



Corporate Presentation

May 2023

Developing Biology-Driven Medicines and Expanding the Impact of Targeted Oncology



We develop differentiated therapies for patients in need that target nodes of cancer growth, spread, and therapeutic resistance in the Hippo and RAS onco-signaling networks



Hippo Pathway



RAS Pathway

- Multiple ongoing clinical trials with **expected data readouts in the next 12 months**
- **Leaders in Hippo pathway** with clinical stage TEAD1 inhibitor **IK-930**
 - Initial monotherapy dose escalation data in all comers, mesothelioma, and EHE in 4Q 2023
 - Broad combination potential including in EGFRm and RASm cancers, starting with osimertinib in NSCLC
- **Novel MEK/RAF inhibitor IK-595** in IND-enabling studies
 - IND in 2H 2023 with broad potential across RAF and RAS mutant cancers
- BMS partnered program **IK-175** with **clinical activity in bladder cancer**
 - Potential for **\$50M in opt-in fees by early 2024**, \$450M in milestones plus global royalties
- Cash **runway into 2026**

Seasoned Executive Team with 50+ INDs and 14 Regulatory Approvals



23

average years
of experience



50+

INDs



14

regulatory
approvals

Executive Team



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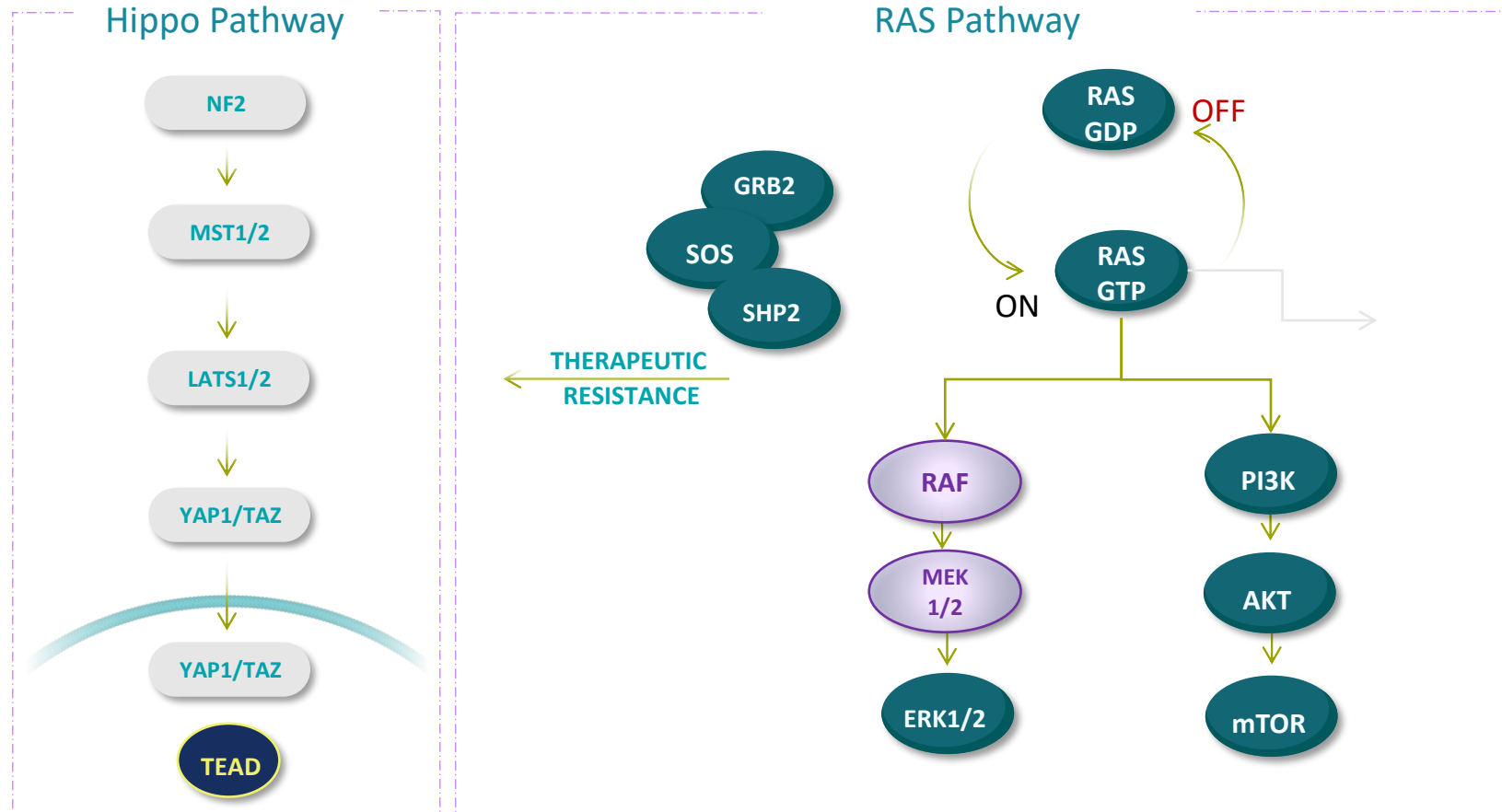
Director, Center for Mechanism-
Based Therapeutics and Chair,
Medical Oncology, Memorial
Sloan-Kettering Cancer Center

Ikena Wholly-Owned Pipeline Focused on Targeted Oncology



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Nodes in the RAS network are intricately connected to each other and other orthogonal pathways, including Hippo



*Hippo genetically-altered cancers
and Hippo activated resistance*

*RAS^{mut} cancers – one of the most common pathway with genetic alteration in cancers
– potential benefit from monotherapies and combination therapies*

Ikena has deep institutional knowledge and broad capabilities that lay the foundation for discovery programs across the network

Deep knowledge and characterization
of the interconnected nature of
oncogenic nodes

Proven history of drugging difficult targets

Leaders in drugging the Hippo pathway

Advanced capabilities across
biomolecular characterization,
structural biology, chemistry, and
translational medicine

Targeting TEAD & the Hippo Pathway

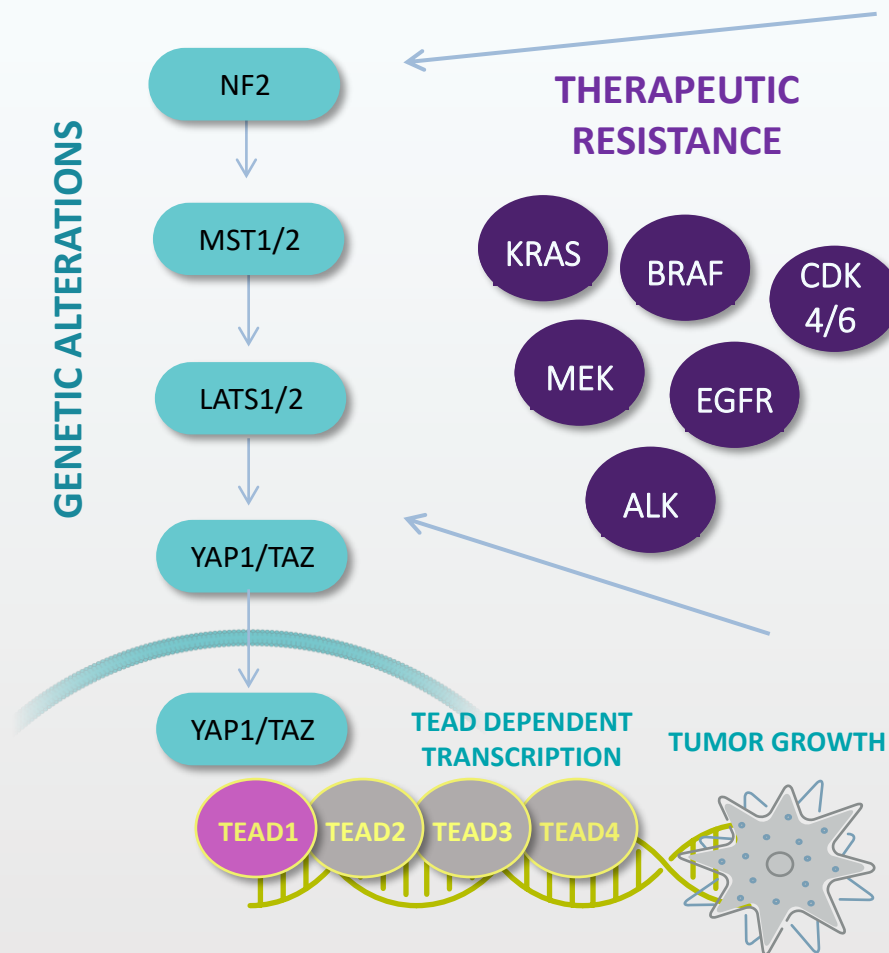
IK-930



IK-930 Well-Positioned to Address Diverse Patient Populations with High Unmet Need

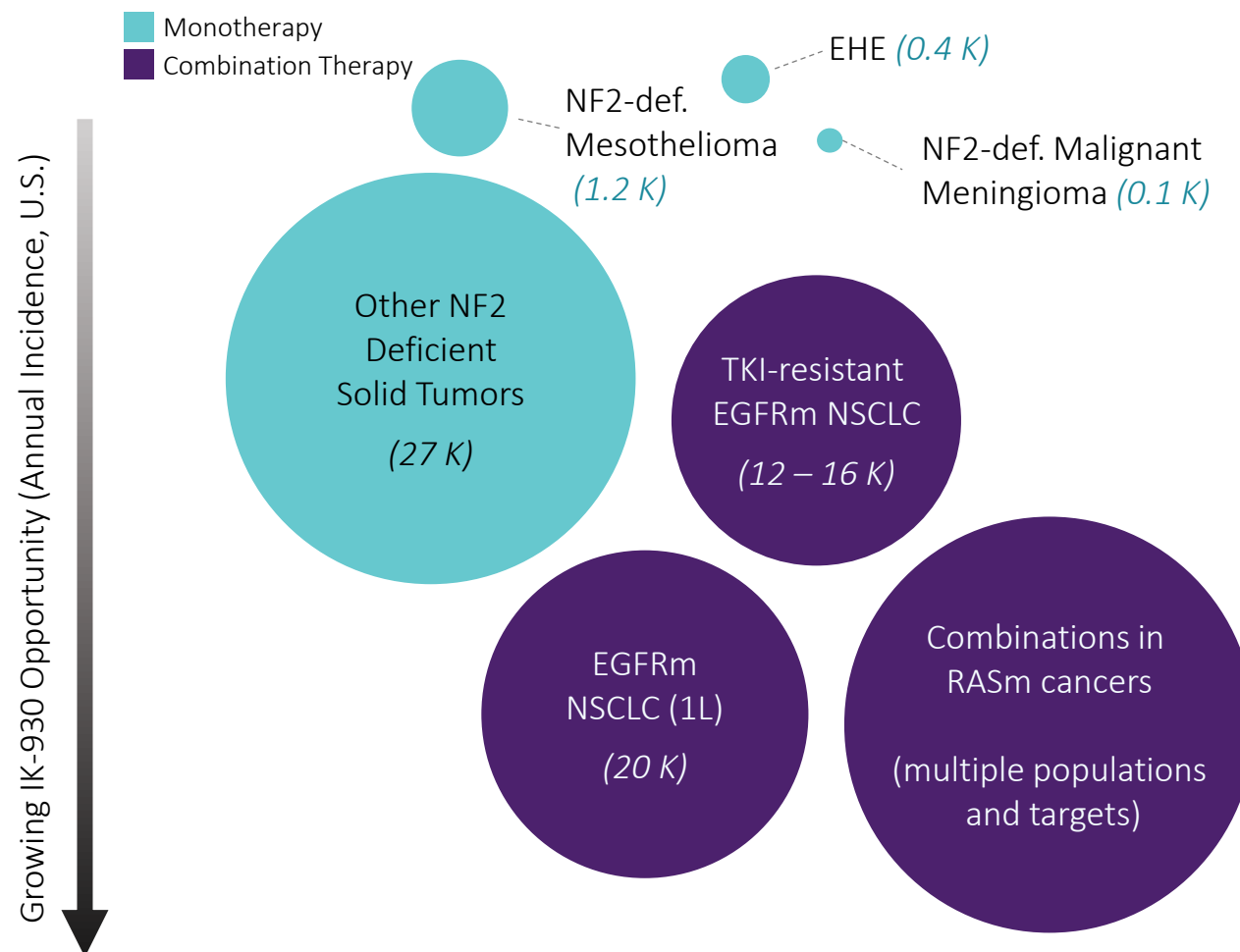
Two distinct mechanisms: Genetic alterations in Hippo pathway and pathway involvement in therapeutic resistance

Hippo Pathway Activity Triggers TEAD Transcription-Dependent Tumor Growth



EHE: Epithelioid Hemangioendothelioma; MPM: Malignant Pleural Mesothelioma.

IK-930 Initial Target Patient Populations



Additional potential opportunities in YAP/TAZ amplified cancers and combinations with RAS pathway agents (MEKi, KRASi)

IK-930 is Potentially both First and Best in Class Targeting Hippo Pathway

IK-930 is a potent Hippo-pathway inhibitor that selectively inhibits TEAD1 and broadly represses oncogenic TEAD activity

IK-930 is a TEAD1 Selective Palmitoylation Inhibitor

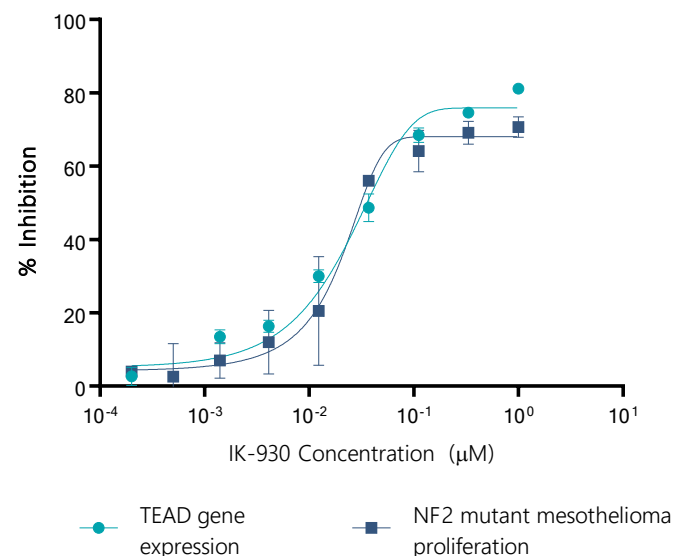
IK-930

	TEAD1	TEAD2	TEAD3	TEAD4
FP (IC ₅₀ μM)	0.88 ± 0.22	9.23 ± 1.80	> 50	6.58 ± 0.93
Click/Chem(IC ₅₀ μM)	0.2-0.5	>20	>20	>20
TSA (Kd; μM)	0.32	2.47	/	17.85
Nanobret (IC ₅₀ μM)	0.091 ± .002	15.53 ± 1.32	> 20	> 20

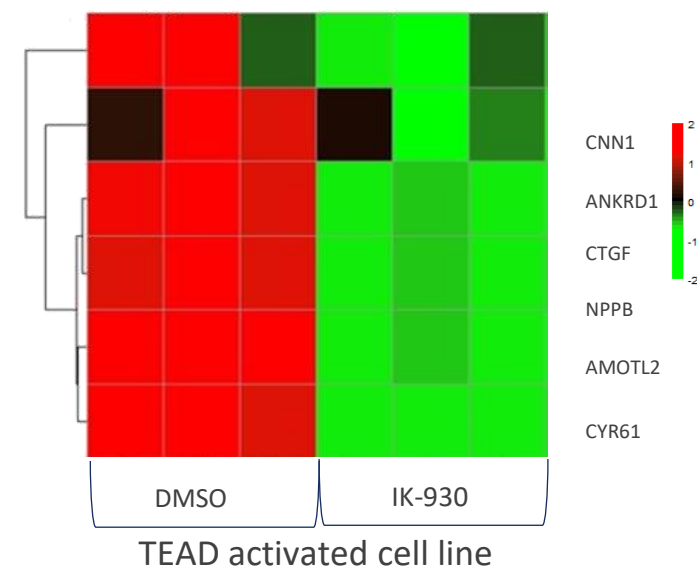
Pan-TEADi

	TEAD1	TEAD2	TEAD3	TEAD4
FP (IC ₅₀ μM)	0.92 ± 0.25	2.29 ± 0.51	1.18 ± 0.52	1.38 ± 0.58
Click/Chem(IC ₅₀ μM)	0.2-0.5	2	0.5	2
TSA (Kd; μM)	0.18	1.77	42.82	0.19
Nanobret (IC ₅₀ μM)	0.030 ± .004	0.51 ± .022	0.041 ± .001	0.32 ± .081

Potent Inhibition of TEAD

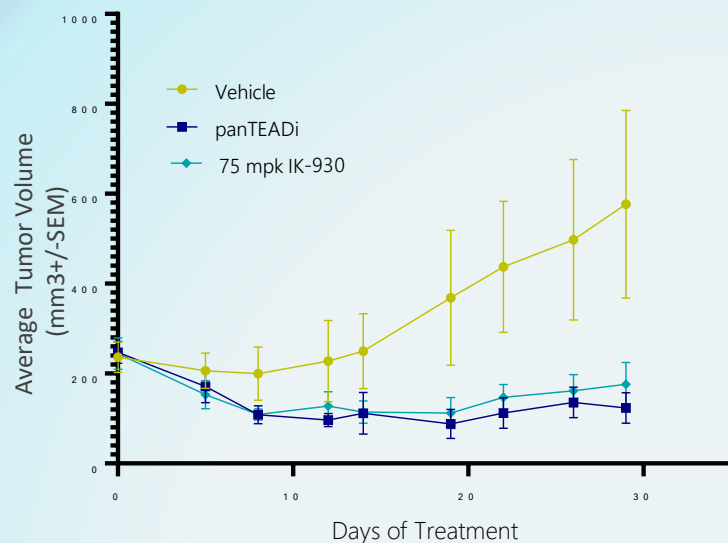


Robust Inhibition TEAD Target Gene Expression

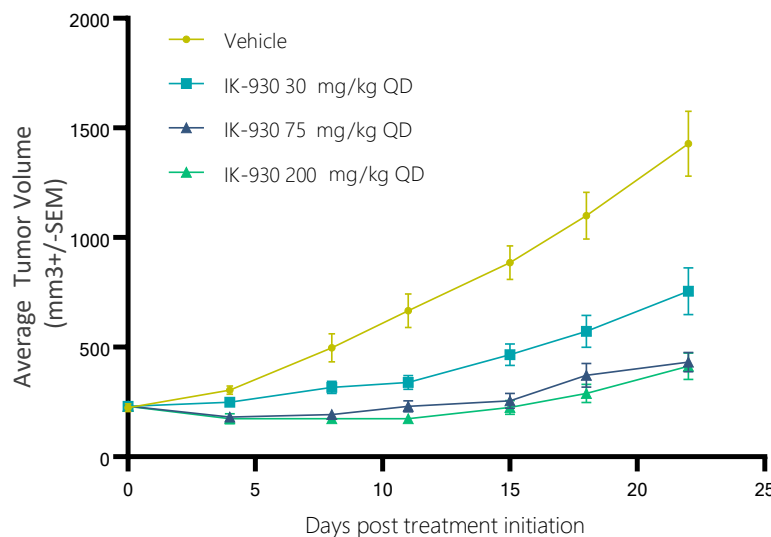


IK-930 Monotherapy Has Potential Across Genetic Mutations in the Hippo Pathway

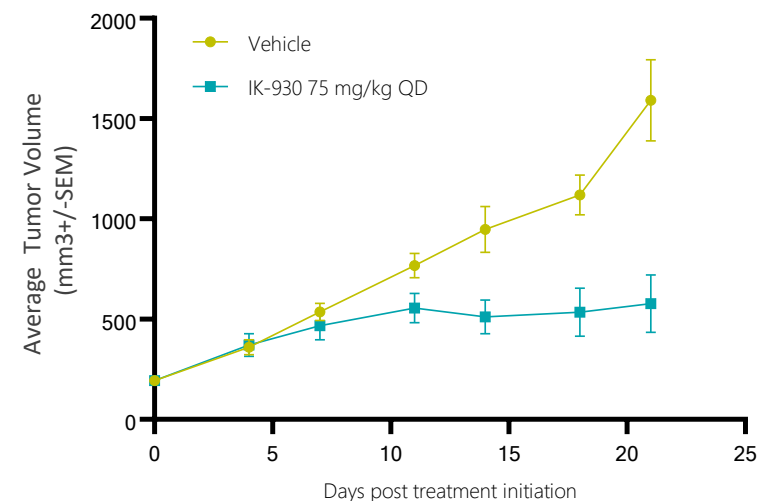
Comparable to panTEADi in NF2 Deficient Mesothelioma with Impact Across Tumor Models for Hippo Pathways Genetic Alterations



NF2 Deficient Mesothelioma Model



LATS1/LATS2 Mutated Mesothelioma Model



YAP1 Amplified HNSCC Model

IK-930 Mechanism Drives TEAD1 into Tumor-Repressive Activity

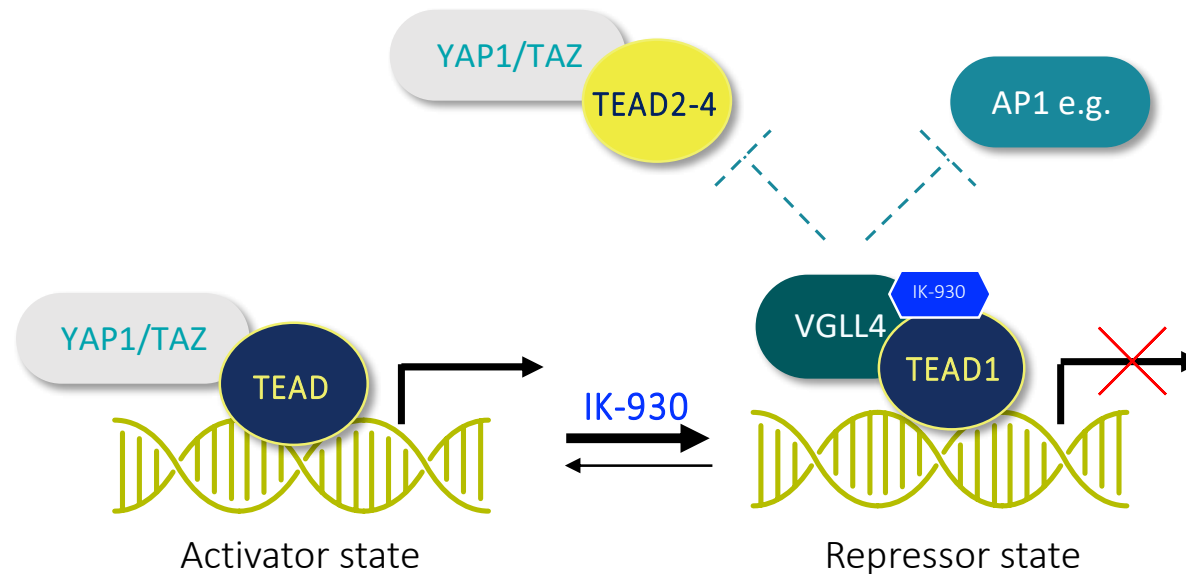
Leveraging the two opposing states of TEAD through binding TEAD1 to inhibit palmitoylation and promoting VGLL4 interactions

Two Opposing States of TEAD

Activator with YAP1 or
TAZ (palmitoylation
dependent)

Repressor with VGLL4
(palmitoylation
independent)

IK-930 Leverages the TEAD Biology to Gain Repressive Activity from Both State



IK-930-TEAD1-VGLL4 complex blocks chromatin access for TEADs and other transcriptional activators

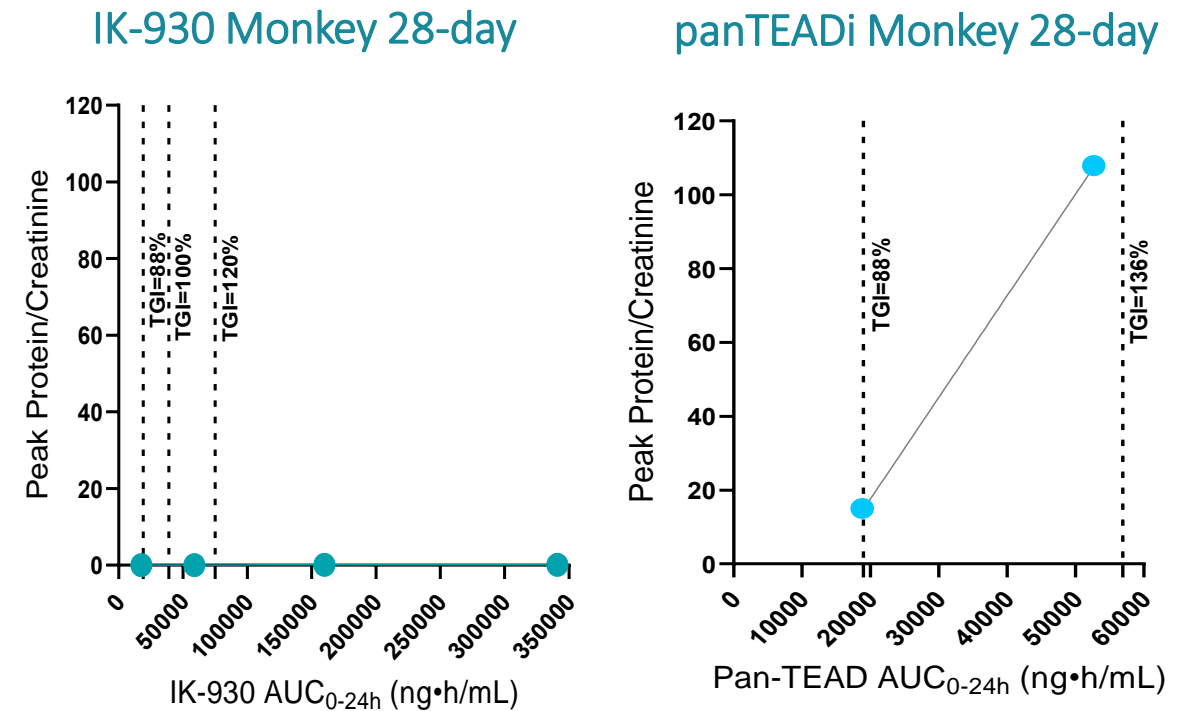
IK-930 Is Designed to Balance Efficacy and On-Target TEAD Renal Tox

Prior attempts to target the Hippo pathway have not been able to balance anti-tumor activity and kidney toxicity

Designing a Targeted Treatment to Maximize Antitumor Activity and Minimize On-Target Tox

- panTEAD inhibition has been seen to drive proteinuria and frank kidney toxicity (Kaneda et al, AACR 2019)
- In preclinical models it has been seen that YAP1 is required for podocyte (highly specialized kidney cell) viability (Schwartzman et al., 2016)
- IK-930's selectivity provide a far wider potential therapeutic window while demonstrating equivalent activity in multiple in vivo models
- 28-Day Monkey Study
 - IK-930: No clinical signs or renal changes observed; all doses
 - No toxicity to other systems
 - panTEADi
 - Decreased activity, ataxia observed in both dose groups
 - High dose halted on day 18 due to mortality and morbidity

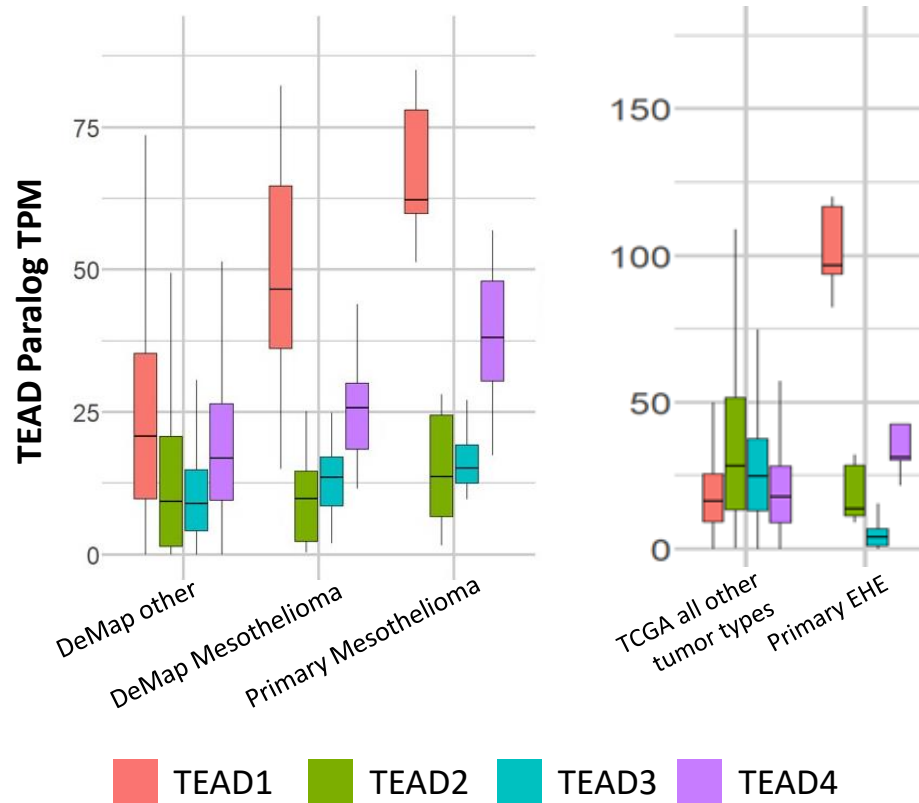
IK-930 Does Not Result in Proteinuria at All Tested Doses in Monkeys, in Contrast to panTEAD Inhibition



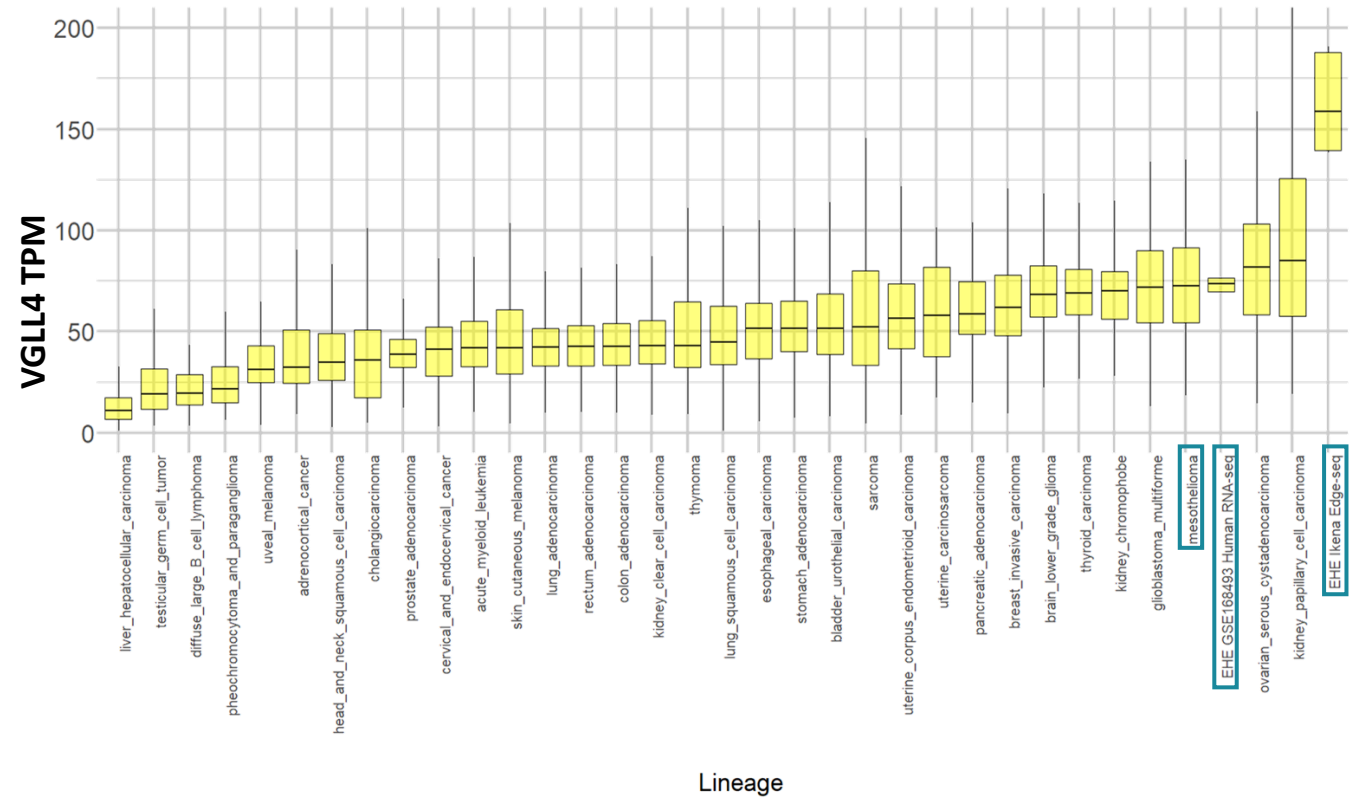
Average urinary protein-to-creatinine ratios and histopathology in non-human primates predicted a **therapeutic index of less than one for panTEAD inhibitors** and a **broad therapeutic window for IK-930**

TEAD1 and VGLL4 are Highly Expressed in IK-930's Initial Target Indications

TEAD1 is the Most Highly Expressed Paralog in Mesothelioma and EHE



Mesothelioma and EHE Have High Expression of VGLL4



IK-930 Monotherapy Clinical Strategy; Initial Data Expected in 4Q 2023

Growing Monotherapy Opportunity

~125,000 newly diagnosed cancer patients per year in the US with known Hippo pathway mutations and alteration



- **Malignant Mesothelioma:** ~40% NF2 loss of function mutations
- **NSCLC:** 6% YAP1 and 29% TAZ amplification
- **Meningioma:** High frequency of NF2 deficiency; Most common CNS tumor, accounting for ~one-third of primary CNS tumors
- **Head & Neck Cancers:** Growing body of knowledge on frequent YAP/TAZ amplification and FAT1 (upstream) deficiency
- **Soft Tissue Sarcomas:** ~90% of epithelioid hemangioendothelioma, or **EHE**, have TAZ-CAMTA1 fusions; 10% of EHE have YAP1-TFE3 fusions

Ongoing Phase 1 Trial Monotherapy Clinical Development Plan

Dose Escalation

*Currently recruiting;
advanced through
multiple doses*

All comers

Tumors known to have high
incidence of Hippo pathway
alterations

Dose Expansion Options

NF2 deficient mesothelioma

Epithelioid
hemangioendothelioma (EHE)

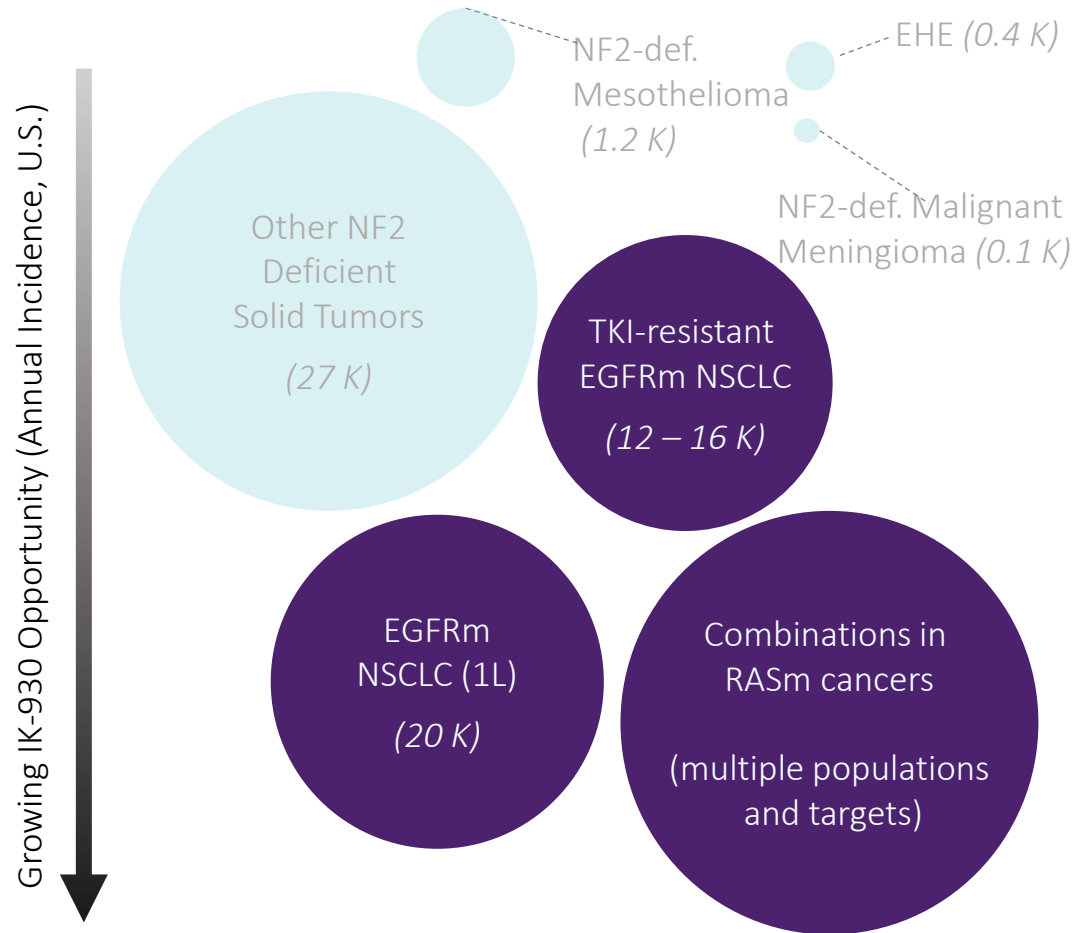
NF2 deficient solid tumors;
agnostic approach

YAP/TAZ gene fusion solid
tumors; agnostic approach

The Hippo Pathways is Implicated in Resistance to Multiple Targeted Therapies

IK-930 has the potential to combat resistance and expand the number of patients that could benefit from targeted therapies

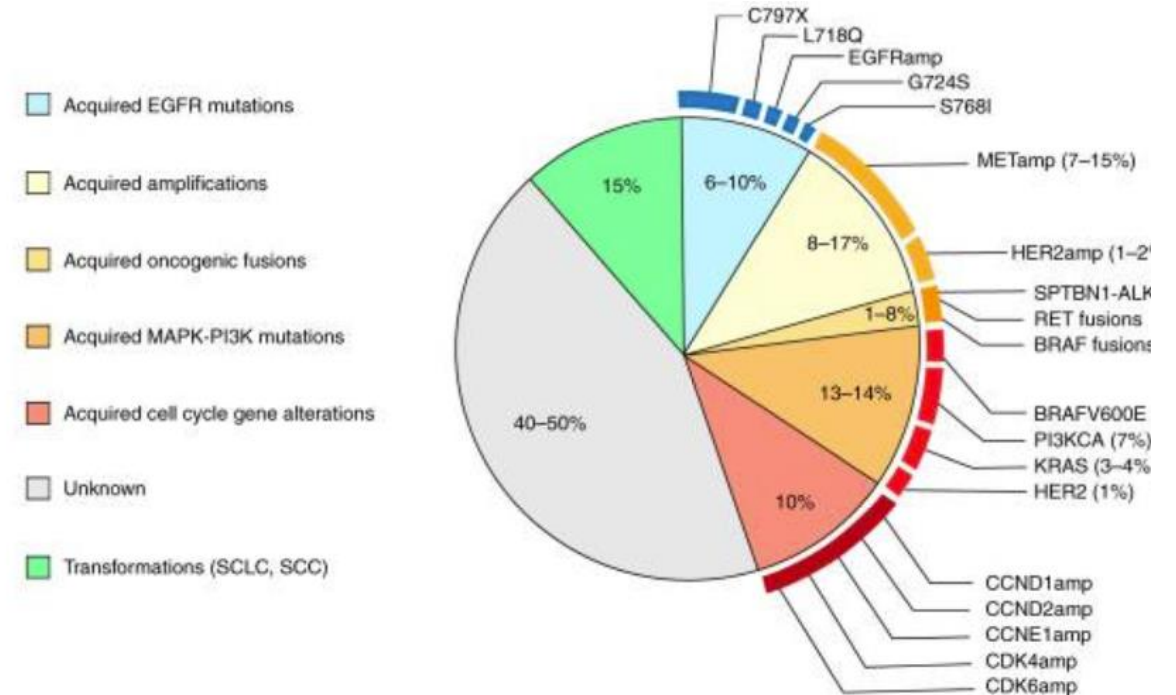
Combating Therapeutic Resistance is a Major Need



Case Study: Resistance Mechanisms to Osi in EGFRm NSCLC

40%+ of patients with Osimertinib resistance have unidentified mechanisms and represent a significant unmet need

Leonetti, et al., Br J Cancer, 2019



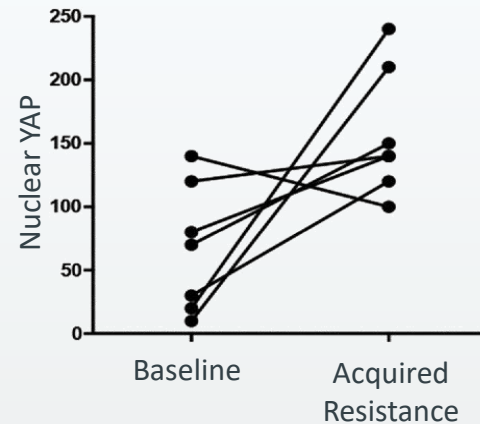
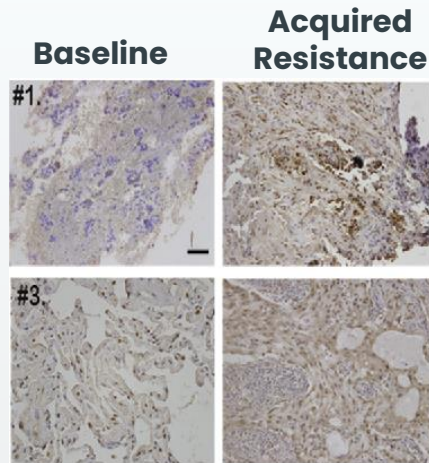
“The biggest hurdle to targeted cancer therapy is the inevitable emergence of drug resistance.”

Lim, et al. Journal of Hematology & Oncology 2019

IK-930 Opportunity to Address Emerging Early-Use Osimertinib Resistance

YAP Nuclear Localization Post Osi Treatment Linked to Acquired Resistance

YAP



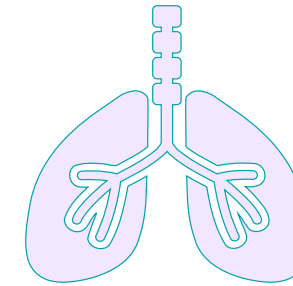
Lee, et al., BBRC, 2016

There is a growing body of data linking the Hippo pathway to resistance to multiple targeted therapies, including osimertinib

Two Clinical Opportunities in EGFR Resistance

First Line Combo with Osi

First line osi combined with IK-930 to potentially prevent the emergence of resistance



Post Resistance Emergence

Treating with IK-930 post the emergence of resistance – negatively selecting for actionable mutations

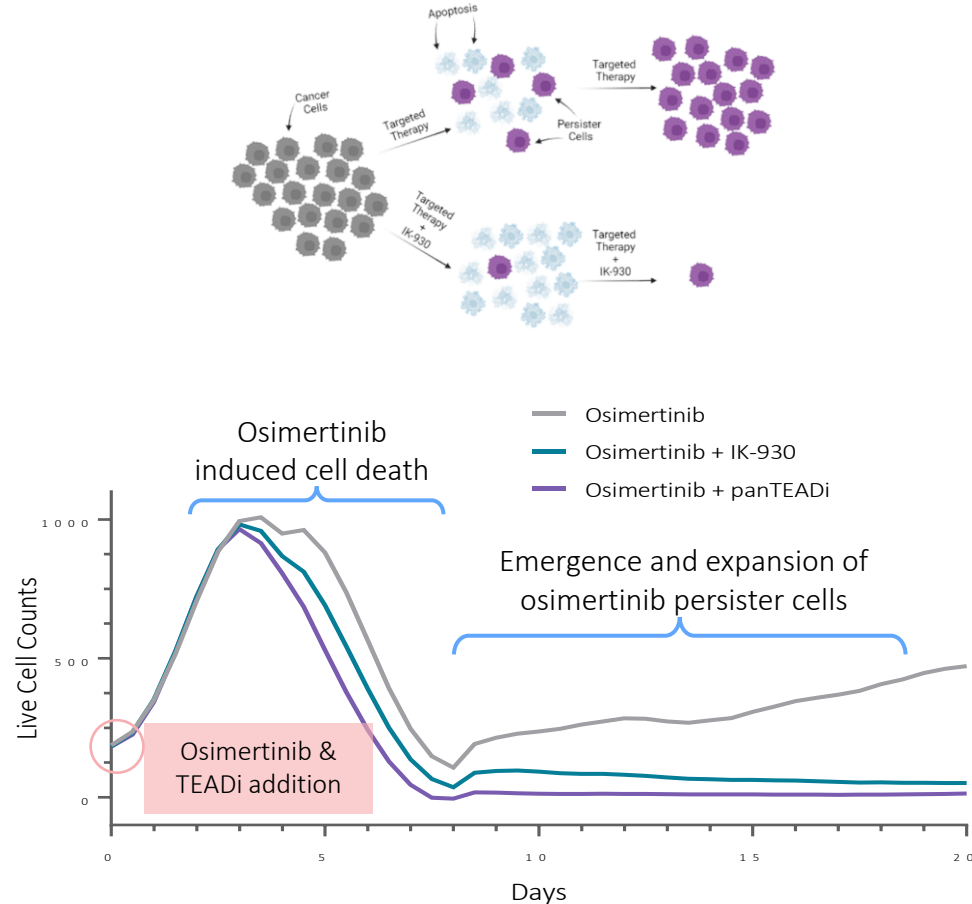
Exploring both as potential paths in clinical program

Clinical supply agreement with AstraZeneca for osimertinib signed in 2022; first combo planned for clinical program

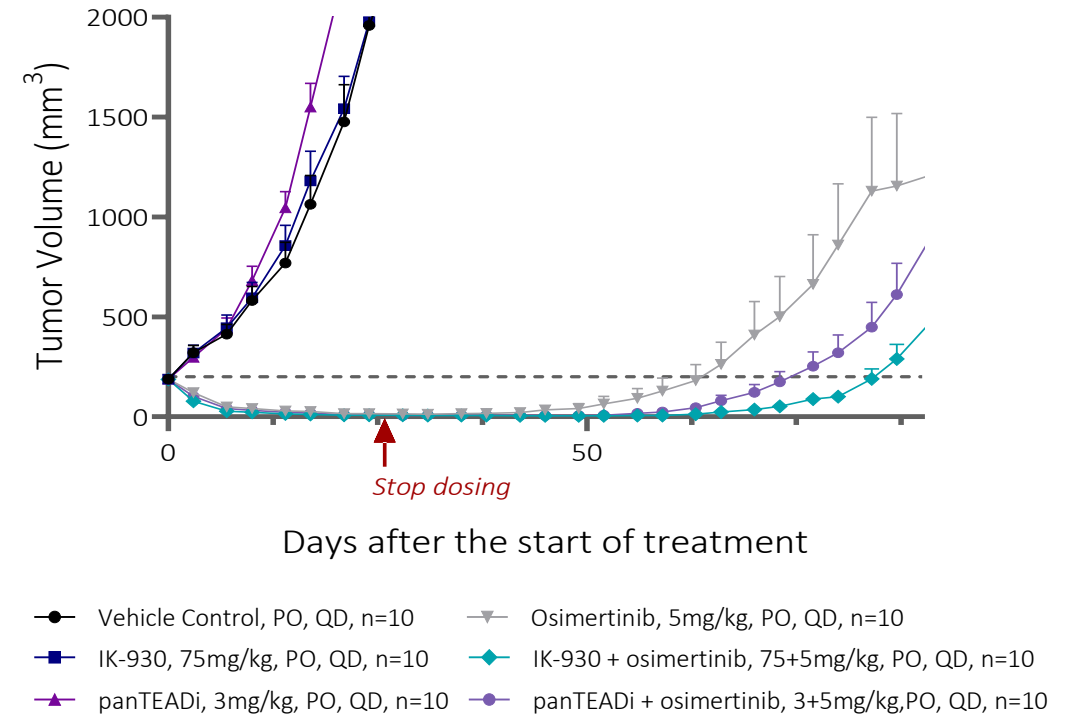
IK-930-Osi Combo Delays Tumor Regrowth *in vivo* and Can Prevent Emergence of *Persisters*

Potential for IK-930 to *prevent* resistance to EGFR inhibitors and even *reverse* the effect when given after resistance has already emerged

IK-930 Delays Emergence of Osi-Resistance *Persisters* Comparably to panTEADi



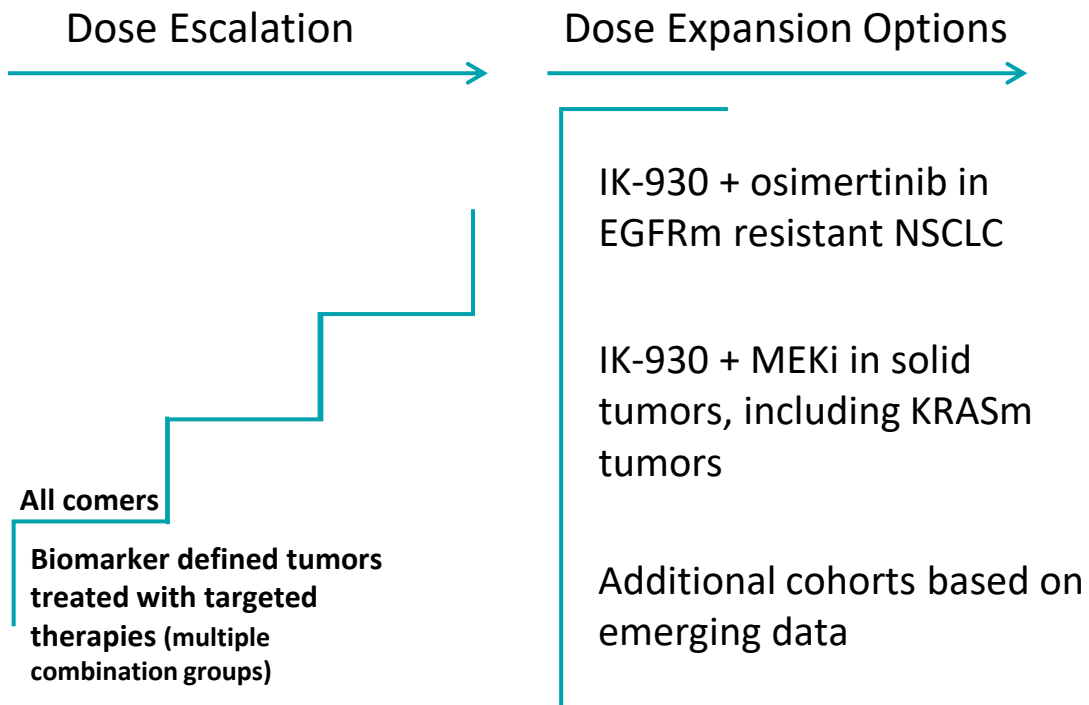
IK-930 + Osi Delays Tumor Regrowth More than panTEADi *in vivo*



IK-930's Potential to Combat Therapeutic Resistance to Other Targeted Therapies

Combination strategy represents an independent mechanism and potential opportunity for IK-930

Combination Clinical Development Plan First Cohort to Initiate in 2023



Addressing a Leading Limitation of Targeted Therapy - Primary and Secondary Therapeutic Resistance

Resistance to multiple targeted therapies and tumor recurrence can be linked to **YAP/TEAD activation**

Overcoming resistance mechanisms and escape could **deepen and prolong responses and address *de novo* resistance**, allowing more patients to respond to target therapies overall

Ikena Leads the Field in Targeting the Hippo Pathway



- **IK-930**: First-in-class, paralog-selective TEAD inhibitor
 - Ongoing phase 1 clinical trial currently in dose escalation
 - Monotherapy cohorts in NF2 mutant mesothelioma and EHE (100% YAP/TAZ)
 - Multiple planned combination cohorts combating therapeutic resistance
 - Data shows potential to prevent and reverse resistance to EGFR inhibitors
 - **Additional data on advantages of paralog-selectivity and combination approach presented at AACR 2023**
 - **Initial clinical data expected in 4Q 2023**
- **Additional research in Hippo pathway leading next-gen efforts**

MEK-RAF Complex Inhibitor

IK-595



The RAS Pathway is Highly Implicated in Cancer

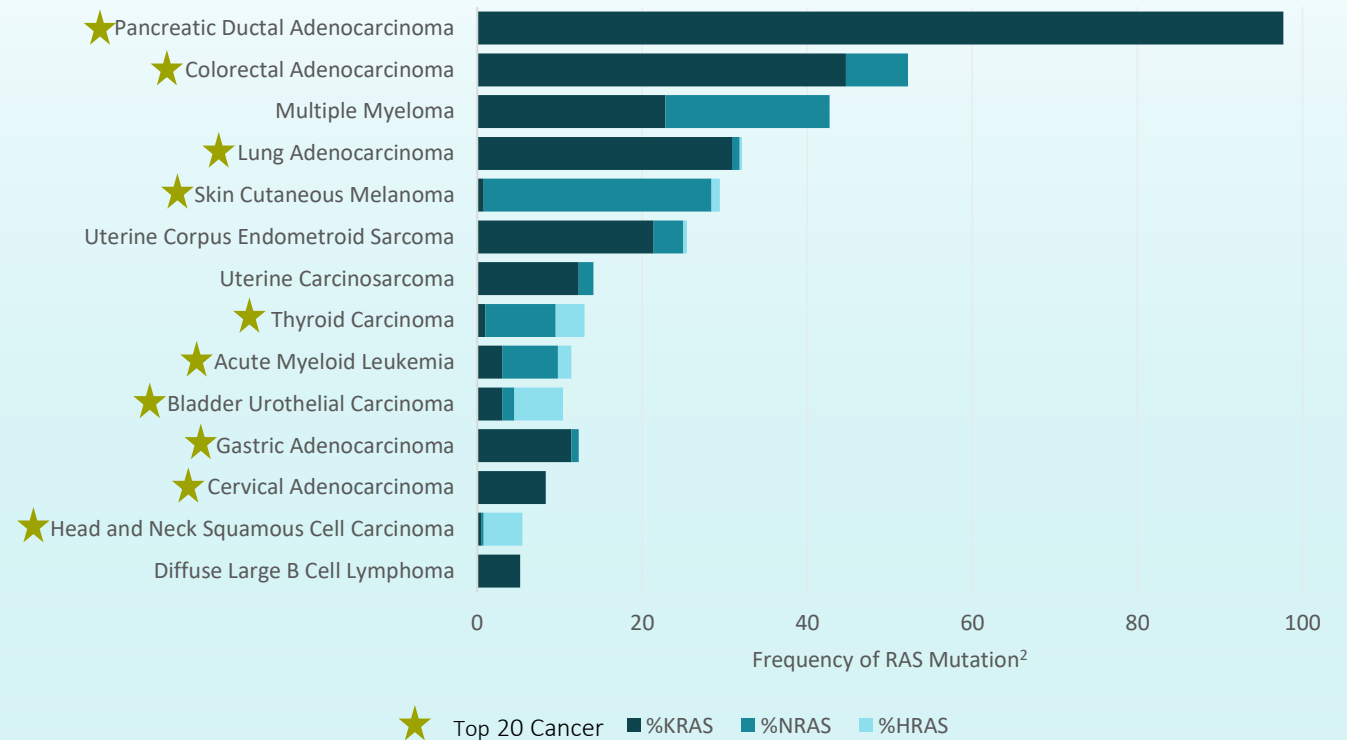
Targeting within the pathway could be impactful for a massive and diverse population

The **RAS pathway** is potentially implicated in **over half a million new cancer diagnoses each year** in the US alone¹

New approaches in targeting the pathway need to consider key learnings

- Approved inhibitors can paradoxically activate MEK/ERK signaling
- CRAF is implicated as a key signaling bypass mechanism for targeted therapies, and has kinase independent activity that drives RAS mutant cancers

10 of the 20 most common cancers worldwide are associated with RAS pathway mutations

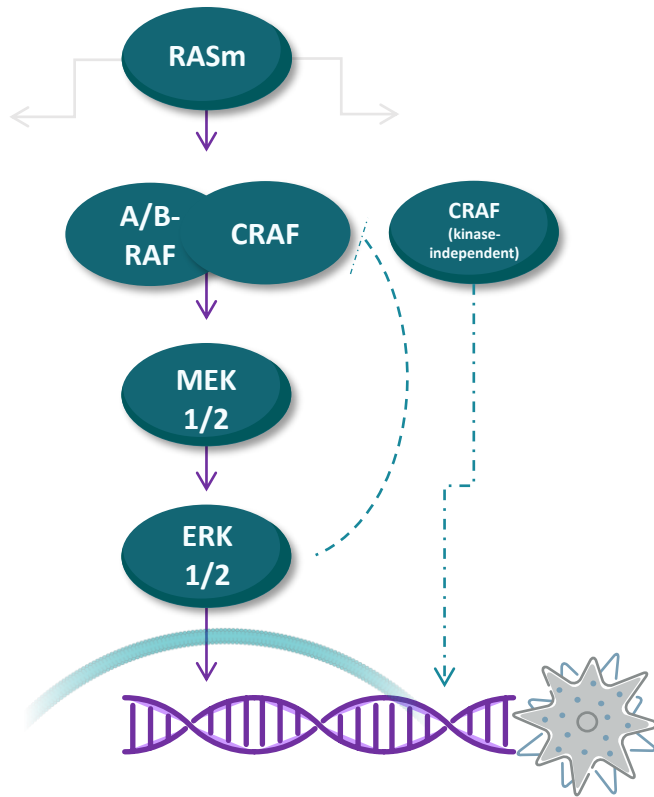


¹ACS and <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3457779/>

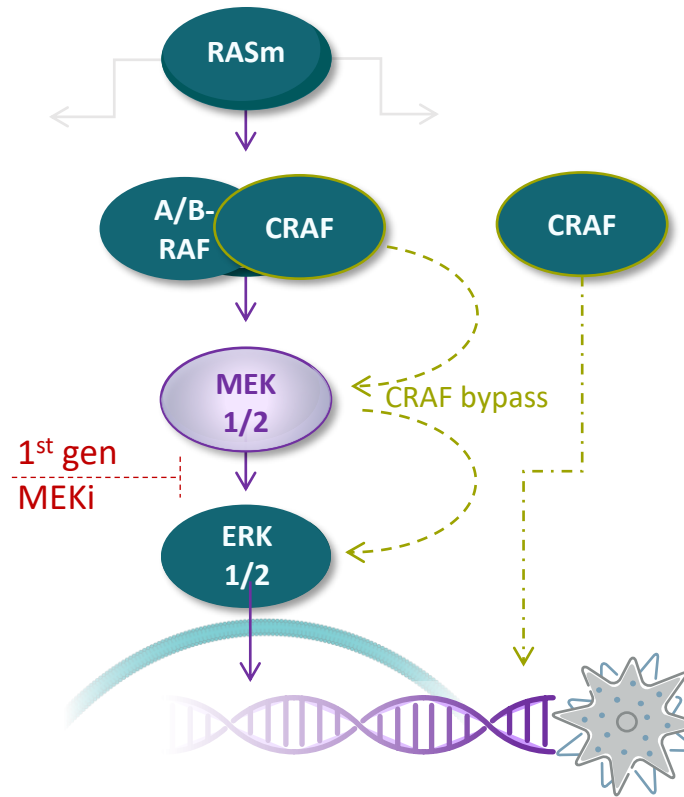
²Cox. Nature Reviews Drug Discovery (2014); World Cancer Research Fund International

First Generation MEK Inhibitors: Insufficient Targeting Leads to Limited Activity

MEK's role in driving ERK-mediated tumor growth



First gen MEK inhibitors trigger CRAF mediated pathway reactivation



Approved MEK inhibitors like trametinib and binimetinib block MEK kinase activity

Feedback in the pathway however triggers CRAF activation

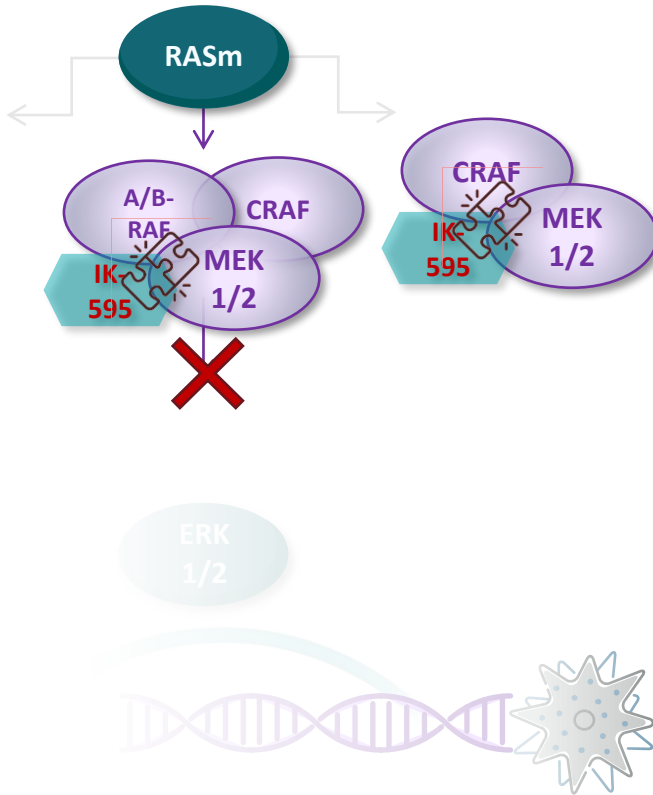
Cancer's survival mechanism utilizes CRAF to reactivate the pathway and bypass inhibition

Additionally, approved inhibitors miss blocking kinase-independent CRAF function that can trigger tumor growth

Leads to incomplete pathway inhibition

IK-595: A Best-in-Class Dual MEK-RAF Complex Inhibitor

IK-595 traps MEK & RAF in an inactive complex to prevent CRAF bypass and kinase-independent CRAF function



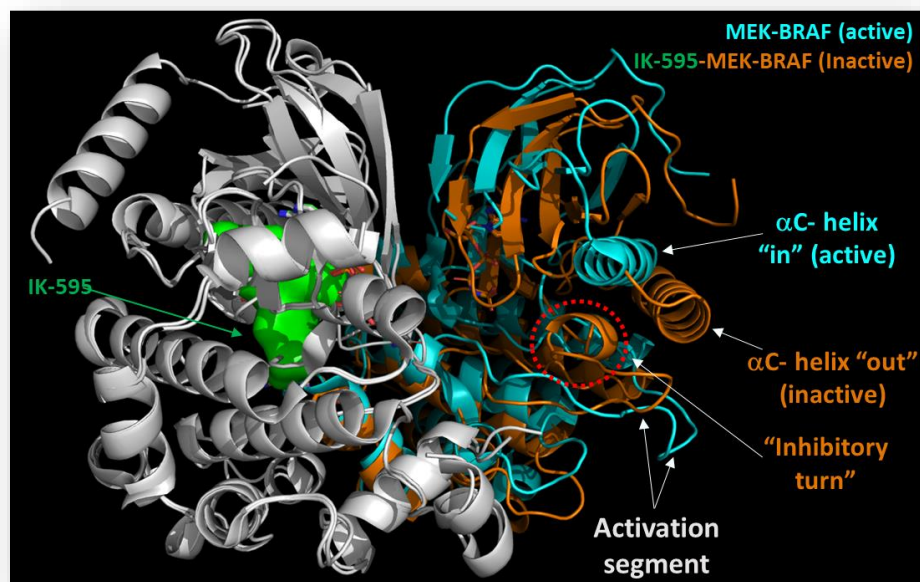
Key IK-595 Advantages

IK-595 is designed to and has shown preclinical evidence of superior profile than first generation and in-development MEK inhibitors

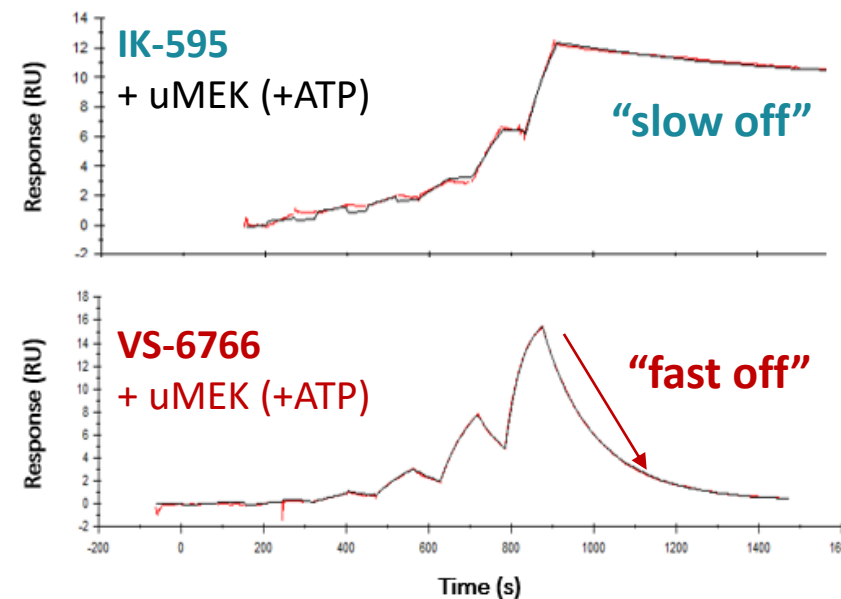
- ✓ Inhibit MEK mediated ERK1/2 phosphorylation
- ✓ Prevent MEK phosphorylation by RAF
- ✓ Alleviate therapeutic resistance through CRAF mediated bypass and pathway reactivation
- ✓ Block CRAF kinase independent activities
- ✓ Optimized PK profile to target IC90 plasma concentrations widening the therapeutic window

Key Advantages of IK-595 Including Robust Stabilization of MEK-RAF Complex

IK-595 traps RAF and MEK in a stable, inactive complex providing advantages in blocking both bypass in the pathway and kinase-independent CRAF function



IK-595 binds to MEK with much slower off-rate kinetics compared to other assets with similar MoA

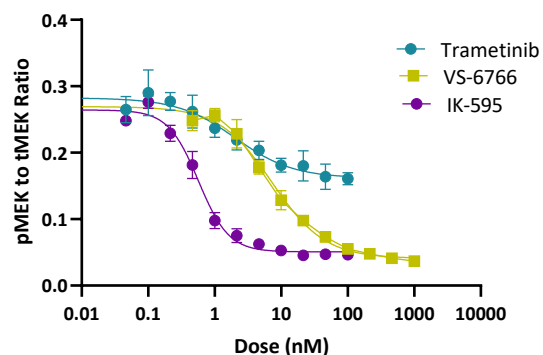


MEK	On Rate ($M^{-1}s^{-1}$)	Off Rate (s^{-1})	Affinity (nM)
IK-595 (to MEK)	8.24 E+04	6.09 E-04	7.39
VS-6766 (to MEK)	1.69 E+05	7.08 E-03	41.83

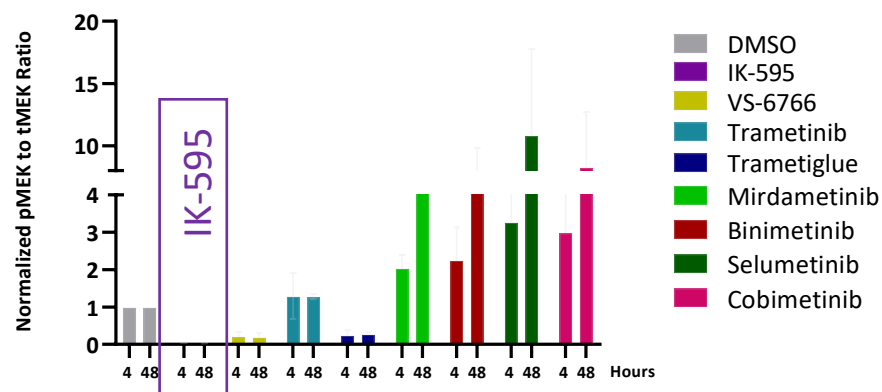
IK-595 Leads to More Durable Pathway Suppression than Other MEK Inhibitors

IK-595 Potently Inhibits MEK Phosphorylation In Vitro

In vitro MEK Phosphorylation (AsPC-1 cells)

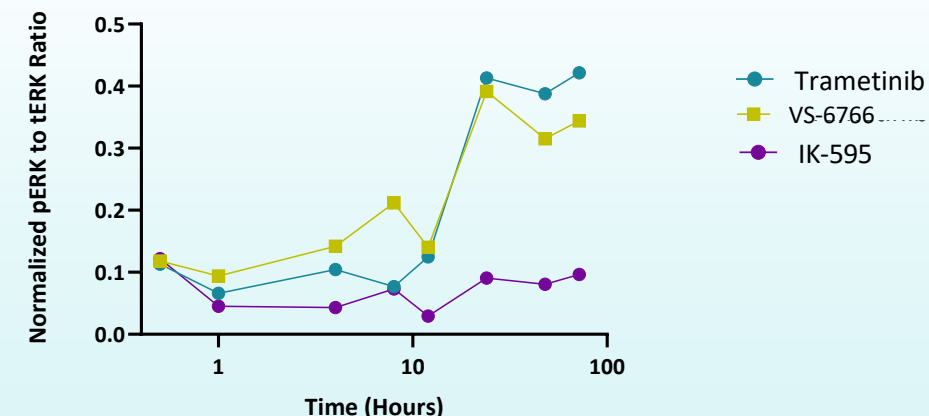


In vitro MEK Phosphorylation (HCT116 cells)

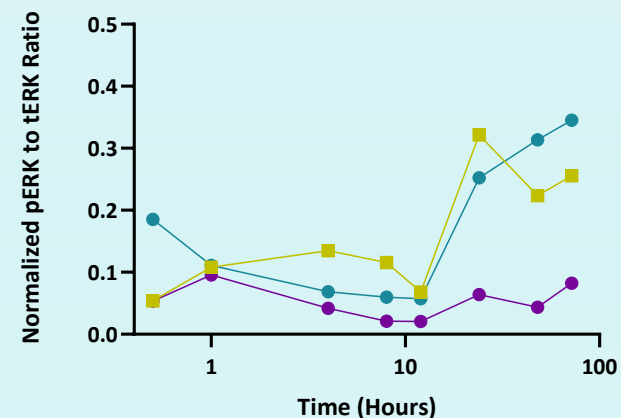


IK-595 Demonstrates Robust and Prolonged pERK Inhibition in Multiple Cell Lines

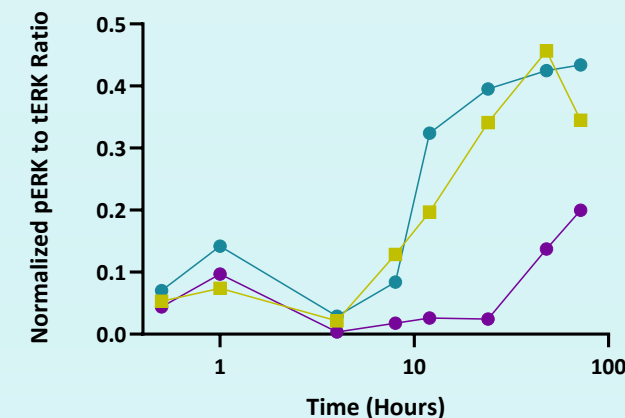
AsPC1 (KRASmut Pancreatic)



NCI-H2122 (KRASmut Lung)



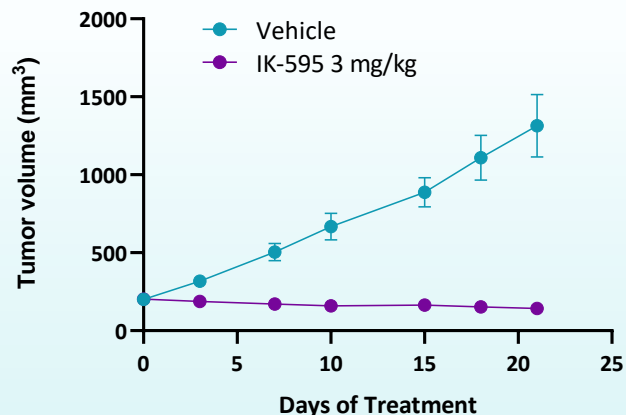
5637 (CRAF Amplified Bladder)



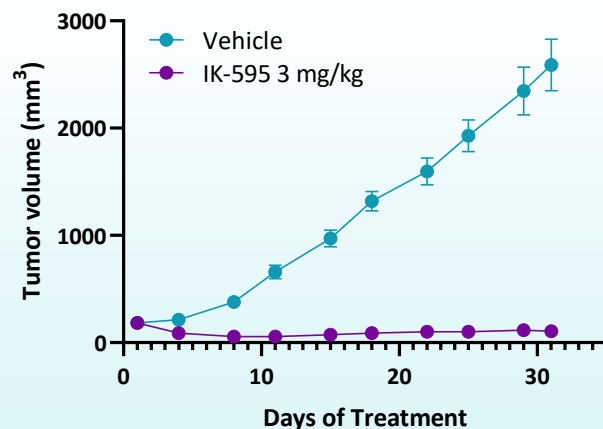
Robust Efficacy in RAS & RAF Models; High Sensitivity in CRAF Dependent Models

Antitumor Activity Across Models at Tolerated IK-595 Doses

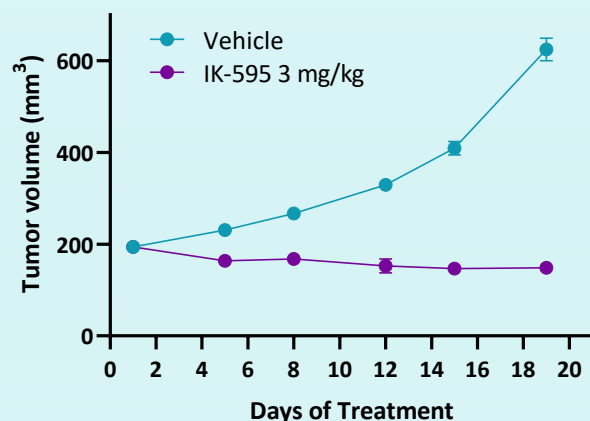
AsPC-1: KRAS G12D Pancreatic Model



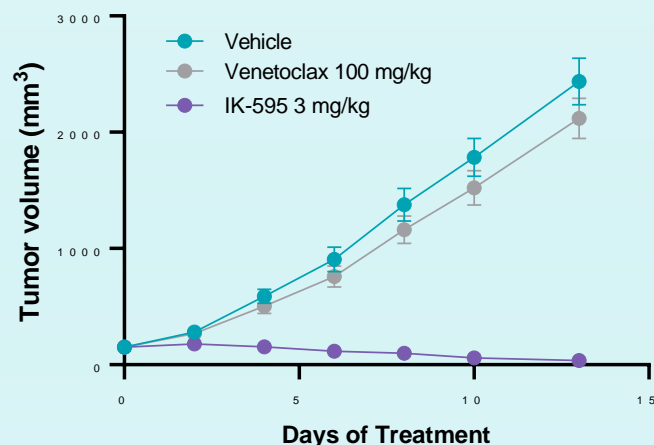
NCI-H2122: KRAS G12C Lung Tumor Model



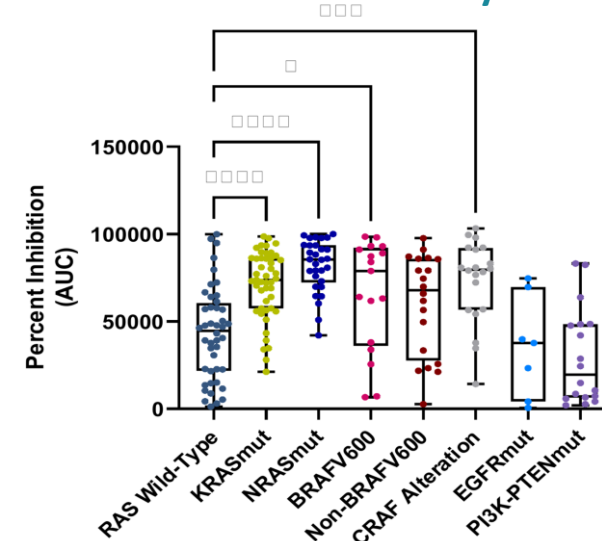
5637: CRAF Amplified Bladder Tumor Model



OCI-AML-3: NRAS Q61L Acute Myeloid Leukemia



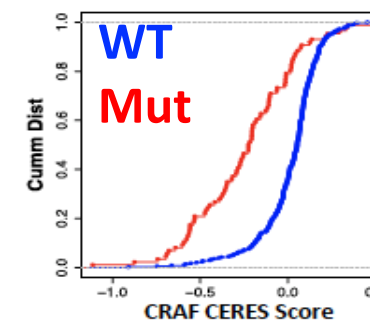
IK-595 Sensitivity



IK-595 has greatest sensitivity in NRAS and KRAS mutant cell lines which are dependent on CRAF

NRAS and KRAS – CRAF CERES Score

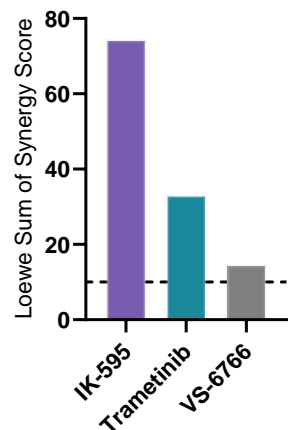
Jones, 4th RAS-Targeted Drug Development Summit 2022



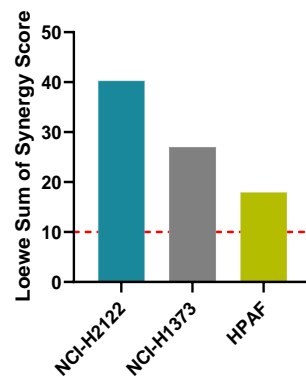
Efficacy achieved with both continuous and intermittent dosing of IK-595

IK-595 shows Significant Synergy Levels with Multiple Combination Agents

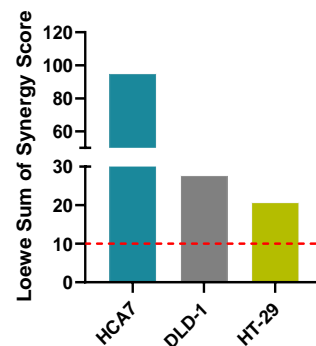
KRAS G12C (Sotorasib)



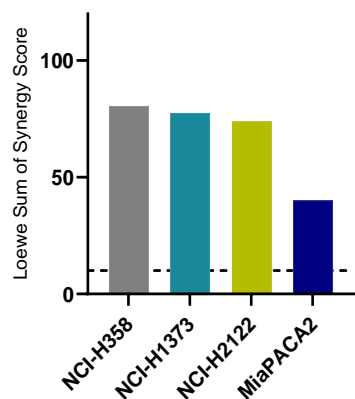
P13K (Inavolisib)



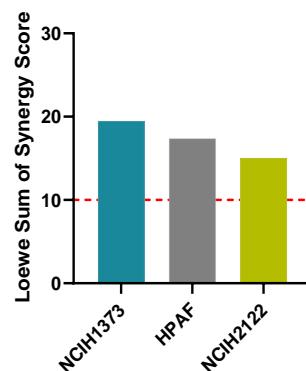
EGFR (Cetuximab)



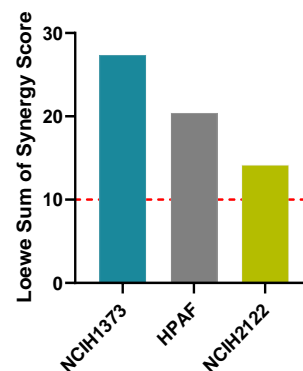
KRAS G12C (Adagrasib)



SOS1 (BI-3406)



SHP2 (RMC-4550)



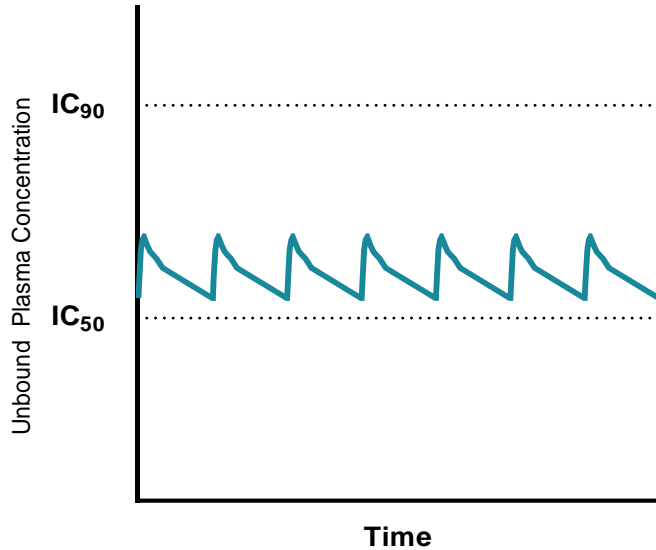
- High synergy scores show the potential for future potential combinations for IK-595
- Demonstrated the potential for expansion to larger patient populations within the RAS pathway
- Also shows potential to address needs in cancer populations where primary mutations fall outside the pathway but engage RAS biology

IK-595 Designed for Therapeutic Index Optimization

$T_{1/2}$ optimized to enable dosing schedules to hit above IC_{90} and achieve impact while allowing for holiday

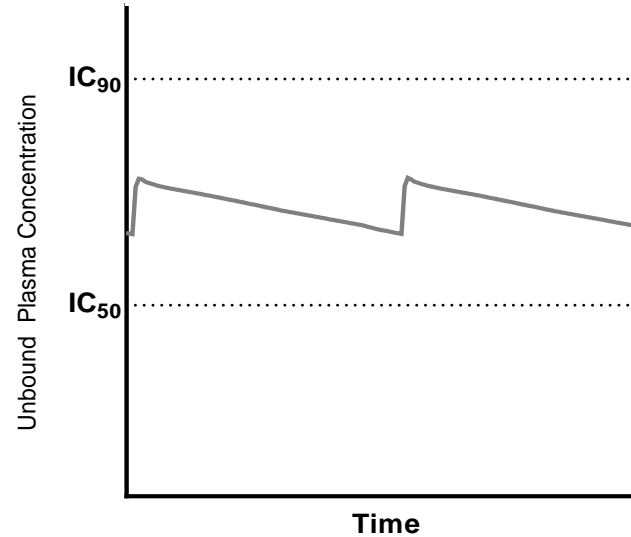
Trametinib

Clinical PK
2 mg QD



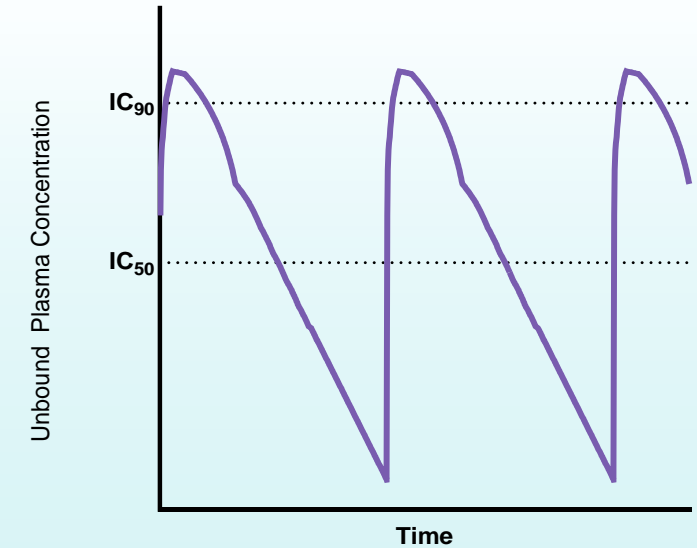
VS-6766

Clinical PK
3.2 mg twice/week



IK-595

Human Predicted PK

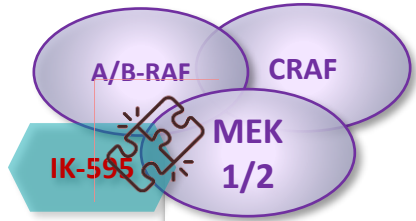


Clinical doses of trametinib and VS-6766 do not reach plasma concentrations above pERK IC_{90} due to the very long human $T_{1/2}$ of trametinib (72-120 hrs) and VS-6766 (60-100 hrs)

Shorter human $T_{1/2}$ of IK-595 allows flexibility in dosing schedules

Enables transient plasma concentrations above IC_{90} & recovery before next dose

IK-595: Best-in-Class Next Generation MEK-RAF Complex Inhibitor



- Novel, best-in-class inhibitor that traps MEK and RAF in an inactive complex for more complete inhibition of the pathway
- Durable, potent inhibition of the pathway demonstrated through multiple data sets
- Mechanisms prevents CRAF bypass and kinase-independent CRAF function
- Preclinical efficacy in multiple disease models
- Difficult to treat CRAF-dependent tumors show high sensitivity to IK-595 in cell lines
- Designed with half life for optimization of therapeutic index and flexible dosing schedules
- **IND planned for 2H 2023**

Targeting AHR to Counter Immunosuppressive TME

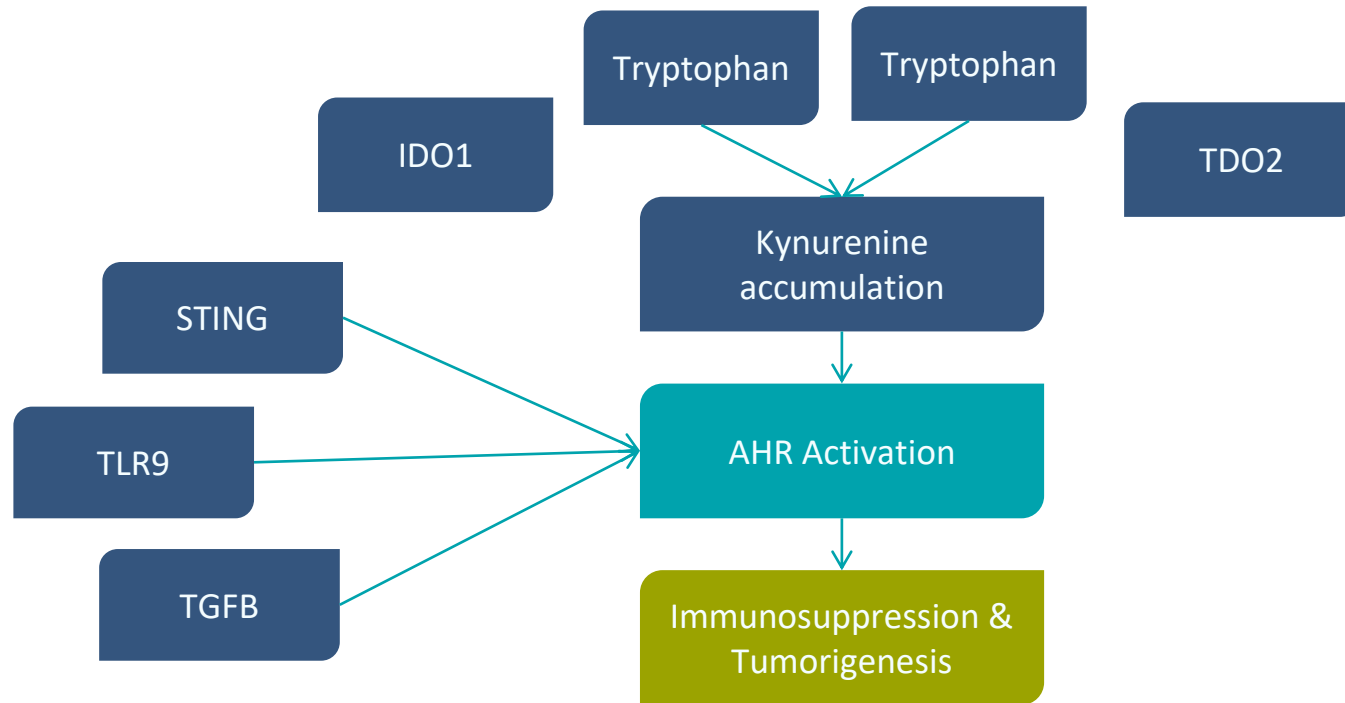
IK-175

 Bristol Myers Squibb™



AHR's Role in Immune Signaling & Identifying Bladder Cancer as Key Population

Activated AHR can prevent immune recognition of cancer through both the innate and adaptive immune systems



AHR modulates activity in both the innate and adaptive immune systems

Novel Assays to Optimize Indication Selection



Proprietary
transcriptional
signature

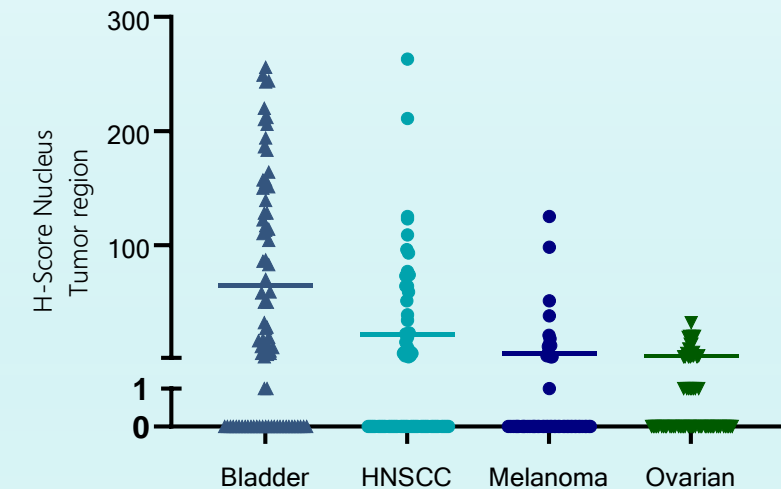


Gene amplification



Proprietary IHC

Tumor Microarray Result



IK-175 Ph1 Study Ongoing in Urothelial Carcinoma Patients

Patients have exhausted SOC and progressed on CPIs

Clinical data presented at SITC 2022 including dose escalation (all-comers), and both mono and combo stage 1 expansion cohorts in urothelial carcinoma

- 43 total patients; 40 evaluable for anti-tumor activity
- 20 dose escalation
- 20 dose expansion (10 mono, 10 combo)

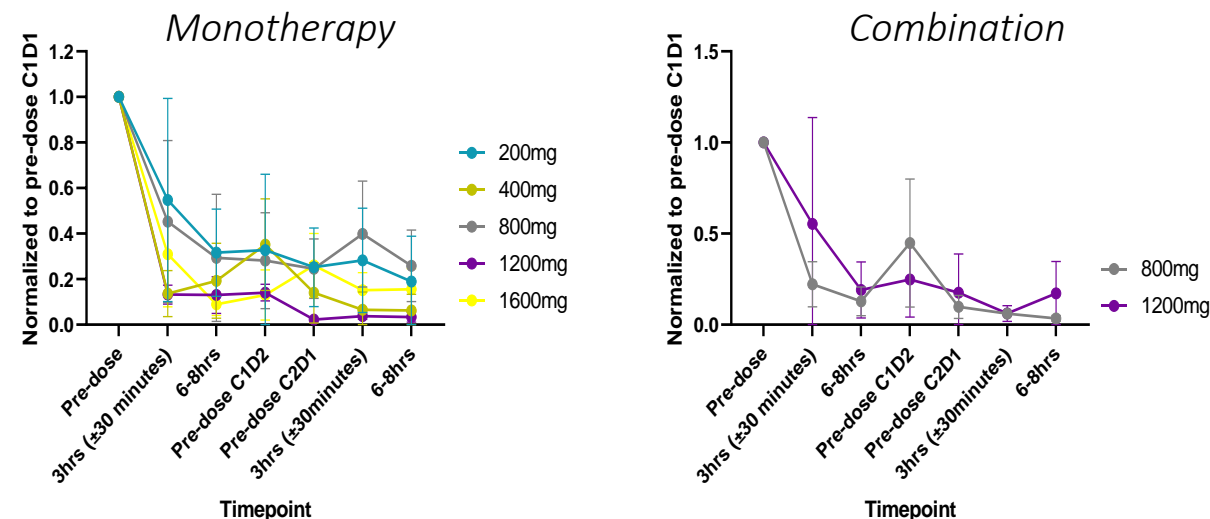
Pharmacodynamics seen at all doses

No DLTs observed

IK-175 was well tolerated with a predictable and manageable safety profile

Encouraging anti-tumor activity and duration of response seen in IK-175 nivolumab combination expansion cohort

Pharmacodynamics at All Doses



Last-line, Heavily Pre-treated Patients

Demographics of Evaluable Urothelial Carcinoma Patients in Initial Clinical Analysis

	Monotherapy (n=10)	Combination (n=10)
Prior lines of anti-cancer therapy		
1-3	2	4
4-10	8	6
ADC experienced	9	6

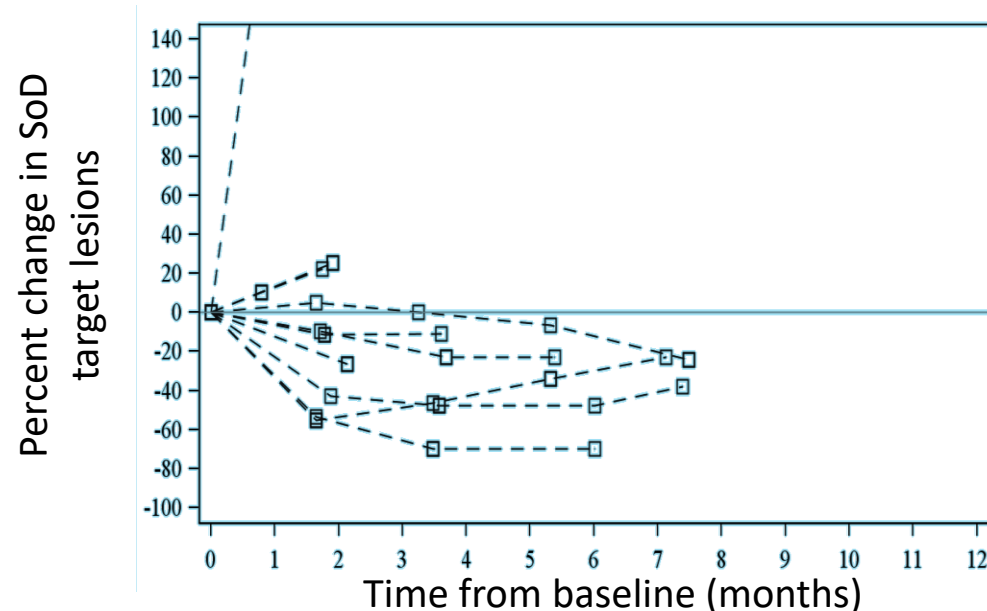
Initial Clinical Urothelial Carcinoma Data Demonstrated Encouraging Anti-Tumor Activity

Clear evidence of monotherapy activity contributing to combination responses
Heavily pretreated patients exhausted all options -- failed checkpoints and have had up to 10 prior lines of therapy
Mono partial response ongoing over 15 months; Combo partial responses ongoing over 5 months

Initial Clinical Data from Stage 1 of Expansion Cohorts












	Monotherapy (n=10)	Combination (n=10)
Best overall response		
Confirmed partial response	1 (10%)	2 (20%)
Stable Disease	1 (10%)	2 (20%)
Progressive disease	6 (60%)	6 (60%)
ORR, n(%)	1 (10%)	2 (20%)
DCR, n(%)	2 (20%)	4 (40%)

Stage 1 of Combination Cohort in Urothelial Carcinoma Showed 40% DCR with Encouraging Anti-Tumor Activity



Combo result represent meaningful potential for patient population with significant and ongoing DoR
Stage 2 of expansion cohorts ongoing

Ikena Wholly Owned Pipeline Focused on Targeted Oncology

		Candidate Target	Indications Interventions	Partnerships & Rights	Discovery	IND Enabling	Phase 1	Upcoming Milestone
Targeted Oncology	Hippo Pathway	IK-930 TEAD	Hippo-Altered Cancers <i>Monotherapy & Multiple Combinations</i>					Initial data expected 4Q 2023
		Undisclosed	Hippo-Altered Cancers					Progressing further pathway research
	RAS Pathway	IK-595 MEK-RAF	RAS and RAF Altered Cancers; Additional Tumor Types					IND in 2H 2023
		Undisclosed	RAS-Mutated Cancers					Progressing research toward add 'l candidate
Immune-Signaling	AHR Signaling	IK-175 AHR	Bladder Cancer, AHR Enriched <i>Monotherapy & Nivolumab Combination</i>	 Bristol Myers Squibb				Continued trial progress; update in 2H 2023
			Head & Neck Cancer, AHR Enriched <i>Nivolumab Combination</i>					Phase 1 ready

