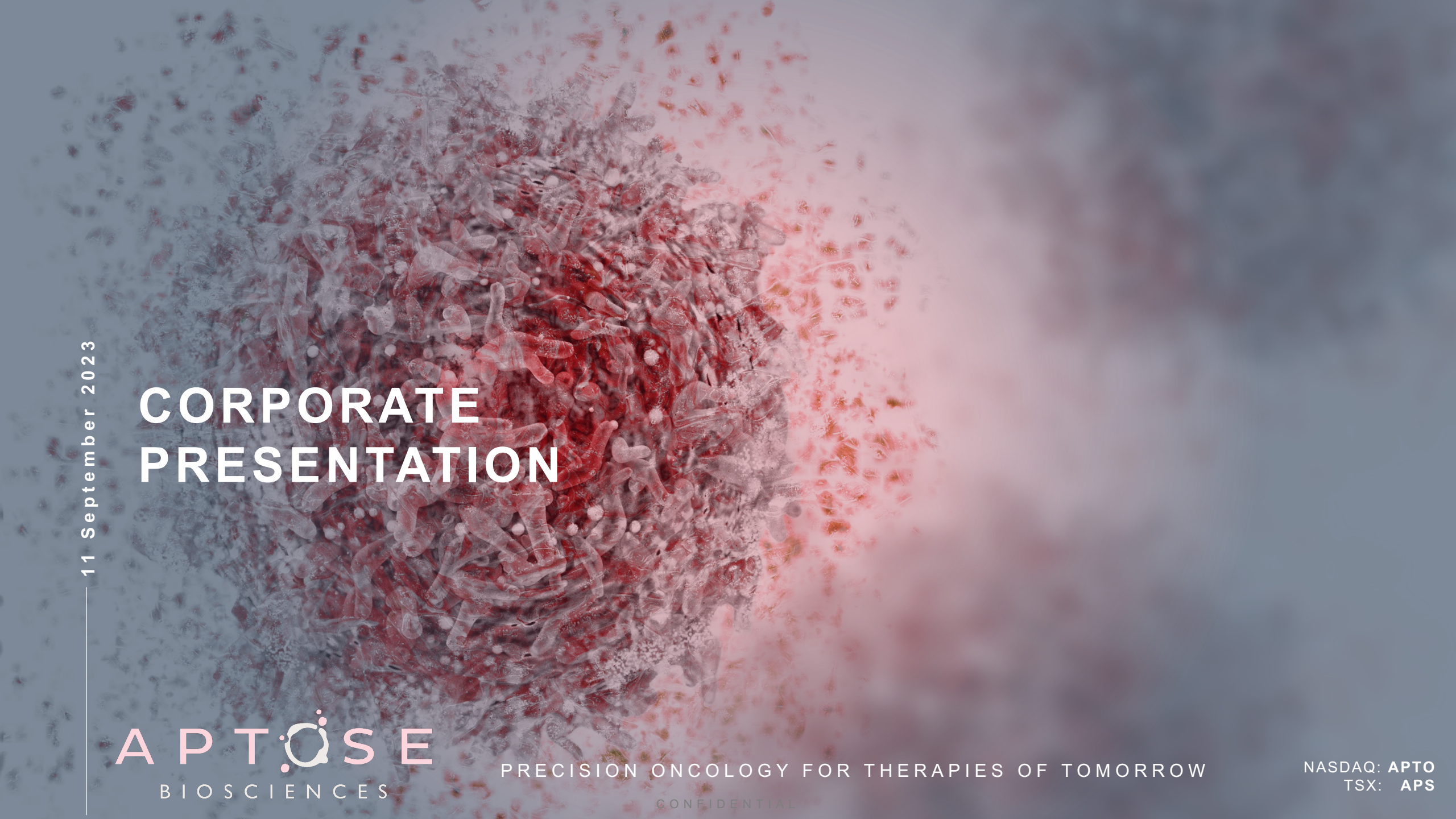

CORPORATE PRESENTATION

11 September 2023

APTOSE BIOSCIENCES

PRECISION ONCOLOGY FOR THERAPIES OF TOMORROW

NASDAQ: **APTO**
TSX: **APS**

Aptose Disclosure

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Aptose Biosciences is a precision oncology company developing oral targeted agents to treat hematologic malignancies

Acute myeloid leukemia, AML
Myelodysplastic syndromes, MDS

(Nasdaq: APTO ; TSX: APS)

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Aptose Investment Highlights

Tuspetinib (TUS) lead agent: Once daily, oral, kinase inhibitor designed to selectively suppress a handful of kinases that drive key oncogenic signaling pathways operative in AML

Mechanistic Precision

SYK FLT3$^{WT/MUT}$ KIT^{MUT} JAK1/2 RSK1/2

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Aptose Investment Highlights

Tuspetinib (TUS) lead agent: Ideal drug for combination therapies in AML

- **AML treatment strategies quickly shifting to combination therapies**
- **Combination therapies deliver greatest commercial and medical impact**
  - Represent 98% of tuspetinib commercial forecasts
  - Projected faster accruals and earlier regulatory approvals
  - Can deliver higher response rates and more durable responses
- **TUS/VEN/HMA ideal combination therapy planned for 1L AML**
- **TUS/VEN clinical responses in R/R AML with Prior-VEN failure**
  - Presents accelerated approval path for TUS/VEN in R/R AML
- **Annual commercial forecast > $2.5 Bn for AML and HR-MDS**

Up to $25M Keystone and $7M Hanmi capital investments

Value-driving clinical milestones during 4Q 2023

Review Clinical Path and Findings that Support Tuspetinib Combination Strategy

EOP1 Meeting with FDA

- **Successful meeting and outcomes**
- RP2D = 80mg once daily
- All approval paths remain available

Dose Escalation Ph 1/2 Trial in R/R AML

- **Demonstrated single agent efficacy**
- Established "*contribution of component*" that TUS brings to combination therapy
- *Favorable safety and tolerability*

APTIVATE Expansion Trial in R/R AML

- TUS or TUS/VEN doublet
- TUS/VEN *safe and highly active* → including *Prior-VEN failure* subgroup that is difficult-to-treat

Finding Differentiates TUS/VEN Doublet from Other Therapies

- **TUS/VEN impressive Response Rate in Prior-VEN AML**
- **High unmet need | Dismal response to salvage therapy**
- **90%+ R/R AML patients entering our APTIVATE trial**
- **Enables a clear Accelerated Approval path**

Why is Prior-VEN Failure R/R AML Such a High Unmet Medical Need?

Vast majority of VEN-failure patients (2L & 3L+) have no approved or effective experimental options

Prior-VEN Failure R/R AML Patients

Most AML Patients in US will receive Venetoclax and many ultimately fail

Results in high-risk biology and broadly resistant mutation patterns

Fraction of Patients Receive Salvage Therapy

Monotherapies or off label/experimental combinations[1]

Many Transition to Supportive Care or Hospice

Too unfit for salvage therapy or no available options[1]

Salvage Therapy | Dismal response rates and brief OS

- Retrospective Report[1]: **Prior-VEN as frontline** responded to **salvage** therapy with a **4% CR rate**
- Retrospective Report[2]: **Prior-VEN as frontline** responded to **targeted** therapy with a **15% CR rate** (FLT3i or IDHi)
- Retrospective Report[3]: **Prior-VEN as salvage** responded to **targeted** therapies with a **6% CR rate** (FLT3i or IDHi)

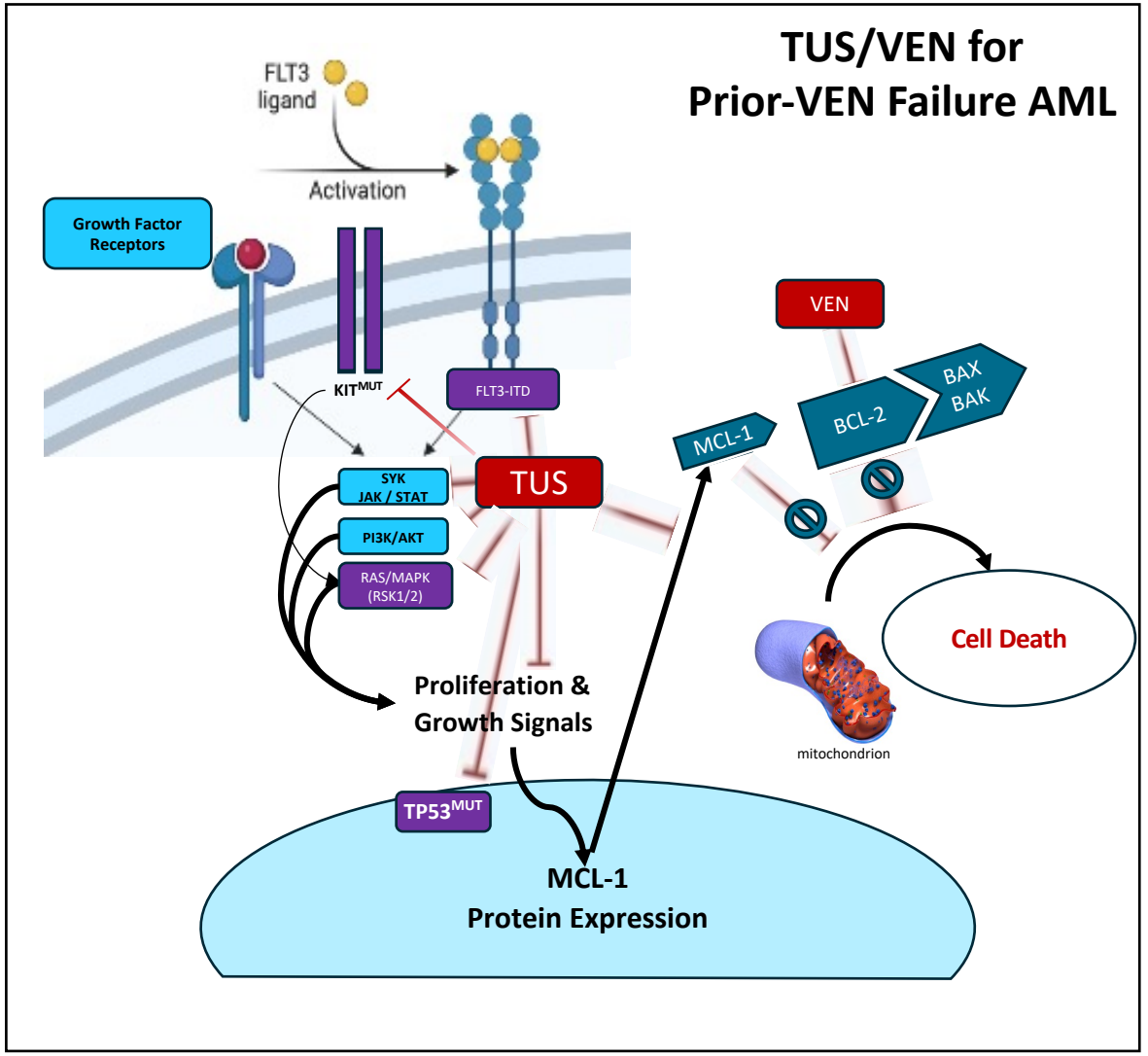
TUS/VEN doublet achieves responses in Prior-VEN failure patients

- **TUS/VEN is well tolerated, once daily oral, and convenient therapy**
- **TUS/VEN has unique mechanism to treat Prior-VEN Failure patients**

[1]Maiti et al., Outcomes of Relapsed or Refractory acute myeloid leukemia after front-line hypomethylating agent and venetoclax regimens. Letters to the Editor, Haematologica 2021;106(3): 894.
[2]Mannis and colleagues, Outcomes with molecularly targeted agents as salvage therapy following frontline venetoclax + hypomethylating agent in adults with acute myeloid leukemia: A multicenter retrospective analysis. Letter to the Editor, Leukemia Research 2023;131:107331.
[3]Bewersforf et al., Efficacy of FLT3 and IDH1/2 inhibitors in patients with acute myeloid leukemia previously treated with venetoclax. Leukemia Research 2022; 122: 106942.

Mechanism of Action for TUS/VEN on Prior-VEN Failure AML

- **BCL-2 Overexpression** blocks cell death
- **Venetoclax Targets BCL-2**
  - **VEN inhibits BCL-2** and enables cell death
  - **VEN alone** has very modest activity in AML
  - **VEN enables** other drugs to work better
- **Venetoclax Resistance is Complex**
  - **KIT, Ras/MAPK, FLT3 mutations** promote signaling
  - **TP53 mutations** prevent cell cycle arrest
  - **MCL-1 overexpression** blocks cell death
  - **VEN cannot overcome MCL-1** blocking cell death
- **TUS/VEN Doublet Mechanism**
  - **TUS inhibits kinase-driven abnormal signaling**
  - **TUS overcomes TP53^{MUT} with clinical responses**
  - **TUS reduces MCL-1 protein** expression
  - **VEN inhibits BCL-2 block** on cell death
  - **TUS/VEN combine to kill AML cells**



APTIVATE: TUS/VEN Delivers Clinical Responses in Prior-VEN Failure R/R AML

Snapshot of Preliminary Observations as of August 1st, 2023

Very early in the treatment of these patients – Provide updates in October

R/R AML Patients Dosed with TUS/VEN Doublet

- **15 pts dosed with TUS/VEN at 01Aug2023**
  - 14 of 15 failed Prior-VEN therapy
  - >90% of patients placed on study in the U.S. have failed prior VEN therapy
- **10 of 15 reached evaluable stage at 01Aug2023**
  - 9 of 10 evaluable had failed Prior-VEN therapy

Patient Subgroup Among 10 Evaluable Patients	CRc Responses
Prior-VEN	**44% (4 of 9)**
FLT3-WT	**43% (3 of 7)**
FLT3-MUT	67% (2 of 3)
No Prior-Ven	100% (1 of 1)
Evaluable	50% (5 of 10)

CRc
CR
CRh
CRp
CRi

Positioned to treat the greatest number of patients and with the greatest medical needs

- **Potential to treat R/R AML FLT3-WT (> 70% AML population) | Not just FLT3-MUT**
- **Potential to treat R/R AML who previously failed VEN | Rising need in U.S. and ROW**

- Efficacy Evaluable with TUS/VEN combo therapy: Completed two planned bone marrow assessments, achieved objective response, or demonstrated disease progression at/after 1st response assessment. Certain patients still on study have not yet reached the efficacy evaluable criteria and may become evaluable in the future (n=3). Not evaluable if withdrew from trial prior to meeting efficacy evaluable criteria (n=2).
- Composite CR (CRc; includes CR, CRh, CRi and CRp)

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Tuspetinib Commercial Potential

AML Patient Needs

Commercial Opportunities

Accelerated Approval Registrational Trials

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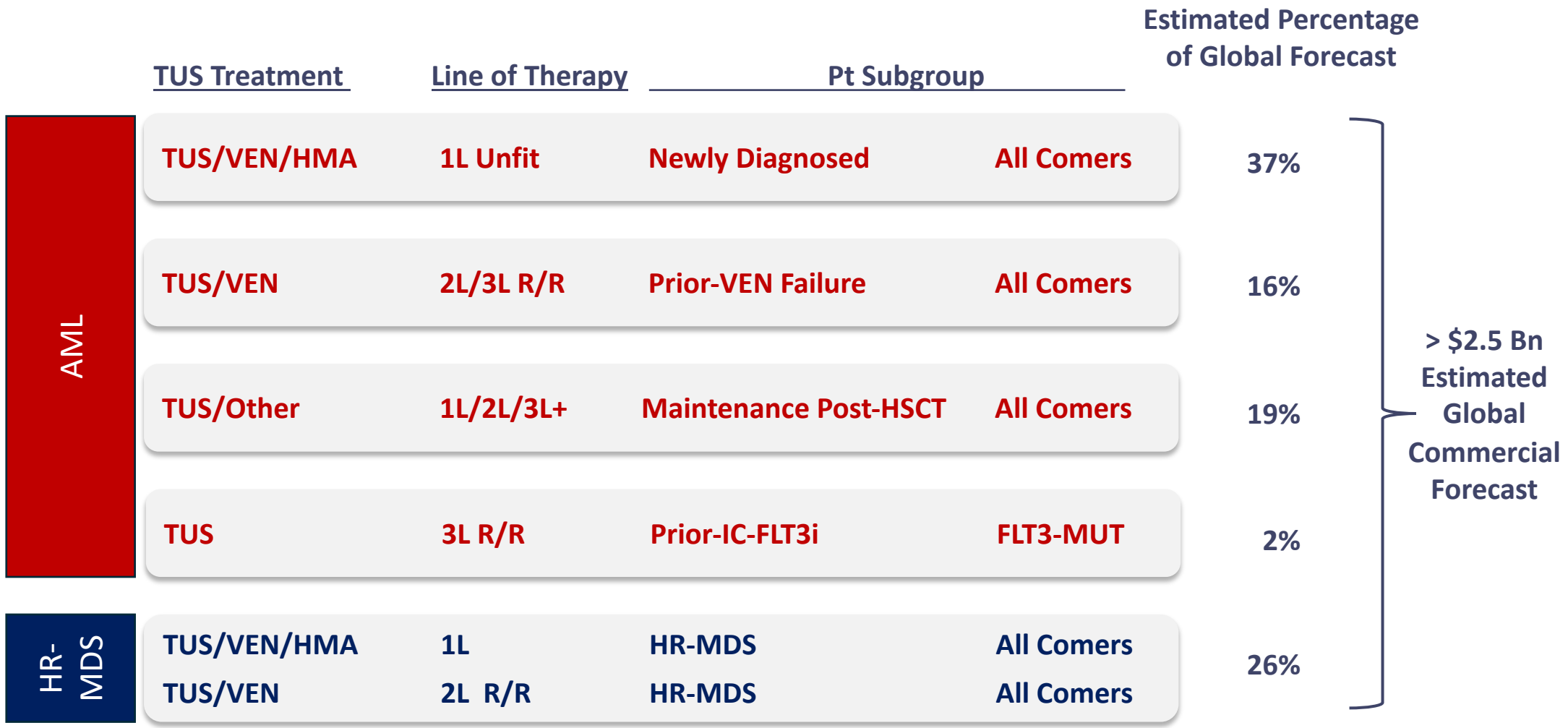
Tuspetinib Potential Annual Sales can Exceed $ 2.5 Bn by 2035
Primary Commercial Opportunities Inclusive of AML and Higher Risk MDS



Plus, Pediatric TUS + Induction Therapy: Value to pediatric population and commercially in the 6-month exclusivity extension worth ≥ $ 800 Mn by 2039

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Rationale and Strategy for Targeting Specific Commercial Opportunities

Highest Priority Opportunity: TUS/VEN Doublet may serve AML patients who failed Prior-VEN therapy

- ***Fastest path to approval – represents our immediate focus for development and commercialization***
- Need emerging as more AML patients receive venetoclax and fail with highly refractory disease
- We believe TUS/VEN treatment of Prior-VEN AML can be developed on an accelerated approval pathway
- TUS/VEN Doublet serves as a steppingstone to the TUS/VEN/HMA Triplet

Greatest Commercial Opportunity: TUS/VEN/HMA Triplet may serve as 1L therapy for newly diagnosed AML

- Potential to address the medical needs of the greatest number of patients

Longer Term Opportunity: TUS Alone or with other agents may serve as maintenance therapy following HSCT

- Long term continuous dosing after AML patients achieve CRs or receive HSCT may help *prevent relapse*

Accelerated Approval Path via Single Arm Trial: TUS may serve 3L+ patients with no approved therapies

- Monotherapy may treat specific AML subgroups with high-risk mutations or who failed prior-IC-FLT3i

Expansion Opportunity: TUS Combinations may serve HR-MDS patients (R/R and 1L HR-MDS)

- Rationale: TUS single agent responses in AML patients with wildtype FLT3 and MDS-like genotypes

Generating Data to Support Clinical Development and Registrational Plans

Phase 1/2 Dose Escalation & Dose Exploration Trial R/R AML

Dose Escalation
- 20mg to 200mg

Dose Exploration
- 40, 80, 120, 160mg
- Up to 20 pts/dose

CRs/No DLT at Four Dose Levels
- 40, 80, 120,160mg
- 12 CRc, 6 CR/CRh, 4 PR

Safe and Well Tolerated

FDA EOP1

APTIVATE
Phase 1/2 Expansion Trial R/R AML

TUS Single Agent : R/R AML	Achieved US Enrollment Goals
TUS/VEN Doublet : R/R AML	Ongoing
TUS/VEN/HMA Triplet Pilot in 1L AML	Planned
2L HR-MDS	Planned

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Tuspetinib Single Agent Clinical Trial

Single Agent Dose Escalation Phase 1/2 Clinical Trial in Patients with R/R AML

Successfully Completed

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Tuspetinib Single Agent Phase 1/2 study in R/R AML

Dose escalation & dose exploration successfully completed

Dose Escalation 18 patients dosed			Dose Exploration 42 patients dosed				Dose	n
Cohort 1: 20 mg QD		✓ **Completed**					20mg	2
Cohort 2: 40 mg QD		✓ **Completed**	40 mg QD	CRs	No DLT	✓ **Completed**	40mg	17
Cohort 3: 80 mg QD		✓ **Completed**	80 mg QD	CRs	No DLT	✓ **Completed**	80mg	20
Cohort 4: 120 mg QD		✓ **Completed**	120 mg QD	CRs	No DLT	✓ **Completed**	120mg	18
Cohort 5: 160 mg QD		✓ **Completed**	160 mg QD	CRs	No DLT	✓ **Completed**	160mg	16
Cohort 6: 200 mg QD	1 DLT	✓ **Completed**					200mg	4

- **Extensive dose exploration to address Project Optimus: 77 patients dosed over 6 dose levels**
- **Clinical Responses (CRs) achieved at 4 dose levels (40, 80, 120, 160mg) with no DLT**
- **CRs in patients with highly adverse genetics, including mutated TP53 and RAS and FLT3^{WT}**
- **Favorable safety and tolerability with no concerns of myelosuppression in remission, QTc, muscle destruction, differentiation syndrome, discontinuations**

Total n = 77

As of 4/26/2023

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Tuspetinib Single Agent Response Rates Compare Favorably to Gilteritinib FLT3i

Tuspetinib is More than a FLT3 Inhibitor (SYK, $FLT3^{WT/MUT}$, KIT^{MUT}, JAK1/2, RSK1/2)

Compare RP2D of Each □No Prior Venetoclax Therapy □FLT3-Mutated and FLT3-Wildtype

FLT3-Mutated R/R AML	Tuspetinib 80mg Phase 1/2 Trial (3L, n=6)	Gilteritinib 120mg Admiral Phase 3 Trial[1,2] (2L, n=247)
CR/CRh	50%	23%

FLT3-Mutated R/R AML

Tuspetinib is more effective relative to gilteritinib Phase 3 Admiral data

FLT3-Wildtype R/R AML	Tuspetinib 80mg Phase 1/2 Trial (2L, n=8)	Gilteritinib 120mg Phase 1b Trial[3] (2L, n=14)
CR/CRh	25%	0%

FLT3-Wildtype R/R AML

- Tuspetinib is more effective than gilteritinib
- Important data that unlock the potential for TUS to treat additional 70-75% of the AML population ($FLT3^{WT}$) not available to gilteritinib

[1]Pulte, and Pazdur and colleagues, FDA Approval Summary: Gilteritinib for Relapsed or Refractory Acute Myeloid Leukemia with a FLT3 Mutation. Clinical Cancer Research 2021;27(13): 3515.
[2]Gilteritinib US package insert May 2019
[3]Perl and colleagues, Selective Inhibition of FLT3 by Gilteritinib in Relapsed/Refractory Acute Myeloid Leukemia: a Multicenter, First-in-human, Open-label, Phase 1/2 Study. Lancet Oncol. 2017;18(8):1061.

Tuspetinib Single Agent is Clinically Safe and Broadly Active in R/R AML

Findings Position Tuspetinib for Combination Therapies

- **Achieved *single agent responses* in heavily pre-treated and elderly R/R AML patients**
  - Responses across diverse subgroups with adverse genetics ($TP53^{MUT}$, RAS^{MUT}, $NPM1^{MUT}$, $FLT3^{MUT/WT}$)
- ***RP2D established as 80mg once daily* for single agent administration**
  - Single agent activity superior to gilteritinib in FLT3-MUT and FLT3-WT patients
  - Potential to treat FLT3-WT patients, representing 70-75% of AML population not accessible to gilteritinib
- **Single agent responses establish *contribution of component* for TUS in combination therapies**
- **Excellent *safety and tolerability* profiles predict TUS will be safe to combine with other agents in combination cocktails without overlapping toxicities**
  - No concerns of myelosuppression in remission, QTc, muscle destruction, differentiation syndrome
  - Avoids discontinuations and many of the typical toxicities observed with other drugs for AML

Tuspetinib APTIVATE Trial

Ongoing APTIVATE Expansion Trial in Patients with R/R AML

TUS Single Agent → Achieved Enrollment Goals

TUS/VEN Doublet → Continuing to Enroll

- Efficacy Evaluable with TUS/VEN combo therapy is achieved when patients have completed two planned bone marrow assessments, achieved objective response, or demonstrated disease progression at/after 1st response assessment.
- Certain patients are not yet evaluable because they are still on study but and have not yet reached the efficacy evaluable criteria but may become evaluable in the future (n=3). Patients are not evaluable if they withdrew from the trial prior to meeting efficacy evaluable criteria (n=2).
- Composite CR (CRc; includes CR, CRh, CRi and CRp)

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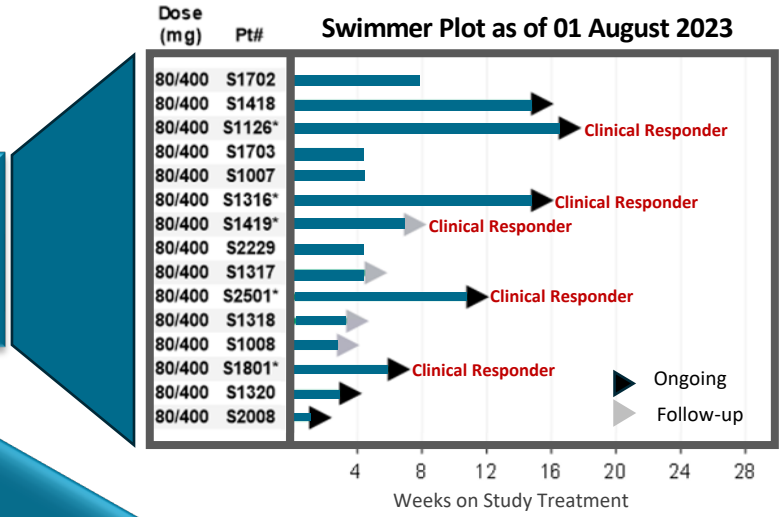
APTIVATE Study: Patient Enrollment *Snapshot as of 01 August 2023*

29 Patients Dosed

TUS Single Agent
14 Patients
13 of 14 Prior-VEN

TUS/VEN Doublet
15 Patients
14 of 15 Prior-VEN

> 90% of patients enrolled to APTIVATE failed Prior-VEN



TUS Single Agent

- **APTIVATE** Trial : 6 Eval. Pts with **Prior-VEN** : RR 18% (1 CRp)
- **Dose Esc.** Trial : 12 Pts with **No** Prior-VEN : RR 42% (5 CR/CRh)[1]
- Against Prior-VEN AML patients, TUS single agent is as good or better than other drugs, but is more active in AML patients with **No** Prior-VEN
- Explains "questions regarding dose response" in Dose Escalation Trial. Dose responsive through 80mg. Above 80mg (120mg, 160mg), most patients enrolled were Prior-VEN : different patient population enrolled at higher doses that is less responsive

TUS/VEN Doublet

Learned TUS/VEN remarkably active in Prior-VEN AML

- **VEN alone** is not active and not used in Prior-VEN failure patients
- This demonstrates responses with TUS/VEN are due to doublet, not VEN
- **Early responses in difficult-to-treat** patients drove **high investigator enthusiasm** for TUS/VEN doublet
- Going forward, we will focus enrollment of APTIVATE patients to the **TUS/VEN doublet**

[1] R/R AML patients treated with 80mg tuspetinib once daily in the Dose Escalation and Sose Expansion Phase 1/2 Trial

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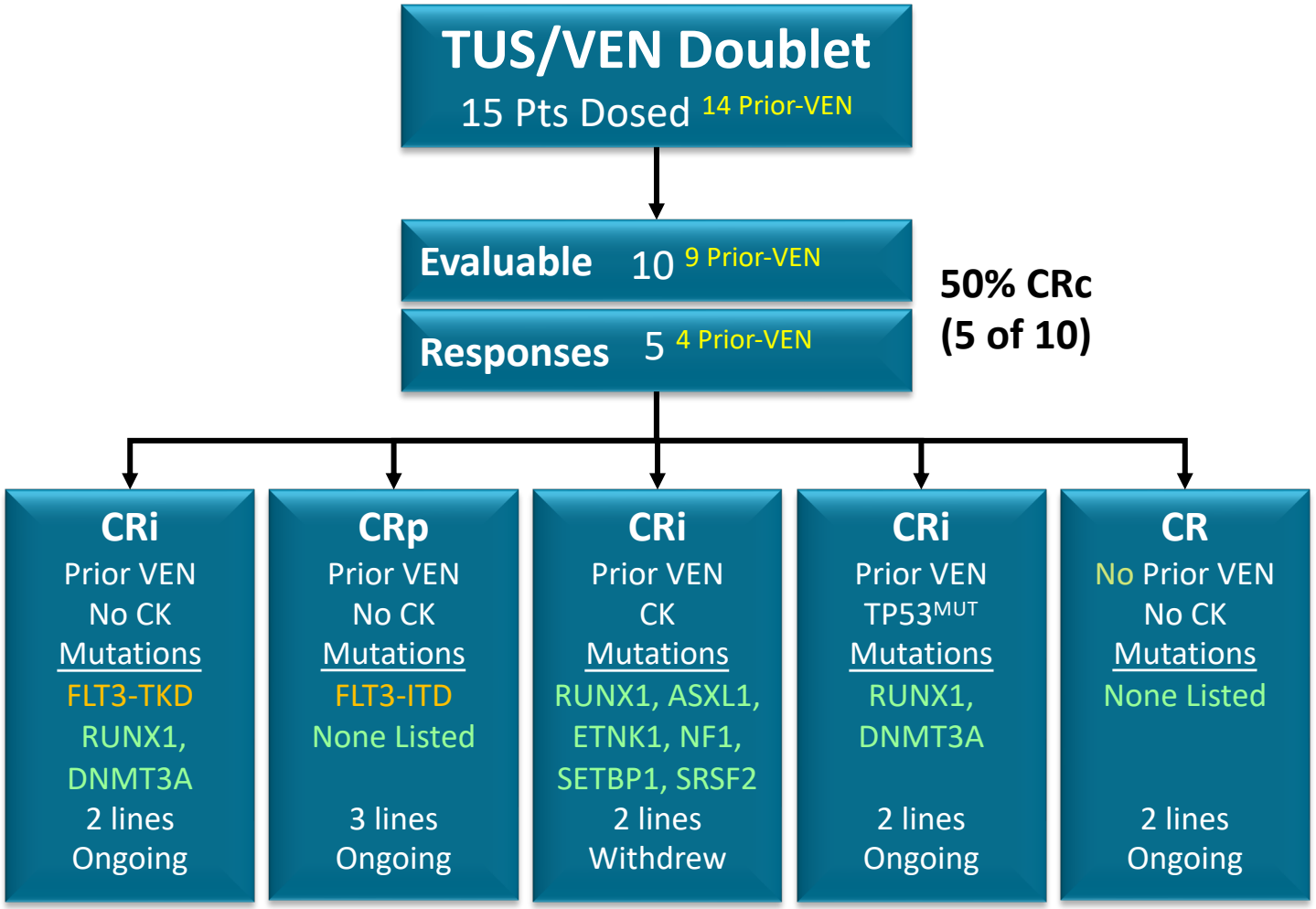
APTIVATE TRIAL: R/R AML Patients Received TUS/VEN

As of 01 August 2023



TUS/VEN Doublet in Evaluable Patients

- Achieved 5 clinical responses among 10 evaluable patients

TUS/VEN 50% CRc

(n= 5 of 10)

- Our patients have been on TUS/VEN for a short period of time; as normal cell counts recover over time, CRi or CRp may "upgrade" to CR/CRh

CRc
CR
CRh
CRp
CRi

- Efficacy Evaluable with TUS/VEN combo therapy is achieved when patients have completed two planned bone marrow assessments, achieved objective response, or demonstrated disease progression at/after 1st response assessment.
- Certain patients are not yet evaluable because they are still on study but and have not yet reached the efficacy evaluable criteria but may become evaluable in the future (n=3). Patients are not evaluable if they withdrew from the trial prior to meeting efficacy evaluable criteria (n=2). Composite CR (CRc; includes CR, CRh, CRi and CRp)
- Patients received 2-5 prior lines of therapy | IC is Intensive Chemotherapy | CK is Complex Karyotype
- Evaluable patients: 9 of 10 Prior-VEN | 2 of 10 Prior-FLT3i | 7 of 10 Prior-IC | 2 of 10 Prior-HSCT

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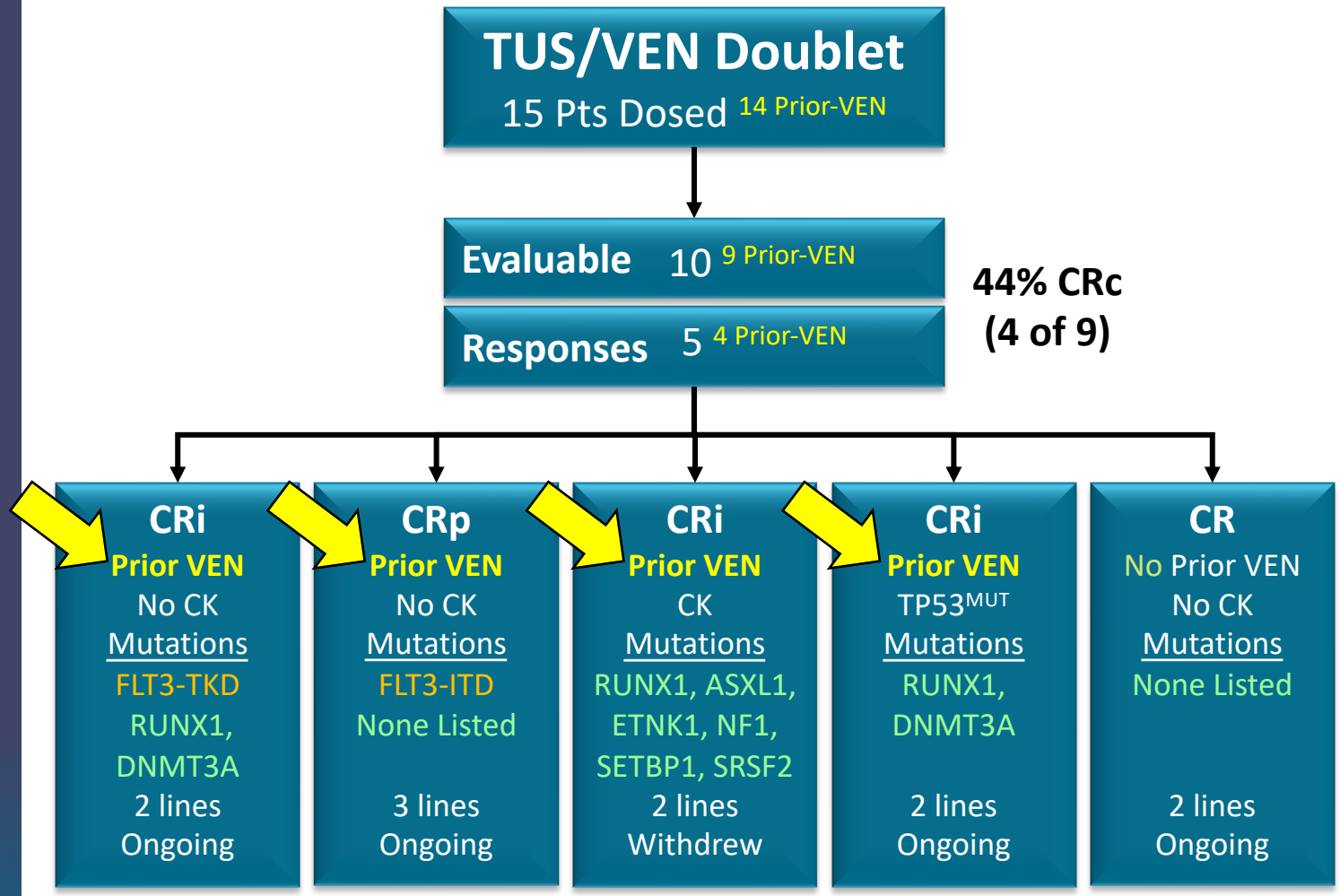
APTIVATE TRIAL: TUS/VEN Doublet for R/R AML with Prior-VEN Failure

As of 01 August 2023



TUS/VEN Doublet for Prior-VEN AML

- Salvage therapy expects responses in <10% of Prior-VEN failure patients

TUS/VEN 44% CRc

(n= 4 of 9)

(n=2 $FLT3^{MUT}$; n=2 $FLT3^{WT}$)

- As normal cell counts recover over time, CRi or CRp may "upgrade" to CR/CRh

- **TUS/VEN offers solution for Prior-VEN patients and a potential accelerated approval path for tuspetinib**

CRc
CR
CRh
CRp
CRi

- Efficacy Evaluable with TUS/VEN combo therapy is achieved when patients have completed two planned bone marrow assessments, achieved objective response, or demonstrated disease progression at/after 1st response assessment.
- Certain patients are not yet evaluable because they are still on study but and have not yet reached the efficacy evaluable criteria but may become evaluable in the future (n=3). Patients are not evaluable if they withdrew from the trial prior to meeting efficacy evaluable criteria (n=2). Composite CR (CRc; includes CR, CRh, CRi and CRp)
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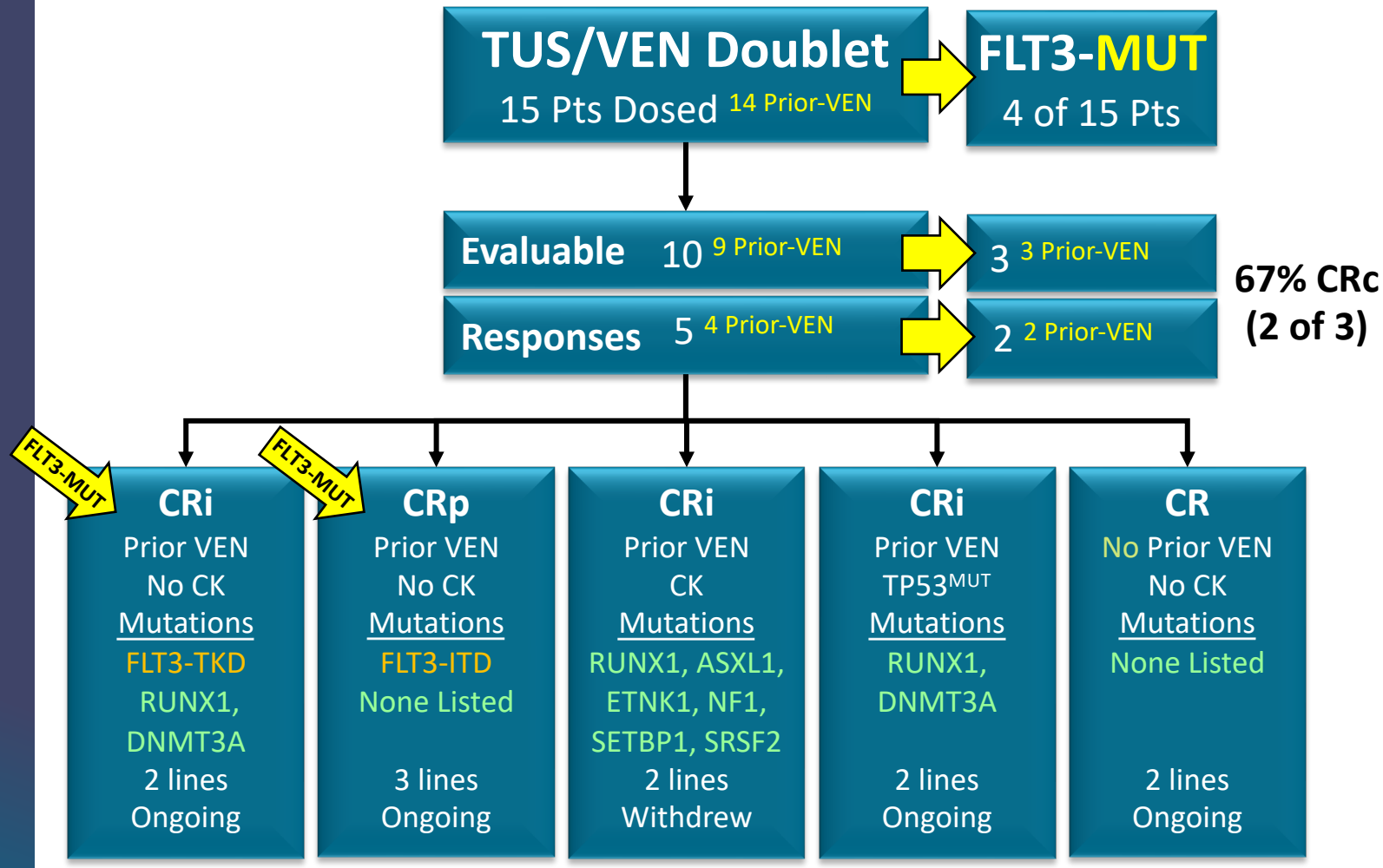
APTIVATE TRIAL: TUS/VEN Doublet for R/R AML with FLT3-Mutated

As of 01 August 2023



TUS/VEN Doublet for FLT3-MUT AML

- R/R AML with Mutated FLT3 respond favorably to TUS/VEN

TUS/VEN 67% CRc

(n= 2 of 3)

(1 $FLT3^{TKD}$; 1 $FLT3^{ITD}$)

- TUS inhibits WT & mutant forms of FLT3 kinase, as well as JAK1/2, SYK, RSK1/2, mutant forms of KIT, TAB1-TAK1, SKT10 to suppress key oncogenic pathways in AML

- Efficacy Evaluable with TUS/VEN combo therapy is achieved when patients have completed two planned bone marrow assessments, achieved objective response, or demonstrated disease progression at/after 1st response assessment.
- Certain patients are not yet evaluable because they are still on study but and have not yet reached the efficacy evaluable criteria but may become evaluable in the future (n=3). Patients are not evaluable if they withdrew from the trial prior to meeting efficacy evaluable criteria (n=2). Composite CR (CRc; includes CR, CRh, CRi and CRp)
- Patients received 2-5 prior lines of therapy | IC is Intensive Chemotherapy | CK is Complex Karyotype
- Evaluable patients: 9 of 10 Prior-VEN | 2 of 10 Prior-FLT3i | 7 of 10 Prior-IC | 2 of 10 Prior-HSCT

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TUS/VEN Responses in FLT3-Mutated R/R AML with Prior-VEN Failure
TUS/VEN Response Rates Compare Favorably to VEN/Gilt

TUS is More Than a FLT3 Inhibitor

CR/CRi (CRc) in FLT3-Mutated AML	
TUS/VEN APTIVATE Prior-VEN (n= 2 of 3)	VEN/Gilt Phase 1b Trial[1] Prior-VEN (n= 22 of 56)
67%	39%

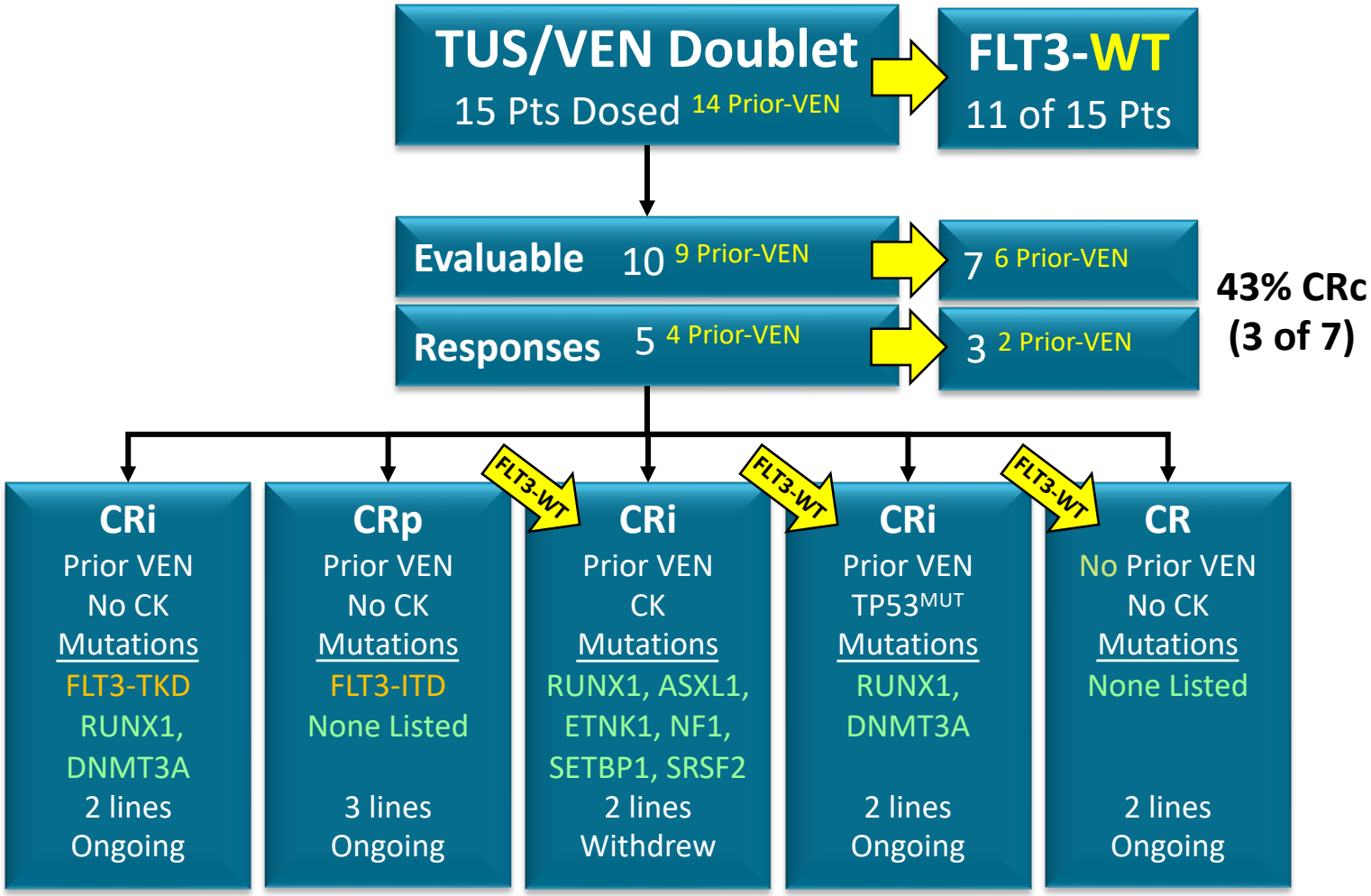
FLT3-Mutated/Failed Prior-VEN

- **TUS/VEN doublet** compares favorably to GILT/VEN
- **Safety is the "secret sauce"** for TUS
- **TUS has superior safety profile** over Gilteritinib
- **TUS/VEN** offers a safer therapeutic solution for **FLT3-mutated AML with Prior-VEN Failure**
- Believe VEN/Gilt will not be as competitive due to its safety profile

[1]Daver and colleagues, Venetoclax Plus Gilteritinib for FLT3-Mutated Relapsed/Refractory Acute Myeloid Leukemia. Journal of Clinical Oncology 2022;40(35):4048.

APTIVATE TRIAL: TUS/VEN Doublet for R/R AML with FLT3-Wildtype

As of 01 August 2023



TUS/VEN Doublet for FLT3-WT AML

- R/R AML with Wildtype FLT3 are not offered a targeted therapy

TUS/VEN 43% CRc

(n= 3 of 7)

- Reminder: FLT3-WT is 70-75% of AML population
- No other agents in development addressing this population
- Substantial market potential for TUS/VEN in FLT3-WT AML

- Efficacy Evaluable with TUS/VEN combo therapy is achieved when patients have completed two planned bone marrow assessments, achieved objective response, or demonstrated disease progression at/after 1st response assessment.
- Certain patients are not yet evaluable because they are still on study but and have not yet reached the efficacy evaluable criteria but may become evaluable in the future (n=3). Patients are not evaluable if they withdrew from the trial prior to meeting efficacy evaluable criteria (n=2). Composite CR (CRc; includes CR, CRh, CRi and CRp)
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TUS/VEN Responses in FLT3-Wildtype R/R AML with Prior-VEN Failure
VEN/Gilt is Not Active in FLT3-WT/Prior-VEN Population

TUS is More Than a FLT3 Inhibitor

CR/CRi (CRc) in FLT3-Wildtype AML Who Failed Prior-VEN	
TUS/VEN APTIVATE (n= 2 of 6)	VEN/Gilt Phase 1b Trial[1] (n= 0 of 5)
33%	0%

FLT3-WT & Failed Prior-VEN

- **TUS/VEN achieved 33% CRc**
  - **Add, the "secret sauce" → Strong safety**
- **TUS/VEN** offers a safe therapeutic solution for AML patients with **FLT3-WT/Prior-VEN Failure**
- **VEN/Gilt not active** in this AML population, and caused prolonged cytopenia and DILI
  - Believe VEN/Gilt will not be competitive

[1]Daver and colleagues, Venetoclax Plus Gilteritinib for FLT3-Mutated Relapsed/Refractory Acute Myeloid Leukemia. Journal of Clinical Oncology 2022;40(35):4048.

Tuspetinib ideal for combination therapy to treat 1L AML and R/R AML

TUS Combination Therapies Offer > $2.5 Bn Commercial Opportunities

Ideal Doublet

1. **Tuspetinib:** myeloid kinase inhibitor
2. **Venetoclax:** BCL-2 inhibitor

Ideal Triplet

1. **Tuspetinib:** myeloid kinase inhibitor
2. **Venetoclax:** BCL-2 inhibitor
3. **HMA:** hypomethylating agent

	Tuspetinib	FLT3 Inhibitors		Menin Inhibitors	
		Gilterinib	Quizartinib	Revumenib	Ziftomenib
Targets:	SYK, JAK1/2 FLT3$^{ITD/TKD/WT}$ RSK1/2, c-KIT^{MUT}	FLT3$^{ITD/TKD}$ AXL	FLT3^{ITD}	Menin	Menin
Avoids myelosuppression	✓	✗	✗	–	–
Avoids QTc prolongation	✓	✗	✗	✗	✓
Avoids differentiation syndrome	✓	✗	–	✓	✗
CRs in FLT3^{MUT} and FLT3^{WT}	✓	✓	–	✓	✓

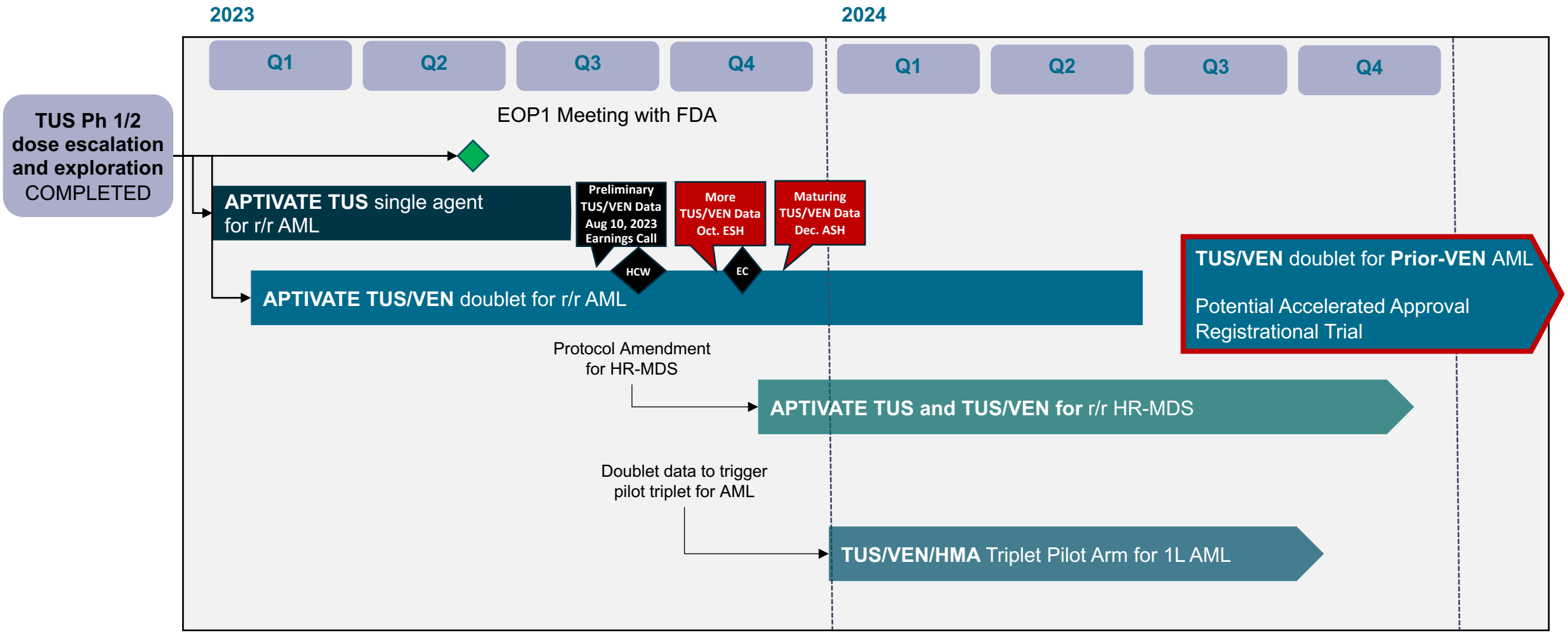
Gilteritinib package insert
Quizartininib 2019 ODAC filing, EMA filing
Emavusertib clinical hold, lifted; Curis Corporate presentation

Revumenib Syndax Corporate Presentation
Ziftomenib Kura Oncology Corporate Presentation
Lanraplenib Kronos Bio Corporate Presentation

APTOSE BIOSCIENCES

Our Immediate Plan: Move TUS/VEN to Accelerated Approval Registrational Trial

- 2L AML (failed 1L VEN/HMA and no approved targeted agents available) | 3L AML (failed 1L VEN/HMA and failed approved targeted agents in 2L)
- High enthusiasm from investigators, as competing off-label regimens likely have greater toxicity and more narrow populations than a TUS/VEN regimen



Aptose Biosciences is a precision oncology company developing oral targeted agents to treat hematologic malignancies

Acute myeloid leukemia, AML
Myelodysplastic syndromes, MDS

(Nasdaq: APTO ; TSX: APS)

APTOSE BIOSCIENCES

Aptose Investment Highlights

Tuspetinib safety, convenience, and breadth of activity make it the ideal drug for combination therapies in AML

- AML treatment strategies quickly shifting to combination therapies
- Combinations provide greatest commercial and patient impacts
- TUS/VEN/HMA triplet ideal therapy for frontline AML
- TUS/VEN achieved CRs in “high need” Prior-VEN AML
- Forecast > $2.5 Bn market potential with AML and HR-MDS

Plan to deliver value-driving clinical milestones Q4 2023

Pursuing TUS/VEN Accelerated Approval in Prior-VEN AML

Key Activities and Upcoming Events

- Advancing partnering discussions
- Planning to expand into HR-MDS
- Planning TUS/VEN/HMA Pilot in 1L AML
- Release updated Doublet data : ESH (Oct)
- Release maturing Doublet data: ASH (Dec)
- Release news flow at November Earnings Call

THANK YOU

APTOSE BIOSCIENCES

PRECISION ONCOLOGY FOR THERAPIES OF TOMORROW