Corporate Presentation

October 2018

NASDAQ: CRIS

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)," "feel(s)," "believe(s)," "will," "may," "anticipate(s)" 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 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; our ability to raise additional capital to fund our operations on terms acceptable to us; 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 forward-looking 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.

Evolution of Curis

Progressing from Pipeline Building to Execution

Curis has built a novel pipeline with three first-in-class programs.
In 2019, our focus shifts to the efficient execution of clinical studies and the production of clinical data.

Pipeline Building

2014-2017

- Identify targets of interest and design first-in-class molecules to hit them
- Establish collaborations to in-license novel technology

Regulatory Planning

2018

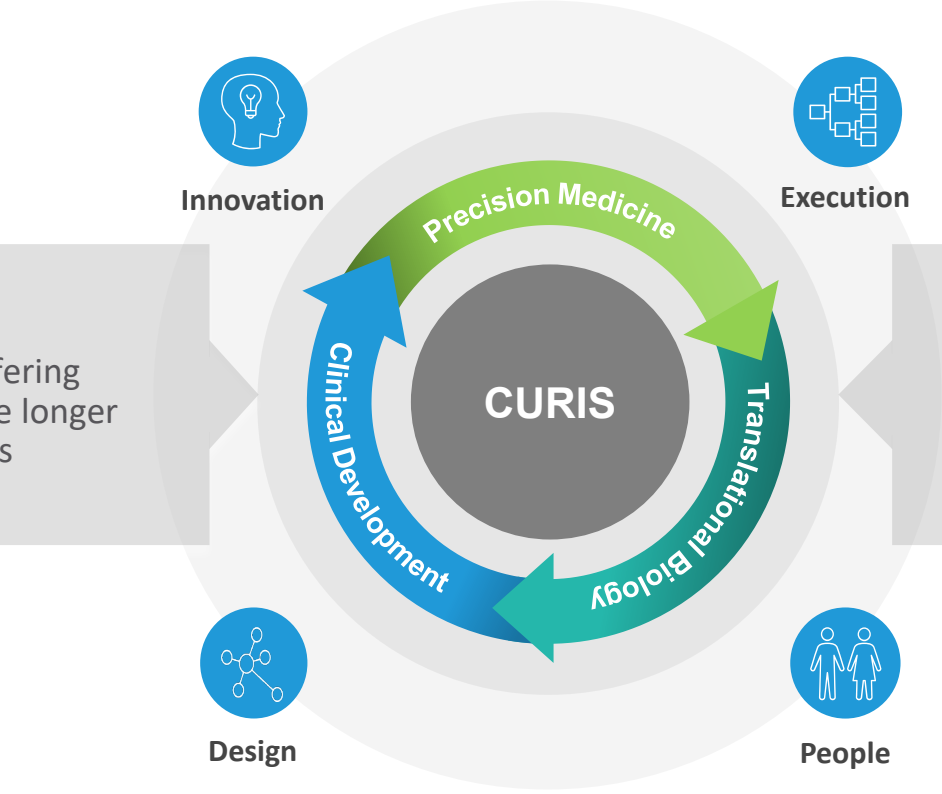
- Consult with clinicians and regulatory agencies to determine clinical path
- Identify the right patient populations for our programs

Execution

2019

- Progress three clinical studies quickly and efficiently
- Produce clinical data in all three programs

Focusing on the New Generation of Targeted Drugs for the Treatment of Cancer



Mission

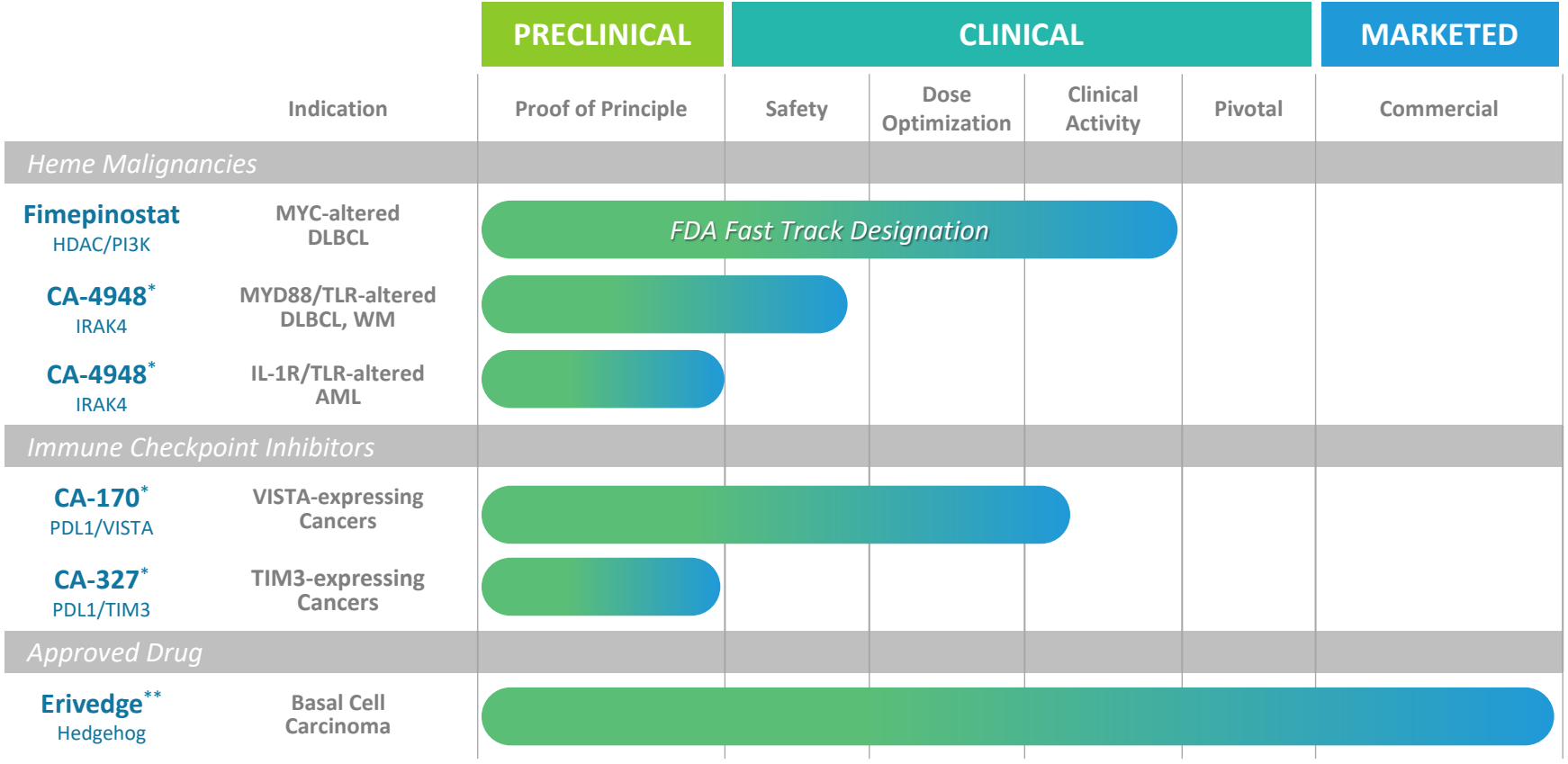
Help patients suffering with cancer to live longer and healthier lives

Strategy

Select the *right* targets
Design the *right* drugs
Study the *right* patients

Pipeline of Oncology Drug Candidates

First-in-Class, orally available, targeted small molecules



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Targeted Drugs in Heme Malignancies

Fimepinostat: For treatment of MYC-altered DLBCL

Diffuse Large B-Cell Lymphoma (DLBCL)

Most common form of NHL accounting for ~30% of cases

- Population
  - 100,000 DLBCL patients diagnosed per year[1,2,3]
    (35% of DLBCL patients are MYC-altered)[4]

- Current Treatment

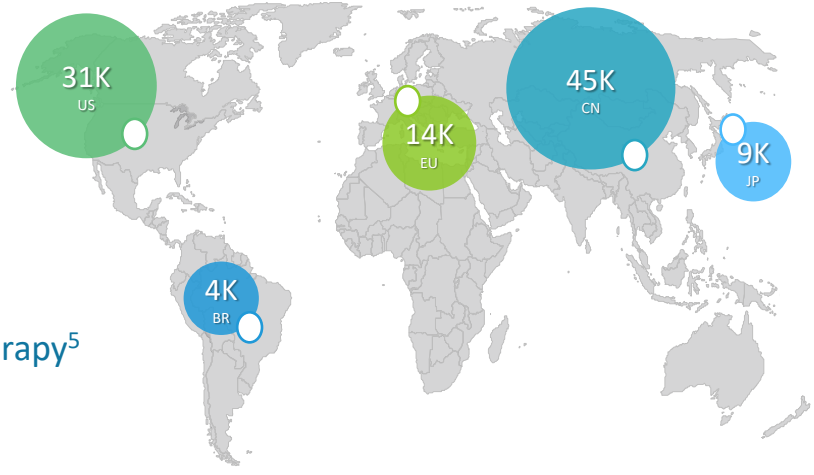
  1st Line Treatment: CHOP/EPOCH ± Rituximab[5]

  Relapsed/Refractory: SCT/CAR-T[4,5]

  or

  Single/Multiple Agent Chemotherapy[5]

DLBCL Incidence (2017)



- Unmet Need
  - Majority of R/R DLBCL patients are ineligible for SCT/CAR-T[5,6,7]
  - Poorest prognosis for patients with Double-hit (DH) and Double-expressor (DE) lymphoma[4]
  - No current treatments target the molecular genetics of disease (e.g., MYC, BCL2, MYD88), that contribute to its chemo-resistance[8,9]

1) Decision Resources, 2018; 2) EvaluatePharma (BlackSwan Insights), 2018; 3) UpToDate, 2018; 4) Landsburg et al. Curr Hematol Malig Rep. 2016 June;11(3):208-17; 5) Galaznik et al. Evaluation of Treatment Patterns Among Patients with DLBCL. ISPOR 22nd Annual Meeting. Boston, MA. May 20–24, 2017; 6) Trinity Partners, 2018; 7) Facts About CAR-T Therapy. Leukemia & Lymphoma Society. 2018; 8) Maji et al. Advances in Cancer Research. 2018. 137:37-75; 9) Kumari et al. Genes (Basel). 2017 Jun; 8(6): 158.

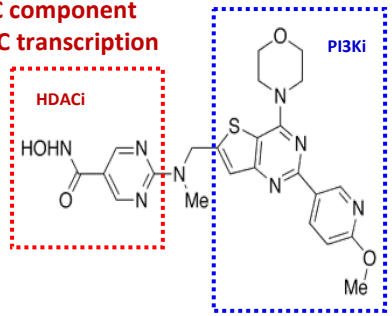
Fimepinostat

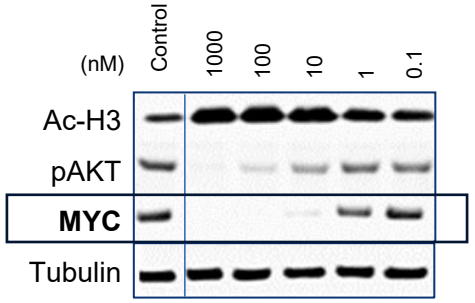
In development for patients with MYC-altered disease

Profile	
Value Proposition	• First-in-class drug with demonstrated anti-tumor activity in DLBCL patients with high unmet need • Composition-of-matter IP extends into 2032
Population	• MYC-altered DLBCL, including Double-Hit Lymphoma
Product Description	• Potent and orally bioavailable dual inhibitor of HDAC and PI3K enzymes[1] • HDAC component inhibits transcription of MYC and MYC-regulated genes[2] • PI3K component results in ubiquitin mediated MYC protein degradation[2] • Favorable safety profile in over 200 patients

The HDAC component inhibits MYC transcription

The PI3K component decreases MYC protein levels





Protein levels in DLBCL cells after treatment with Fimepinostat

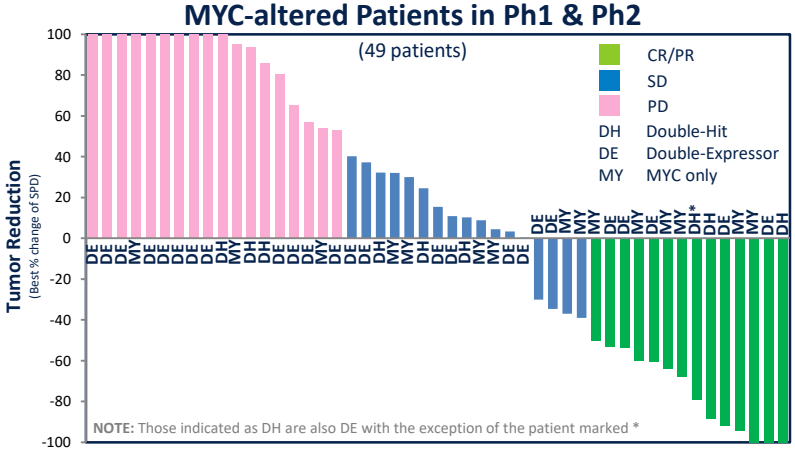
Potent and dose-dependent downregulation of MYC protein

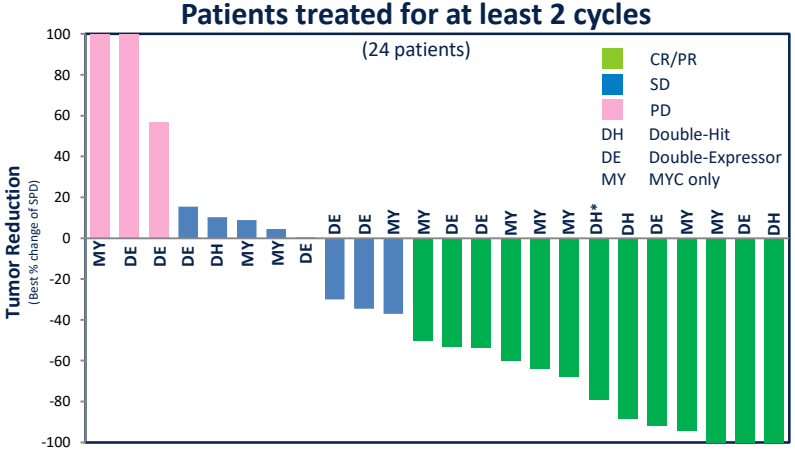
1) Qian et.al. Clin Cancer Res. 2012. 18: 4104

2) Sun et.al. Mol Cancer Ther. 2017. 6: 285

Fimepinostat is Active in MYC-altered DLBCL

Durable responses (13.6 months), including in patients with DH and DE





subset of patients treated ≥ 2 cycles

Strong rationale to combine with anti-lymphoma agents to improve time to onset of response

105 patients with R/R DLBCL treated in Ph1 & Ph2
- 60 patients (49 evaluable) with MYC-altered disease
- 8 CR and 6 PR, including 8 patients that are DH and/or DE
- 13.6 month median duration of response

24 patients with R/R DLBCL were treated ≥ 2 cycles
- Fimepinostat efficacy improves with multi-cycle exposure
- Combining Fimepinostat with an anti-lymphoma agent could improve time to onset of response

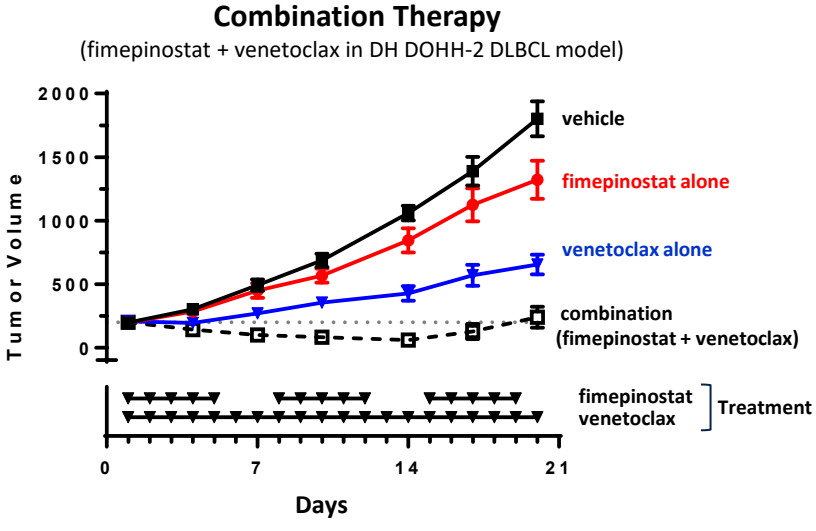
Combination Treatment Strategy

Fimepinostat + venetoclax highly synergistic in DH and DE lymphomas

In combination, these two agents have the potential to be the first mechanism-based therapy that addresses the two genetic alterations that define DH and DE lymphomas

MYC is targeted by fimepinostat
BCL2 is targeted by venetoclax

- NCCN Guidelines explicitly identify lymphoma that has MYC and BCL2 alteration as a discrete entity with poorer prognosis, where clinical trial is indicated
  - As a monotherapy, fimepinostat resulted in 23% ORR in patients with MYC-altered R/R DLBCL[1]
  - As a monotherapy, venetoclax resulted in 18% ORR in patients with R/R DLBCL[2]
  - In non-clinical studies, fimepinostat and venetoclax are highly synergistic[3]



1. In Phase 1 and Phase 2 studies, 14 of 60 MYC-altered R/R DLBCL patients experienced a PR or CR (23% ORR)
2. Davids et al. JCO. 2017. 35:826
3. Sun et al. Blood. 2016. 128:4184

Targeted Programs in Heme Malignancies

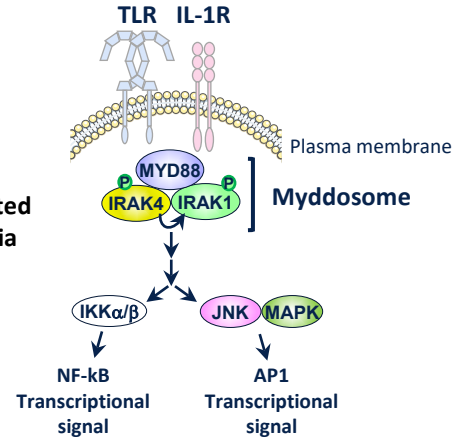
CA-4948: For treatment of MYD88/TLR-altered DLBCL and IL-1R/TLR-altered AML

CA-4948

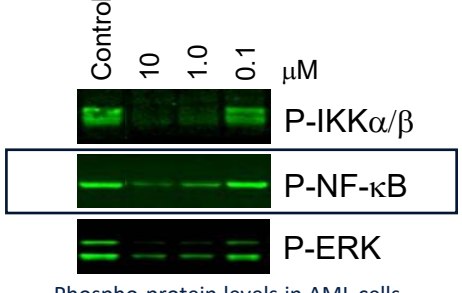
In development for patients with MYD88/TLR-altered disease

Profile	
Value Proposition	• First-in-class IRAK4 inhibitor in cancer • A defined subset of malignancies are driven by overactivity of the TLR/IL-1R pathway, which is dependent on IRAK4 • Composition-of-matter IP extends into 2035
Population	• Lymphoma: MYD88-altered DLBCL, MYD88-altered Waldenström's macroglobulinemia • Leukemia: IL-1R/TLR-altered AML
Product Description	• Potent and orally bioavailable inhibitor of IRAK4 for treatment of MYD88-altered tumors

Inhibition of this pathway was validated in Waldenström's macroglobulinemia with ibrutinib



Potent and direct inhibitor of NF-kB signal transduction



Phospho-protein levels in AML cells after treatment with CA-4948

Potent and selective inhibitor of IRAK4 enzyme

	Affinity
Kinase	K_d (nM)
IRAK4	23
IRAK1	12,000
IRAK2	>20,000
IRAK3	8,500

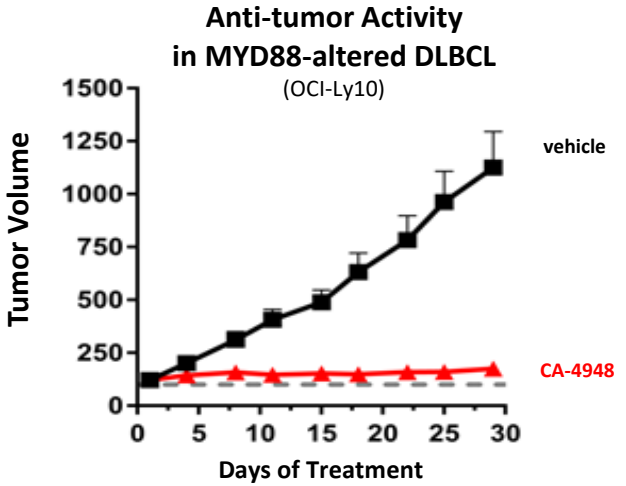
Booher et al. AACR. 2017. #1168

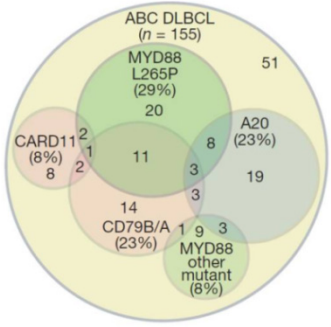
CA-4948 is Active in DLBCL

Potent anti-tumor activity in MYD88-altered DLBCL

MYD88 alterations prevalent in 29% of ABC-DLBCL[1]

- CA-4948 exhibits potent anti-tumor activity in MYD88-altered ABC-DLBCL
  - MYD88 mutation is associated with constitutive activation of NF-κB signaling[1]
  - NF-κB and JAK kinase signaling promotes malignant cell survival in ABC-DLBCL[1]
  - ABC subtype of DLBCL is the most difficult subtype to treat, despite recent advances in therapy[1]
- Ongoing Ph1 clinical trial designed to demonstrate anti-tumor activity in lymphoma and leukemia





Overlap of Gene Mutations in ABC-DLBCL

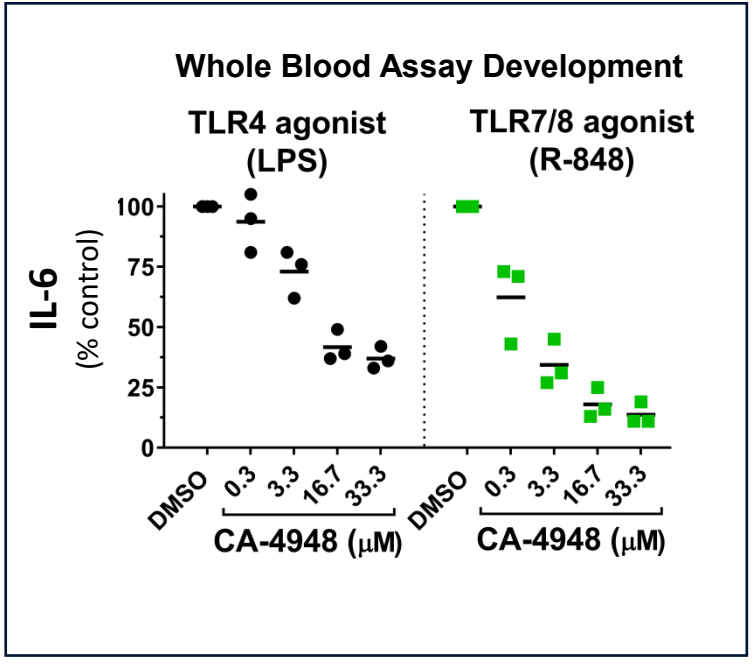
(Image adapted from Ngo et al. Nature. 2011.)

1. Ngo et al. Nature. 2011 Feb 3;470(7332):115-9
2. Caner et al. Genet Test Mol Biomarkers 19, 372–378

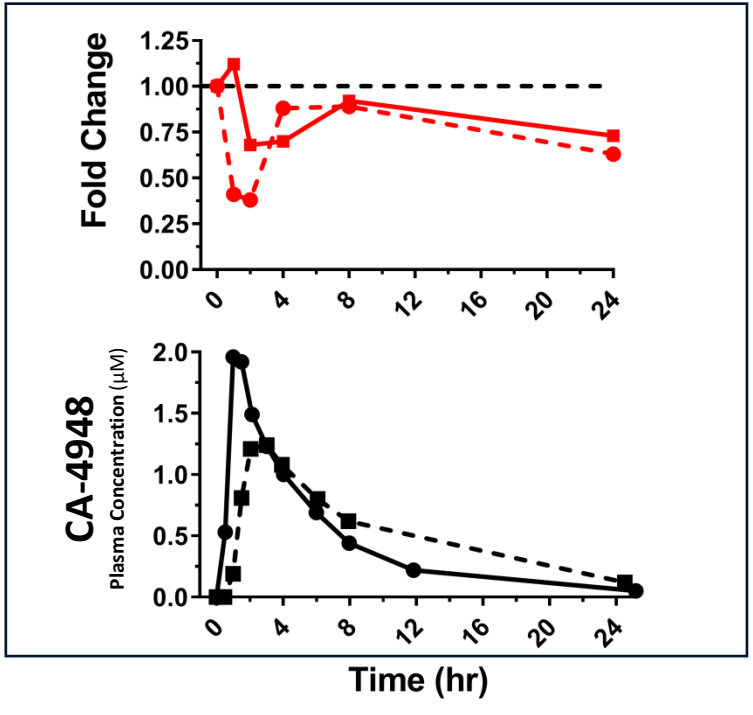
CA-4948 Pharmacodynamic Activity in Patients

Whole blood assay measuring ex-vivo cytokine production

IL-6 Production in TLR-stimulated Whole Blood
(healthy volunteers)



IL-6 Production in TLR-stimulated Whole Blood
(CA-4948 Ph1 patients)



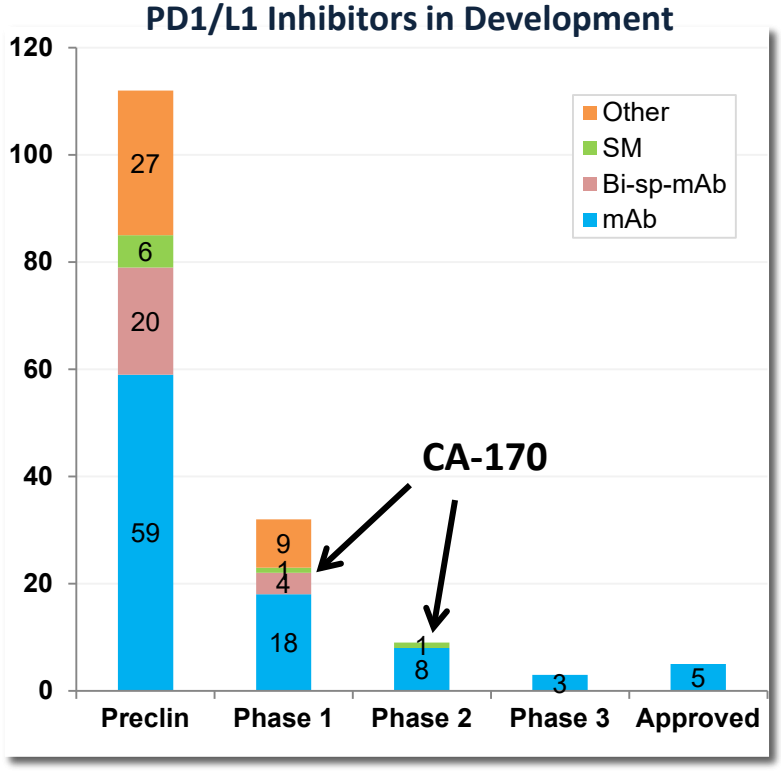
Small Molecule Immune Checkpoint Inhibitors

First oral, small molecule checkpoint inhibitor in clinical development and the only anti-VISTA agent in the clinic

Checkpoint Inhibitor Therapy

Small molecule approach provides differentiated drug profile

- Curis is the first company to advance an oral small molecule checkpoint inhibitor into the clinic (CA-170)
- CA-170 is the first-in-class checkpoint inhibitor targeting both PD-L1 and VISTA
- Advantages of oral small molecules:
  - Short half-life (< 24hr), allows rapid cessation in the event of AE
  - Ability to adjust dosing schedule, especially in combination treatment setting
  - Convenient administration, especially for chronic treatment



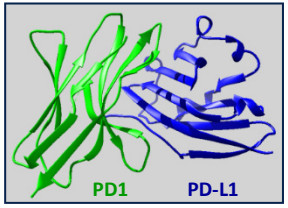
Tang et al. Annals of Oncology 0: 1–8, 2017

CA-170 is an Antagonist of PD-L1 and VISTA

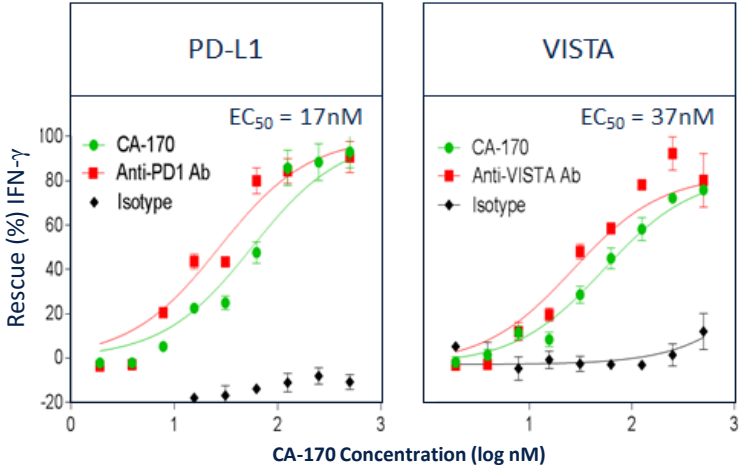
Only VISTA inhibitor in clinical development

Profile	
Value Proposition	• First-in-class VISTA inhibitor in clinical development • Only oral PD-L1 inhibitor in clinical development • Composition-of-matter IP through 2034
Population	• Patients with VISTA-expressing cancers • Patients with tumors not addressable by anti-PD1/PD-L1 treatment alone
Product Description	• Orally available, small molecule targeting PD-L1 and VISTA immune checkpoints • Favorable safety profile in 59 patients*

CA-170 Binds to the Receptor-Ligand Interaction Site



Dose dependent activation of PD-L1 or VISTA-inhibited human T cells *ex-vivo*

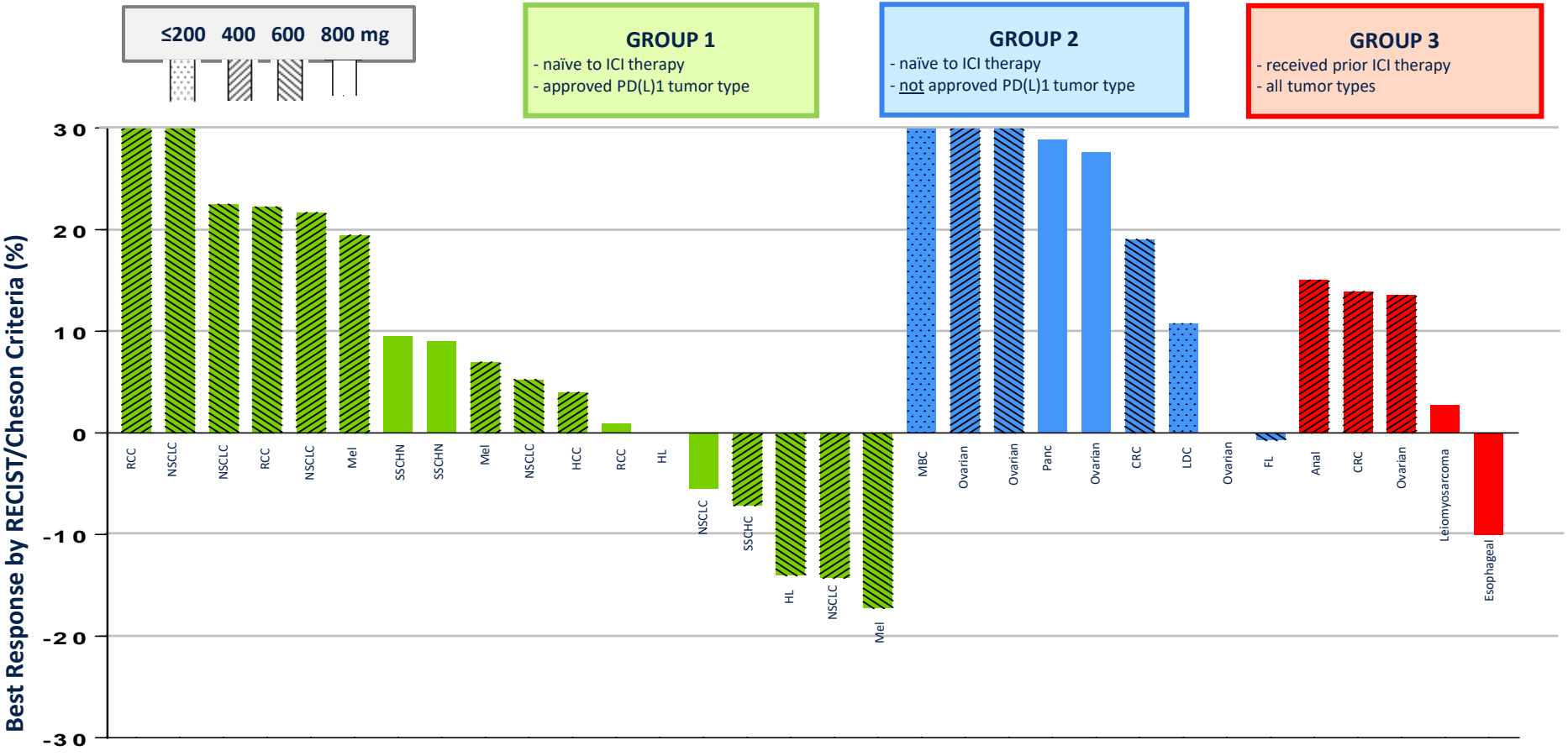


IFN-γ production used as a marker for T cell activation

* From safety evaluable patients enrolled in CA-170-101 trial (NCT02812875)

Clinical Activity in Phase 1 Trial

Tumor shrinkage observed in multiple patients

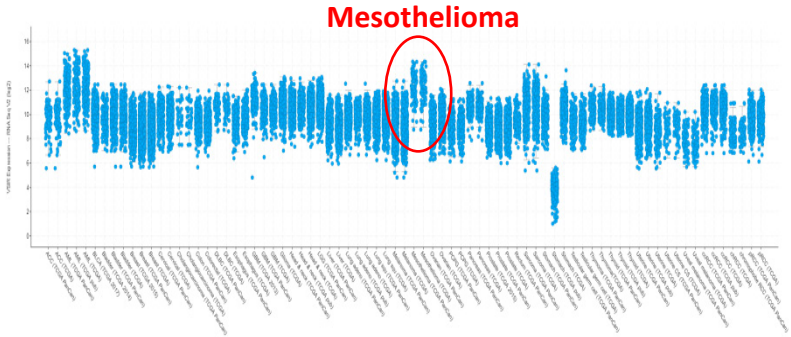


VISTA is an Inhibitory Immune Checkpoint

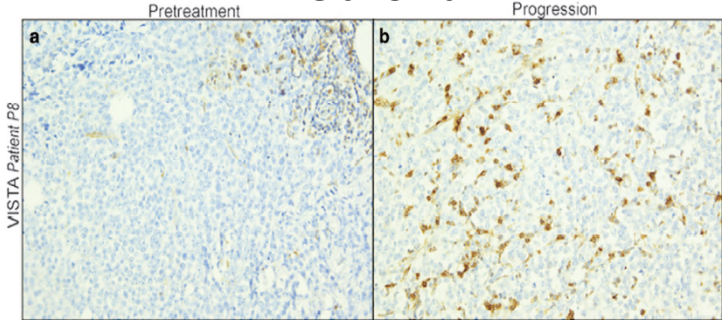
Highly expressed on tumor cells and on infiltrating immune cells

- Unlike PD-1, VISTA is expressed on tumor cells in subpopulations of certain cancers
  - ~ 90% of Mesothelioma cells[1]
  - ~ 20% of NSCLC cells[2]
  - ~ 14% of TNBC cells[3]
  - ~ 8% of gastric cancer cells[4]
- VISTA expression on immune cells is up-regulated after checkpoint inhibitor therapy
  - ~ 25% of ipilimumab-treated prostate cancer patients show a 5-fold increase of VISTA expression[5]
  - ~ 60% of melanoma patients show increased VISTA expression at progression[6]

VISTA Gene Expression Analysis (TCGA)



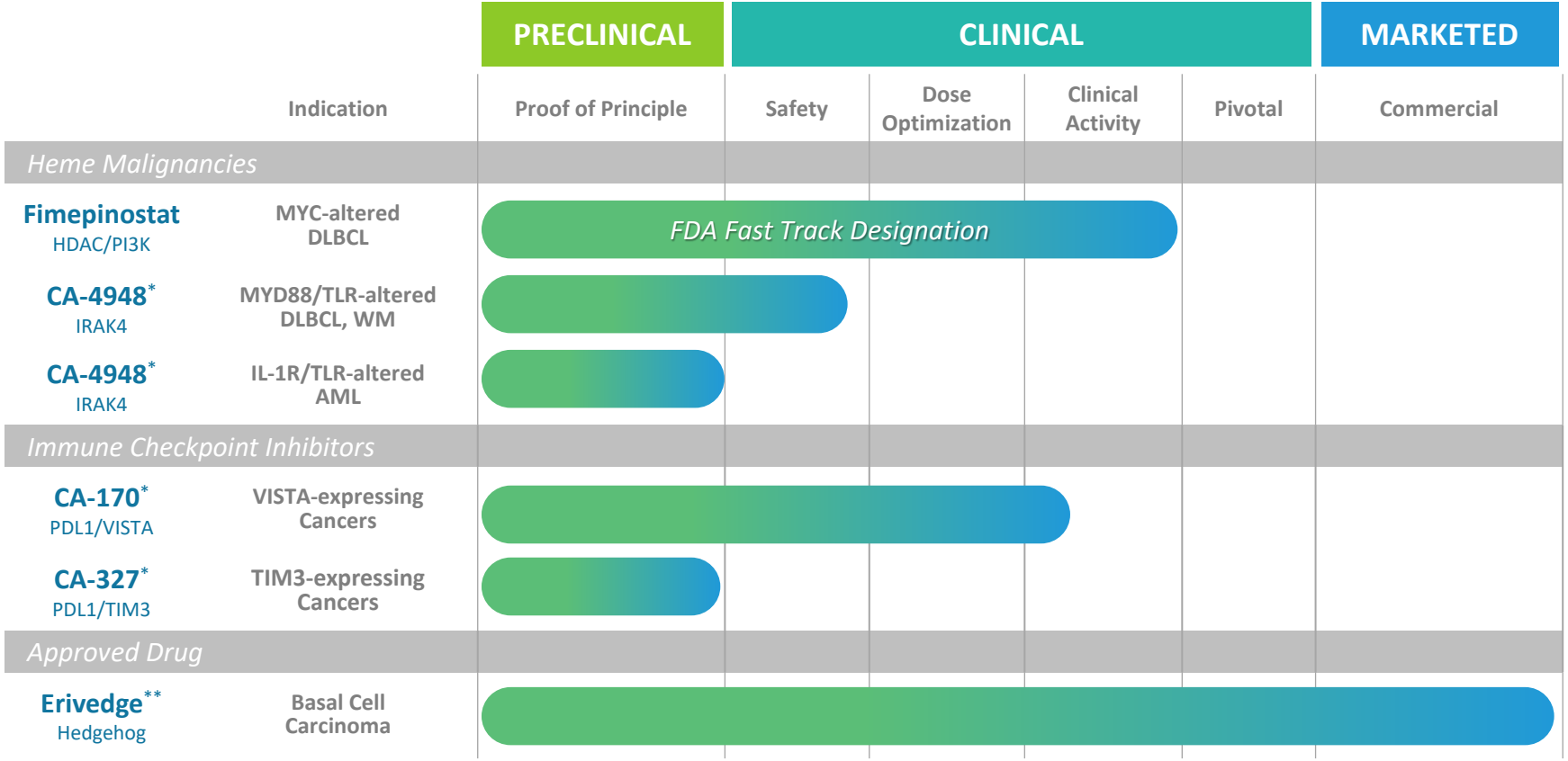
Melanoma[6]



1) Zauderer MG. ID 13232. WCLC. 2018; 2) Villarroel-Espindolai et al. Clinical Cancer Research. 2018; 3) Gruber et al. Poster 4749. AACR. 2018;
4) Boger et al. OncoImmunology. 2017. Volume 6. Number 4; 5) Gao et al. Nature. 2017. 23: 551–555; 6) Kakavand et al. Modern Pathology. 2017

Pipeline of Oncology Drug Candidates

First-in-Class, orally available, targeted small molecules



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Financial Summary

As of June 30, 2018	
Cash & Marketable Securities	$40.4M
Basic Shares Outstanding	33.2M
Fully Diluted Shares Outstanding	37.3M

NOTE:
Fully Diluted Shares = 33.2M basic shares + 4.1M options

NASDAQ: CRIS