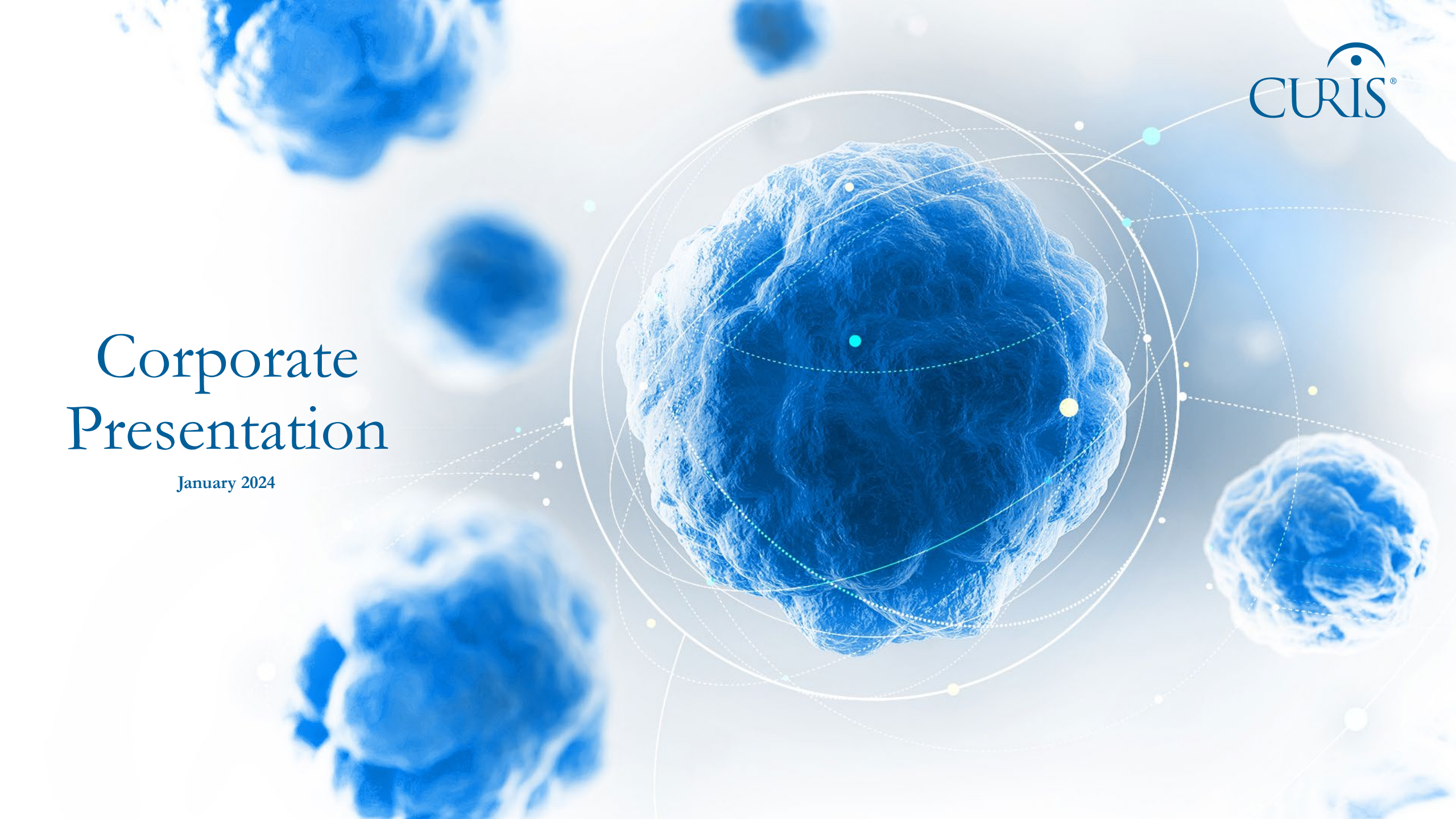


# Corporate Presentation

January 2024

# Cautionary Note Regarding Forward Looking Statements and Disclaimers

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; our cash runway; the proposed focus on emavusertib 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 and when the U.S. Food and Drug Administration may take further regulatory action with regard to our trials, 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 FDA 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 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 reports filed with the Securities and Exchange Commission, including the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022 and the Company's Quarterly Reports on Form 10-Q for the quarters ended March 31, 2023, June 30, 2023 and September 30, 2023, 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.

This presentation includes statistical and other industry and market data that we obtained from industry publications and research, surveys, and studies conducted by third parties as well as our own estimates. All of the market data used in this presentation involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data. Industry publications and third-party research, surveys, and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. Our estimates of the potential market opportunities for our product candidates include several key assumptions based on our industry knowledge, industry publications, third-party research, and other surveys, which may be based on a small sample size and may fail to accurately reflect market opportunities. While we believe that our internal assumptions are reasonable, no independent source has verified such assumptions.

# Corporate Overview

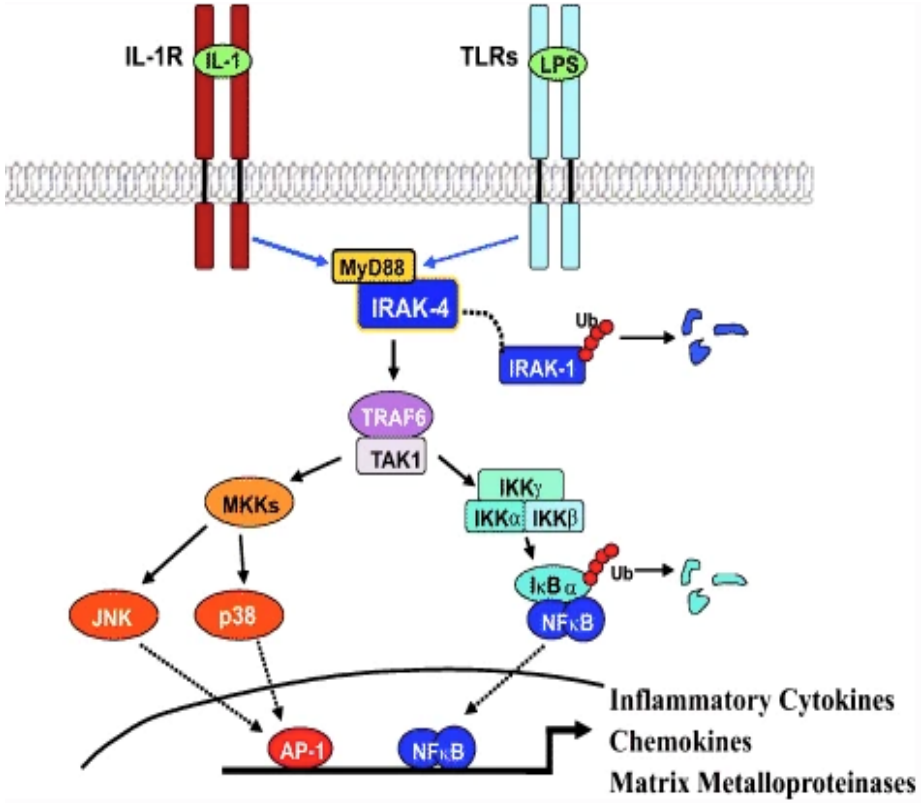
*Leader of IRAK4 Inhibition; Developing Emavusertib with Broad Application in Oncology*

| | | |
|---|---|---|
| **Investment Overview** | Emavusertib is a novel, highly-active IRAK4 inhibitor with potential cornerstone utility in heme and solid tumors<br>*Full development program underway in front-line and end-stage AML/MDS; BTKi combination PoC study in PCNSL*<br>*Single agent and combination study results near-term (2024); Cash runway into 2025 – $68.5M as of Sept 30, 2023* | |
| **Recent Update** | Initial PCNSL data released at ASH 2023 extends thesis for IRAK4/BTK combination in lymphoma,<br>3 of 5 patients – who had progressed on BTKi – achieved CR when dosed with combination | |
| **Key Indications** | TakeAim Leukemia: | Near-term, potentially registration-directed, PoC studies with monotherapy in AML/MDS<br>*Emavusertib inhibits IRAK4 and FLT3, the two most prevalent disease drivers in AML/MDS[1,2]* |
| | TakeAim Lymphoma: | Near-term, potentially registration-directed, combination study with ibrutinib in PCNSL<br>*Complementary blockade of the two key pathways driving NF-κB mediated proliferation in NHL* |
| | Solid Tumors: | Multiple investigator-sponsored studies expected to enroll in 2024<br>*Preclinical studies have shown IRAK4 potentiates chemo- and immunotherapies in combination in solid tumor malignancies* |
| **Market Opportunity** | AML/MDS: | **333K patients[3]**<br>*all patients addressable with either front-line combination or salvage-line monotherapy* |
| | NHL/CLL: | **1.9M patients[3]**<br>*all patients addressable with emavusertib in combination with BTKi* |
| | Solid Tumors: | **tbd**<br>*potential opportunities currently being explored in metastatic melanoma, bladder, colorectal, and others* |

1) Smith et al. Nat Cell Biol 2019; 2) Saygin, et al. J Hematol Oncol. 2017 Apr 18; 3) 2022 Prevalence Data DRG Clarivate

# IRAK4 is a Novel Anti-Cancer Target

*Oncogenic IRAK4 activity promotes inflammation and impairs T cell function*




Koziczak-Holbro M 2008

- Upregulation of IRAK4 in tumors leads to activation of NF-κB, JNK, and MAPK[1,2]
- IRAK-4 upregulation is associated with increased phenotypically exhausted TILs, MDSCs, increased CD4+ T regs, and resistance to aPD-1 therapy[4,5]
- Tumor and stromal IRAK4 activation drives collagen and hyaluronan deposition, promoting inflammation in the TME[3]
- Targeting IRAK4 has demonstrated anti-cancer activity as a single agent and the ability to potentiate chemo- and immunotherapies in combination[3]

1. Rhyasen GW and Starczynowski DT. *Br J Cancer.* 2015; 112(2): 232-237. 2. Madonna G, et al. *J Transl Med.* 2012; 10(1):53. 3. Lim et al, 2023 IRAK4 Symposium 4. Martin Lasola JJ., et al. *Cancer Immunol Res.* 5(3_suppl):B31. 5. Somani VK, et al. *Gastroenterology.* 2022; 162(7): 2047-2062.

# Emavusertib Has A Unique Molecular Fingerprint

*Targeted design is specifically engineered to be best-in-class*

*The NCI selected emavusertib for NCI-sponsored research and clinical studies of IRAK4*

**Emavusertib**
**Kinase Interaction Map**

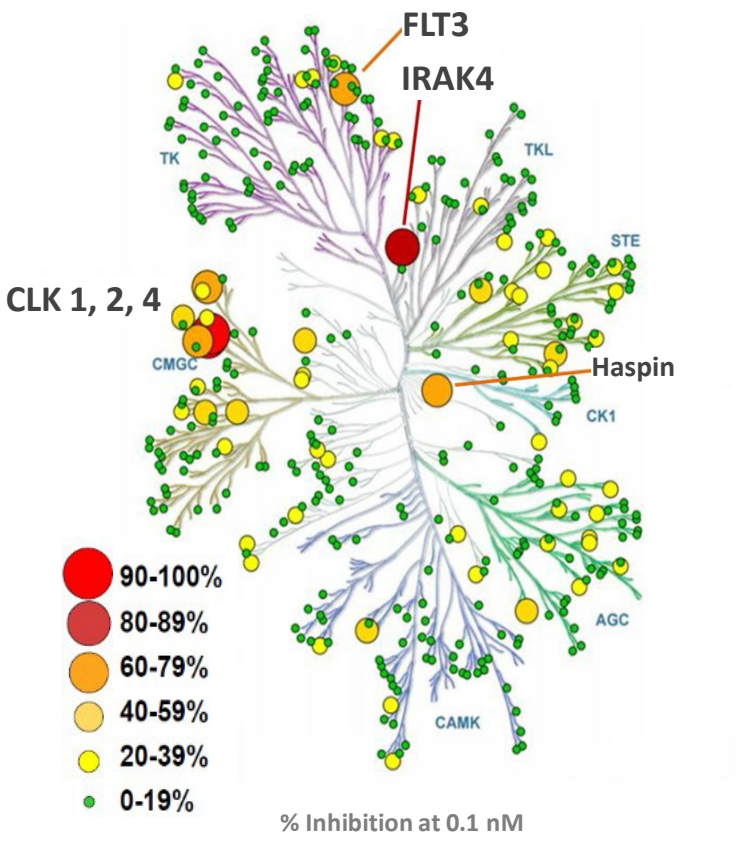



Illustration reproduced courtesy of Cell Signaling Technology

**Emavusertib**
**Binding Affinity**

| Target | $K_d$ nM |
|---|---|
| IRAK1 | 12,000 |
| IRAK2 | >20,000 |
| IRAK3 | 8,500 |
| **IRAK4** | **23** |
| DYRK1A | 25 |
| **FLT3 WT** | **31** |
| **FLT3 (D835H)** | **5** |
| **FLT3 (D835V)** | **44** |
| **FLT3 (D835Y)** | **3** |
| **FLT3 (ITD)** | **8** |
| **FLT3 (K663Q)** | **47** |
| **FLT3 (N841I)** | **16** |
| Haspin (GSG2) | 32 |
| CLK1 | 10 |
| CLK2 | 20 |
| CLK3 | >20,000 |
| CLK4 | 14 |
| TrkA | 130 |

DiscoverX Kinase Panel
(378 kinases screened)

*high binding affinity to IRAK4*
*(>97% inhibition achieved at Ph2 dose concentrations)*

*high binding affinity to FLT3*
*contributes additional anti-cancer activity, differentiating emavusertib from other IRAK4-directed therapies*

CURIS

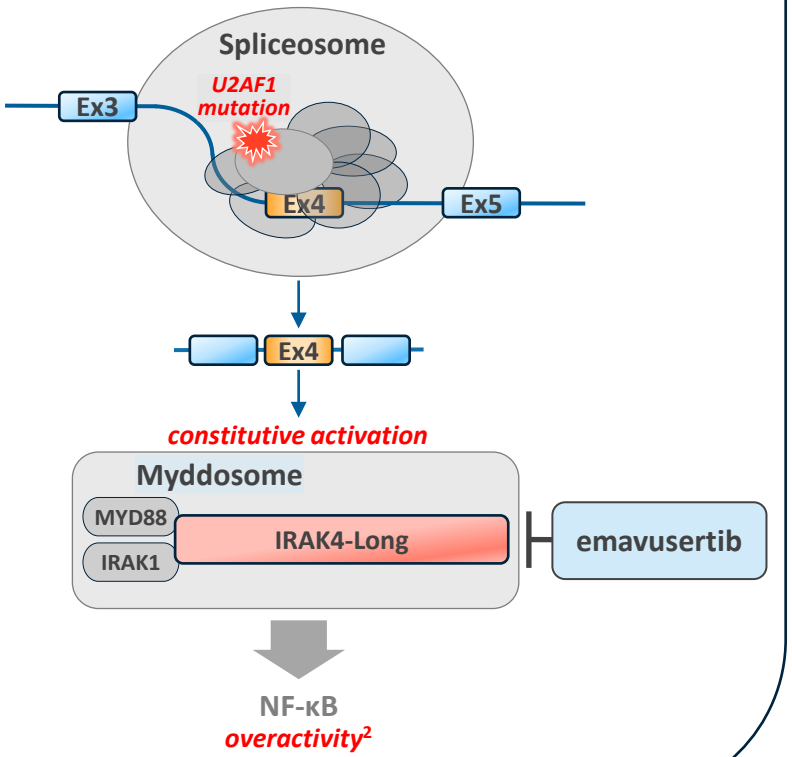
# Emavusertib in Leukemia

# Emavusertib Has a Unique Mechanism of Action

*The two primary targets of emavusertib are independent drivers of cancer*

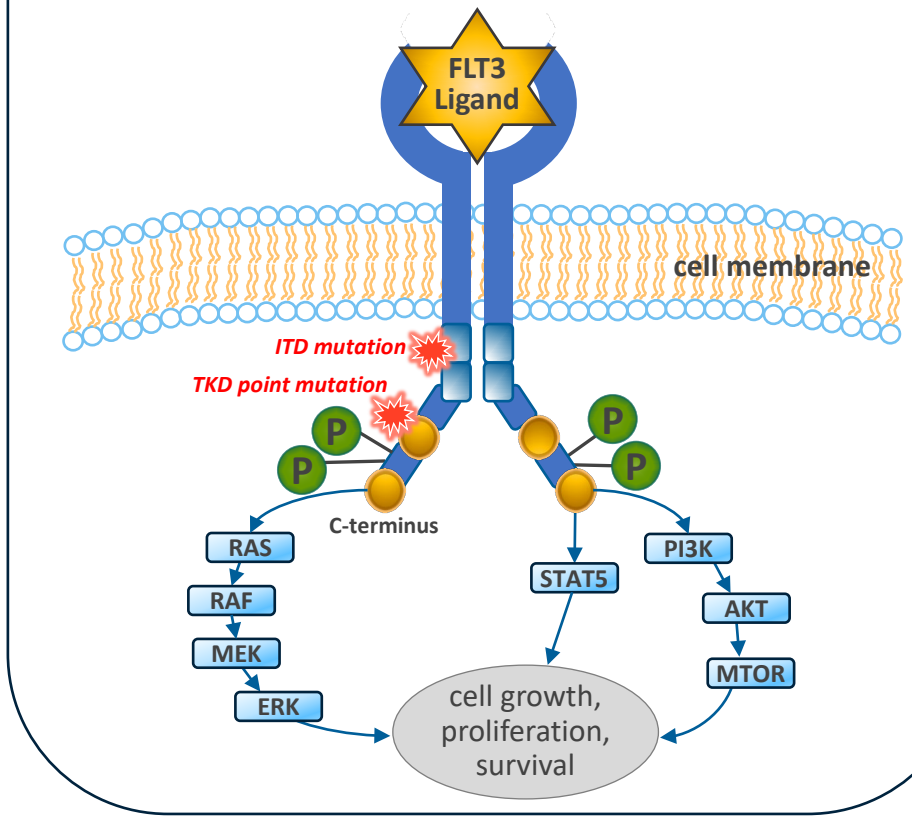
## IRAK4

*spliceosome mutations drive overexpression of IRAK4-Long, which constitutively activates the myddosome, driving NF-κB overactivity*




## FLT3

*genetic mutations cause constitutive activation of FLT3 and downstream cell growth, proliferation, and survival pathways*

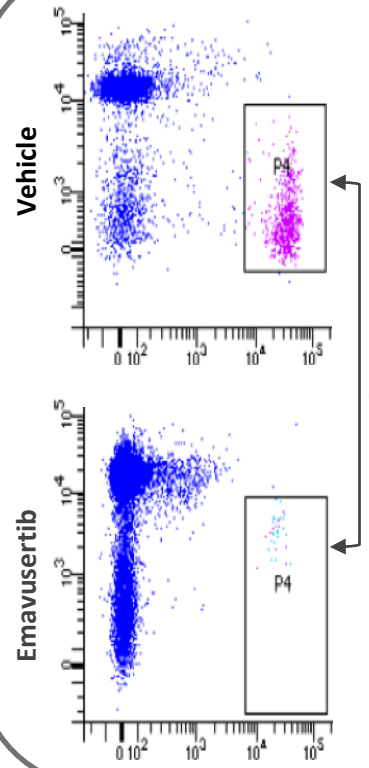



1) Guillamot et al. Nat Cell Biol 2019; 2) Smith et al. Nat Cell Biol 2019; 3) American Cancer Society, Cancer Facts & Figures 2020; 4) Leukemia & Lymphoma Society, Facts and Statistics Overview

# Preclinical Data

*Rationale for monotherapy and combination with azacitidine/venetoclax*

## Monotherapy in IRAK4

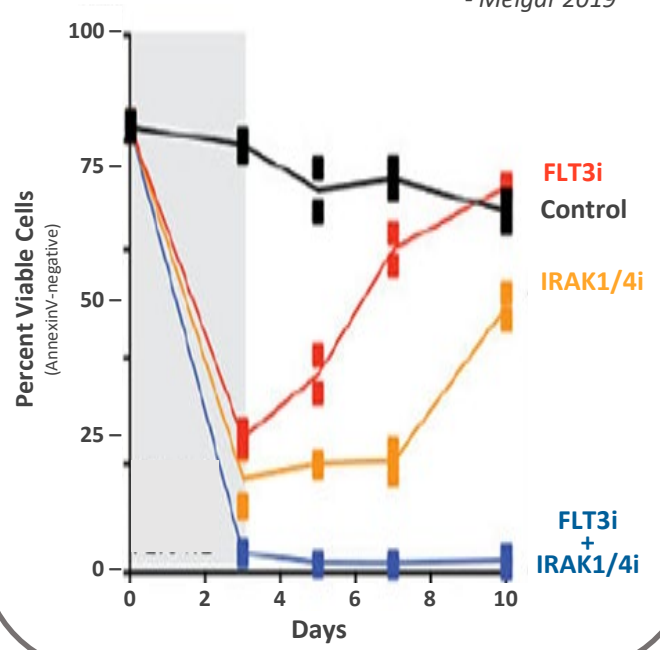



*clear reduction of leukemic blasts in models with high IRAK4-L expression*

*emavusertib demonstrates monotherapy activity in patient-derived xenografts[1]*

## Monotherapy in FLT3

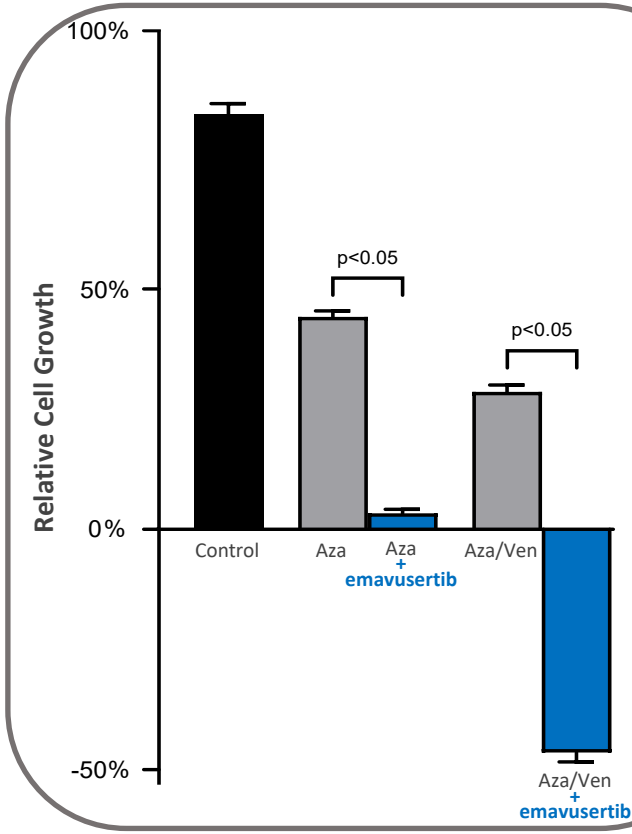
*"Concomitant targeting of IRAK1 or IRAK4, alongside FLT3, is the most effective means to overcome the adaptive resistance incurred when targeting FLT3"*
*- Melgar 2019*




*IRAK/FLT3 combination demonstrates synergy in pre-clinical studies[2]*

*FLT3-ITD cells treated for 3 days with DMSO (control), quizartinib (0.5 µM), IRAKi (10 µM), and quizartinib + IRAKi*

## Combination with Aza/Ven



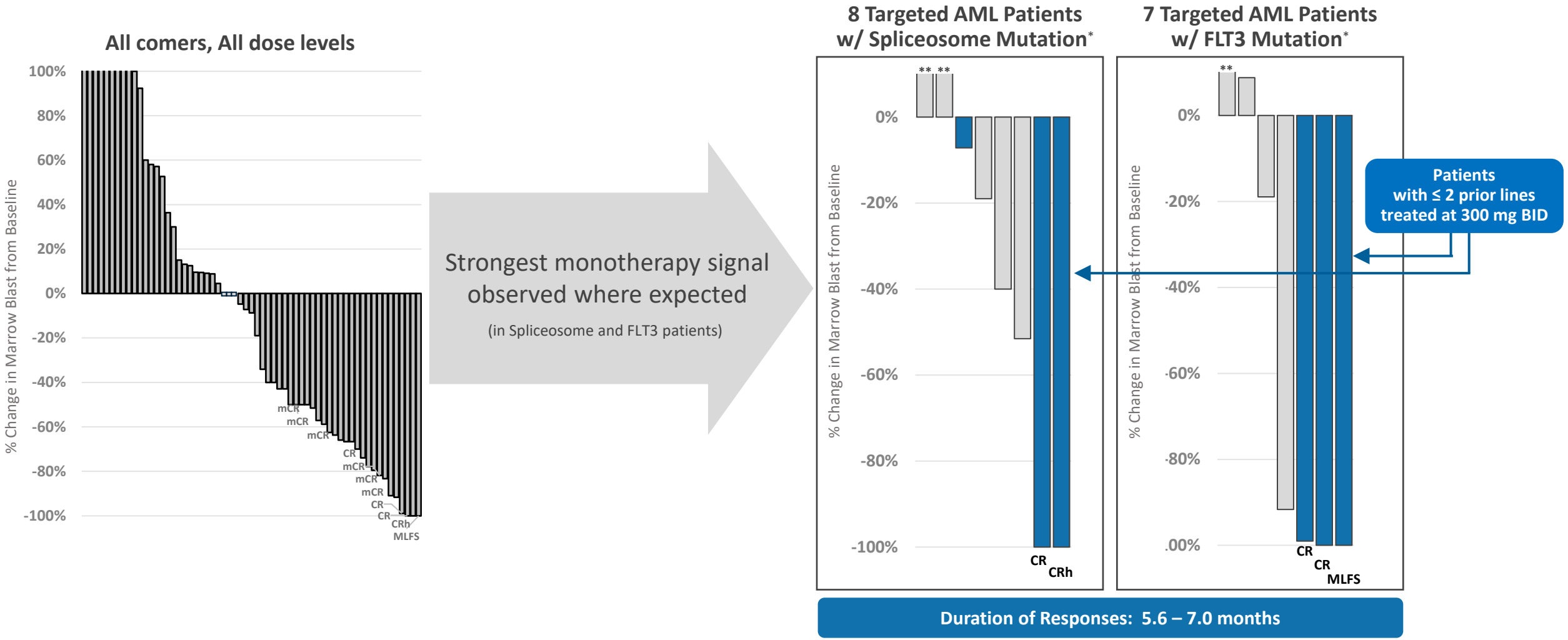

*emavusertib demonstrates synergy with both azacitidine and venetoclax in THP-1 model[3]*

*AML cell lines treated for 96 hrs (values presented as mean ± SE)*

*1) Choudhary et al. AACR 2017; 2) Melgar, Sci Transl Med. 2019; 3) Curis AML MDS poster, EHA 2021*

# Emavusertib Compelling Initial Clinical Data

*Showing clear single agent activity where expected in AML/MDS clinical studies*




Note: 84 total AML/MDS patients enrolled in monotherapy as of Feb 9, 2023 with data cut-off as of Mar 17, 2023;

* Three AML patients had both FLT3 and Spliceosome mutation and are counted in both populations; evaluable patients include all patients whose disease was determined to be evaluable for objective response with baseline and post-treatment marrow assessments

** Denotes blast percent increase > 10%

# Emavusertib in Leukemia (AML/MDS)

*The ideal candidate to address the two largest genetically-defined populations in AML/MDS*

Emavusertib addresses the two largest genetically-defined populations in AML/MDS:

1) IRAK4-L (>50% of population)[1]
2) FLT3 (>25% of population)[2]

- Demonstrated single-agent activity
- Genetically-defined patient population
- Dual targeting of IRAK4 and FLT3 may prevent adaptive resistance observed with current FLT3 inhibitors[3]

TakeAim

**Next Steps**

**TakeAim Leukemia Study**

- *Monotherapy: R/R AML with FLT3*
  *R/R AML with Spliceosome*
- *Combination: AML/MDS in combination with azacitidine/venetoclax*

1) Smith et al. Nat Cell Biol 2019; 2) Saygin, et al. J Hematol Oncol. 2017 Apr 18; 3) Melgar, Sci Transl Med. 2019

CURIS

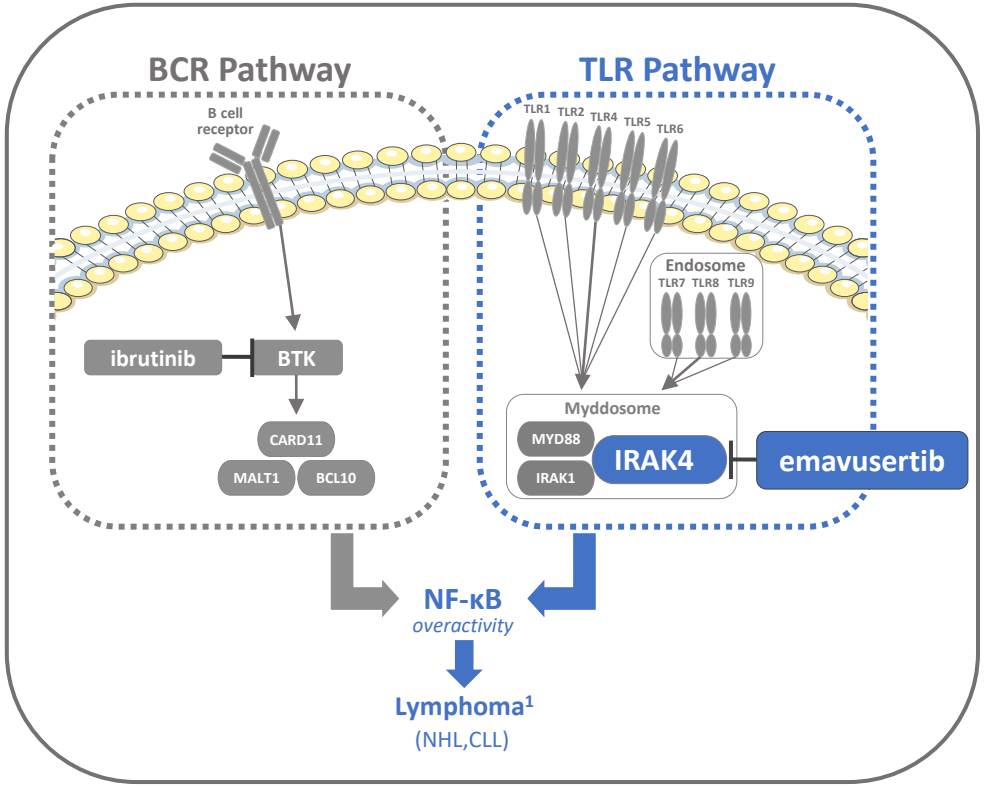
# Emavusertib in Lymphoma

# Emavusertib in Lymphoma

*Combination therapy provides complimentary inhibition of two pathways that drive NF-κB*

### *NFκB Biology:*
### *Two Pathways Drive NHL/CLL*

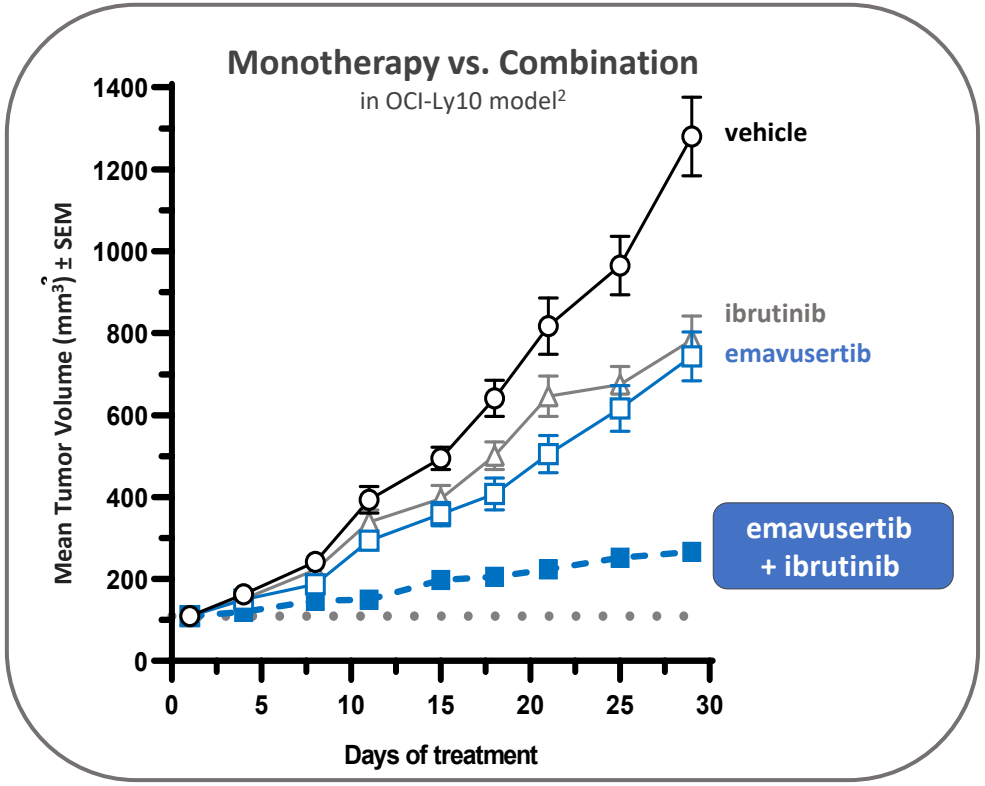
*BCR and TLR Pathways independently drive NF-κB overactivity (and NF-κB drives NHL/CLL)*




1) IMBRUVICA Package Insert. Rev 08/2018

### *Clinical Strategy:*
### *Block both pathways with Combination Therapy*

*In preclinical testing, blocking both IRAK4 and BTK drove tumor reduction better than blocking either one alone*

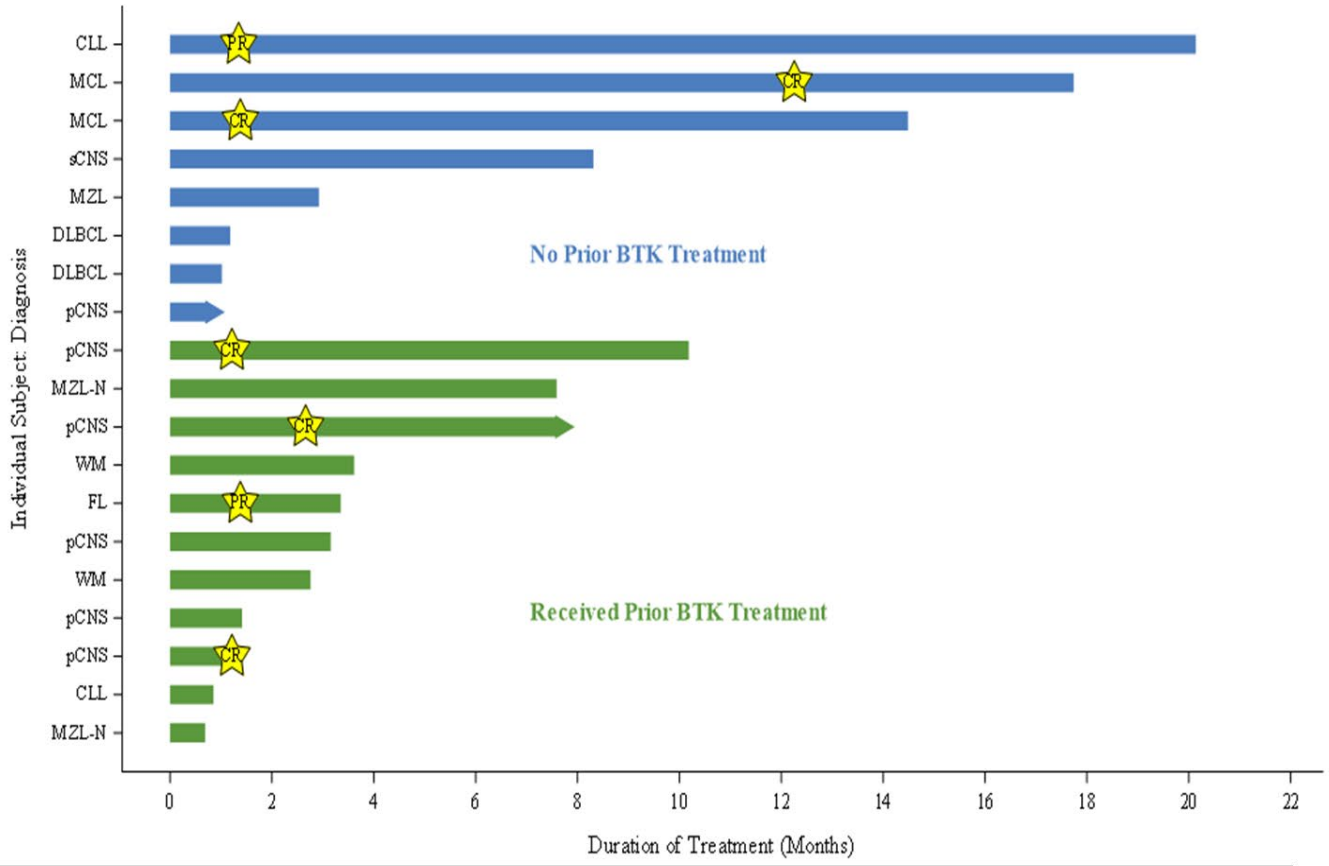


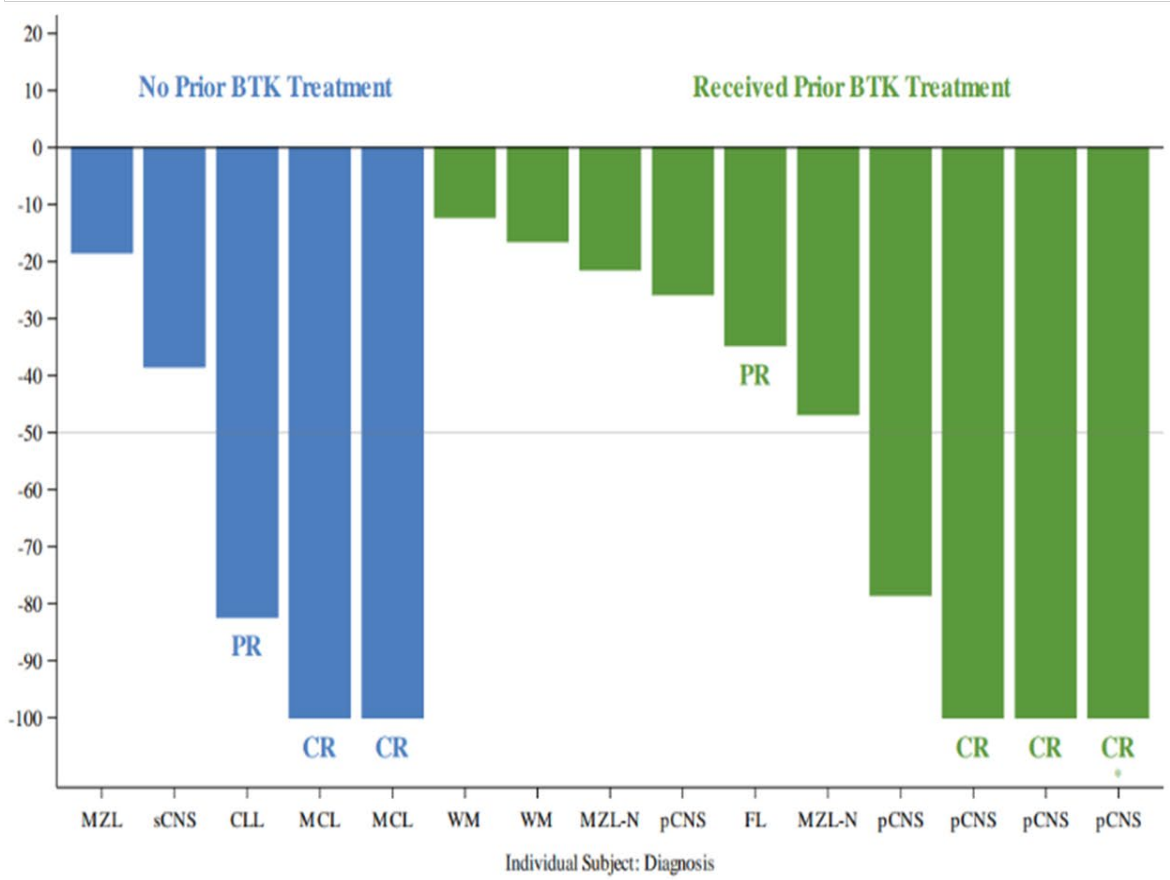

2) Booher et al. Waldenström Roadmap Symposium 2019

# ASH 2023 Clinical Data in Lymphoma

*All patients achieved decreases in tumor burden, including multiple complete responses*

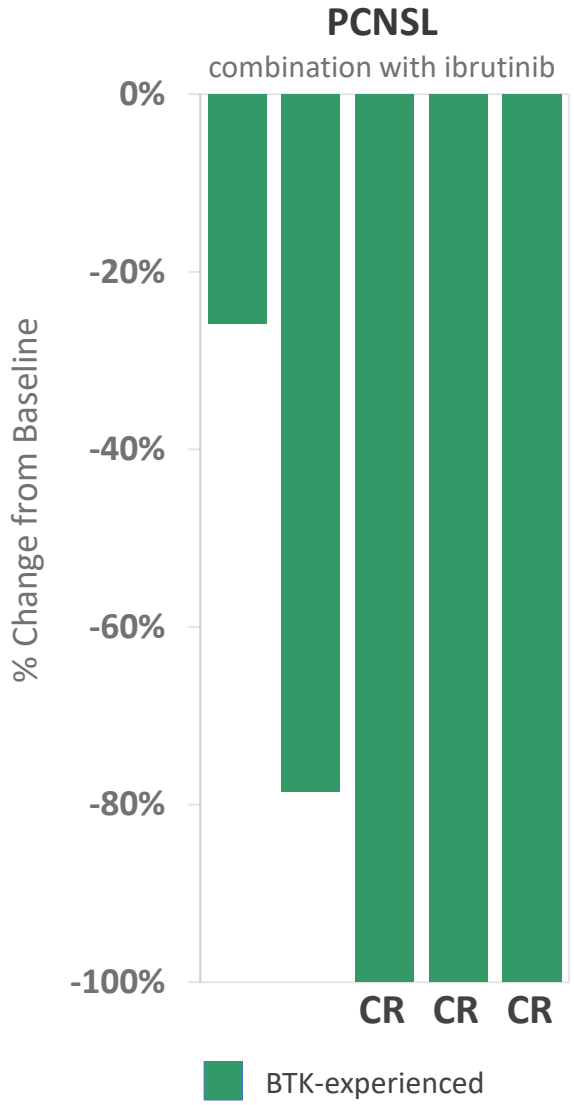
- 19 treated patients, 11 of whom had received prior BTKi treatment, demonstrated anti-cancer activity
- Median treatment duration was 96 days (range 21-613 days), suggesting acceptable safety and tolerability
- Majority of patients had decreases in tumor burden or stable disease over time
- The preliminary efficacy data of 16 evaluable patients in combination with ibrutinib showed 5 CR

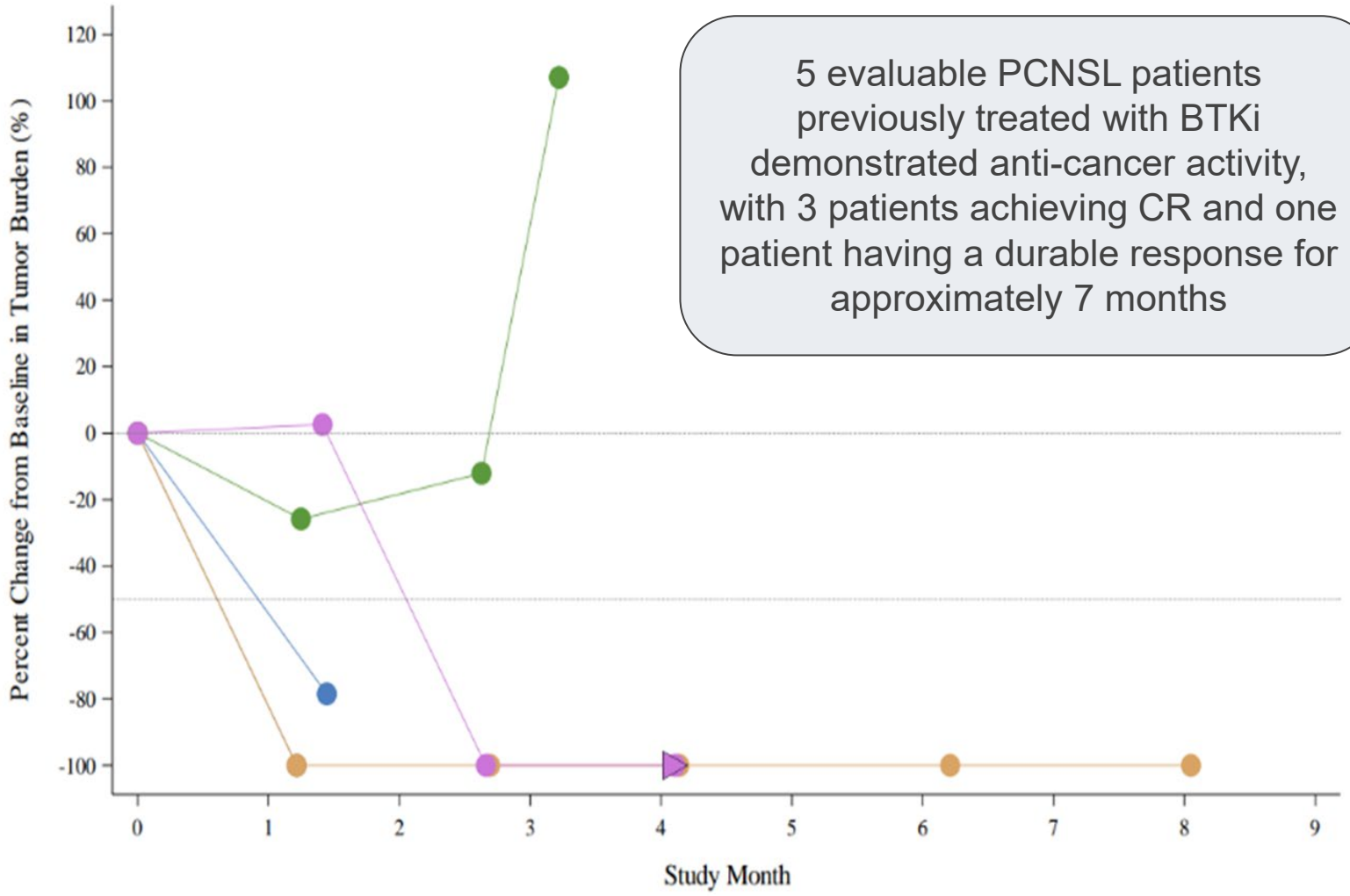


# ASH 2023 Clinical Data in PCNSL

*All patients achieved decreases in tumor burden, including multiple complete responses*




5 evaluable PCNSL patients previously treated with BTKi demonstrated anti-cancer activity, with 3 patients achieving CR and one patient having a durable response for approximately 7 months

# Clinical Strategy in Lymphoma

*Emavusertib is the ideal candidate to combine with BTKi to maximize downregulation of NF-κB*

- Patients are currently treated with BTKi because it downregulates NF-κB
- Two pathways drive NF-κB:
  1) BCR Pathway: *addressed by blocking BTK*
  2) TLR Pathway: *addressed by blocking IRAK4*
- Initial clinical data suggest blocking both pathways may overcome resistance to ibrutinib

TakeAim

**Next Steps**

**TakeAim Lymphoma Study**

- *Combination with BTKi: R/R PCNSL*

# Corporate Overview

*Leader of IRAK4 Inhibition; Developing Emavusertib with Broad Application in Oncology*

| | | |
|---|---|---|
| **Investment Overview** | Emavusertib is a novel, highly-active IRAK4 inhibitor with potential cornerstone utility in heme and solid tumors<br>*Full development program underway in front-line and end-stage AML/MDS; BTKi combination PoC study in PCNSL*<br>*Single agent and combination study results near-term (2024); Cash runway into 2025 – $68.5M as of Sept 30, 2023* | |
| **Recent Update** | Initial PCNSL data released at ASH 2023 extends thesis for IRAK4/BTK combination in lymphoma,<br>3 of 5 patients – who had progressed on BTKi – achieved CR when dosed with combination | |
| **Key Indications** | TakeAim Leukemia: | Near-term, potentially registration-directed, PoC studies with monotherapy in AML/MDS<br>*Emavusertib inhibits IRAK4 and FLT3, the two most prevalent disease drivers in AML/MDS[1,2]* |
| | TakeAim Lymphoma: | Near-term, potentially registration-directed, combination study with ibrutinib in PCNSL<br>*Complementary blockade of the two key pathways driving NF-κB mediated proliferation in NHL* |
| | Solid Tumors: | Multiple investigator-sponsored studies expected to enroll in 2024<br>*Preclinical studies have shown IRAK4 potentiates chemo- and immunotherapies in combination in solid tumor malignancies* |
| **Market Opportunity** | AML/MDS: | **333K patients[3]**<br>*all patients addressable with either front-line combination or salvage-line monotherapy* |
| | NHL/CLL: | **1.9M patients[3]**<br>*all patients addressable with emavusertib in combination with BTKi* |
| | Solid Tumors: | **tbd**<br>*potential opportunities currently being explored in metastatic melanoma, bladder, colorectal, and others* |

1) Smith et al. Nat Cell Biol 2019; 2) Saygin, et al. J Hematol Oncol. 2017 Apr 18; 3) 2022 Prevalence Data DRG Clarivate

# End of Corporate Presentation

*NASDAQ: CRIS*