APRIL 2023

CORPORATE PRESENTATION

APTOSE BIOSCIENCES

PRECISION ONCOLOGY FOR THERAPIES OF TOMORROW

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

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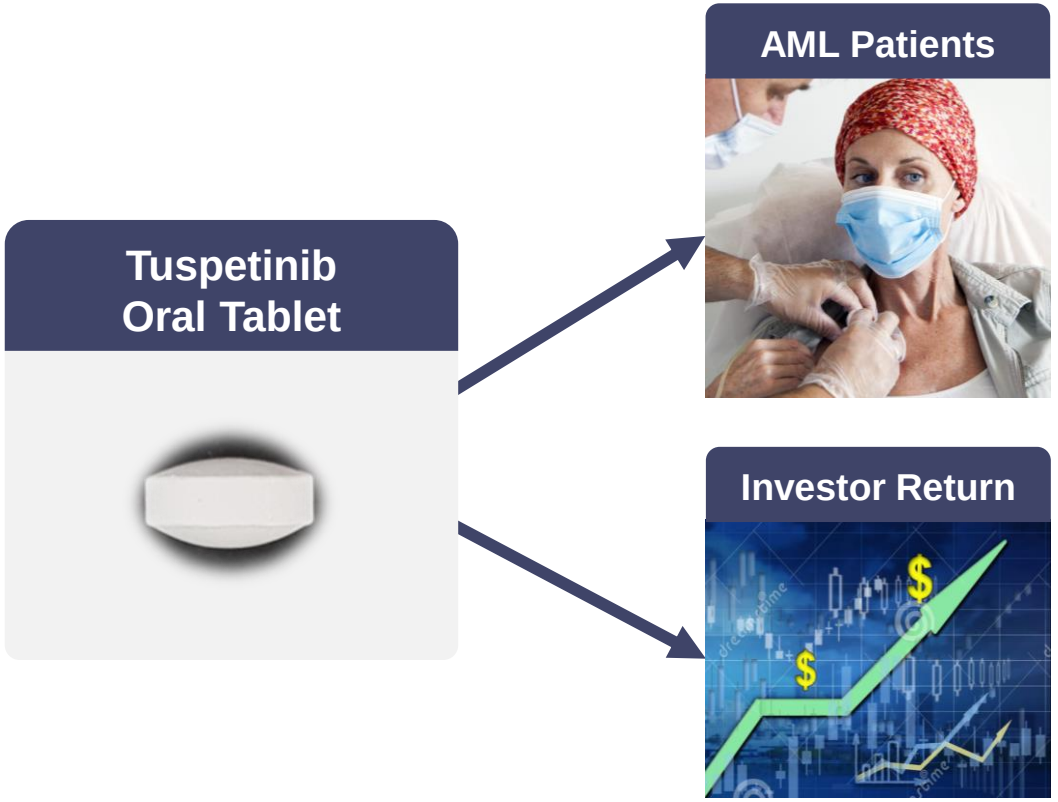
Aptose is a precision oncology company developing oral targeted agents to treat hematologic malignancies



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

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Aptose Investment Highlights

Tuspetinib (Tus) myeloid kinase inhibitor: safe and effective, once daily, oral agent to treat AML

- CRs across 4 dose levels with no DLT
- Favorable safety and non-myelosuppressive
- Broadly active across diverse AML populations
- Accelerated approval paths as monoRx and doublet
- Ideal for 1L triplet therapy and maintenance therapy
- Orphan Drug and Fast Track Status
- $1B+ market potential

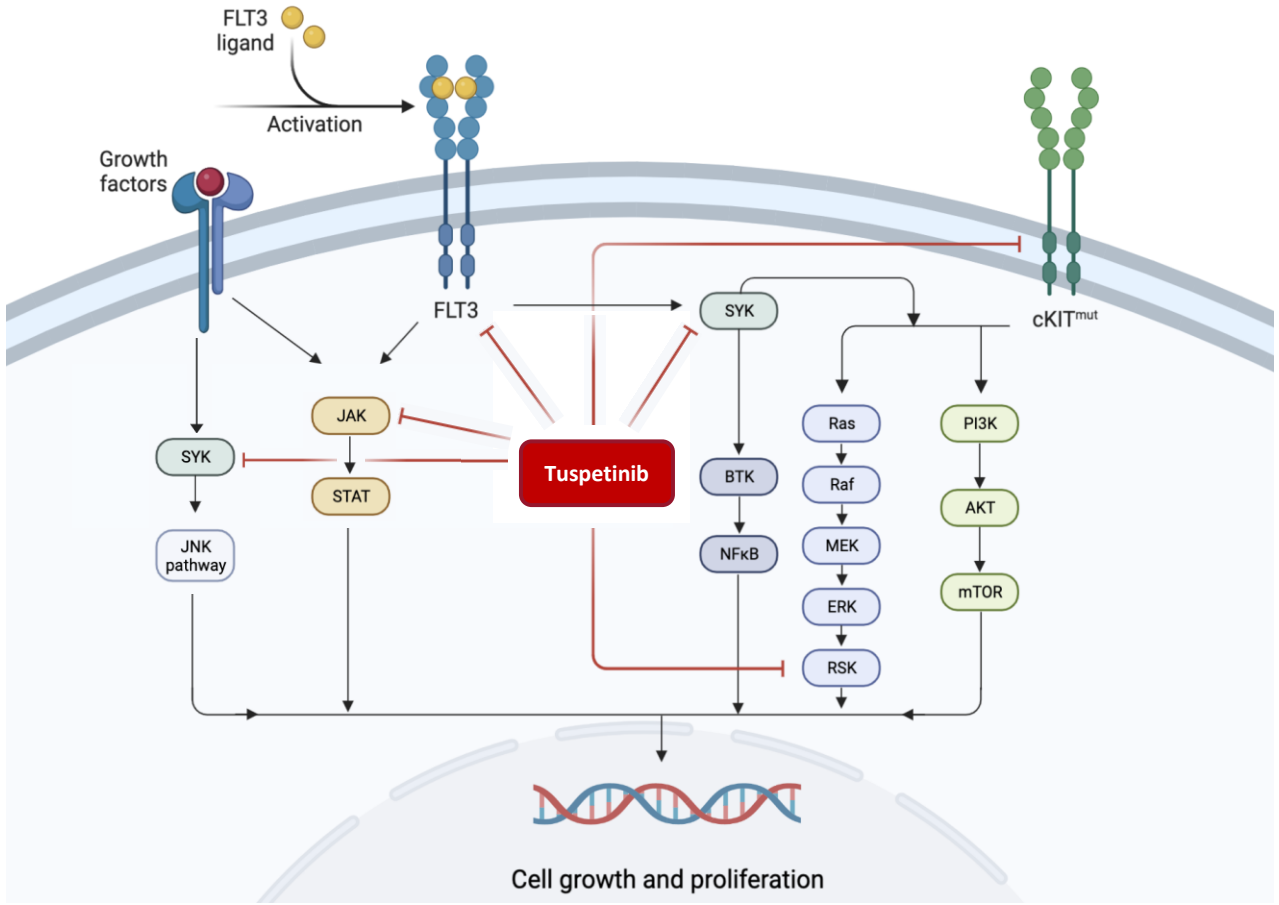
Luxeptinib (Lux) lymphoid & myeloid kinase inhibitor

- Clinically active in AML and B-cell cancers
- Exploring new formulation with improved absorption

Value-driving near-term clinical milestones during 2023

Tuspetinib simultaneously targets clinically validated kinases in oncogenic signaling pathways in AML

Avoids the need to fully suppress any single target – Avoids typical toxicities of other agents



Multi-drug therapy in a single tablet

- Uniquely and potently targets **FLT3, SYK, JAK1/2, cKIT^{MUT},** and **RSK**
- Suppresses multiple dysregulated signal transduction pathways that drive AML proliferation and resistance
- Ideal for **monotherapy, combination** therapy, and **maintenance** therapy

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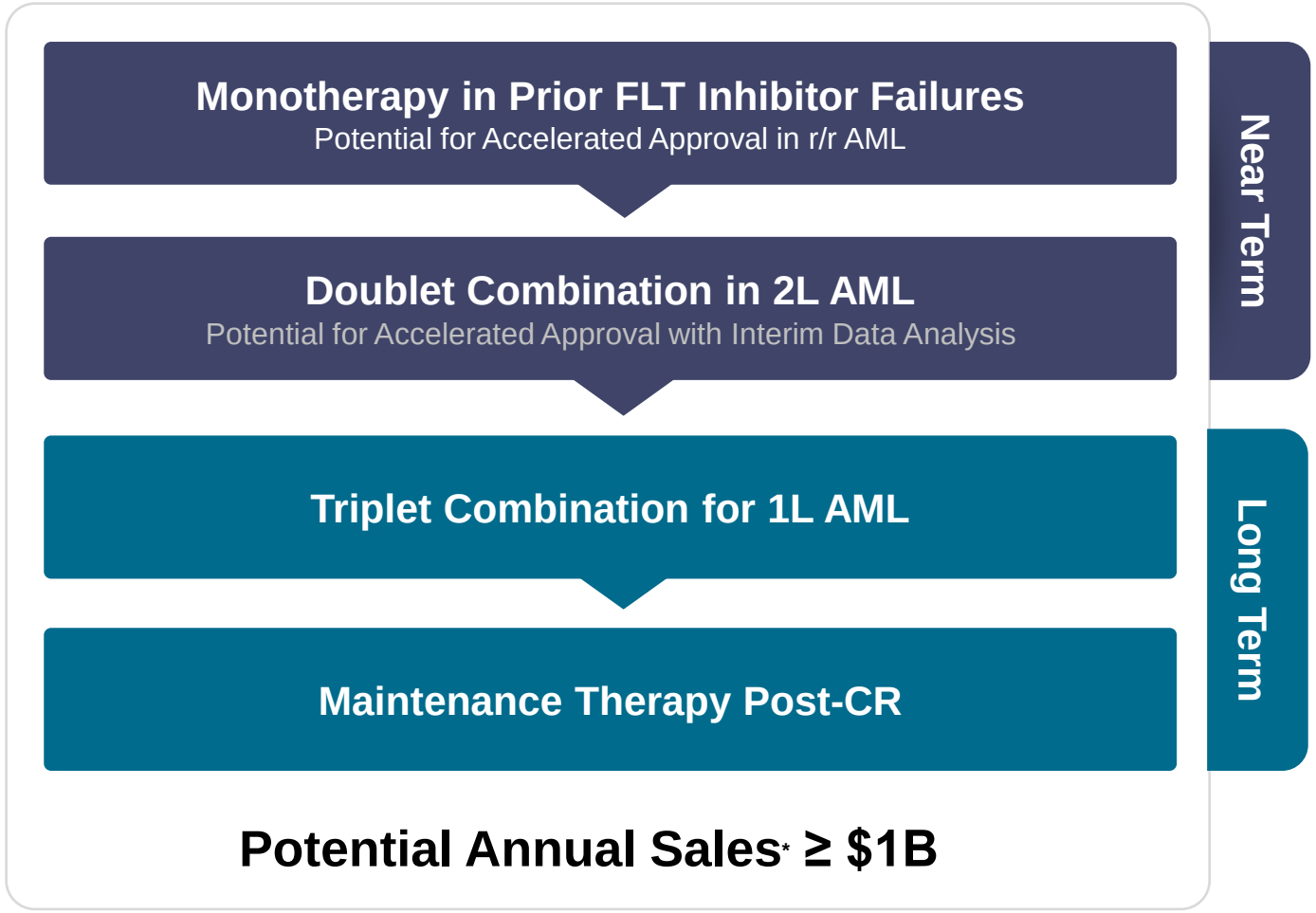
Building a long-term strategy for tuspetinib blockbuster potential

Addresses multiple AML patient populations and commercial opportunities



Tuspetinib blockbuster potential

- Delivers potent single agent CRs among refractory AML regardless of adverse mutation status
- CRs among wildtype FLT3 patients, representing 70% of AML population
- Avoids typical toxicities of other kinase inhibitors, including myelosuppression
- Paths identified for accelerated approval
- Ideal for oral maintenance & combination therapy representing significant markets

*Company estimate based on internal data

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Tuspetinib monotherapy in r/r AML who failed prior FLT3i

Accelerated approval path with fast-to-market opportunity

FLT3^{mut} AML failed prior FLT3 inhibitors
(3L+ r/r AML population with no approved options)**:**

Gilteritinib (Xospata®) *FY 2022E sales: ~$355M**

Midostaurin (Rydapt®)

Sorafenib (Nexavar®)

Quizartinib

FLT3i failure

Tuspetinib Monotherapy

- Active against all forms FLT3 & other targets
- Responses in patients who failed prior FLT3i
- Potential to address an unmet medical need
- Fast-to-market strategy in US

Accelerated development strategy may offer more rapid value creation

* Sales figures from Astellas FY 2022 guidance

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Tuspetinib doublet therapy in 2L AML

Accelerated approval opportunity with large commercial potential

2L AML failed all 1L agents (all comer):

- Failed chemotherapy
- Failed 1L HMA + Ven
- Failed 1L FLT3 inhibitor

Tuspetinib + venetoclax doublet therapy

- Active in AML with **FLT3^{MUT}**
- Active in **larger AML population** with **FLT3^{WT}**
- Potential to address an **unmet medical need**
- Potential for interim analysis and **early approval**
- Option for confirmatory regulatory strategy in US

Accelerated development strategy may offer more rapid value creation

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New era of triplet therapy with targeted agents for 1L AML creates a significant commercial opportunity for tuspetinib

Triplet with Targeted Agents for AML | Analogous to HIV Cocktail Therapy

Blood Cancer Journal www.nature.com/bcj

ARTICLE OPEN

Check for updates

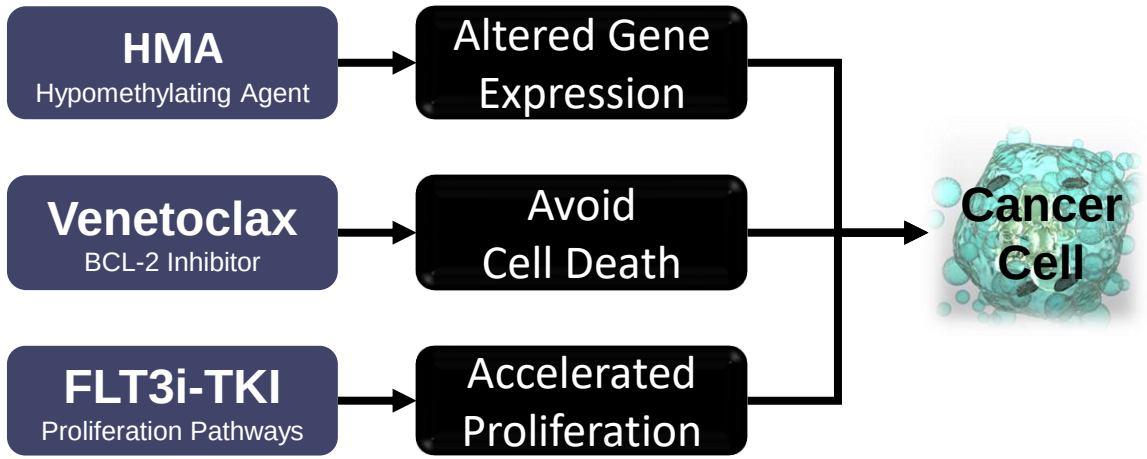
Hypomethylating agent and venetoclax with FLT3 inhibitor "triplet" therapy in older/unfit patients with *FLT3* mutated AML

Musa Yilmaz[1], Hagop Kantarjian[1], Nicholas J. Short[1], Patrick Reville[1], Marina Konopleva[1], Tapan Kadia[1], Courtney DiNardo[1], Gautam Borthakur[1], Naveen Pemmaraju[1], Abhishek Maiti[1], Elias Jabbour[1], Nitin Jain[1], Ghayas Issa[1], Koichi Takahashi[1], Koji Sasaki[1], Maro Ohanian[1], Sherry Pierce[1], Guillin Tang[2], Sanam Loghavi[2], Keyur Patel[2], Sa A. Wang[2], Guillermo Garcia-Manero[1], Michael Andreeff[1], Farhad Ravandi[1] and Naval Daver[1]✉

Improves CR/CRh/CRi to >90%

Improves MRD-negative status

Improves OS (survival) and gives hope



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Tuspetinib for triplet therapy in 1L AML due to favorable safety profile

Large commercial opportunity

Current triplet: HMA + Venetoclax + FLT3i

HMA: Hypomethylating agent

Venetoclax: BCL-2 inhibitor (*2022 sales: $2.9B)**

FLT3i: Current FLT3 inhibitors

Problems with current triplet:
HMA + Venetoclax + FLT3i-TKI

Safety issue with QTc prolongation

Prolonged myelosuppression

Limited breadth of antileukemic activity

Ideal triplet: HMA + Venetoclax + Tuspetinib

HMA: Hypomethylating agent

Venetoclax: BCL-2 inhibitor

Tuspetinib: Myeloid kinase inhibitor

Solution for ideal triplet:
HMA + Venetoclax + **Tuspetinib**

No observed cardiotoxicity

No observed differentiation syndrome

No myelosuppressive with continuous dosing

Active on $FLT3^{MUT}$ and $FLT3^{WT}$

*FIERCE PHARMA SPECIAL REPORT: The top 15 best-selling cancer drugs in 2022

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Tuspetinib maintenance therapy post-CR

Large commercial opportunity

Patients who achieve a CR

- CR post-Tus Monotherapy
- CR post-Tus triplet Therapy
- CR post-Chemotherapy
- CR post-HSCT

Tuspetinib maintenance therapy

- Tus monotherapy or Tus|Ven or Tus|HMA
- Applicable to larger FLT3$^{WR \text{ or } MUT}$ AML populations
- Maintain patients long term MRD-negative CR
- Extend disease free state and survival

Maintenance strategy may offer significant long-term value creation

"HSCT": Hematopoietic Stem Cell Transplant

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Pathway to commercialization: global APTIVATE dose expansion trial ongoing to support registrational studies for accelerated approval

✓ Dosing Completed

Phase 1/2 trial tuspetinib single agent

Part A: **Dose Escalation:**
- 6 cohorts: 20mg to 200mg
- N=18 dosed

Part B: **Dose Exploration:**
- 4 cohorts: 40, 80, 120, 160mg
- N=42+ dosed
- No dose-limiting toxicities
- Mutation agnostic responses

Dosing Ongoing

Phase 1/2 APTIVATE expansion trial

Tuspetinib Monotherapy
- FLT3-mutated cohort:
  - Enrich Prior FLT3i
- FLT3-unmutated cohort
  - Enrich $TP53^{MUT}$ / complex karyotype

Doublet Combination of Tuspetinib + Venetoclax
- FLT3-mutated/FLT3-unmutated

Triplet Combo Pilot Study
- Planned 2H2023
- 1L All comers: Tus | Ven | HMA

Dosing Planned

Registrational Trials

Registrational Phase 2: monotherapy
- $FLT3^{MUT}$ r/r AML (prior FLT3i therapy)

Registrational Phase 2: monotherapy
- $TP53^{MUT}$ or $NPM1^{MUT}$ r/r AML

Doublet Phase 2 randomized study
- 2L AML, $FLT3^{MUT}$: Tus | Ven vs. Gilt
- 2L AML, $FLT3^{WT}$: Tus | Ven vs. Chemo

Triplet Phase 2/3 randomized study
- 1L unfit AML : Tus | Ven | HMA + Maint vs. HMA | Ven
- 1L fit AML, $FLT3^{WT}$: Tus | Chemo + Maint vs. Chemo

Paths for US Accelerated Approvals and Global Marketing

Paths for Full Approval and Maximizing Commercial Value

"Fit & unfit patients": The AML subtype, cytogenetics, and molecular features are essential for a patient's prognosis. These can influence the treatment choice. However, the therapeutic choice is also influenced by the physician-assessed "fitness" of the patient's ability to tolerate intensive chemotherapy.

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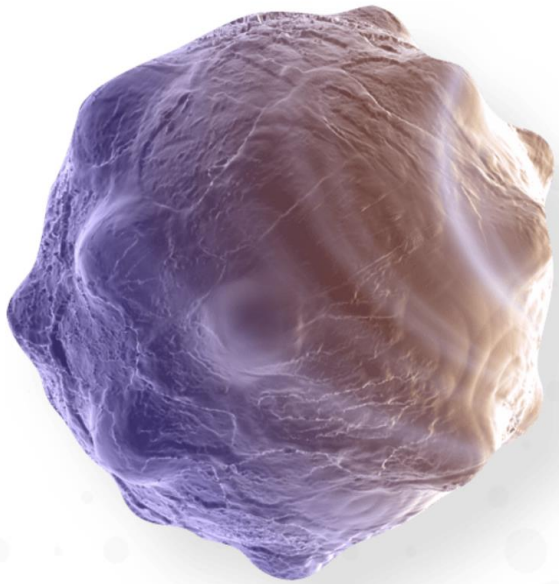

Initial Results from the Tuspetinib Phase 1/2 Clinical Trial

Relapsed or Refractory AML

Tuspetinib Phase 1/2 Study in r/r AML: Dose Escalation & Dose Exploration Completed

Dose Escalation
18 patients dosed

Cohort 1: 20 mg QD	✓ Completed
Cohort 2: 40 mg QD	✓ Completed
Cohort 3: 80 mg QD	✓ Completed
Cohort 4: 120 mg QD	✓ Completed
Cohort 5: 160 mg QD	✓ Completed
Cohort 6: 200 mg QD	✓ Completed

Dose Exploration
42 patients dosed

40 mg QD	CRs	No DLT	Dosing
80 mg QD	CRs	No DLT	✓ Completed
120 mg QD	CRs	No DLT	✓ Completed
160 mg QD	CRs	No DLT	✓ Completed

Favorable, non-myelosuppressive safety profile across six dose levels:

- No drug-related SAE or deaths
- No drug-related QTc prolongation
- No DLT through 160 mg dose level
- Plasma $t_{1/2}$ estimated at 40hrs

Dose escalation and dose exploration completed across six dose cohorts:

- Total patients dosed in Part A + Part B = 60
- Total evaluable for efficacy in Part A + Part B = 48
- Total evaluable for efficacy at 80/120/160mg = 42
- Additional patients being placed on 40mg dose level

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Phase 1/2 dose escalation and exploration - patient characteristics

Patient Characteristics	
Demographic:	**N=60 (%)**
Male	35 (58.3%)
Race:	
Asian	32 (53.3%)
White	22 (36.7%)
Median age	61 (range: 18-83)
FLT3 Mutation Status	
$FLT3^{MUT}$	26 (43.3%)
$FLT3^{WT}$	33 (55.0%)
Unknown	1 (1.7%)
Prior Lines of AML Therapy - Mean (range)	2.7 (1 to 8)
Type of Prior Therapy	N (%)
Prior Drug Therapy (Chemotherapy/Not Radiation)	60 (100%)
Cytotoxic Chemotherapy	43 (71.7%)
HMA	36 (60.0%)
Venetoclax	30 (50.0%)
HSCT	17 (28.3%)
FLT3 Inhibitor	14 (23.3%)

Dose escalation and exploration completed across six dose cohorts

- **As of 10/6/22, 60 patients treated across 6 dose levels**
- **Patients heavily pre-treated**
  - Cytotoxic chemotherapy (72%)
  - HMAs (60%)
  - Venetoclax (50%)
  - HSCT (28.3%)
- **Half (50%) of $FLT3^{MUT}$ patients failed prior FLT3 inhibitor**

Data from 2022 ASH Annual Meeting

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Tuspetinib favorable safety profile and broad therapeutic window

Favorable Safety Profile

- No drug-related myelosuppression
- No drug related AE of QTc prolongation
- No observed differentiation syndrome
- No drug related SAE, deaths, or discontinuations
- No DLT from 20 mg level through 160 mg level
- One DLT of muscle weakness at 200 mg
  - Reversibility in patient with high exposure
  - Not rhabdomyolysis | No muscle destruction
  - No AE of elevated creatine phosphokinase (CPK)
- Avoids many of the typical toxicities observed with other TKI and menin inhibitors

Treatment-emergent AEs (TEAEs), Safety Analysis Set, Parts A and B (N=60)	
Patients Experiencing TEAEs	**N (%)**
Any	56 (93.3%)
Most Frequent TEAEs (>15% of patients)	
Pneumonia	18 (30.0%)
Pyrexia	12 (20.0%)
Nausea	11 (18.3%)
Diarrhea	9 (15.0%)
≥ Grade 3	41 (68.3%)
SAEs	31 (51.7%)
Leading to treatment discontinuation	6 (10.0%)
Leading to death	11 (18.3%)
Patients Experiencing TEAEs Related to HM43239	**N (%)**
Any	17 (28.3%)
Most Frequent Related TEAEs (>5% of patients)	
Diarrhea	7 (11.7%)
Nausea	5 (8.3%)
≥ Grade 3	6 (10.0%)
Decreased neutrophil count	2 (3.3%)
Muscle weakness	2 (3.3%)
Decreased white blood cell count	1 (1.7%)
Nausea	1 (1.7%)
Leukopenia	1 (1.7%)
SAEs	0 (0%)
Leading to death	0 (0%)
Dose Limiting Toxicity (DLT)*	1 (1.7%)

Data from 2022 ASH Annual Meeting

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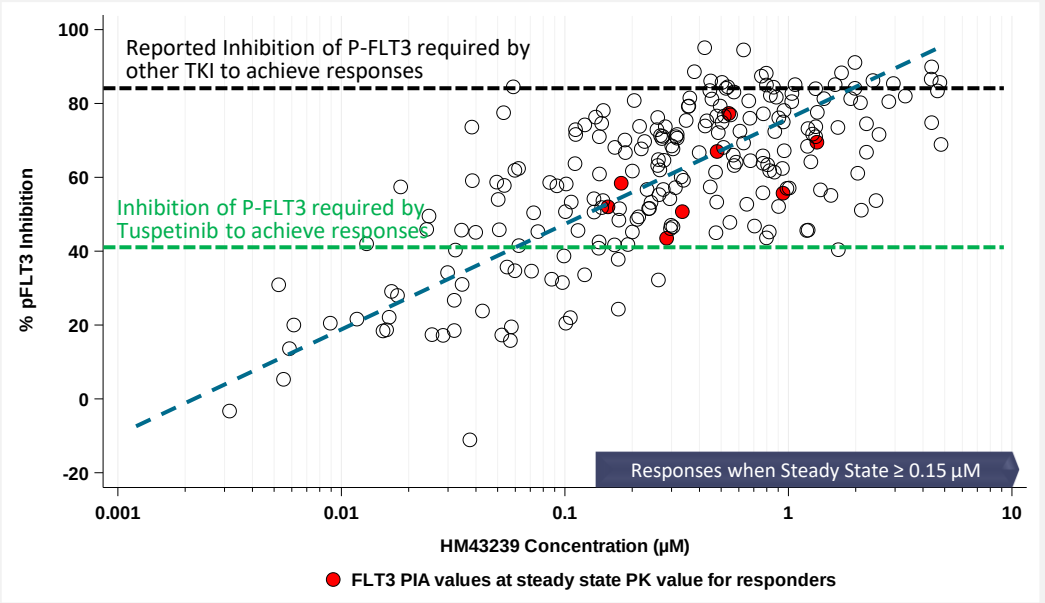
Tuspetinib in patient plasma inhibits multiple kinase targets

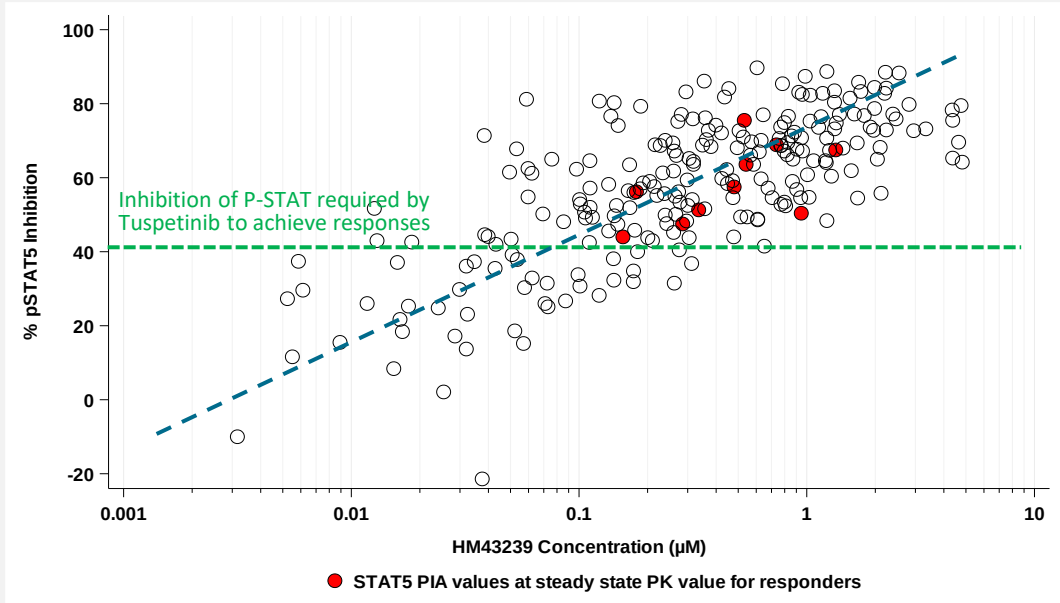
Full inhibition of each target is not required

Lower doses needed for responses = fewer toxicities

Inhibition of FLT3 activity
Measure P-FLT3 in MOLM-14 AML Cells
By Patient Plasma in PIA Assay



Inhibition of JAK activity
Measure P-STAT5 in MOLM-14 AML Cells
Patient Plasma in PIA Assay



Abbreviations: PIA, plasma inhibitory activity; PK, pharmacokinetics; PKAS, pharmacokinetics analysis set.
Note: available PIA values with corresponding PK values at the same timepoints from patients in PKAS are plotted in these figures.

Data from 2022 ASH Annual Meeting | Graphs prepared 08Feb2023

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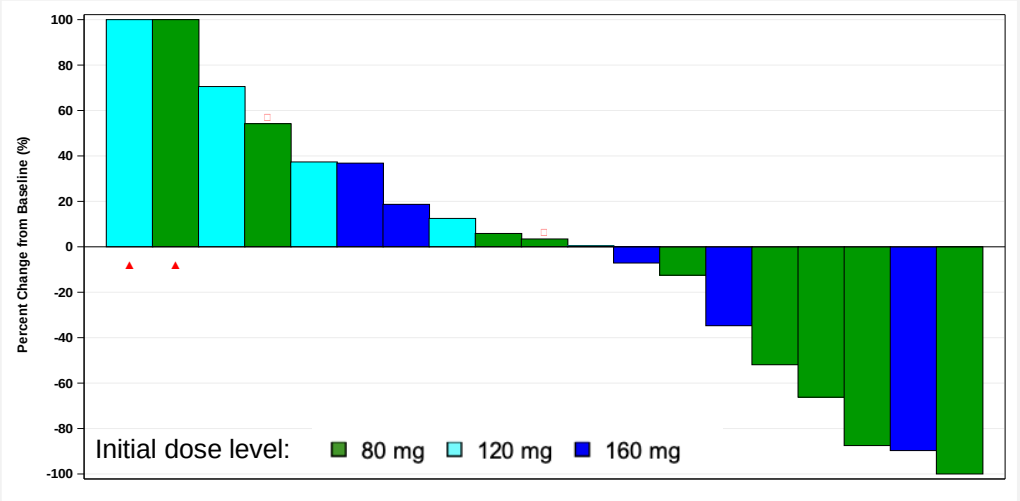
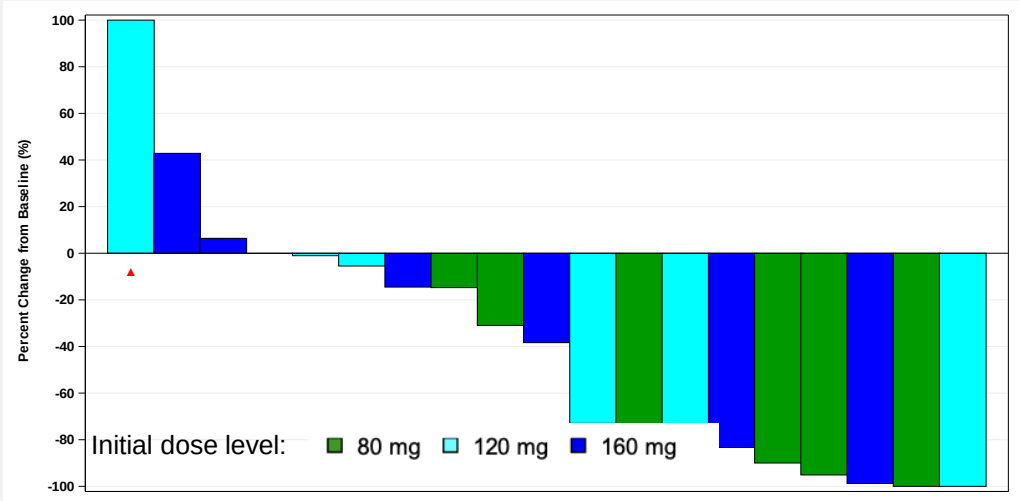
Clinical activity: bone marrow blast reductions achieved across multiple dose levels in both FLT3^{WT} patients and FLT3^{MUT} patients

Blast Reductions | FLT3^{WT} Patients



Blast Reductions | FLT3^{MUT} Patients



- **Blast reductions observed in heavily pretreated r/r AML patients across multiple dose levels**
- **Several CR achieved with blast clearance accompanied by full recovery of normal blood cells**
- **Meaningful bone marrow blast reductions highlight the potential of tuspetinib to reach a CR when combined with hypomethylating agents, venetoclax, or other active therapies**

*Indicates patients who administered hydroxyurea within 7 days prior to the lowest marrow blast value.
ΔIndicates patients with percent change from baseline > 100% are shown as 100% and indicated with a triangle.

Data from 2022 ASH Annual Meeting

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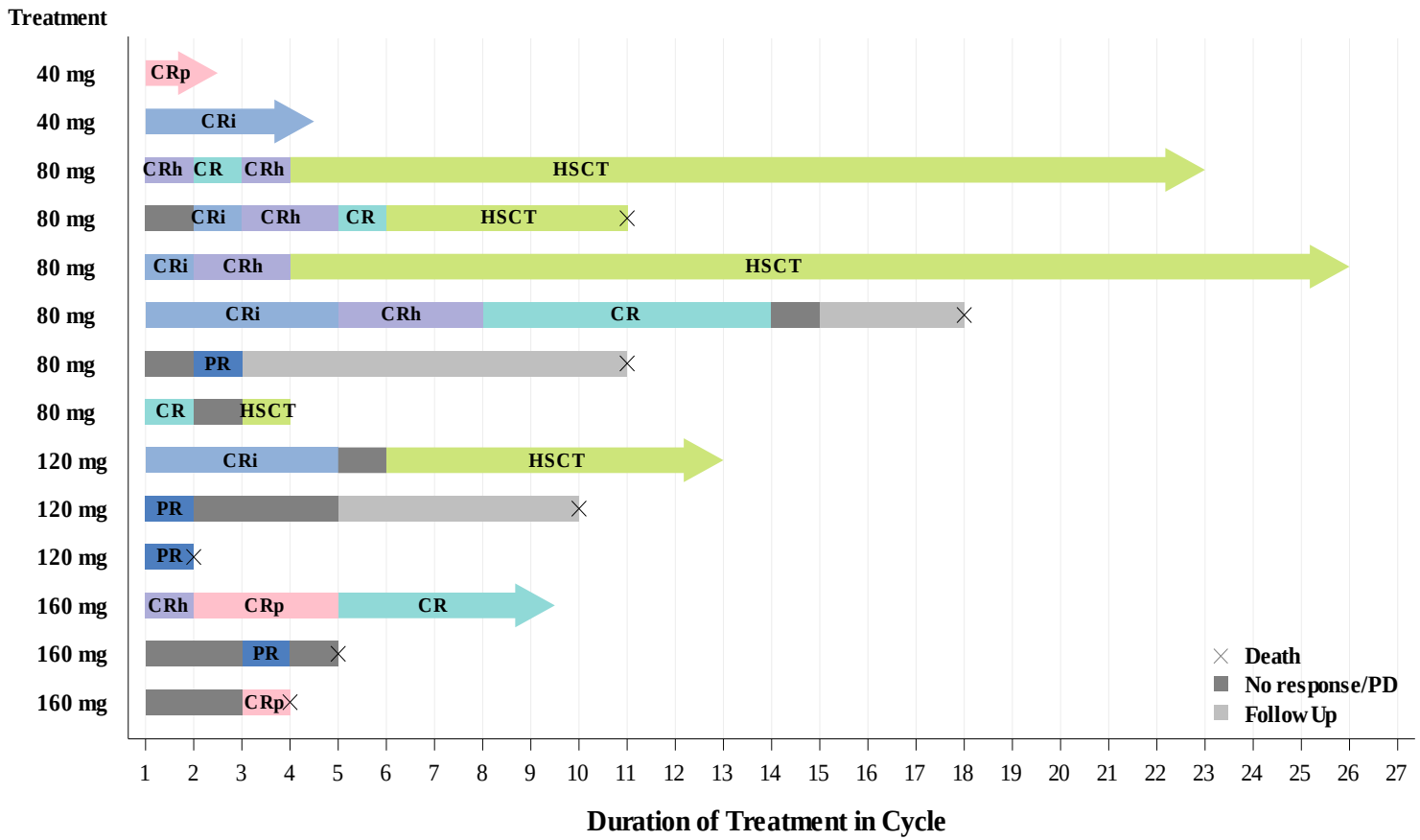
R/R AML patients achieving clinical responses with tuspetinib monotherapy



Responder Analysis

Responses achieved across four dose levels

Responses mature over time with ongoing continuous dosing

Many bridged to potentially life-saving transplant (HSCT)

Durability observed when no HSCT unavailable

Executed: 08FEB2023

Abbreviation: CR, complete response; CRh, complete response with partial hematologic recovery; CRi, complete response with incomplete hematologic recovery; CRp, complete response with incomplete platelet recovery; HSCT, hematopoietic stem cell transplantation; ND, not done; NE, not evaluable; PD, progressive disease; PR, partial remission.
Note: 'No response' includes refractory or not done. The right arrow at the end of horizontal bar indicates patients are still on study, whereas without the right arrow indicates patients discontinued from study.
Note: The bone marrow aspiration/biopsy date was used as response date. Each response assessed at a regular visit is considered to have started 1 cycle before the assessment; the start of the response is considered the integer part of (study day/28) if the response occurred at the End of Treatment visit.
*Indicates patients who received prior FLT3 inhibitors, including gilteritinib and/or midostaurin.

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Tuspetinib safely delivers monotherapy responses across diverse AML populations

Mutations present									
Pt.	FLT3^{MUT}	RAS	NPM1	DNMT3A	RUNX1	IDH	Other	Dose Level	Best Response
1							TP53	80mg	CR
2							TP53, TET2	40 mg	CRp
3	X	X					RUNX1	80mg	CRh
4		X					U2AF1, BCOR, SETBP1	160mg	CR
5	X	X	X	X			PTPN11	120mg	PR
6	X		X	X				80mg	CR
7	X		X					160mg	CRp
8	X		X	X		X		160mg	PR
9						X	SRSF2	80mg	CR
10	X				X		SF3B1, RB1	80mg	CR
11	X				X		MLL-PTD	120mg	CRi
12					Not yet reported			40mg	CRi
13	X				Not yet reported			120mg	PR
14							ASXL1, CBL	80mg	PR

Mutation Response Analysis

Responses across populations with highly adverse mutations: TP53, RAS, NPM1, FLT3, IDH, DNMT3A, RUNX1, MLL genes

37.5% of CRc Responders are FLT3^{WT} (3 of 8)

TP53^{MUT} / complex karyotype responders

Tuspetinib delivers durable complete responses in Phase 1a trial

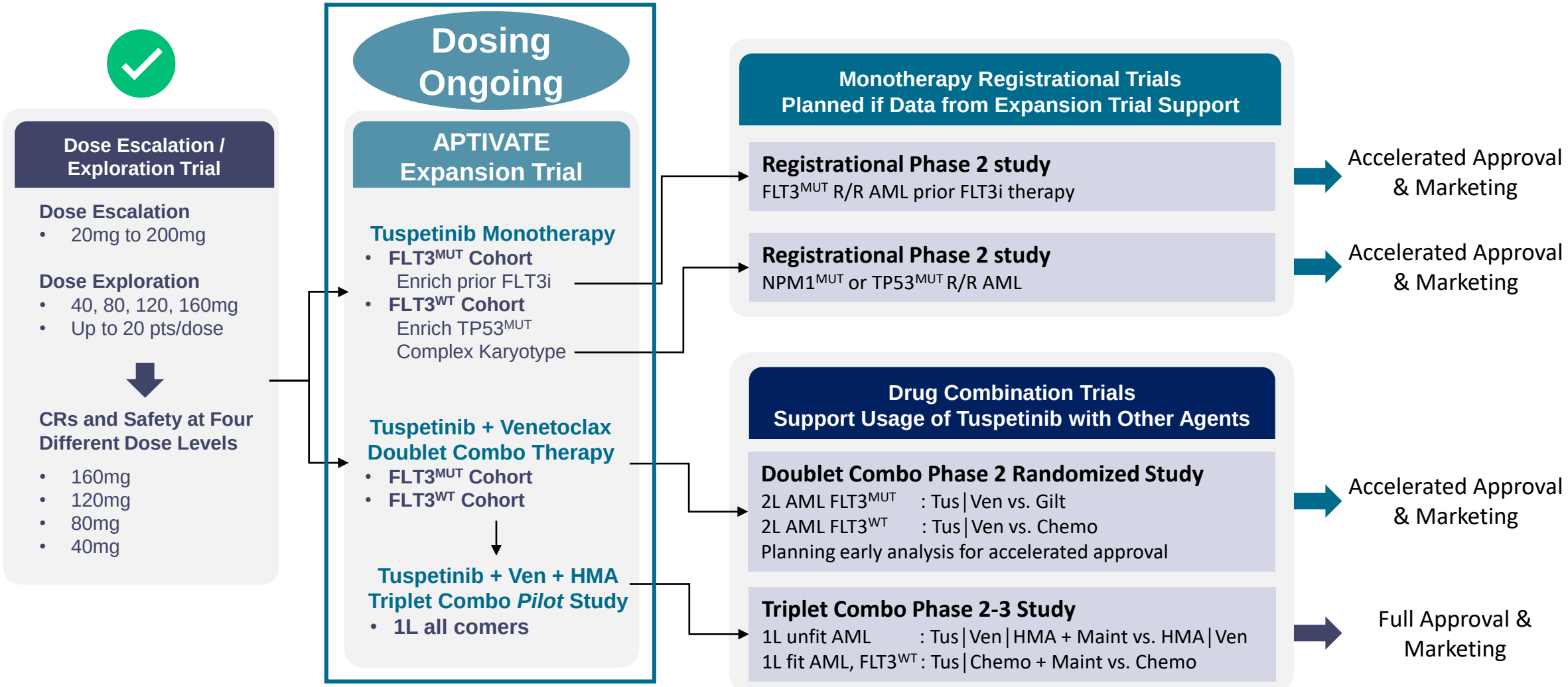
Best efficacy response in evaluable r/r AML
80 mg | 120 mg | 160 mg

Best Response:	RAS^{MUT} n=7	$FLT3^{MUT}$ n=21	$FLT3^{WT}$ n=21	$FLT3^{MUT}$ + prior FLT3i n=11	ALL n=42
CRc	2 (28.6%)	5 (23.8%)	3 (14.3%)	2 (18.2%)	8 (19.0%)
CR/CRh	2 (28.6%)	3 (14.3%)	3 (14.3%)	1 (11.1%)	6 (14.3%)
ORR	3 (42.9%)	8 (38.1%)	4 (19.0%)	3 (27.3%)	12 (28.6%)

Summary of Efficacy

- ✓ORR: 29% at dose levels advanced to ACTIVATE expansion trial
- ✓Responses in heavily pretreated patients (mean 2.7 prior therapies | 3L+)
- ✓Responses achieved across four dose levels
- ✓Many responders bridged to potentially life-saving transplant (HSCT)
- ✓Responses across populations with highly adverse mutations including $FLT3^{WT}$ patients
- ✓Responses in $FLT3^{MUT}$ patients who failed prior FLT3 inhibitors

Tuspetinib APTIVATE global expansion trial ongoing to support registrational trials for accelerated approval and drug combination trials



Single agent Expansion studies designed to collect data on a small number of patients in "high need" groups and segue into Ph 2 Registrational Trial(s)

Combination Expansion studies designed to illustrate safety and efficacy of Tuspetinib with venetoclax and segue into Phase 2-3 randomized trials and demonstrate Tuspetinib can be the preferred agent for combination therapy

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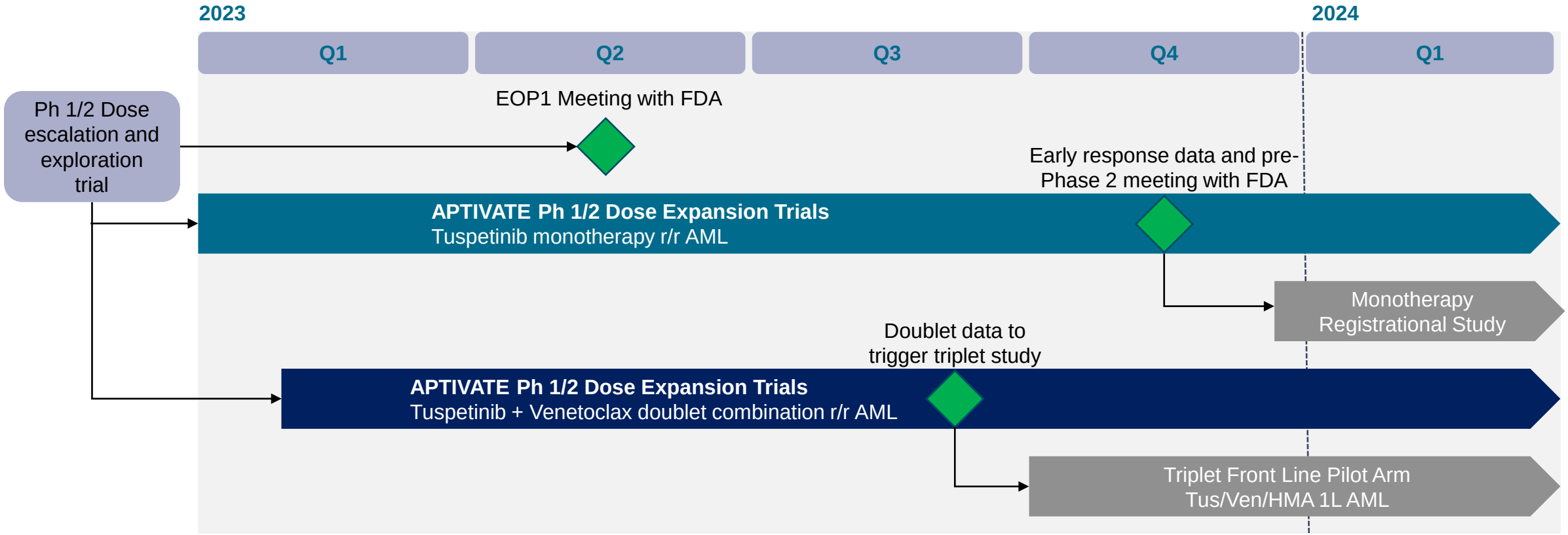
Tuspetinib APTIVATE trial delivering value-creating milestones in 2023



Anticipate data from monotherapy, doublet therapy and triplet therapy during 2023

Tuspetinib best-in-class TKI for AML

	Tuspetinib	Gilterinib	Quizartinib	Emavusertib	Revumenib	Ziftomenib	Lanraplenib
Targets:	SYK, JAK1/2 $FLT3^{ITD/TKD/WT}$ $c\text{-}KIT^{MUT}$	$FLT3^{ITD/TKD}$	$FLT3^{ITD}$	IRAK4/FLT3	Menin	Menin	SYK
Safety: broad Tx window	✓	–	✗	✗	–	–	–
Avoids QTc prolongation	✓	✗	✗	✓	✗	✓	✓
Avoids differentiation syndrome	✓	✗	–	✓	✓	✗	✓
Single agent efficacy in AML	✓	✓	–	✓	✓	✓	–
Potential beyond AML	✓	✗	✗	✓	–	–	✗

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

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Tuspetinib ideal TKI for triplet combination to treat 1L AML

Ideal Triplet

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

	Tuspetinib	FLT3 Inhibitors		Menin Inhibitors	
		Gilterinib	Quizartinib	Revumenib	Ziftomenib
Targets:	SYK, JAK1/2 $FLT3^{ITD/TKD/WT}$ $c\text{-}KIT^{MUT}$	$FLT3^{ITD/TKD}$	$FLT3^{ITD}$	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

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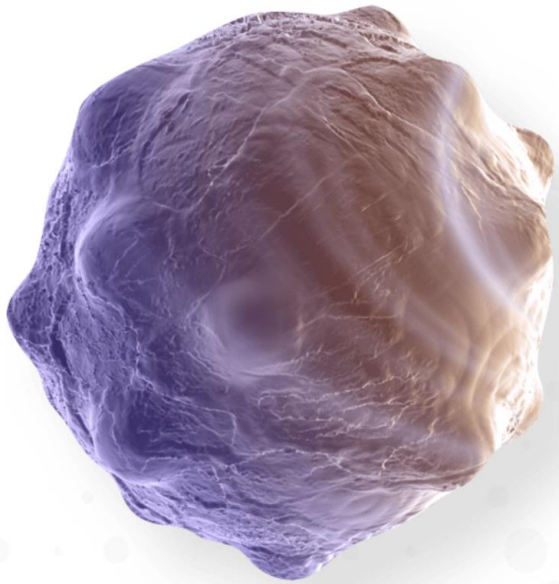
Tuspetinib vision of “Firsts” that increase survival at each stage of AML

Tuspetinib is positioned to be 1st in the next wave of innovation in AML

Recently approved targeted agents have run their course of the current wave of innovation in AML – their lifecycle is limited by their expected LOE expiration

The patent runway, efficacy profile and safety profile position tuspetinib potentially to become the first regulatory approved drug at each stage of the disease (1L, 2L, post-CR, and deep relapsed/refractory)

r/r AML	1st approved targeted agent in FLT3+ patients who have failed prior FLT3i
2L AML	1st approved targeted agent in Tus+VEN doublet in 2L AML patients
Frontline (1L) AML	1st approved targeted agent in Tus+VEN+HMA triplet in fit & unfit patients
Post-CR Maintenance	Targeted agent of choice in patients with CR following chemo or HSCT



Luxeptinib (Lux)

Oral Lymphoid & Myeloid Kinase Inhibitor

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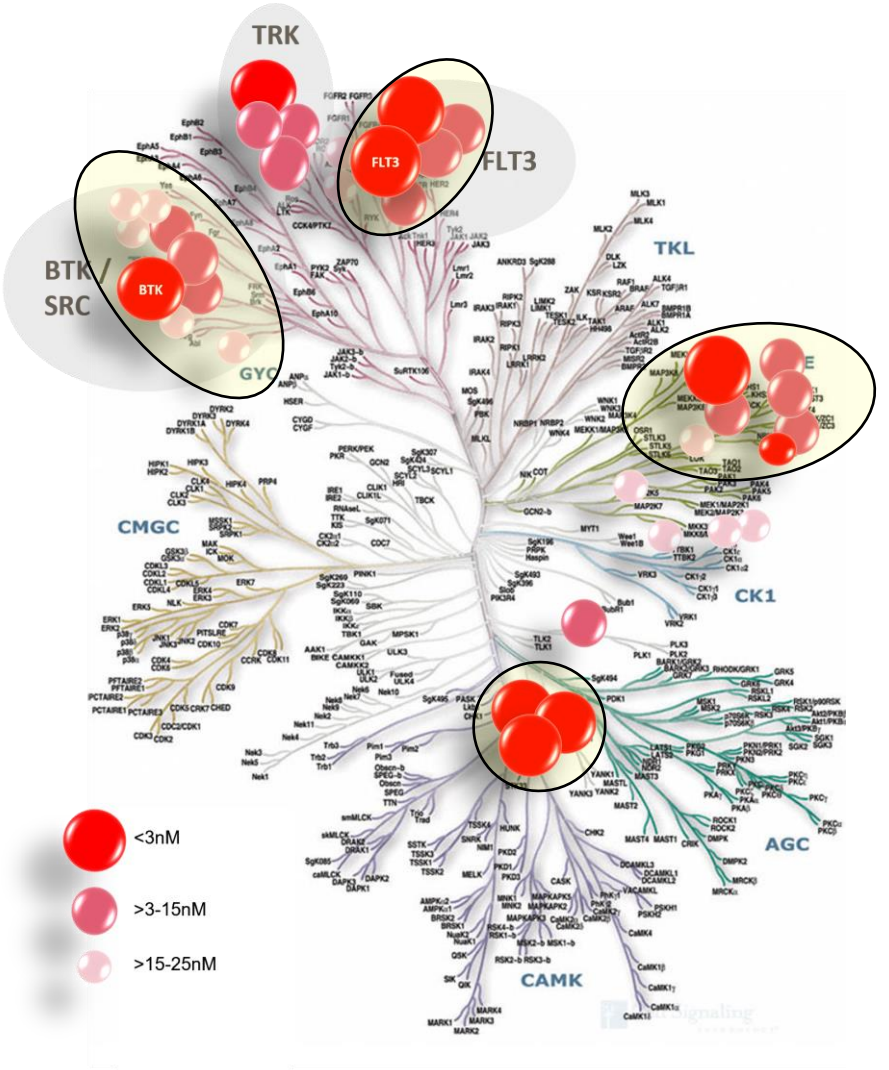
Luxeptinib: Clinical activity achieved in AML and B-cell cancer patients

Potent suppression of multiple kinases driving AML and B-cell cancers

- Inhibits BTK, FLT3, CSF1R, PDGFRα, TRK, AURK, and others
- Well-tolerated with dosing at 900mg BID with G1 original formulation
- Antitumor activity in diverse B-cell cancers
- Delivered CR (MRD-) in r/r AML patient
- Exploring G3 new formulation with improved absorption and pharmacokinetics

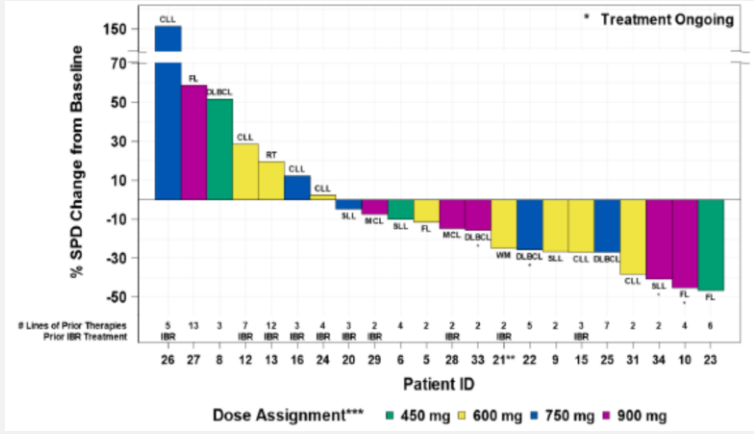


Luxeptinib: demonstrated clinical activity but needs improved PK

Phase 1a/b in
r/r B-cell leukemias and lymphomas

36 patients dosed

Best responses in evaluable B-cell malignancy patients



✓ **CR in DLBCL**

Phase 1a/b in
r/r AML and MDS

29 patients dosed

Best responses in evaluable R/R AML patients

CR in FLT3+ AML Patient
Achieved CR with 450mg BID dose level of G1
Achieved MRD-negative status
Demonstrates active against R/R AML

✓ **CR in AML**

G1 original formulation active but poorly absorbed and requires administration of high doses

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G3 improved formulation of luxeptinib

Luxeptinib 3rd Generation (G3) Formulation

Novel self emulsifying formulation

Designed for more rapid absorption (early Tmax), more efficient absorption (use lower doses), longer retention (longer t1/2), greater accumulation (higher steady state levels)

Administered as a single dose to define its PK profile in cancer patients

PK modeling predicts approx. an 18-fold improvement in bioavailability

Modeling predicts steady state with 50mg G3 Q12h is comparable to 900mg G1 Q12h

Ongoing continuous dosing – 3x3 dose escalation study with AML patients

Treatment of R/R AML patients with 50mg G3 Q12h is ongoing

Anticipate preliminary readout of PK properties with continuous dosing 1H 2023

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Aptose Biosciences (APTO) Key Financial Highlights Q4/2022

Q4 Financial Highlights

Cash balance on Dec. 31, 2022, was $47M

Cash burn during Q4 was $8.4M

Cash runway into Q1 of 2024

The net loss during Q4 was $10M

The net loss FY 2022 was $41.8M

Net loss per share Q4 ($0.11) and FY 2022 ($0.45)

Capitalization

Market capitalization is approximately $60 million

Recent market cap. high was $294M on 6/2021

Tuspetinib was acquired for $12.5M

Common stock O/S March 23, 2023, was 93,005,278

No debt, warrants, or preferred equity

Commercial est. peak sales in excess of $1B annually

FIRM	ANALYST
Bios Research	Aaron Fletcher, Ph.D.
Canaccord Genuity	John Newman, Ph.D.
Cantor Fitzgerald	Li Watsek
H.C. Wainwright	Joseph Pantginis, Ph.D.
JonesTrading	Soumit Roy, Ph.D.
Oppenheimer & Co.	Matthew Biegler
Piper Sandler & Co.	Edward Tenthoff
RBC Capital Markets	Gregory Renza, M.D.

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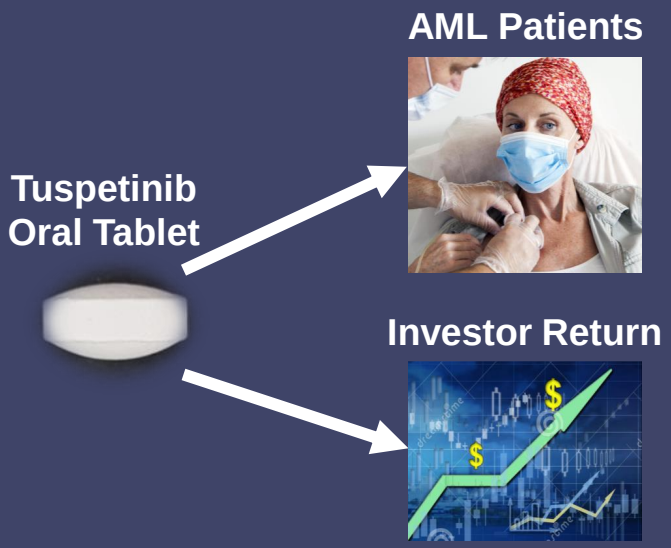

Aptose is a precision oncology company developing oral targeted agents to treat hematologic malignancies

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Aptose Investment Highlights

Tuspetinib (Tus) myeloid kinase inhibitor: safe and effective, once daily, oral agent to treat AML

- CRs across 4 dose levels with no DLT
- Favorable safety and non-myelosuppressive
- Broadly active across diverse AML populations
- Accelerated approval paths as monoRx and doublet
- Ideal for 1L triplet therapy and maintenance therapy
- Orphan Drug and Fast Track Status
- $1B+ market potential

Luxeptinib (Lux) lymphoid & myeloid kinase inhibitor

- Clinically active in AML and B-cell cancers
- Exploring new formulation with improved absorption

Value-driving near-term clinical milestones during 2023

Oppenheimer Expert Call: AML Current Treatments and Future Directions

Held January 27, 2023

Quotes Regarding Tuspetinib from the KOL: *Dr. Harry Erba MD, PhD*
Professor of Medicine, Hematologic Malignancies and Cellular Therapy, Duke Cancer Institute

"Let's remember, phase 1 studies are for toxicity assessments and finding the recommended phase 2 dose. But of course, we want to see responses, and ***we see responses, and some of them are surprising!*** *In patients who don't have mutated FLT3."*

"…I'll tell you what was most interesting to me when I look at the duration of responses and the way the study was done. ***There are responses, clearly responses.*** *But here's the thing.* ***The drug did not have to be stopped in order to see a CR or a CRh.*** *Don't underestimate that. That's really important because it limits our combination partners because of myelosuppression with the FLT3 inhibitors we have."*

"This drug may be better suited for the combinations that we hope to develop than anything we have right now."

"…when I look at the data for Tus, I'm more ***excited about the lack of myelosuppression****"*

"…at the doses that they can use to get a response, it's not leading to like an 85, 90% inhibition of FLT3 activity. And so I think that might be why they're getting away with less myelosuppression"

"A drug like Tus will have a position mostly because it has a better toxicity profile than the drugs that we're using now in terms of myelosuppression"

"If this drug continues to be safe and effective without the myelosuppression, it could be a game changer" Dr. Naval Daver[1]

[1] Aptose ASH KOL Event Recording Dec. 11 2022

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THANK YOU

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PRECISION ONCOLOGY FOR THERAPIES OF TOMORROW