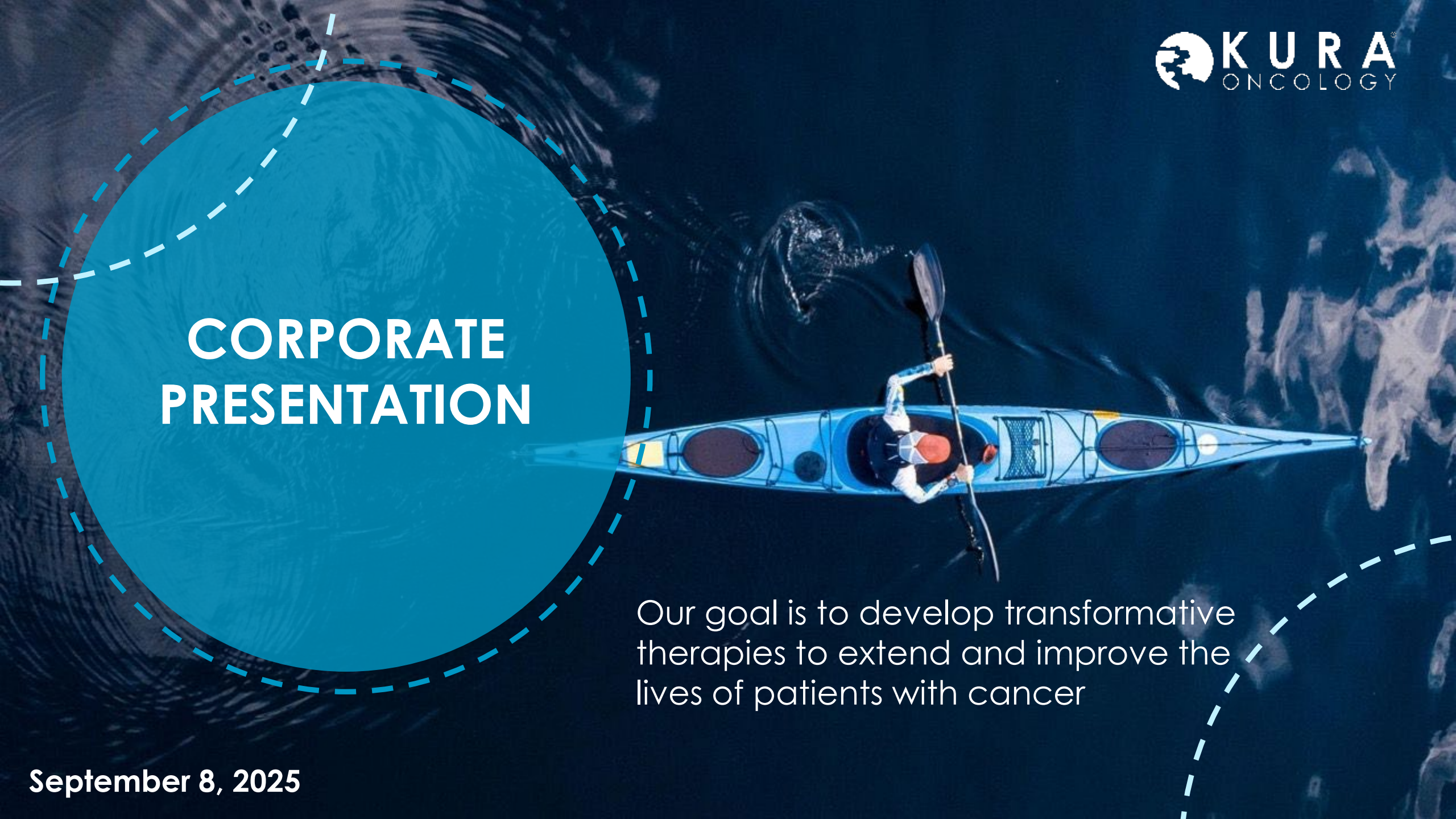
CORPORATE PRESENTATION



Our goal is to develop transformative therapies to extend and improve the lives of patients with cancer

September 8, 2025

FORWARD-LOOKING STATEMENTS

This presentation contains forward-looking statements. Such statements include, but are not limited to, statements regarding our research, preclinical and clinical development activities, plans and projected timelines for ziftomenib, KO-2806 and tipifarnib, plans regarding regulatory filings, our expectations regarding the relative benefits of our product candidates versus competitive therapies, our expectations regarding the therapeutic and commercial potential of our product candidates, and our expectations regarding our collaboration with Kyowa Kirin. The words "believe," "may," "should," "will," "estimate," "promise," "plan", "continue," "anticipate," "intend," "expect," "potential" and similar expressions (including the negative thereof) are intended to identify forward-looking statements. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. Risks that contribute to the uncertain nature of the forward-looking statements include: our preclinical studies and clinical trials may not be successful; the U.S. Food and Drug Administration (FDA) may not agree with our interpretation of the data from clinical trials of our product candidates; we may decide, or the FDA may require us, to conduct additional clinical trials or to modify our ongoing clinical trials; we may experience delays in the commencement, enrollment, completion or analysis of clinical testing for our product candidates, or in the reporting of data from such clinical testing, or significant issues regarding the adequacy of our clinical trial designs or the execution of our clinical trials may arise, which could result in increased costs and delays, or limit our ability to obtain regulatory approval; our product candidates may not receive regulatory approval or be successfully commercialized; unexpected adverse side effects or inadequate therapeutic efficacy of our product candidates could delay or prevent regulatory approval or commercialization; we may not be able to obtain additional financing; and our collaboration with Kyowa Kirin may not be successful. Additional risks and uncertainties may emerge from time to time, and it is not possible for Kura's management to predict all risk factors and uncertainties.

All forward-looking statements contained in this presentation speak only as of the date on which they were made. Other risks and uncertainties affecting us are described more fully in our filings with the Securities and Exchange Commission. We undertake no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made.

This presentation also contains statistical, preclinical and clinical data obtained from and prepared by third parties. The recipient is cautioned not to give undue weight to such disclosures. Neither the Company nor any other person makes any representation as to the accuracy or completeness of such data or undertakes any obligation to update such data after the date of this presentation.

KURA ONCOLOGY IS BUILDING FOUNDATIONS FOR LONG TERM GROWTH

COMMERCIAL READINESS

Nov 30, 2025 PDUFA target action date for ziftomenib in relapsed/refractory (R/R) *NPM1*-m AML

Phase 3 registration-enabling trials in frontline AML on track for 2H 2025

R/R and frontline AML U.S. market opportunity could exceed $7B per year

FIRST-IN-CLASS PIPELINE

Farnesyl transferase inhibitor (FTI) designed to improve activity of TKIs, PI3Kα inhibitors and RAS inhibitors in solid tumors

FTI's potential U.S. total addressable market (TAM): > 200k patients across multiple tumor types

Meaningful additional opportunities for menin inhibitors in GIST as well as diabetes and cardiometabolic diseases

WELL-CAPITALIZED

$630.7 million in pro forma cash, cash equivalents and short-term investments as of June 30, 2025

Ziftomenib AML development costs offset by anticipated milestone funding under Kyowa Kirin collaboration agreement

Combination of cash and near-term milestones expected to support our ziftomenib AML program through commercialization

ANTICIPATED MILESTONES: STEADY CADENCE OF DATA READ-OUTS EXPECTED ACROSS MULTIPLE PROGRAMS

Ziftomenib	Present full data from KOMET-001 Phase 2 registration-directed trial in R/R *NPM1*-m AML	✓
	Present preliminary clinical data from KOMET-007 Phase 1b trial in 1L intensive AML	✓
	PDUFA target action date of Nov 30, 2025 for ziftomenib NDA in R/R NPM1-m AML	4Q 2025
	Initiate KOMET-017 Phase 3 registration-enabling trials in 1L *NPM1*-m and *KMT2A*-r intensive and non-intensive AML	2H 2025
	Present preliminary clinical data from Phase 1b expansion of KOMET-007 in 1L non-intensive AML	2H 2025
KO-2806 / tipifarnib	Initiate one or more expansion cohorts in combination with cabozantinib in RCC	1H 2026
	Present preliminary clinical data from FIT-001 trial for KO-2806 as monotherapy and combo with cabozantinib in RCC[1]	4Q 2025
	Present clinical data from the KURRENT-HN trial of tipifarnib in combo with alpelisib in *PIK3CA*-dependent HNSCC[1]	4Q 2025
Next-gen Menin	Nominate a development candidate for next-generation menin inhibitor program for diabetes	✓

[1]Abstracts accepted for presentation at 2025 European Society for Medical Oncology (ESMO) Congress. Posters #2604P, #981P, #1349P.

FINANCIAL HIGHLIGHTS (NASDAQ: KURA)

Cash, Cash Equivalents and Marketable Securities

$630.7M

in pro forma cash, cash equivalents and short-term investments as of June 30, 2025

Anticipated Significant Near-Term Milestones

$375M

in potential near-term milestones, including launch of ziftomenib in the monotherapy R/R setting

Shares Outstanding

86.8M
COMMON STOCK

19.1M options, RSUs, PSUs, warrants & pre-funded warrants as of June 30, 2025

Kura anticipates collaboration plus cash balance as of June 30, 2025 to fund ziftomenib AML program to potential commercialization in frontline combinations

ZIFTOMENIB

POTENT, SELECTIVE MENIN INHIBITOR

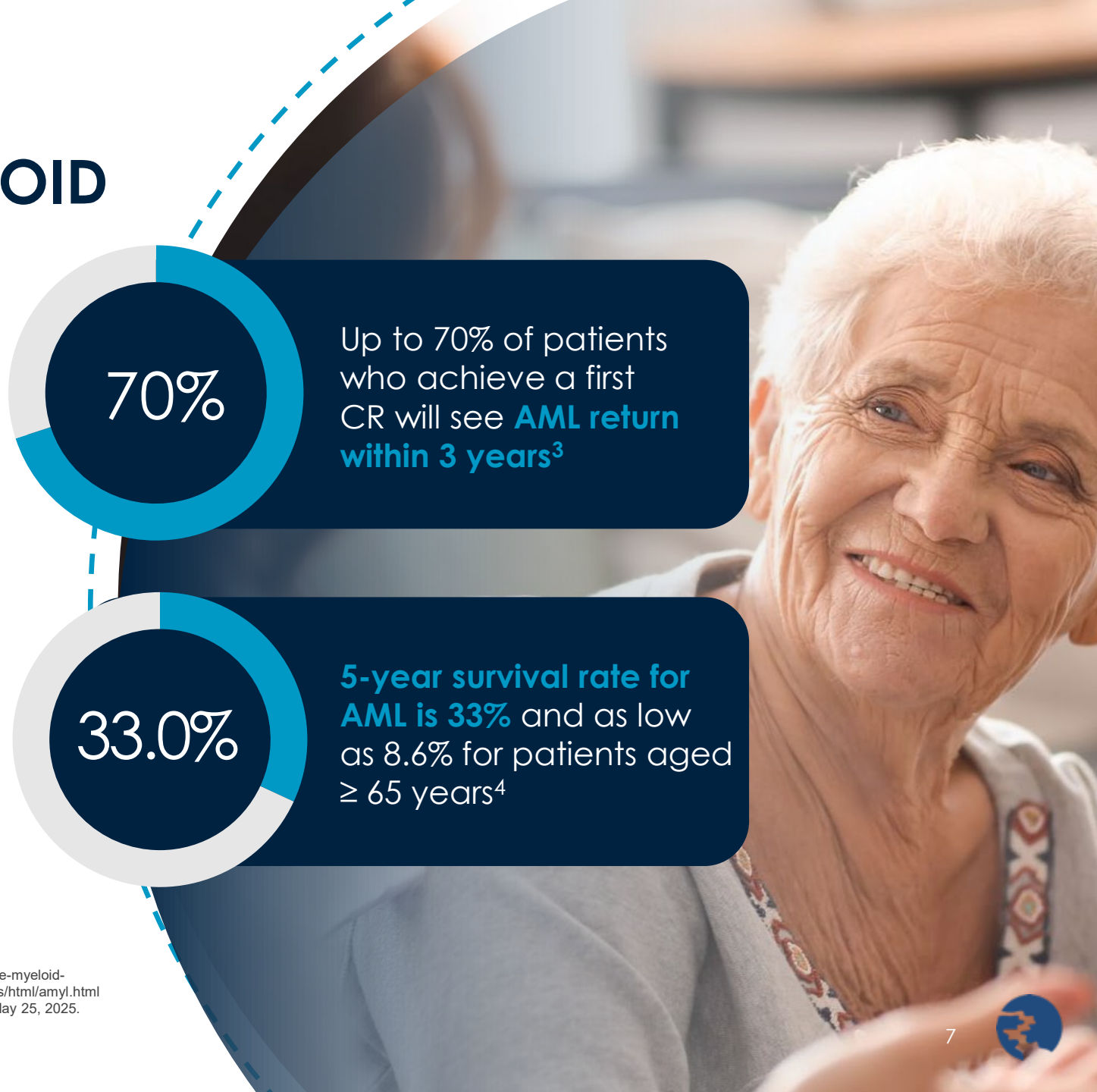
Targeted Investigational Menin Inhibitor for Relapsed/Refractory and Newly Diagnosed and Acute Myeloid Leukemia (AML)

SIGNIFICANT UNMET NEED REMAINS FOR ACUTE MYELOID LEUKEMIA (AML) PATIENTS

An estimated 22,010 new cases of AML diagnosed each year in the United States[1]

Median age at diagnosis is 69 years; majority of diagnoses made in patients aged 65 to 74 years.[2]

Current FDA approved therapies include combination chemotherapy regimens such as 7+3, venetoclax and hypomethylating agents (HMAs) and FLT3 inhibitors like midostaurin or quizartinib



AML, acute myeloid leukemia; CR, complete response.

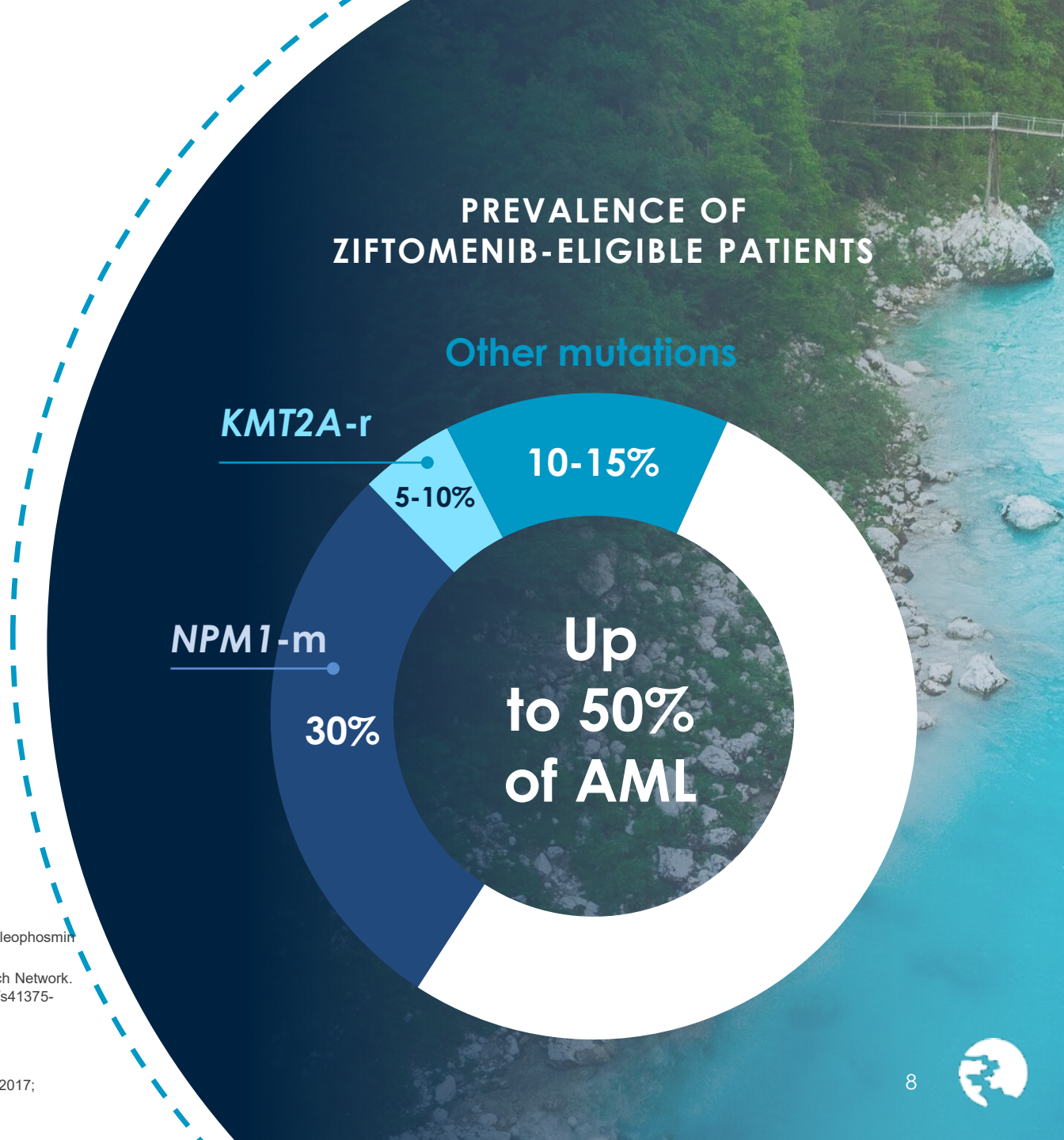
1. American Cancer Society. Updated June 5, 2024. Accessed August 27, 2024. https://www.cancer.org/cancer/types/acute-myeloid-leukemia/about/key-statistics.html **2.** National Cancer Institute. Accessed August 27, 2024. https://seer.cancer.gov/statfacts/html/amyl.html **3.** Kumar CC. *Genes Cancer*. 2011;2(2):95-107. doi:10.1177/1947601911408076 **4.** National Cancer Institute. Accessed May 25, 2025. https://seer.cancer.gov/statfacts/html/amyl.html

UP TO 50% OF AML PATIENTS MAY BENEFIT FROM MENIN INHIBITOR THERAPY

AML is characterized by significant genetic heterogeneity due to driver mutations, including *NPM1*m, *FLT3*m, *IDH1/2*m and *KMT2A*r [1-2]

Up to 50% of AML cases may be menin-dependent, including those driven by *NPM1*m and *KMT2A*r[3-7]

NPM1 mutations are observed in 30% to 35% of cases and are an important upstream driver mutation that uses the menin pathway[8,9]



AML, acute myeloid leukemia; *KMT2A*r, lysine methyltransferase 2A rearrangement; *NPM1*-m, mutated nucleophosmin 1; *NPM1*m, nucleophosmin 1 mutation; *FLT3*m, FMS-like tyrosine kinase 3 mutation; *IDH1/2*, mutations in isocitrate dehydrogenases types 1 and 2.

1. Papaemmanuil E *et al. N Engl J Med*. 2016;374(23):2209-2221. doi:10.1056/NEJMoa1516192 **2.** The Cancer Genome Atlas Research Network. *N Engl J Med*. 2013;368(22):2059-2074. doi:10.1056/NEJMoa1301689 **3.** Issa GC *et al. Leukemia.* 2021;35(9):2482-2495. doi:10.1038/s41375-021-01309-y **4.** Candoni A, Coppola G. *Hematol Rep.* 2024;16(2):244-254. doi:10.3390/hematolrep16020024 **5.** Bertrums EJM *et al. Haematologica.* 2023;108(8):2044-2058. doi:10.3324/haematol.2022.281653 **6.** National Cancer Institute. Accessed October 16, 2024. https://seer.cancer.gov/seertools/hemelymph/ 51f6cf59e3e27c3994bd547d/ **7.** National Cancer Institute. Accessed October 16, 2024. https://seer.cancer.gov/seertools/hemelymph/5a7e288d1ef557f9c8636d31/ **8.** Burrows F *et al.* Poster presented at: AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics: Discovery, Biology, and Clinical Applications; October 26-30, 2017; Philadelphia, PA. **9.** Falini B, Dillon R. *Blood Cancer Discov*. 2024;5(1):8-20. doi:10.1158/2643-3230.BCD-23-0144

CONCLUSIONS FROM KOMET-001 PHASE 1 TRIAL

komet-001
ACUTE LEUKEMIAS
KURA KO-MEN-001

Ziftomenib displays an encouraging safety and tolerability profile

Reported events most often consistent with manifestations of underlying disease

Low rates of myelosuppression

No evidence of drug-induced QTc prolongation

Differentiation syndrome manageable with mitigation strategy
No Grade 4-5 events

Ziftomenib achieved clinically meaningful, MRD-negative responses in heavily pretreated patients

CR/CRh rate of 23% in Phase 2 patients (n=92)

Median OS of 16.4 months among responding patients compared to 3.5 months in non-responding patients

Similar response rates were seen, regardless of prior therapies, including HSCT and venetoclax

Monotherapy data supportive of combination strategies

No predicted adverse drug-drug interactions

Optimization of *KMT2A*-r benefit/risk planned via combination strategies to maximize time on treatment

Oral, QD dosing allows for convenient administration and combination with standards of care

Nov 30, 2025 PDUFA target action date for ziftomenib in relapsed/refractory (R/R) *NPM1*-m AML

Wang et al. Lancet Oncol. 2024 Oct;25(10):1310-1324

POSITIVE PHYSICIAN FEEDBACK ON POTENTIAL ZIFTOMENIB PROFILE

DEEP RESPONSES

Efficacy in ven exposed patients

Among r/r AML patients in KOMET-001 who respond

- 16.4 median survival
- High rate of MRD negativity

SIMPLICITY

Oral administration

Once daily dosing

No QTc monitoring requirement

COMBINABILITY

No clinically meaningful DDIs associated with CYP3A4 inhibitors and substrates

SAFETY

Low, infrequent myelosuppression

Differentiation syndrome well managed

No clinically meaningful QTc prolongation related to zifto

ZIFTOMENIB MARKET POTENTIAL IN R/R AML

High Unmet Need in R/R *NPM1*-m AML

20%
~50%

20% are primary refractory; ~50% will relapse who achieved an initial CR[1-4]

<10%

Fewer than 10% of all patients with R/R AML are alive at 5 years[5]

Potential for Sustained Treatment

~6 mo
Duration of Treatment

Potential for safe and well-tolerated targeted Tx to support sustained treatment

$36-40k /month

Analog pricing, including for recently approved product

Attractive Market Opportunity

$350-400M/yr

U.S. market opportunity in R/R *NPM1*-m AML

Combination of encouraging clinical activity and safety in a once-daily oral medication supports an attractive R/R opportunity

AML, acute myeloid leukemia; CR, complete response.

1. Bertoli S, et al. Blood. 2018;132(suppl 1):2802. 2. Hubmann M, et al. Haematologica. 2014;99(8):1317-1325. 3. SEER Cancer Stat Facts: Acute Myeloid Leukemia. National Cancer Institute. Bethesda, MD. Accessed March 14, 2023. https://seer.cancer.gov/statfacts/html/amyl.html. 4. Issa G, et al. Blood Adv. 2023;7(6):933-942. 5. DeWolf et. al, Blood 2020; 136 (9) 1023-1032.

INVESTIGATING ZIFTOMENIB ACROSS THE AML CONTINUUM IN UP TO 50% OF PATIENTS

1L TREATABLE

Intensive (IC) or Non-Intensive (NIC) Tx

Transplant/ No Transplant

Post-Transplant Maintenance

komet ACUTE LEUKEMIAS

KOMET-007
1L Zifto + Ven/Aza
1L Zifto + 7+3

KOMET-017-IC
1L Zifto + 7+3
1L Placebo + 7+3

KOMET-017-NIC
1L Zifto + Ven/Aza
1L Placebo + Ven/Aza

RELAPSED / REFRACTORY

IC or NIC Therapy or Tolerable Therapy

Transplant/ No Transplant

Targeted Therapy if FLT3-m~~, IDH1/2m~~ and/or NPM1m

Non-Intensive Therapy/ Palliative Care

komet ACUTE LEUKEMIAS

KOMET-001
R/R *NPM1*-m AML

KOMET-007
R/R Zifto + Ven/Aza
R/R Zifto + Ven Only

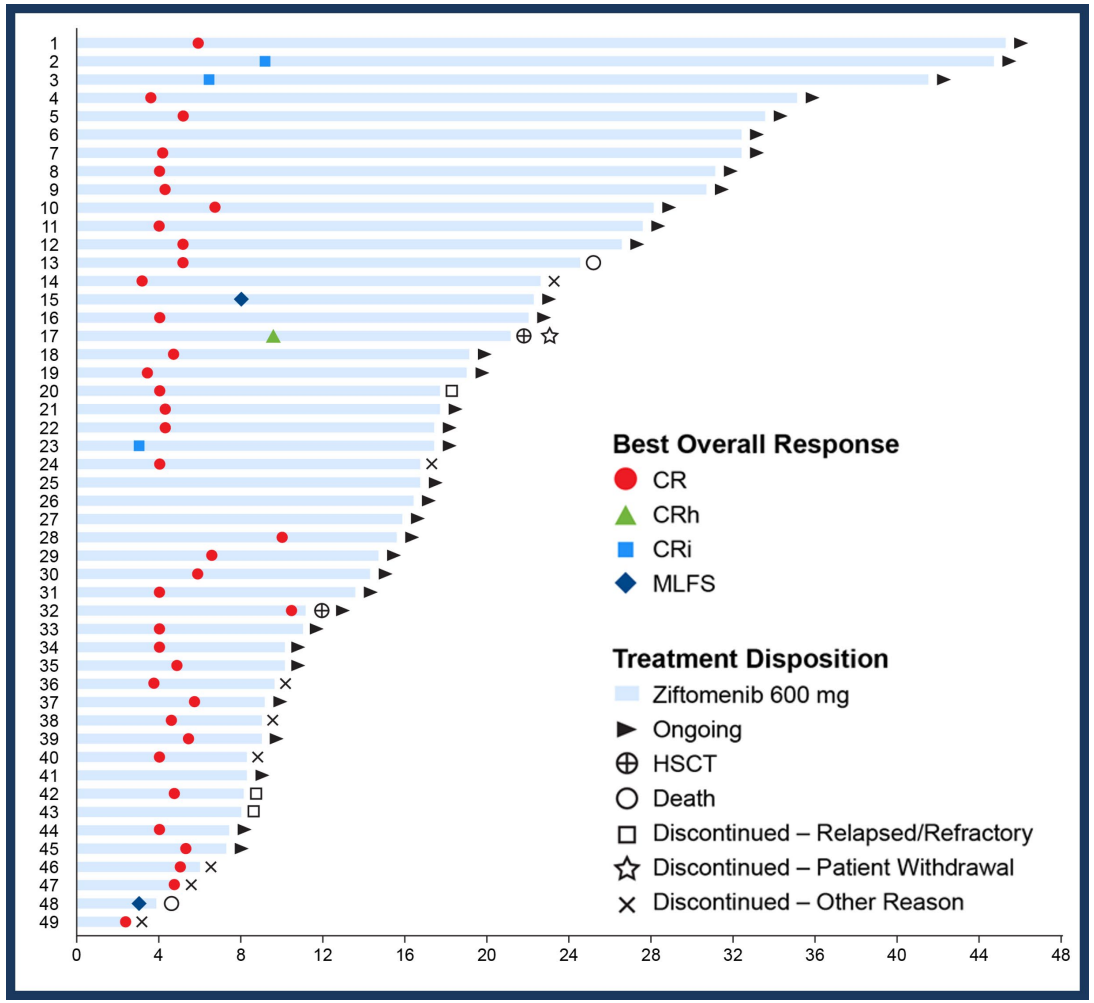
KOMET-008
R/R Zifto + FLAG-IDA
R/R Zifto + LDAC
R/R Zifto + gilteritinib

Investigator-/Company-Sponsored Studies
Post-HSCT Maintenance

*IC = patients eligible for induction chemotherapy; NIC = patients eligible for non-intensive chemotherapy

DURATION OF TREATMENT & PRELIMINARY CLINICAL OUTCOMES IN *NPM1*-m 1L AML (KOMET-007 TRIAL)

komet-007
ACUTE LEUKEMIAS
KURA KO-MEN-007



For *NPM1*-m, after a median follow-up of 24.9 weeks (range 4.3–47.1):

- Median duration of CR was **not reached**[a]
- Median OS was **not reached**[a]
- 2 *NPM1*-m patients received HSCT
- 3 Discontinuations due to relapse
- 96% (47/49) of patients remained alive and continued on-study[b]

Data cutoff: Mar 21, 2025.
[a]Among response-evaluable patients.
[b]Patients on-treatment or in long-term follow-up.
CR / CRh / CRi, complete remission with full / partial / incomplete hematologic recovery; HSCT, hematopoietic stem cell transplant;; OS, overall survival.

CONCLUSIONS FROM ONGOING KOMET-007 PHASE 1 TRIAL

komet-007
ACUTE LEUKEMIAS
KURA KO-MEN-007

Ziftomenib with 7+3 was well tolerated across all dose levels

No DLTs or ziftomenib-associated QTc prolongation reported

DS occurred in 2% (n=1, Gr3), successfully managed and patient remained on treatment

Ziftomenib administration did not impact or delay ANC and platelet count recovery

Robust clinical activity with deep responses in both *NPM1*-m and *KMT2A*-r AML

9CR: 93% for *NPM1*-m, 83% for *KMT2A*-r patients

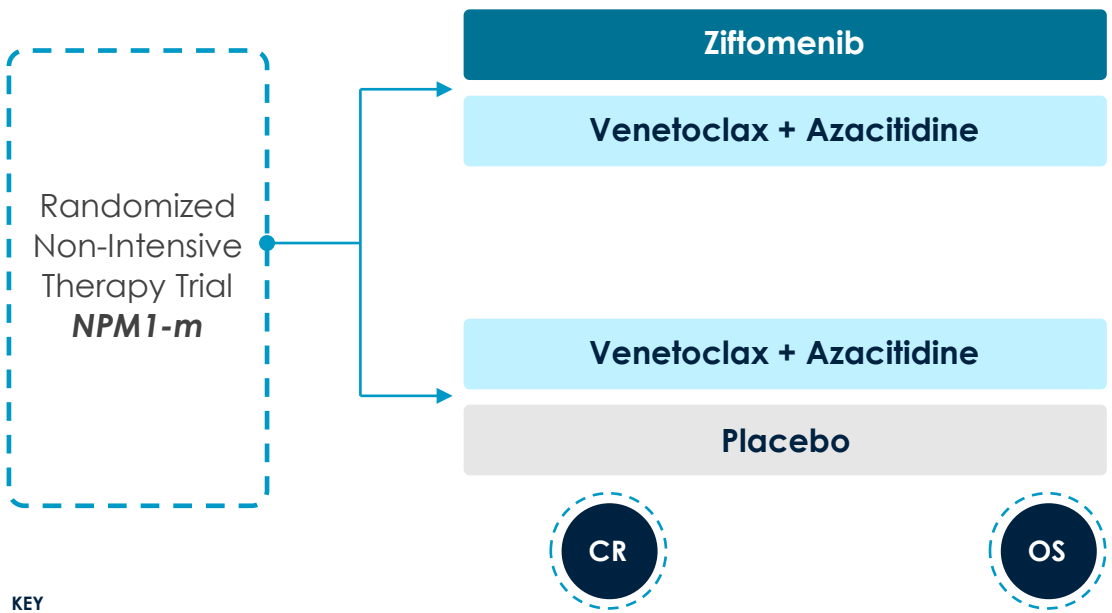
CRc MRD negativity: 68% for *NPM1*-m, 83% for *KMT2A*-r patients

Median OS not reached after median follow-up of 24.9 and 15.7 weeks for *NPM1*-m and *KMT2A*-r AML

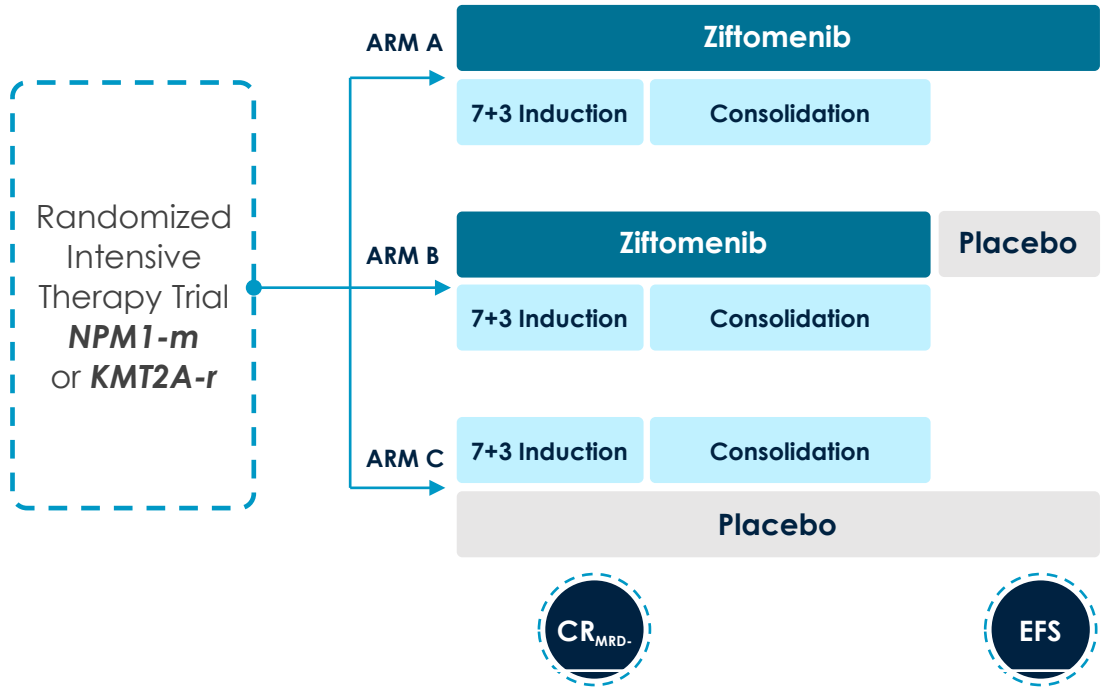
Data support advancement of ziftomenib with 7+3 in 1L *NPM1*-m and *KMT2A*-r AML

KOMET-017 PROVIDES TREATMENT OPTIONS TO BROA FRONTLINE AML PATIENT POOL

KOMET-017-NIC
(NON-INTENSIVE CHEMOTHERAPY)



KOMET-017-IC
(INTENSIVE CHEMOTHERAPY)



KEY

Ziftomenib | SOC Backbone | Placebo

Expected to start in 2H 2025 (see Zeidan AM et al. EHA 2025 Abstract #PB2573)

7+3 means seven days of cytarabine and 3 days of daunorubicin
CR, complete response; OS, overall survival; CR MRD-, complete response with minimal residual disease; EFS, event-free survival

ZIFTOMENIB MARKET POTENTIAL IN NEWLY DIAGNOSED AML

High Unmet Medical Need

~70% of patients who achieve a first CR will relapse within 3 years[1]

~11% 5-year survival rate is 33% and as low as 8.6% for patients aged ≥ 65 years[3]

Large Population & Potential for Sustained Benefit

~22,010 Newly diagnosed cases of AML each year in the U.S.[2]

12-24 months Potential for benefit / risk to support sustained treatment

Expansive Market Opportunity

$36-40k /month Analog pricing, including for recently approved product

>$7B/yr Annual U.S. market opportunity in 1L AML

Combination of encouraging clinical activity and safety in a once-daily oral medication could unlock a large market opportunity

AML, acute myeloid leukemia; CR, complete response.

1. Kumar CC. Genes Cancer. 2011;2(2):95-107. doi:10.1177/1947601911408076 2. American Cancer Society. Updated June 5, 2024. Accessed August 27, 2024. https://www.cancer.org/cancer/types/acute-myeloid-leukemia/about/key-statistics.html
3. National Cancer Institute. Accessed May 25, 2025. https://seer.cancer.gov/statfacts/html/amyl.html.

STRATEGIC COLLABORATION WITH KYOWA KIRIN POSITIONS KURA TO UNLOCK THE FULL VALUE OF ZIFTOMENIB AND PIPELINE

- Complementary expertise and vision to capitalize on the full potential of ziftomenib in AML
- Kura retains leadership and key strategic rights to ziftomenib in the U.S. to preserve strategic flexibility
- Enables broad development and commercialization, including 1L fit/unfit, combos with targeted therapies and maintenance setting
- Along with current cash, collaboration has potential to fully fund ziftomenib AML program through to commercialization of 1L combinations – multi-$B opportunities
- Kura maintains rights to its programs while accelerating associated opportunities

ZIFTOMENIB

MENIN INHIBITOR IN GIST

Targeted Investigational Menin Inhibitor in Combination with Imatinib for Treatment of Gastrointestinal Stromal Tumors (GIST)

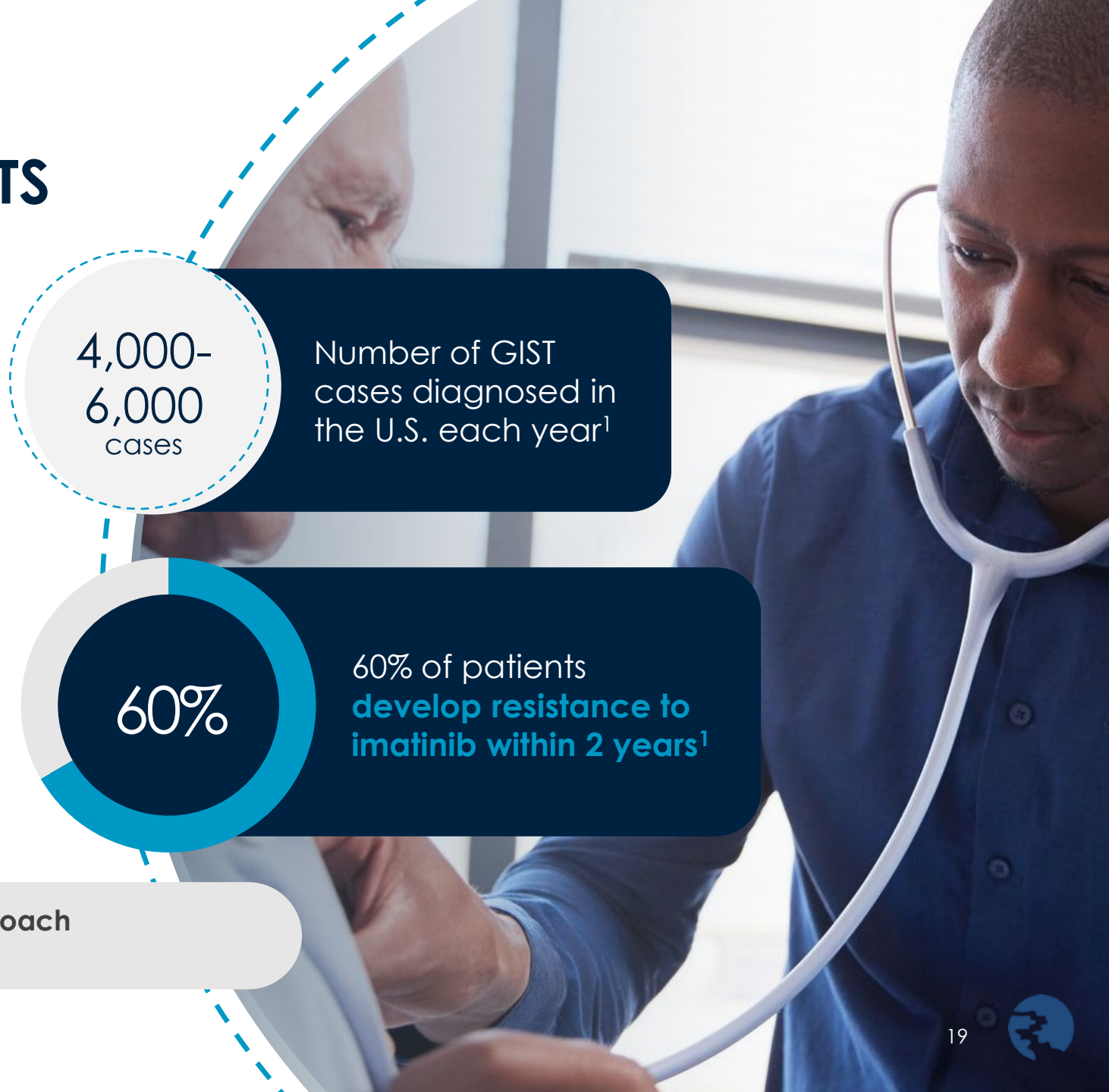
SIGNIFICANT UNMET NEED REMAINS FOR GIST PATIENTS

Gastrointestinal Stromal Tumor (GIST)

Tumors can start anywhere in the GI tract, but they occur most often in the stomach (about 60%) or the small intestine (about 35%)

Current FDA-approved therapies include imatinib, sunitinib, regorafenib and ripretinib

Until now, all approaches have targeted KIT inhibition via tyrosine kinase inhibitors (TKIs)



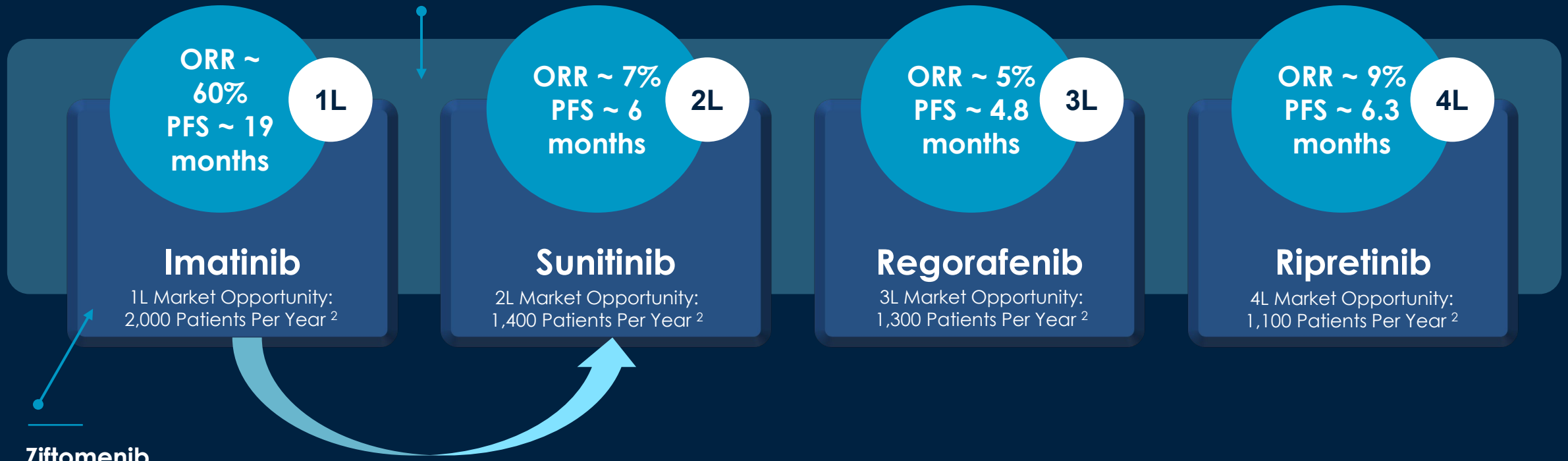
Menin inhibition is a potentially paradigm-altering approach to the treatment of GIST

1. https://www.cancer.org/cancer/types/gastrointestinal-stromal-tumor/about/key-statistics.html. American Cancer Society; 2. Gramza, A.W., Corless, C.L. and Heinrich, M.C., *Clin Cancer Res* (2009) 15 (24): 7510–7518.

ZIFTOMENIB OFFERS POTENTIAL TO SHIFT THE TREATMENT PARADIGM IN GIST

komet-015
GI STROMAL TUMORS
KURA KO-MEN-015

Ziftomenib may overcome resistance to imatinib



Ziftomenib may prevent resistance to imatinib

60% of patients develop resistance to imatinib within 2 years[1]

1 FDA Guidance (2020): Clinical Drug Interaction Studies – Cytochrome P450 Enzyme- and Transporter-Mediated Drug Interactions Guidance for Industry

2 Estimated New Annual Treatable Patients Per Year – Epi: K. Søreide et al. / Cancer Epidemiology 40 (2016) 39–46; Kelly et al. J Hematol Oncol (2021) 14:2; 1L Imatinib: Assumes mid-point of annual GIST incidence (5K) * (35% metastatic + 7.5% (from locally advanced) + 7.5% (localized)) = 2,500 * .85% KIT; Assume 95% drug treatment rate in 1L ~2k; 2L: 1L to 2L progression having developed resistance to imatinib varies (60-75%), utilize 75% here ~1500 patients * 95% drug treatment rate. Note from 2L to 3L to 4L progression and treatment assumed at 90%

ZIFTOMENIB MARKET POTENTIAL IN GIST

komet-015
GI STROMAL TUMORS
KURA KO-MEN-015

Meaningful Unmet Need

~4-6K

Newly diagnosed cases of GIST each year in the U.S.[1]

~60%

Patients who **develop resistance** to imatinib **within 2 years**[2]

Potential for Sustained Benefit

24+ months

Potential for benefit / risk to support sustained treatment

$35k /month

Analog pricing, including for approved KIT inhibitors

Attractive Market Opportunity

$500M -$1B peak

Potential for benefit / risk to support sustained treatment

Ability to combine with imatinib in a once-daily oral medication could unlock a significant market opportunity

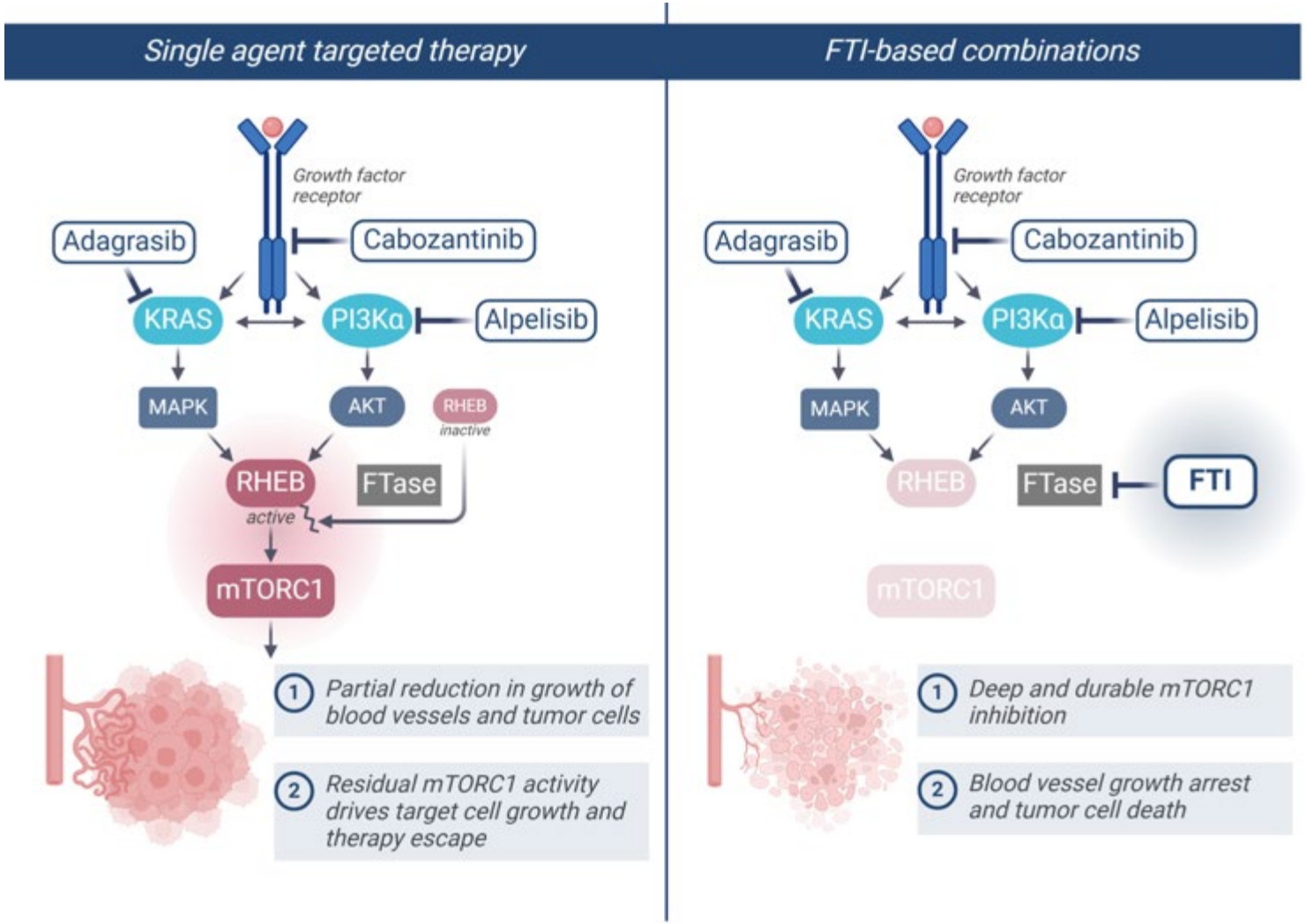
1. https://www.cancer.org/cancer/types/gastrointestinal-stromal-tumor/about/key-statistics.html. American Cancer Society;
2. Gramza, A.W., Corless, C.L. and Heinrich, M.C., Clin Cancer Res (2009) 15 (24): 7510–7518.

KO-2806

A POTENT, SELECTIVE COMPANION INHIBITOR TO TARGETED THERAPIES

Class-leading drug candidate to address innate and adaptive resistance to various classes of targeted therapies

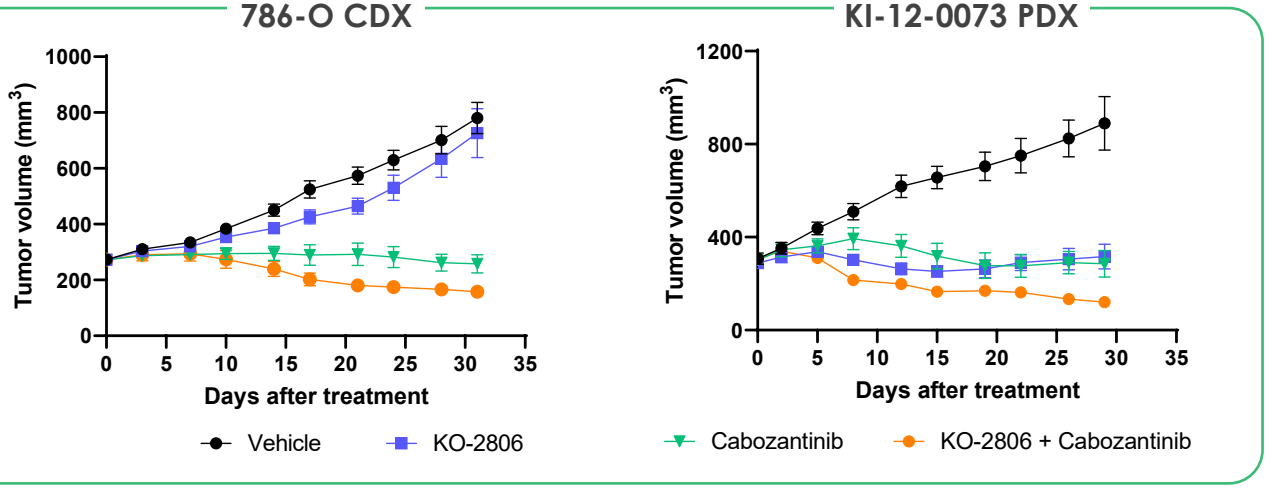
DESPITE ADVANCES, RESISTANCE REMAINS A CHALLENGE FOR MANY CLASSES OF TARGETED THERAPIES IN CANCER

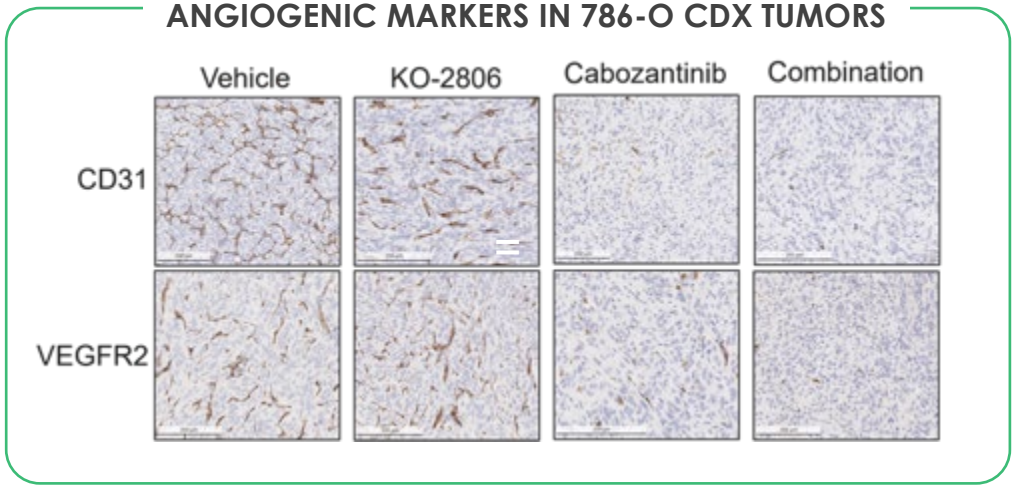


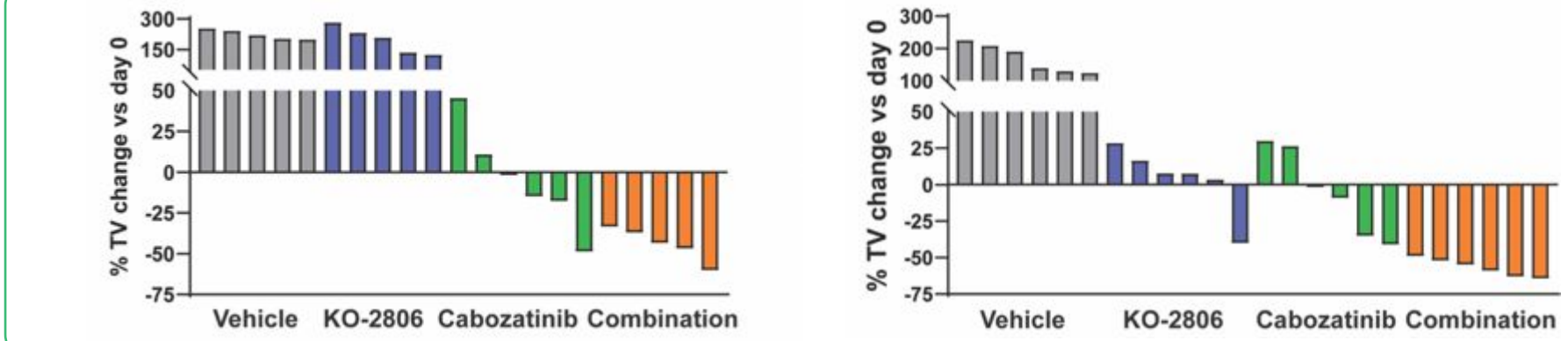
- Persistent mTORC1 activity is a frequent and consistent non-genetic driver of inherent and adaptive resistance to multiple classes of targeted therapies (*e.g.*, KRAS inhibitors, PI3Kα inhibitors, TKIs in RCC)

- This mTORC1 vulnerability is targetable with a farnesyl transferase inhibitor, which blocks mTORC1 activation via de-farnesylation of RHEB while sparing mTORC2 inhibition and its associated toxicities.

THE ANTI-ANGIOGENIC ACTIVITY OF CABOZANTINIB IS ENHANCED BY ADDITION OF KO-2806

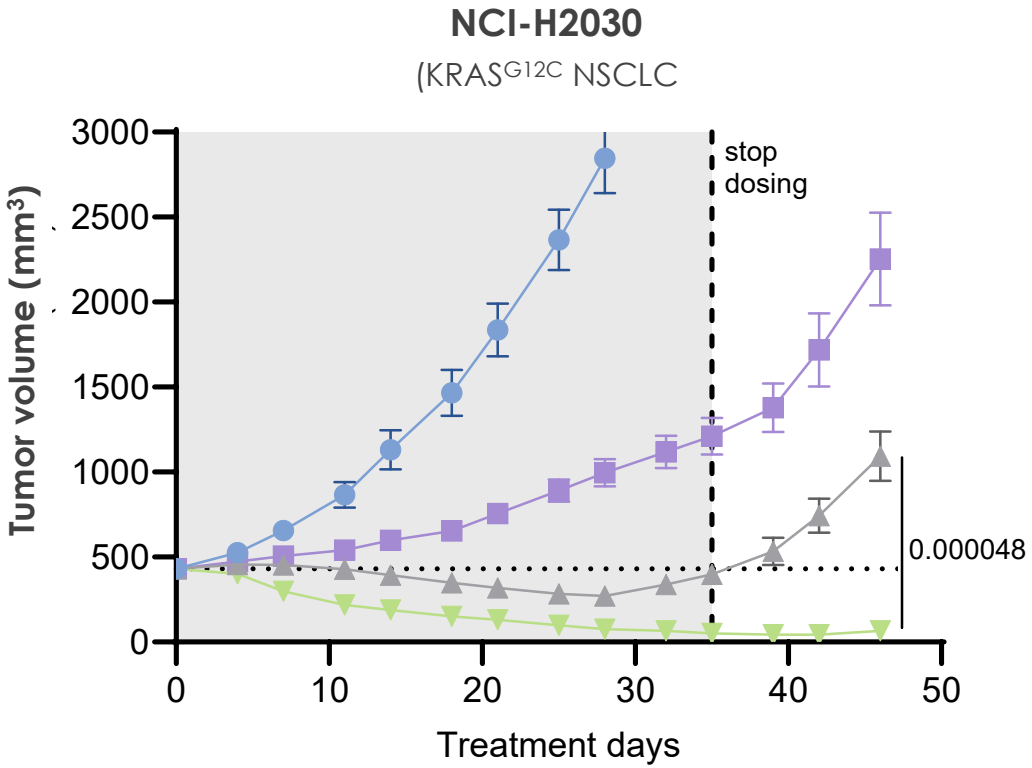


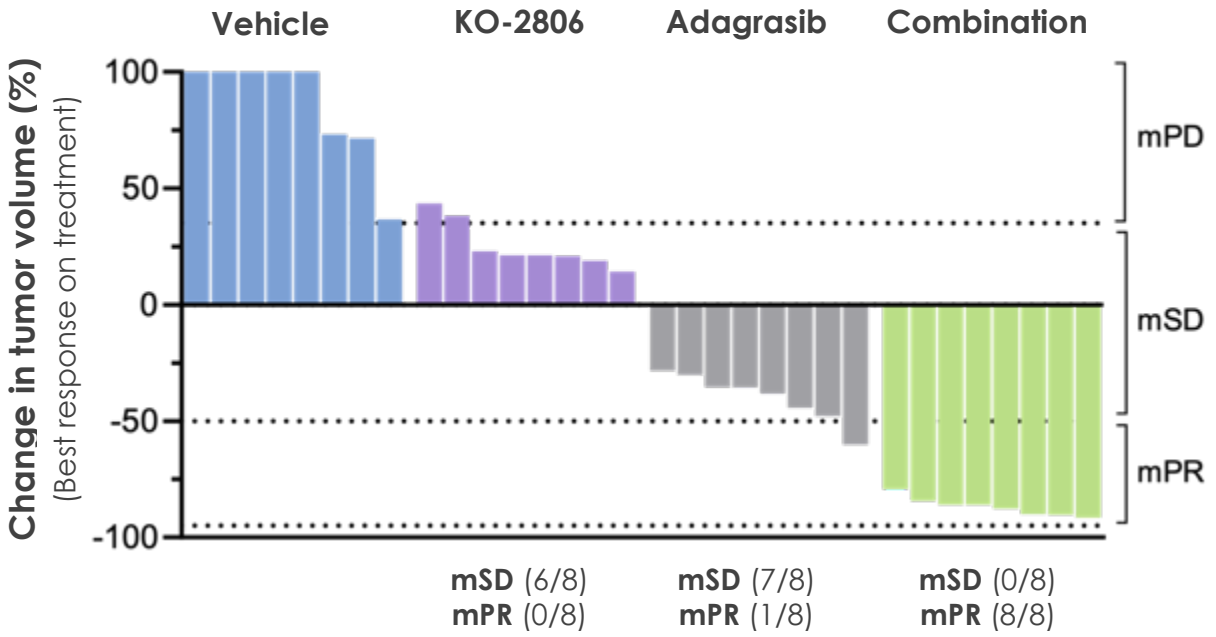




Gatchalian J. et al, AACR-NCI-EORTC 2023 Abstract #34634

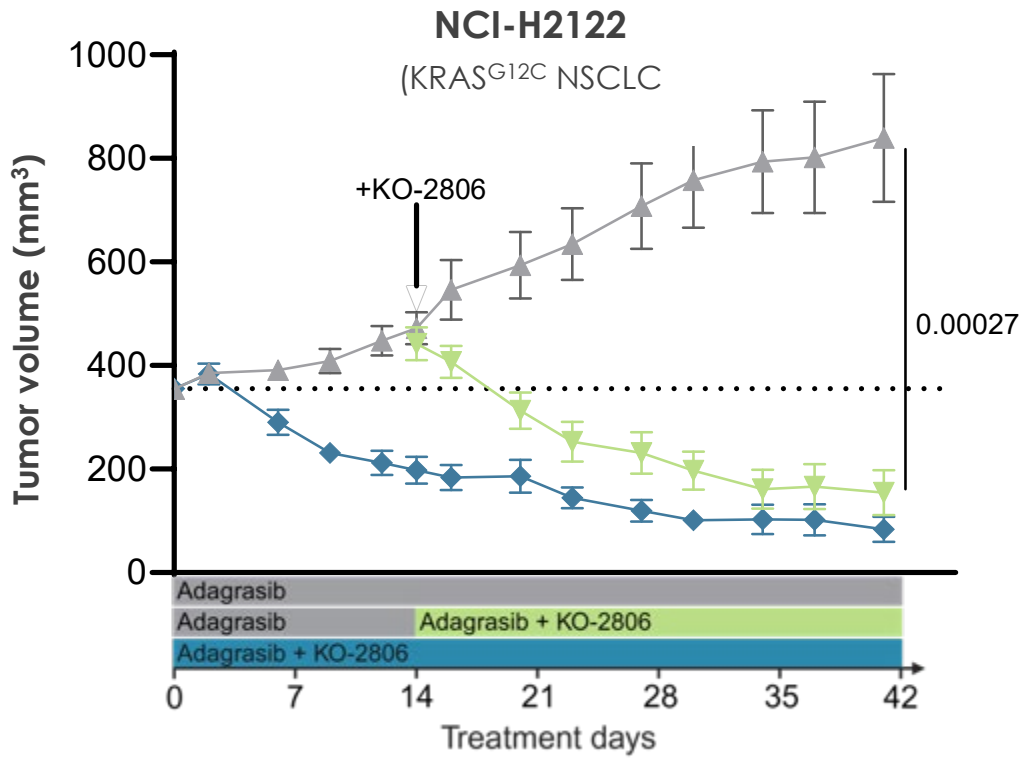
COMBINATION WITH KO-2806 ENHANCES DEPTH AND DURATION OF RESPONSE COMPARED TO ADAGRASIB ALONE

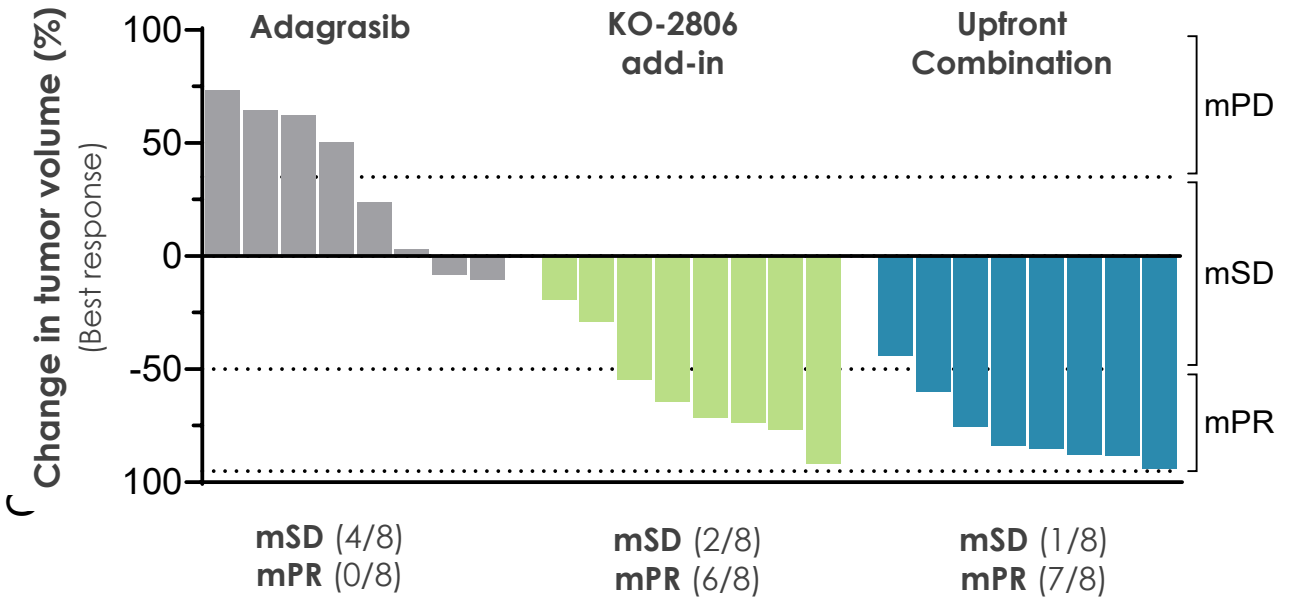




Patel H. *et al.* EORTC-NCI-AACR 2023 Abstract #34968

TUMORS PROGRESSING ON KRAS^{G12C} INHIBITOR, ADAGRASIB, ARE RE-SENSITIZED BY THE ADDITION OF KO-2806





Patel H *et al*. EORTC-NCI-AACR 2024 Abstract #388

FIT-001 PHASE 1 FIRST-IN-HUMAN CLINICAL TRIAL OF KO-2806 IN PATIENTS WITH ADVANCED SOLID TUMORS

FIT-001
KURA KO-2806-001

PART 1A (MONOTHERAPY) DOSE ESCALATION → **PART 1A (COMBINATIONS) DOSE ESCALATION** → **PART 1B (COMBINATIONS) DOSE EXPANSION**

OBJECTIVES

PRIMARY

Evaluate safety and tolerability of KO-2806 (dose escalation)

Determine the MTD/HPDD and/or the OBAD of KO-2806 (dose escalation)

Define RP2D of KO-2806 (dose expansion)

Evaluate the antitumor activity of KO-2806 in combination with cabozantinib in RCC and adagrasib in $KRAS^{G12C}$-mutant NSCLC (dose expansion)

SECONDARY

Evaluate the safety and tolerability of KO-2806 (dose expansion)

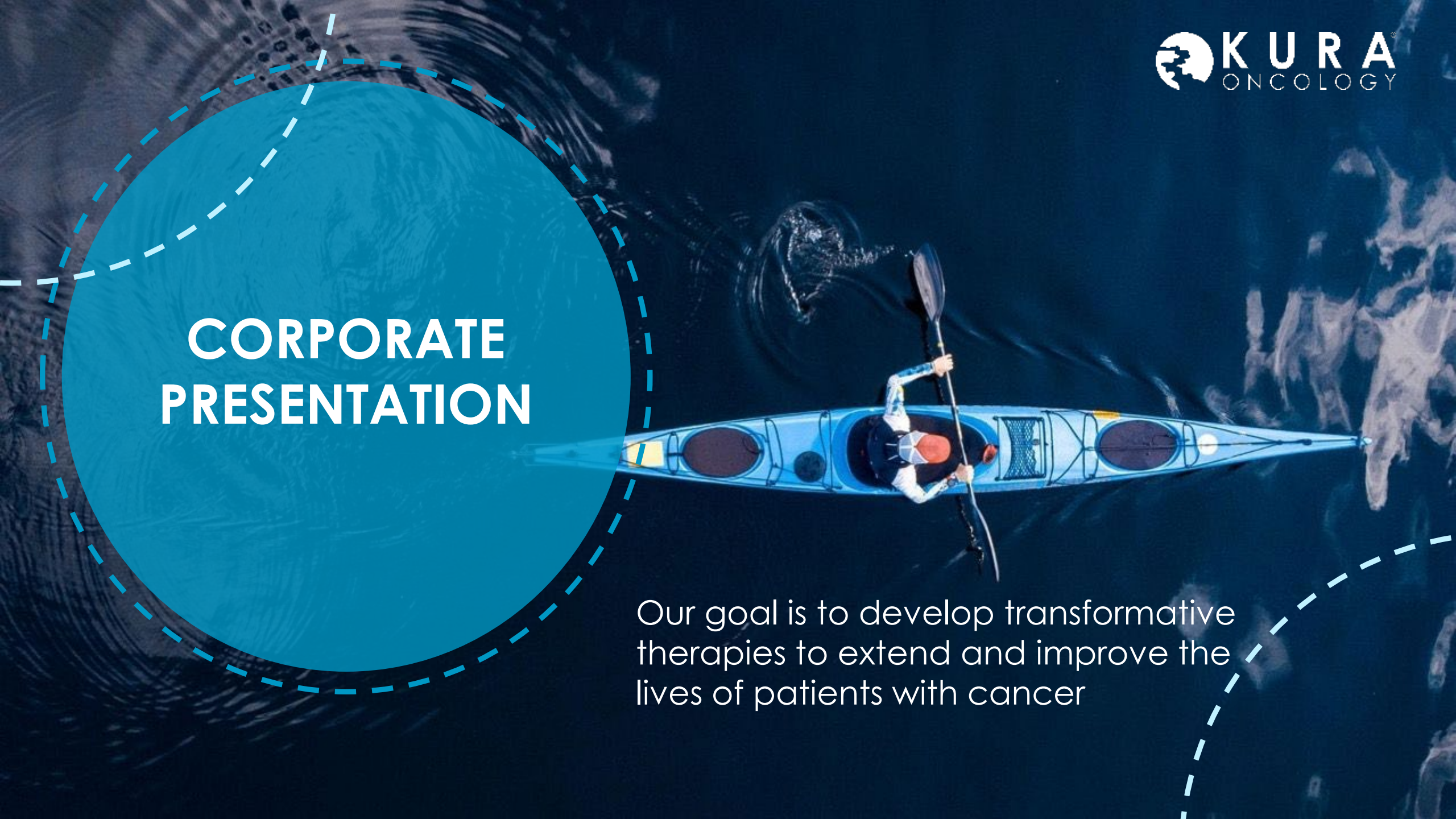
Evaluate the preliminary antitumor activity of KO-2806 (dose escalation and dose expansion)

Characterize the PK of KO-2806 when administered as monotherapy, and the PK of KO-2806 and the combination agents when administered in combination therapy (dose escalation and expansion)

Preliminary clinical data for KO-2806 as a monotherapy and combo with cabozantinib in RCC accepted for presentation at ESMO 2025

MTD/HPDD = maximum tolerated dose/highest protocol-defined dose; OBAD = optimal biologically active dose

CORPORATE PRESENTATION



Our goal is to develop transformative therapies to extend and improve the lives of patients with cancer