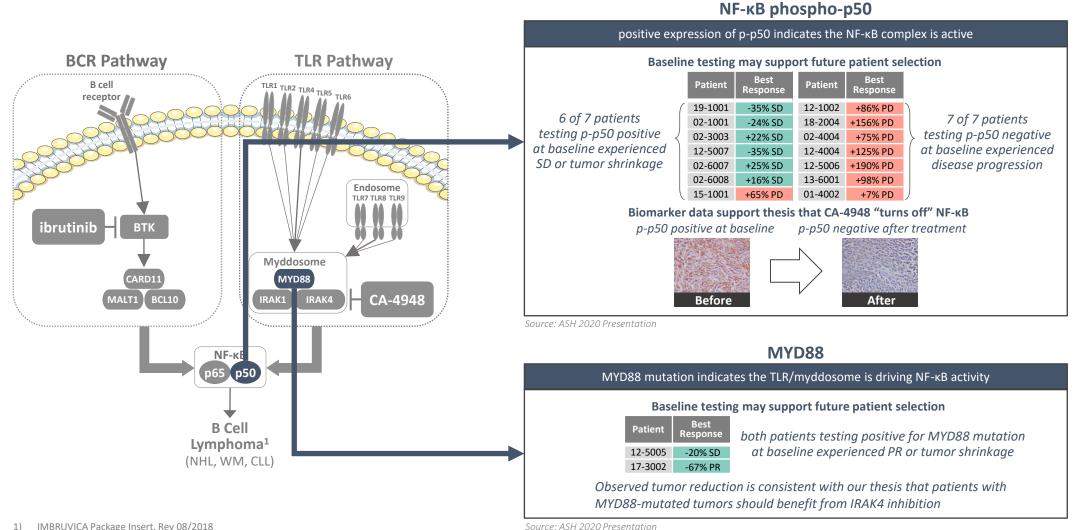
Basel	ine Patient Characteristics	Patients (n=31)			
Female n (%) : Male n (%)		26 (84) : 5 (16)			
Median Age (range)		69 yrs			
	DLBCL	14 (45)			
Diagnosis n (%)	Transformed Follicular	6 (19)			
	Waldenströms Macroglobulinemia	4 (13)			
	Other	7 (23)			
Median lines of prior therapy		4			
Prior Therapy n (%)	BTK inhibitor	6 (19)			
	CAR-T	5 (16)			
	ASCT	7 (23)			
	Other	13 (42)			
MYD88 Status	Positive	2 (6)			
	Negative	18 (58)			
	Unknown	11 (35)			

Source: ASH 2020 Presentation

Heavily pre-treated population



### Two potential biomarkers may increase probability of success



Source: ASH 2020 Presentation



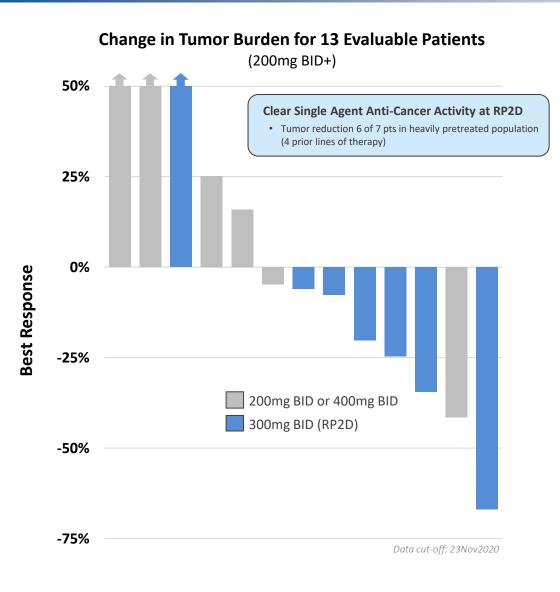
Promising preliminary safety data

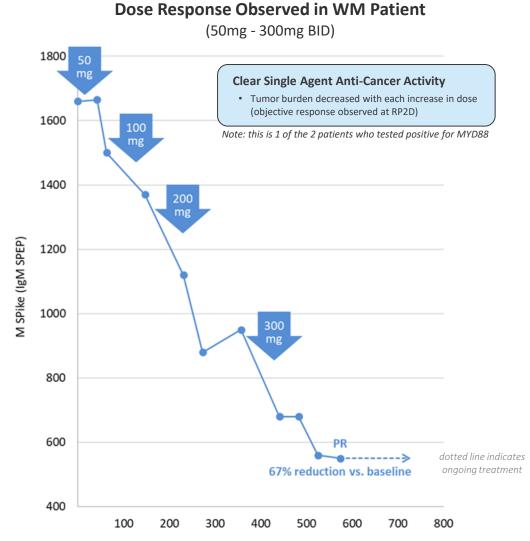
### Predictable and manageable safety profile

- MTD not exceeded until 400mg BID
- No overlap in dose-limiting toxicity with ibrutinib, which is planned for combination with CA-4948
- Dose-limiting side effect at higher doses consists of uncomplicated rhabdomyolysis (elevated CPK and muscle soreness), was manageable, quickly and easily detected, readily reversible, and did not limit further treatment at a reduced dose level

	Adverse Reaction	200 mg BID (n=5); (%)		<b>300 mg BID</b> (n=6); (%)		<b>400 mg BID</b> (n=8); (%)		<b>All</b> (n=30); (%)	
		All Grades	Grade 3 or 4	All Grades	Grade 3 or 4	All Grades	Grade 3 or 4	All Grades	
	Diarrhea	20	0	33	0	25	0	20	
Gastrointestinal disorders	Nausea	20	0	17	0	38	0	27	
Gastrointestinai disorders	Vomiting	20	0	17	17	25	0	20	
	Constipation	20	0	0	0	13	0	20	
	Upper respiratory infection	40	20	0	0	13	0	7	
Respiratory	Dyspnoe	20	0	0	0	13	13	7	
	Upper-airway cough	40	0	0	0	0	0	7	
	Fatigue	40	0	0	0	50	0	37	
General & Other	Oedema	20	0	0	0	0	0	10	
	Dehydration	20	0	0	0	13	13	10	
	Headache	20	0	0	0	13	0	10	
	Dizziness	0	0	0	0	25	0	20	
Nervous system disorders	Insomnia	20	0	0	0	13	0	7	
	Peripheral sensory neuropathy	0	0	0	0	25	0	7	
	Back pain	20	0	0	0	13	0	10	
Musculoskeletal disorders	Myalgia	40	0	0	0	38	0	17	
	Rhabdomyolysis	0	0	0	0	25	25	7	
	Muscle weakness	20	20	0	0	13	0	7	
	Neutropenia	40	40	17	17	25	0	7	
Hematological	Anemia	20	0	33	0	13	13	20	
	Thrombocytopenia	0	0	0	0	13	13	7	

### Preliminary clinical data: clear reduction in tumor burden

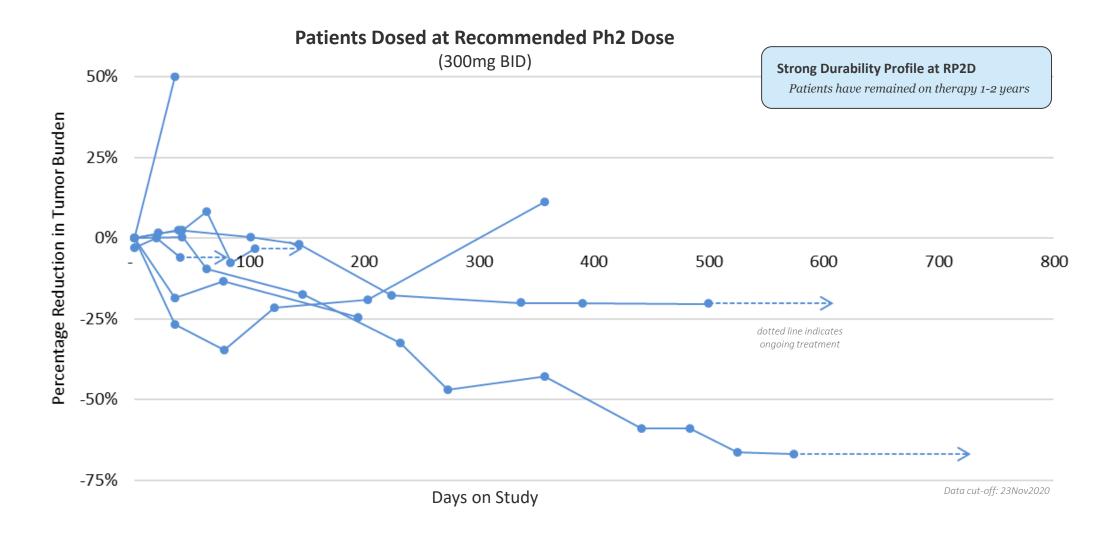




Days on Study

CURI

### Preliminary clinical data: strong durability profile



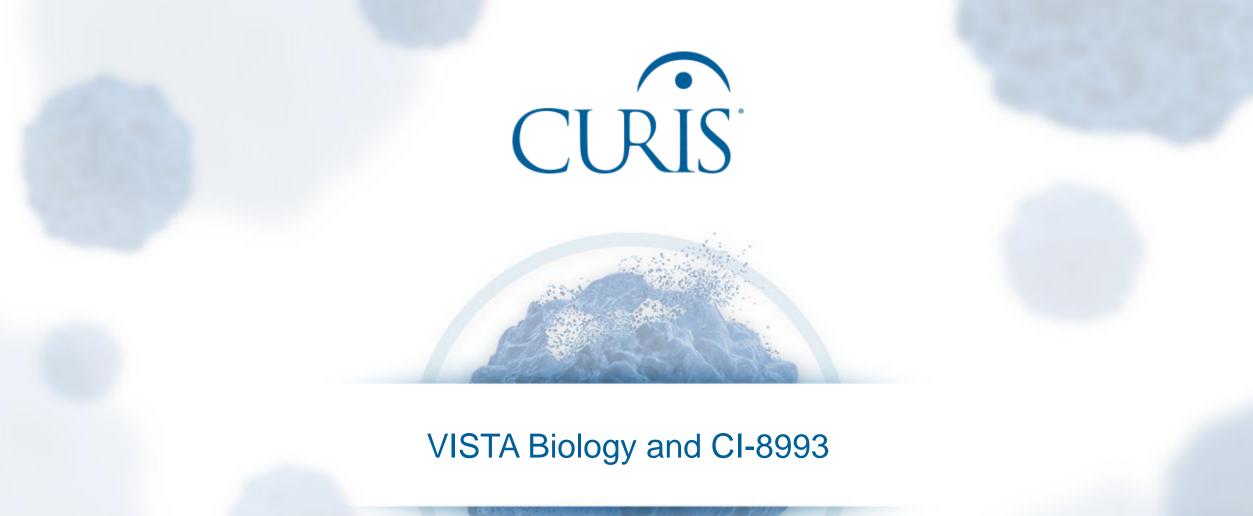


### CA-4948 is the ideal candidate to combine with BTKi to maximize downregulation of NF- $\kappa B$

- Patients are treated with BTKi because downregulating NF-κB activity provides benefit in B Cell Cancers
- Two pathways drive NF-κB:
  - BCR Pathway: addressed with BTKi
  - TLR Pathway: addressed with IRAK4i
- Preliminary clinical data demonstrate clear reduction in tumor burden, even in heavily pretreated patients

### Next Steps in Expansion

- BTKi naïve, Marginal Zone Lymphoma (MZL)
- BTKi naïve, Primary CNS Lymphoma (PCNSL)
- BTKi naïve, ABC-DLBCL
- Patients with adaptive resistance to ibrutinib





# **VISTA Biology**

### VISTA is an important checkpoint regulator target across multiple malignancies

#### **RESEARCH ARTICLE SUMMARY**

#### T CELLS

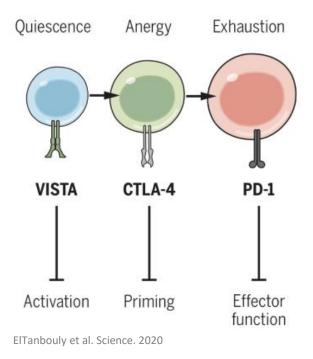
# VISTA is a checkpoint regulator for naïve T cell quiescence and peripheral tolerance

Mohamed A. ElTanbouly\*, Yanding Zhao\*, Elizabeth Nowak, Jiannan Li, Evelien Schaafsma, Isabelle Le Mercier, Sabrina Ceeraz, J. Louise Lines, Changwei Peng, Catherine Carriere, Xin Huang, Maria Day, Brent Koehn, Sam W. Lee, Milagros Silva Morales, Kristin A. Hogquist, Stephen C. Jameson, Daniel Mueller, Jay Rothstein, Bruce R. Blazar, Chao Cheng†, Randolph J. Noelle†

- CTLA-4, PD-1, and VISTA are the three main players in controlling checkpoint blockade
- VISTA controls early T cell activation events
- Blockade of VISTA will allow for an expanded T cell response against tumors

ElTanbouly et al. Science. 2020

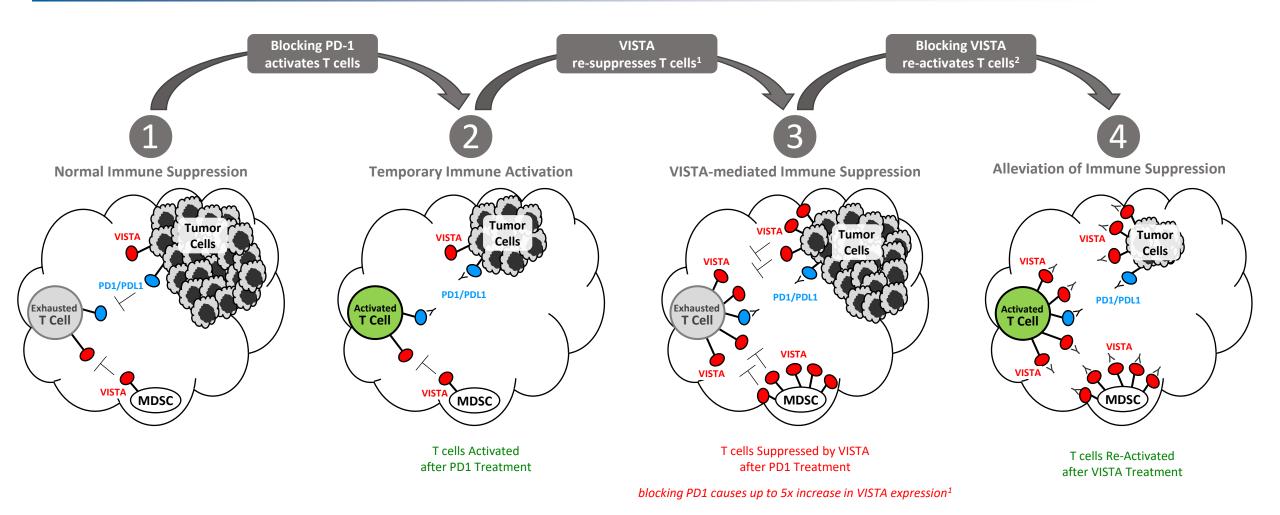
#### Integration of VISTA with other wellestablished negative checkpoint regulators of T cell activation



# **VISTA Biology**



### Role of VISTA in immune suppression in the tumor microenvironment (TME)



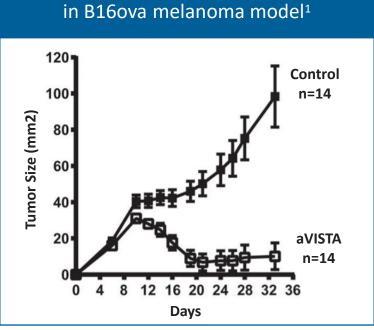
# **CI-8993 Preclinical Data**



Clear anti-cancer activity suggest potential transformation of immune-oncology treatment

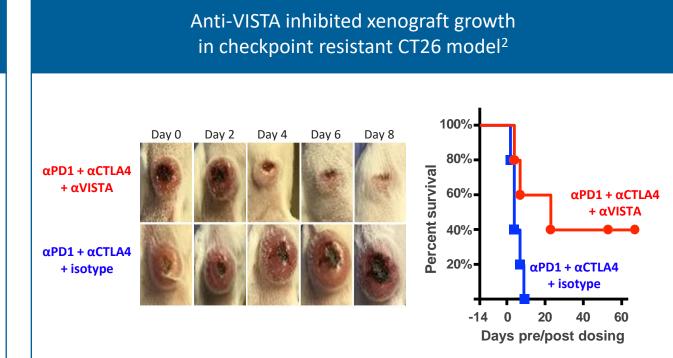
### Monotherapy

Anti-VISTA inhibited tumor growth



<sup>1</sup> Le Mercier et al. Cancer Res. 2014 Apr 1

**Combination Therapy** 

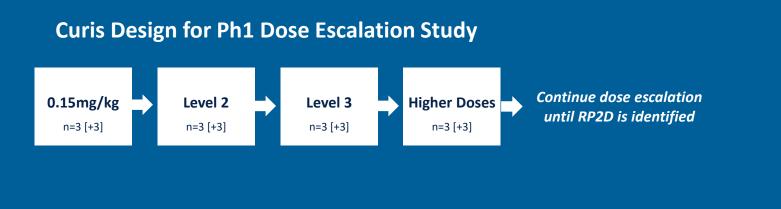


<sup>&</sup>lt;sup>2</sup> J. Lines, IEBMC Conference 2019

# **CI-8993 Clinical Plan**

# CURIS

### Ongoing clinical study to determine safety



#### **Patient Population**

• Patients with advanced refractory solid tumors (includes mesothelioma, melanoma, NSCLC, TNBC)

#### Treatment

- Bi-weekly dosing
- Mitigate potential toxicities by desensitization, premedication, dosing interval and duration

#### Objective

- Safety, PK/PD, tolerability during dose escalation
- Anti-cancer activity during expansion

### CI-8993 is the first anti-VISTA monoclonal antibody to enter the clinic

- Janssen licensed VISTA IP from ImmuNext in 2012 and initiated a Ph1 study in 2016 (JNJ-61610588)
- 12 patients were enrolled; initial dose level was 0.005mg/kg
- Low-grade transient Cytokine Release Syndrome (CRS) seen at 0.15mg/kg and above

### Janssen halted study after 1 DLT at sub-therapeutic dose level

- The only patient treated at 0.3mg/kg experienced grade 3 CRS-associated encephalopathy after 36hrs on treatment
- Patient was initially treated w/antibiotics; symptoms resolved after treatment with tocilizumab
- Janssen opted to halt the study and return IP to ImmuNext

Target range for expected anti-cancer activity (0.5 – 2.0mg/kg) was never reached

#### **Curis Study Design Incorporates Key Learnings from Janssen Ph1 Study**

- CRS is likely an on-target toxicity; indicates drug is hitting the target and inducing inflammatory response
- Oncology community is now familiar with managing CRS; NCCN guidelines were issued in 2018
- FDA cleared the study IND which outlined our plan for managing CRS and enabling escalation to therapeutic dose levels

# CI-8993 in Solid Tumors



### CI-8993 has potential to be the leading anti-VISTA therapeutic

- VISTA's role in enforcing T cell quiescence limits the effectiveness of other immune checkpoint therapies
- Preclinical data demonstrate potential to transform treatment with CTLA4/PD1 checkpoint inhibitors
- CI-8993 is the leading anti-VISTA monoclonal antibody in clinical studies

### **Next Steps in Dose Escalation**

• Confirm that CI-8993 can be administered safely (that CRS can be managed) in dose escalation

# **Corporate Overview**

Investment Thesis	Curis seeks to develop novel, first-in-class, cancer therapeutics that we believe have significant potential in areas of unmet patient need Cash and investments of approximately \$150M as of September 30, 2021; cash runway into 2024				
Robust Pipeline	CA-4948: CI-8993:	first-in-class inhibitor of IRAK4 in oncology There are no drugs currently approved for IRAK4 inhibition in oncology first-in-class antagonist of VISTA There are no drugs currently approved for VISTA inhibition			
Upcoming Milestones	Jan 2022: Jan 2022: 2022: 2022:	Report safety data in CI-8993 (VISTA) Report updated data CA-4948 in AML/MDS monotherapy Discuss potential for rapid approval path for CA-4948 with FDA Report initial data of CA-4948 in combination with ibrutinib in NHL			

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### Curis

### Committed, Experienced Leadership Team



Mark Noel Head, Intellectual Property

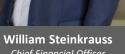
**Reinhard von Roemeling** Head, Clinical Development

**Raul Soikes** Head, Portfolio Management



Nancy Soohoo General Counsel





Chief Financial Officer

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End of Corporate Presentation

NASDAQ: CRIS

