ikena ONCOLOGY

August 2021

Nasdaq: IKNA

www.ikenaoncology.com

Disclaimer

This Presentation contains forward-looking statements and information. All statements other than statements of historical facts contained in this Presentation, including statements regarding our strategy, future financial condition, future operations, projected costs, prospects, plans, objectives of management and expected market size, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “may,” “will,” “should,” “expect,” “intend,” “plan,” “anticipate,” “believe,” “estimate,” “target,” “seek,” “predict,” “potential,” “continue” or the negative of these terms or other comparable terminology. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market size, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements in this Presentation include, but are not limited to, statements about: the initiation, timing, progress, results, and cost of our research and development programs and our current and future preclinical and clinical studies, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available, and our research and development programs; our ability to efficiently discover and develop product candidates; our ability to initiate, recruit and enroll patients in and conduct our clinical trials at the pace that we project; our ability to obtain and maintain regulatory approval of our product candidates; our ability to compete with companies currently marketing or engaged in the development of treatments that our product candidates are designed to target; our reliance on third parties to conduct our clinical trials and to manufacture drug substance for use in our clinical trials; the size and growth potential of the markets for our product candidates and our ability to serve those markets; the ability and willingness of our third-party strategic collaborators to continue research and development activities relating to our development candidates and product candidates; our ability to obtain and maintain adequate intellectual property rights; our estimates of our future expenses, revenue, capital requirements or our need for or ability to obtain additional financing; our expected uses of the net proceeds to us from this offering; the potential benefits of strategic collaboration agreements, our ability to enter into additional strategic collaborations or arrangements, and our ability to attract collaborators with development, regulatory and commercialization expertise; our financial performance; developments and projections relating to our competitors or our industry; the effect of the COVID-19 pandemic, including mitigation efforts and economic effects, on any of the foregoing or other aspects of our business operations, including but not limited to our preclinical studies or current and future clinical trials. We caution the recipient not to place considerable reliance on the forward-looking statements contained in this presentation. The forward-looking statements in this Presentation speak only as of the date of this document, and we undertake no obligation to update or revise any of these statements. Our business is subject to substantial risks and uncertainties, including those referenced above.

Certain information contained in this Presentation relates to or is based on estimates, projections and other information concerning the Company’s industry, its business and the markets for its programs and product candidates and studies, publications, surveys and other data obtained from third-party sources and the Company's own internal estimates and research. While the Company believes these third-party sources to be reliable as of the date of this Presentation, it has not independently verified, and makes no representation as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, all of the market data included in this Presentation involves a number of assumptions and limitations, and there can be no guarantee as to the accuracy or reliability of such assumptions. Finally, while we believe our own internal research is reliable, such research has not been verified by any independent source.

These forward-looking statements are based on the beliefs of our management as well as assumptions made by and information currently available to us. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. If such assumptions do not fully materialize or prove incorrect, the events or circumstances referred to in the forward-looking statements may not occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this presentation to conform these statements to actual results or to changes in our expectations, except as required by law. Accordingly, readers are cautioned not to place undue reliance on these forward-looking statements. Additional risks and uncertainties that could affect our business are included under the caption “Risk Factors” in our Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission for the three months ended March 31, 2021.

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Building a Targeted Oncology Company Focused on Developing Novel Cancer Therapies

Strong track record of discovering and developing novel oncology programs

- **5** Novel programs
- **2** in clinical trials
- **4** internally discovered
- **2** in IND-enabling studies
- **2** partnered programs

Portfolio of highly differentiated biomarker-driven programs and product candidates

Targeted Oncology

- TEAD
- ERK5
- RAS Pathway

Tumor Microenvironment

- AHR
- Kynureninase
- EP4

Initial Public Offering

- **Completed successful IPO in March 2021, raised $144M in gross proceeds**

Series B Financing

- **Closed Series B financing in December 2020, raised $120M in gross proceeds**

Strategic Collaboration

- **Potential near-term financial upside with validating BMS collaboration**

Bristol Myers Squibb™

- **$80.5M** upfront
- **$14.5M** equity investment
- **$90M in potential opt-in fees**
- **$900M** potential future milestones[1]

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[1] If BMS elects to license IK-175 and IK-412, Ikena is entitled to up to $265M in regulatory milestones and $185M in commercial milestones for each program as well as a tiered royalties at rates ranging from the high single to low double digit percentages based on worldwide annual net sales.

Experienced Executive Team

23
average years of experience

50+
INDs

14
regulatory approvals

Mark Manfredi, Ph.D.
President
& Chief Executive Officer

MILLENNIUM · Takeda

Douglas Carlson
Chief Operating Officer &
EVP, Finance

COLLEGIUM Pharmaceutical · COWEN · Lundbeck · PequotCapital

Jeffrey Ecsedy, Ph.D.
Chief Scientific Officer

MILLENNIUM · Takeda

Sergio Santillana, M.D.
Chief Medical Officer

ARIAD · gsk · Lilly · MERRIMACK® · Takeda

Maude Tessier, Ph.D.
Chief Business Officer

Boston Children's Hospital · MERCK

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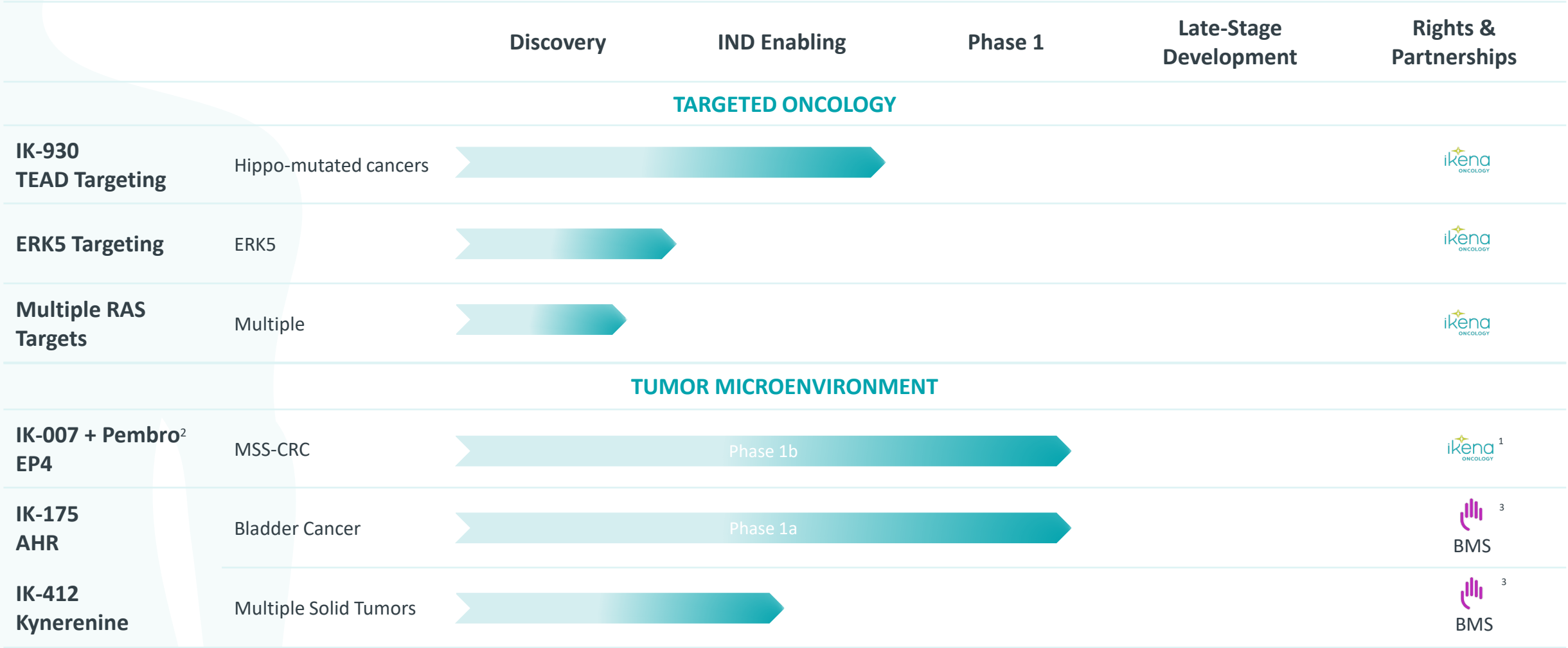
Pipeline Targeting Cancer from Multiple Angles



[1] Ikena has a worldwide exclusive license except China and Taiwan from AskAt.

[2] Pembrolizumab provided through a clinical trial collaboration and supply agreement with Merck.

[3] BMS has the right to exclusively license under a master collaboration agreement.

IK-930, a TEAD Inhibitor

- Broad clinical opportunity in genetically altered tumors
- Genetic alterations of Hippo pathway occur in ~10% of all cancers
- Planned IND submission in 2H 2021

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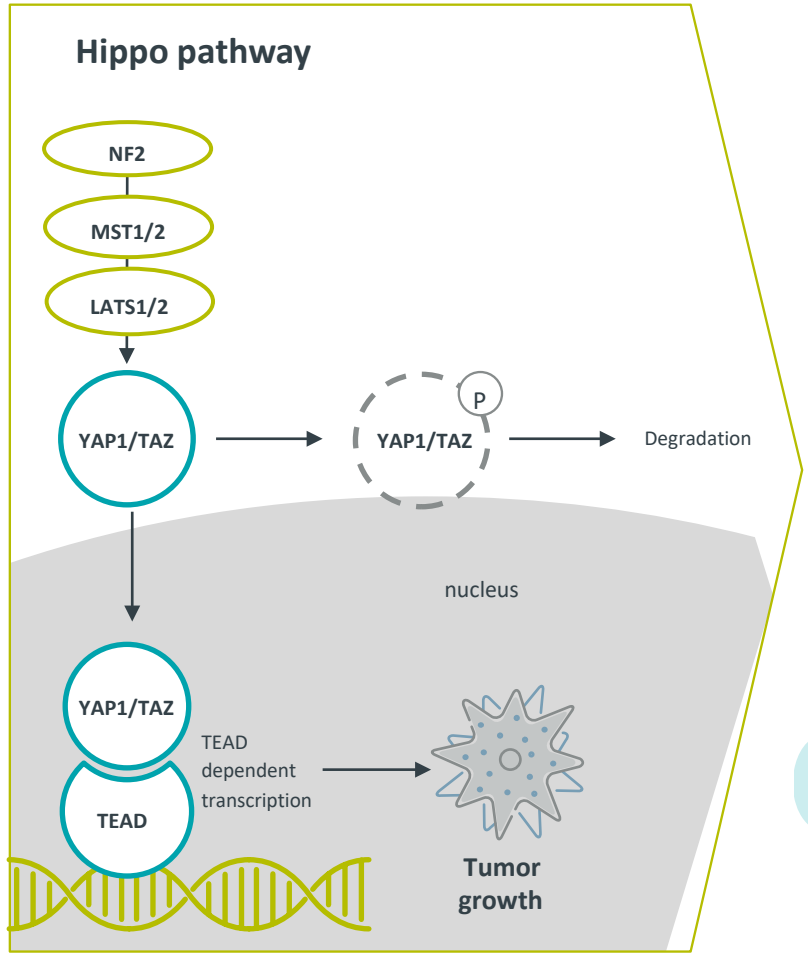
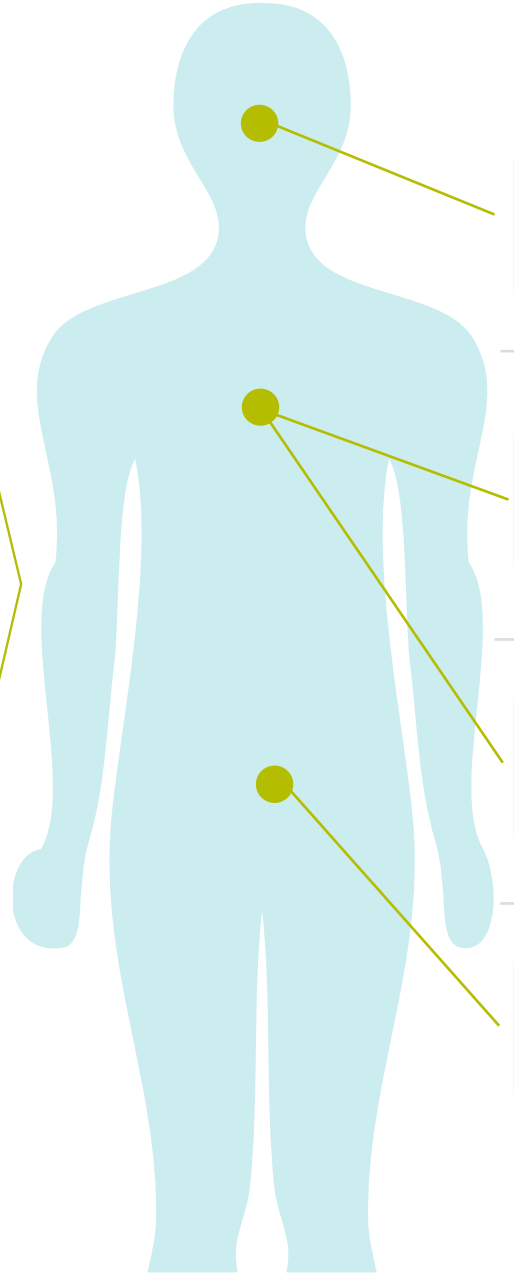
Genetic Alterations in Hippo Signal Transduction Pathway Drive Oncogenesis in Patients Across Multiple Indications





Meningioma

- High frequency of NF2 deficiency
- Most common CNS tumor, accounting for ~one-third of primary CNS tumors

Non-small Cell Lung Cancer (Squamous and adenocarcinoma)

- **6%** YAP1 and **29%** TAZ amplification
- Drives resistance to EGFR therapies

Malignant Mesothelioma

- **~40%** have NF2 loss of function mutations
- Associated with poor patient prognosis

Soft Tissue Sarcoma

- **~90%** of epithelioid hemangioendothelioma, or EHE, have TAZ-CAMTA1 fusions
- 10% of EHE have YAP1-TFE3 fusions

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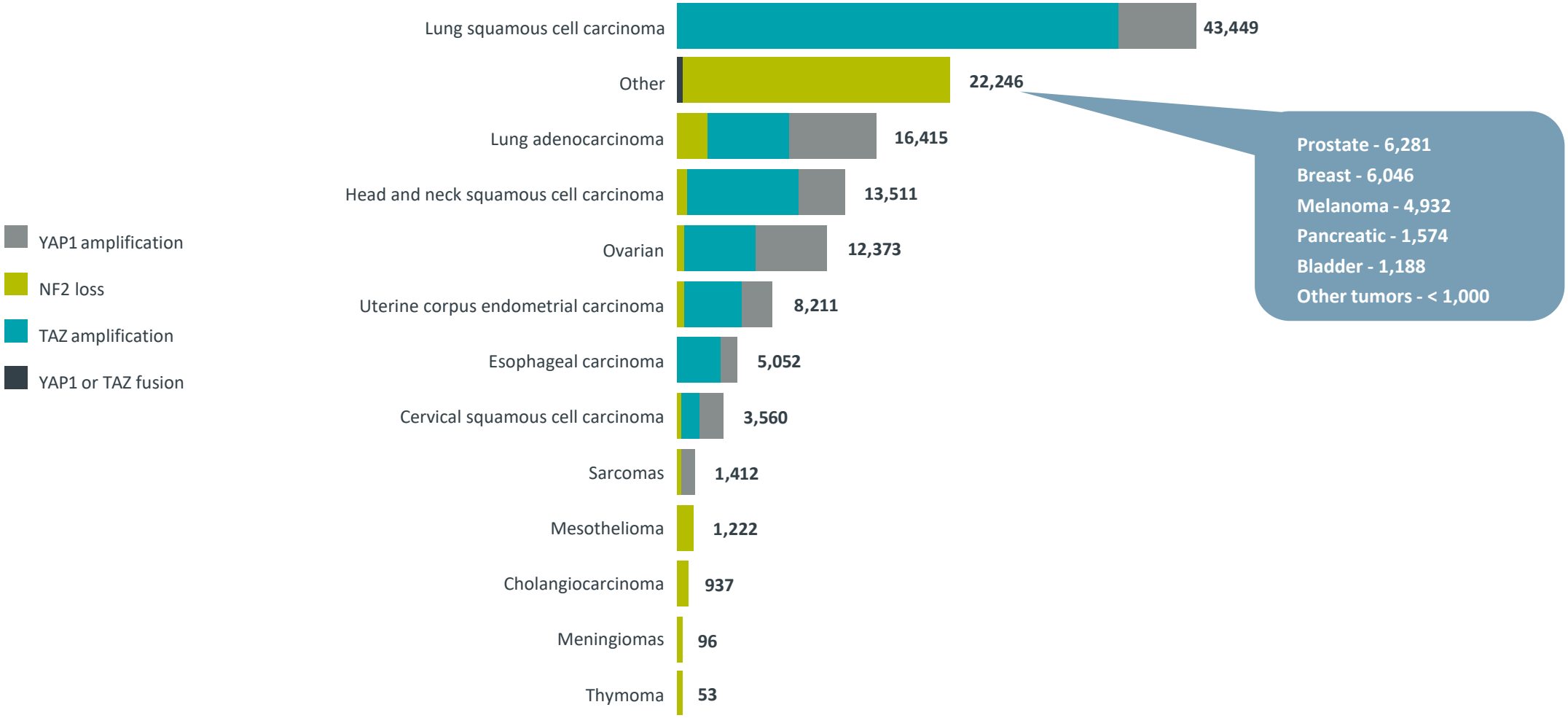
~125,000 Newly Diagnosed Cancer Patients (US Only / Year) with Deregulated Hippo Pathway

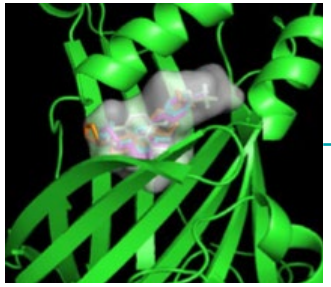
~10% of all cancers have dysregulation of the Hippo pathway and subsequent activation of TEAD

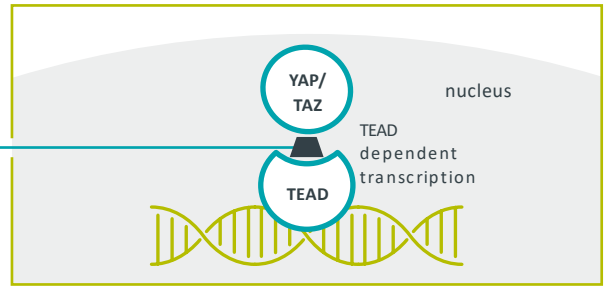


*Based upon The Cancer Genome Atlas (TCGA) analysis, literature analysis, and GlobalData 2021 incidence estimates. Other comprises collective tumor types where NF2 mutational frequency is <5% for each indication

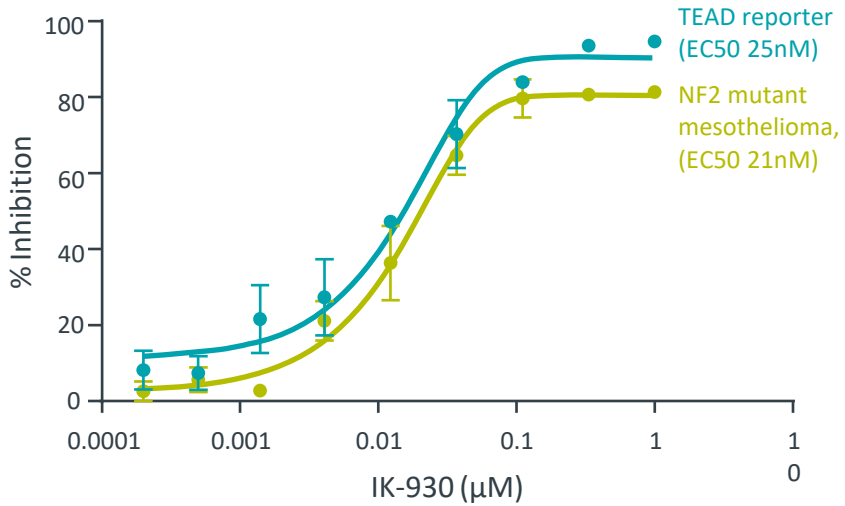
IK-930 is a Potent, Selective and Well-Tolerated TEAD Inhibitor

IK-930 Binds in Central Lipid Pocket of TEAD

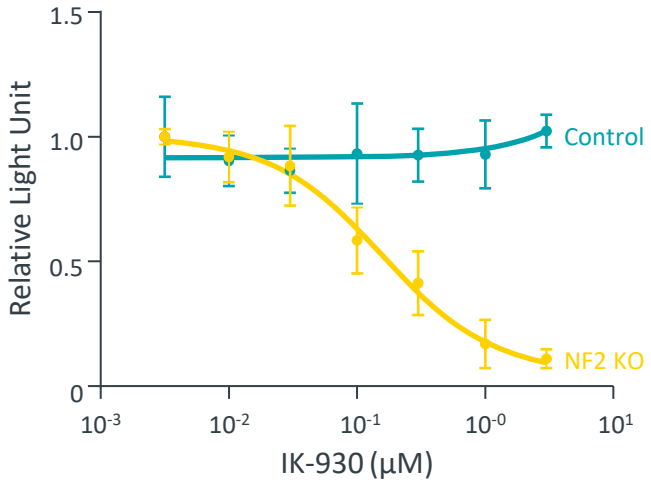




IK-930 is a Potent TEAD Inhibitor



IK-930 is Selectively Active in Hippo Pathway Mutated Cells



Cyp, hERG and Safety Panel Profiling Suggest Low Risk for Drug-drug Interaction and Off Target Toxicity Concerns

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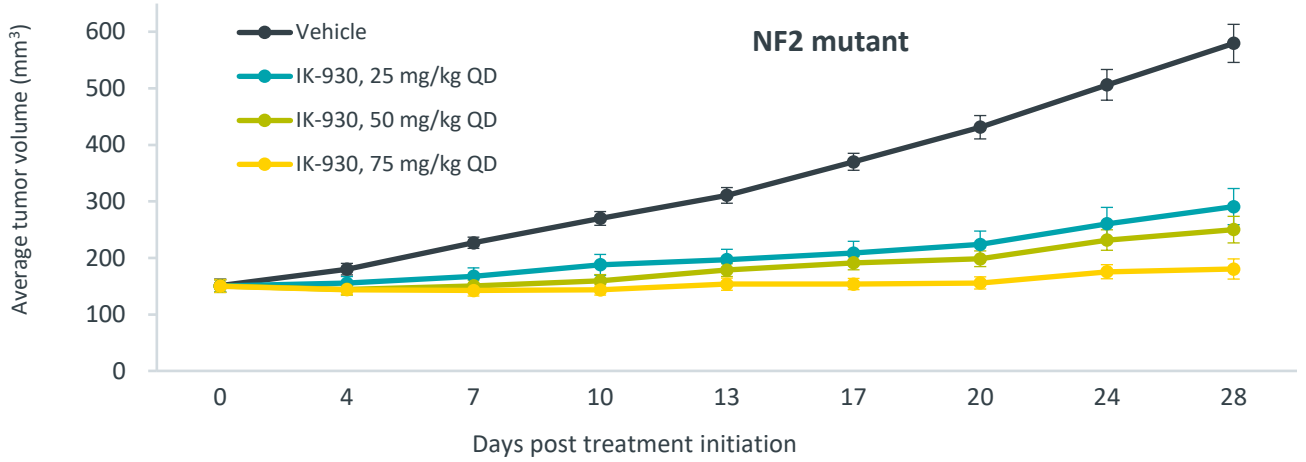
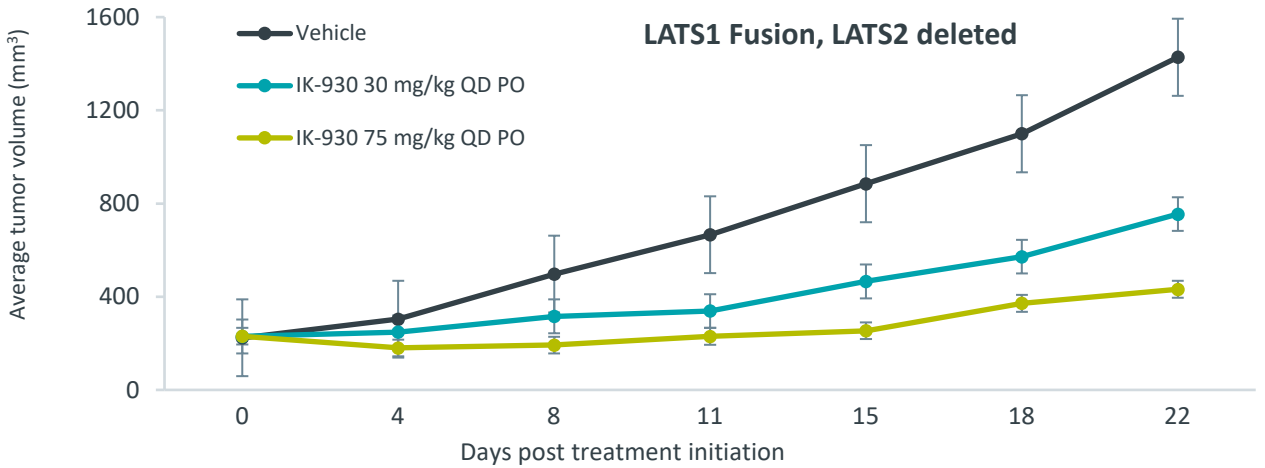
IK-930 Demonstrated Favorable PK/PD and Anti-Tumor Activity in Tumor Models with Hippo Pathway Mutations

Pharmacokinetics / Pharmacodynamics

- Orally bioavailable
- Favorable pharmacokinetics and pharmacodynamics
- Well-tolerated where anti-tumor activity observed

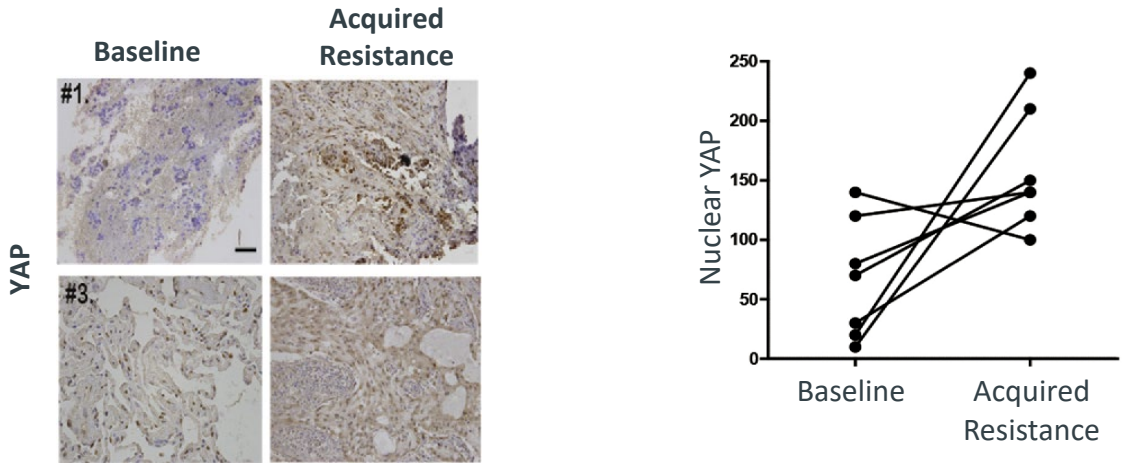
Growth Inhibition in Genetically Driven Xenograft Models



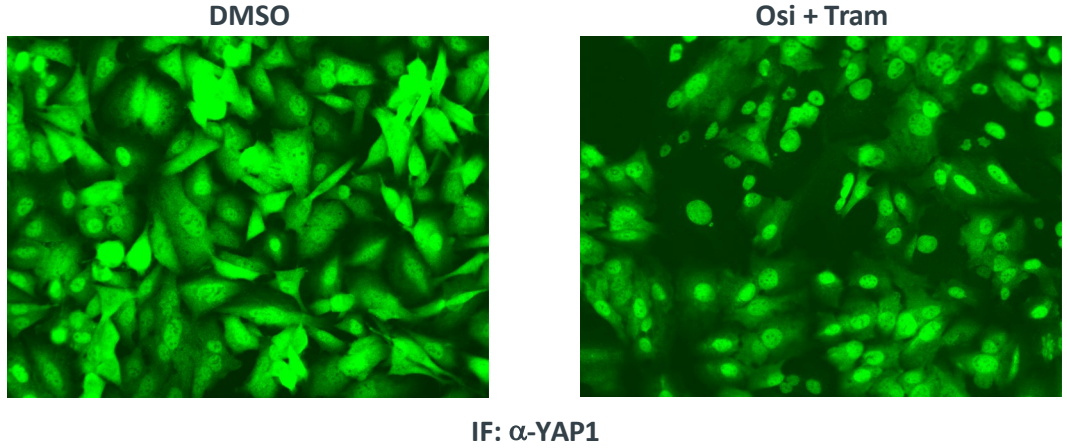


Clinical Opportunity to Treat EGFR Resistant Patients with IK-930

Patient Tumor YAP Expression at Baseline and After Acquired Resistance to EGFR Inhibitors

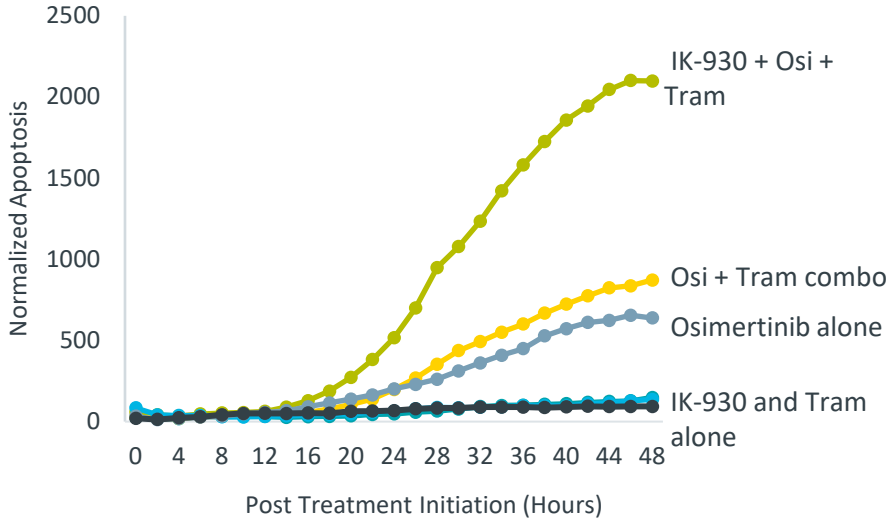


EGFR Inhibitor (osimertinib) Promotes YAP1 Nuclear Localization in EGFR Mutant NSCLC Cells

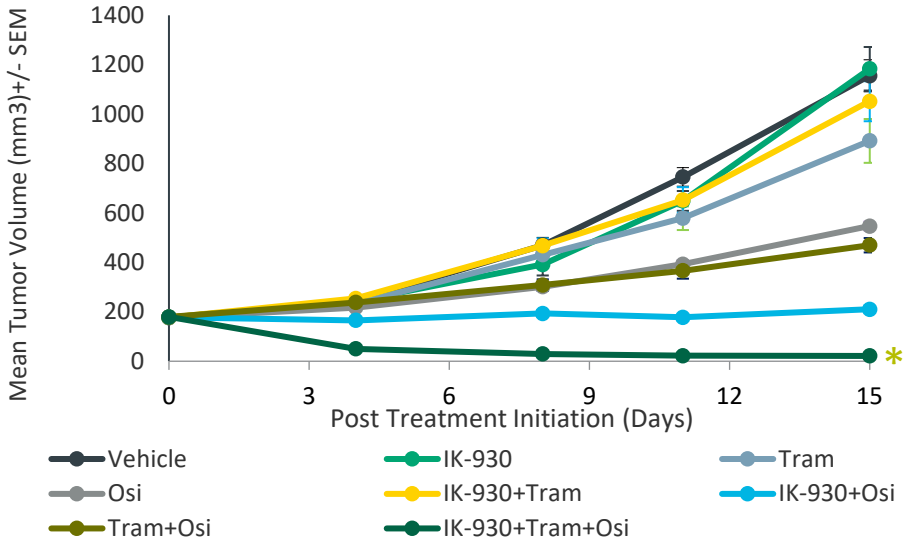


IF: α-YAP1

IK-930 Overcomes EGFRi/MEKi Resistance *In Vitro* in EGFR Resistant Lung Cancer Cells



IK-930 Synergy with EGFRi and MEKi *In Vivo*



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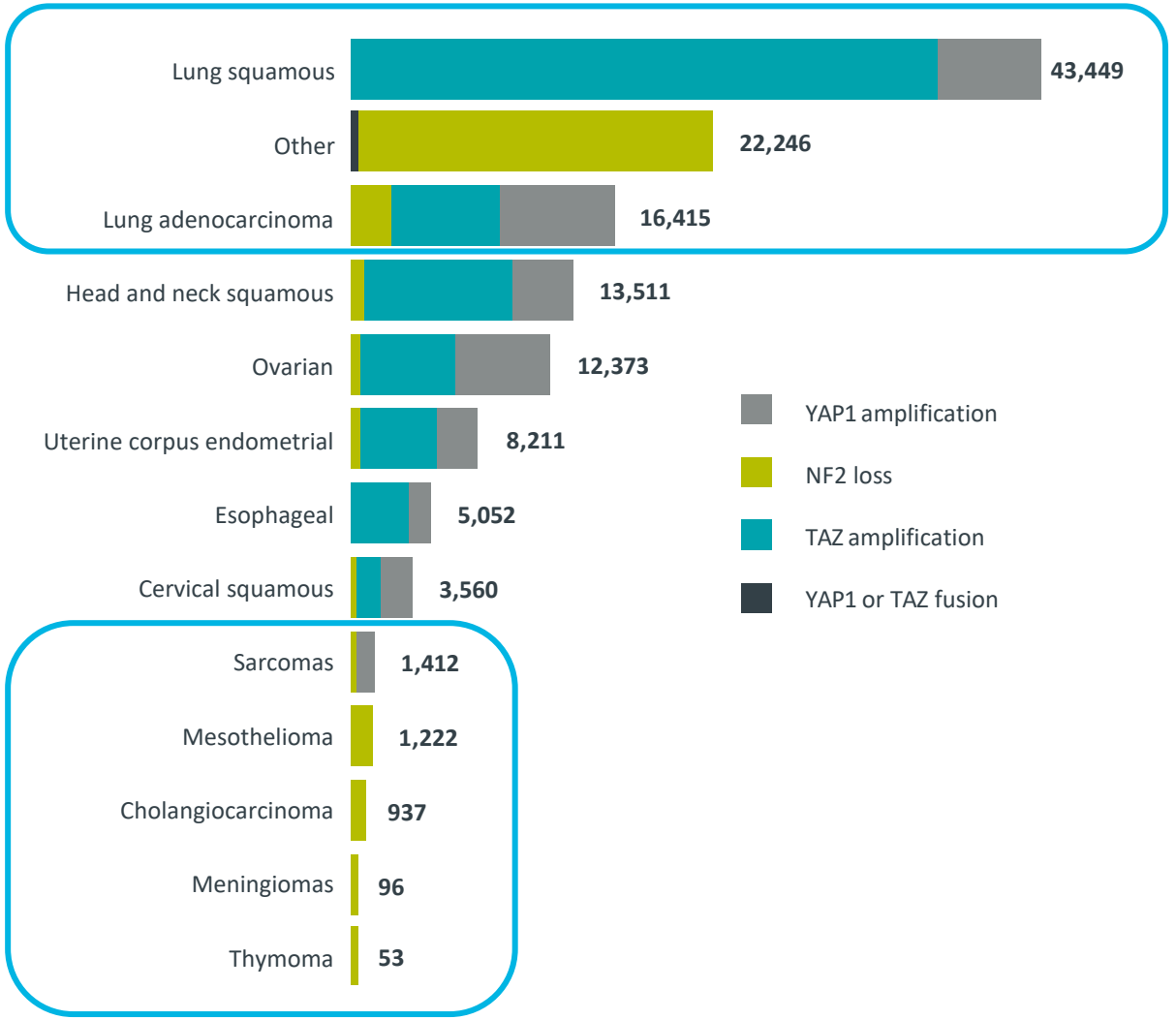
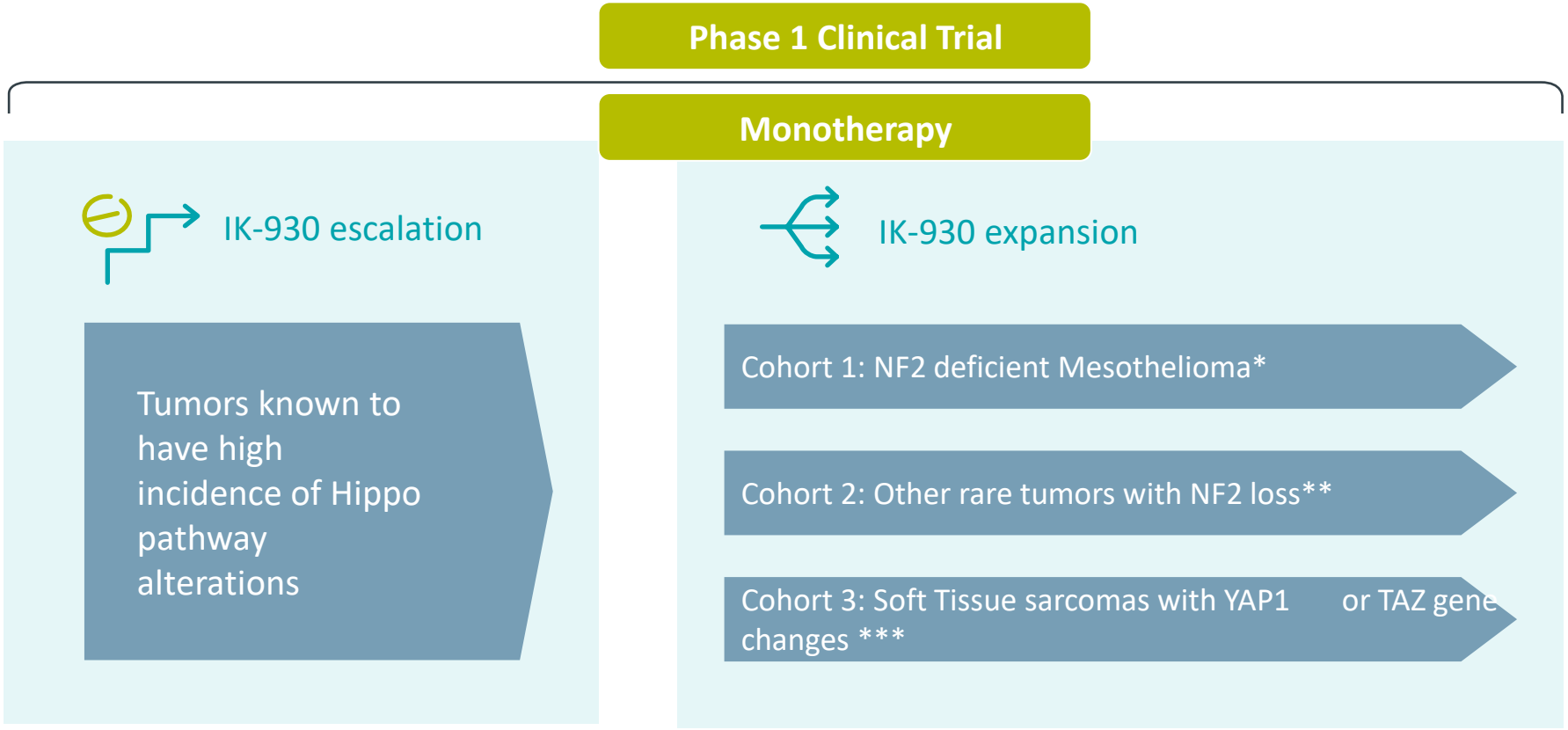
Kurppa 2020; Bratch 2019
BBRC. 2016 May 20;474(1):154

Comprehensive Clinical Development Strategy in Genetically Defined Cancers with Unmet Need

- **Rapid proof-of-concept and fast-to-market opportunities of IK-930 monotherapy for patients with genetic alterations in Hippo pathway**
  - NF2, YAP1 and TAZ biomarker enriched populations
  - Orphan indications with high unmet need
  - Potential for tumor agnostic approach
- **Expansion into combinations with other targeted therapies as well as larger indications**
  - To reverse mechanism of resistance in broader indications



Rapid Clinical POC/Fast-to-Market Opportunities as a Monotherapy in Orphan Indications



* **Cohort 1: Approximately 40% of all Malignant Mesothelioma**
** **Cohort 2: Includes Meningioma, Thymoma, Cholangiocarcinoma and others**
*** **Cohort 3: Includes Myxoid Liposarcoma, Synovial sarcoma, Angiosarcoma and EHE**

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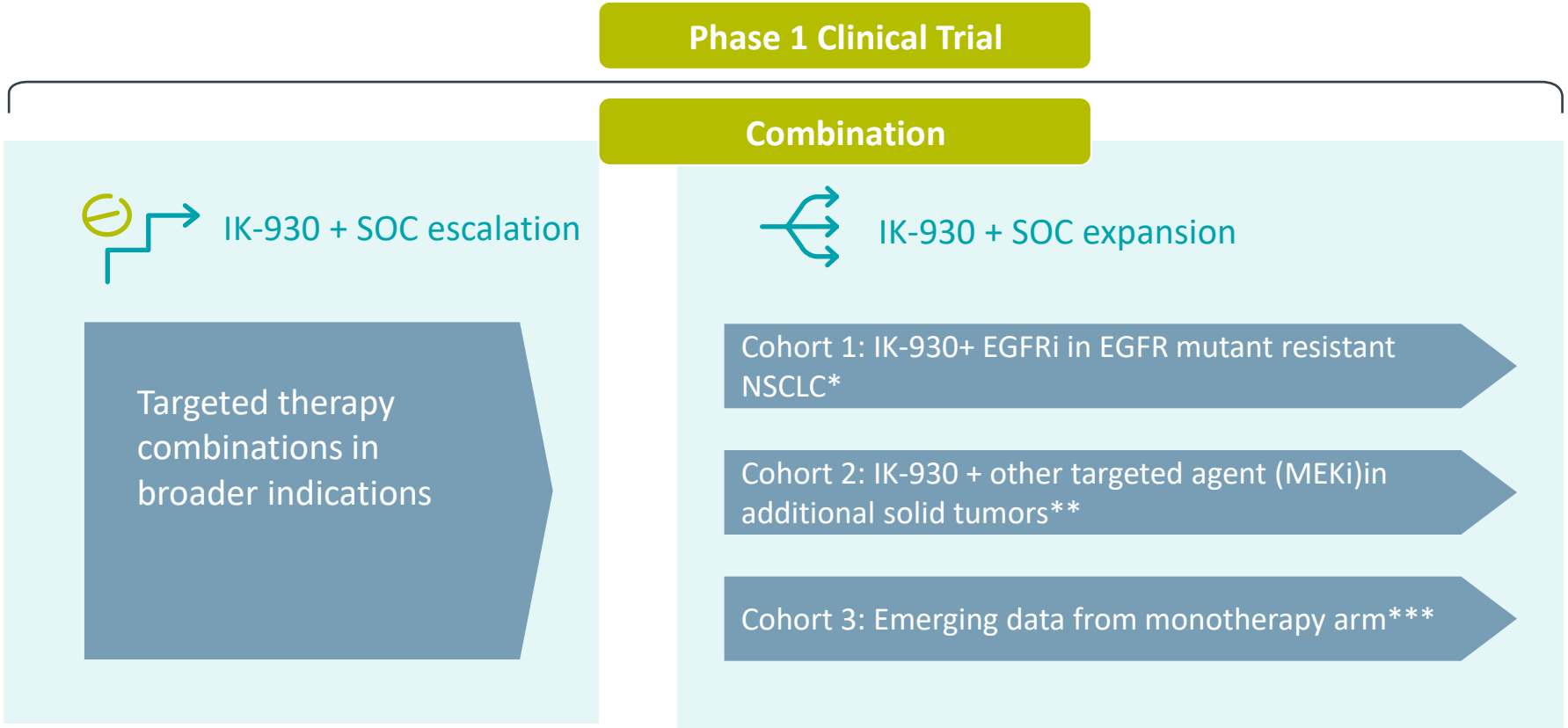
Planned Expansion into Combinations with Other Targeted agents in Broader Indications Targeting KRASm and EGFRm Resistant Tumors



* **Cohort 1: EGRFm NSCLC resistant to treatment**
** **Cohort 2: KRASm sold tumors including CRC, NSCLC and Pancreatic carcinoma**
*** **Cohort 3: Based on emerging data from study (including explore triple combination IK-930/EGFRi/MEKi)**

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ERK5 Inhibitor

- Broad clinical opportunity in KRAS-mutated pancreatic/lung cancer
- 85% of KRAS mutations not addressed by current product candidates or approved therapies
- Expect to initiate IND-enabling studies in 2H 2021 with anticipated IND submission in 2H 2022

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Rationale for Targeting KRAS Mutant Tumors Through ERK5

Large Population and Unmet Medical Need in KRAS Mutated Cancers

- KRAS mutation occurs in ~26% of all human cancers
- High mutation rates in pancreatic (90%), colorectal (27-56%), lung (25%) cancers

HRAS

KRAS G12C: Mirati, Amgen, more

NRAS

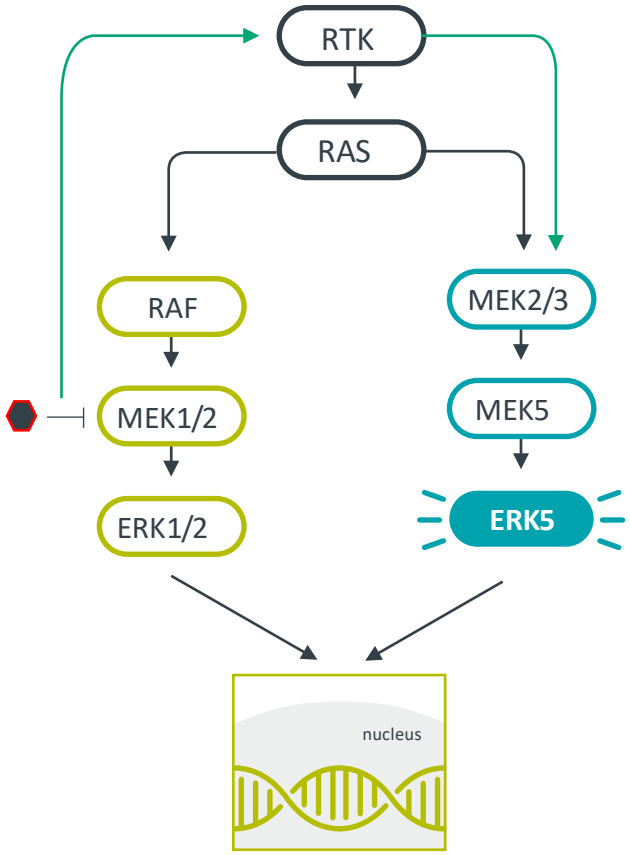
KRAS G12D

KRAS G12V

KRAS G13

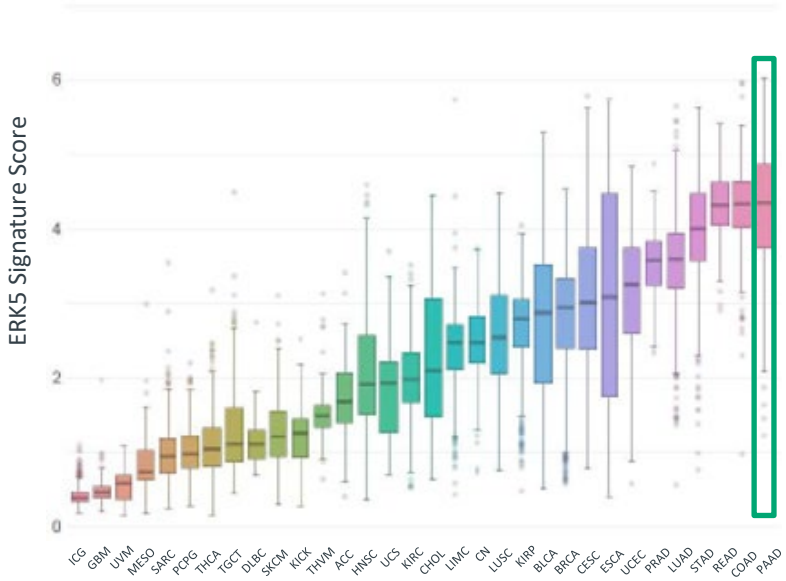
>85% RAS Mutations Not Addressed by Current Product Candidates or Approved Therapies

ERK5 is an Opportunity to Target Unaddressed KRAS Mutant Cancers



- Tumorigenesis
- Metastasis
- Therapeutic resistance (e.g., MEK1/2 inhibition)

ERK5 Signature Highest in Cancers with High Incidence of KRAS Mutations



TCGA RNAseq data

E.g., Pancreatic cancer (90%)

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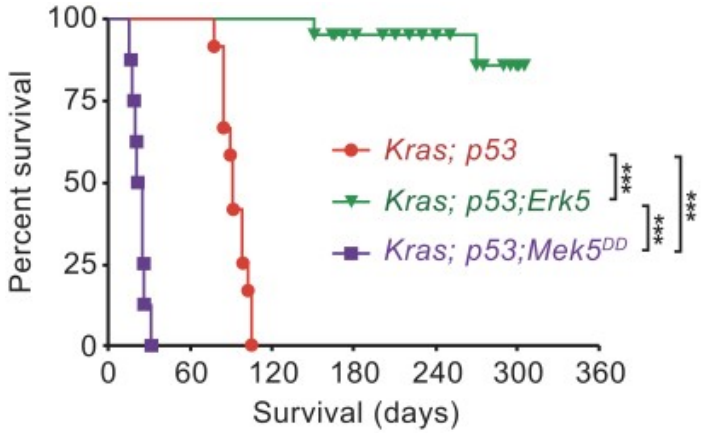
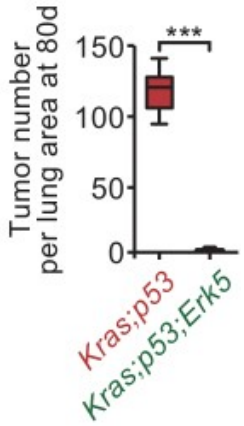
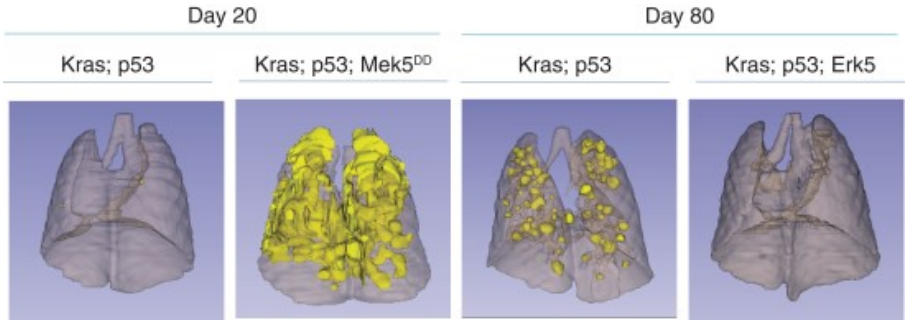
Role of ERK5 in KRAS Mutant Cancers: Strong Genetic and Tool Compound Validation

ERK5 Knockout Prevents Tumor Formation and Improves Survival in KRAS Mouse Lung Tumor Model



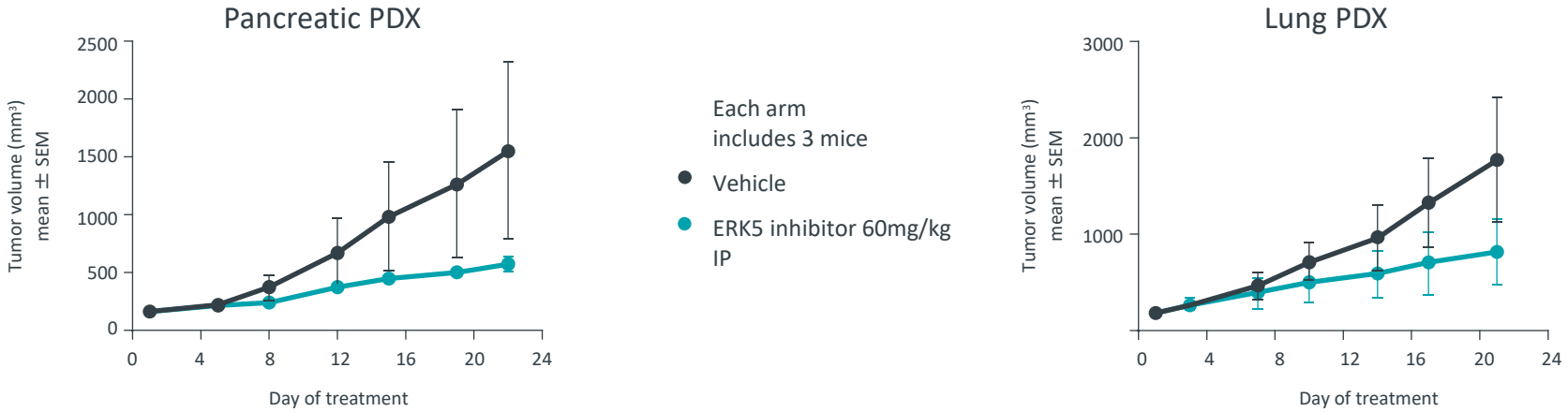




Tumors are shown in yellow

Unpublished data, Dr. Pawel Mazur, MD Anderson

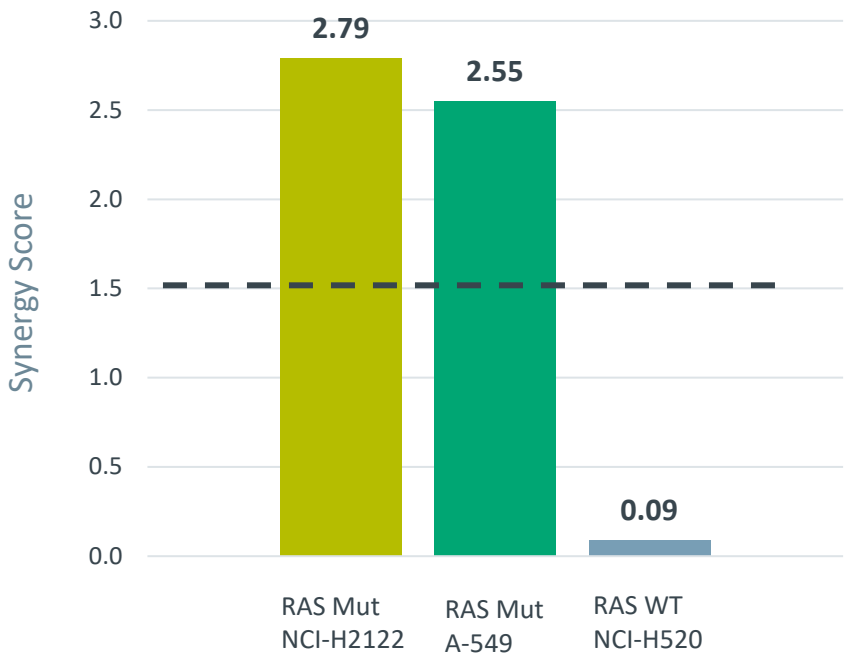
ERK5 Inhibition Reduces Tumor Formation in Patient-derived Xenografts



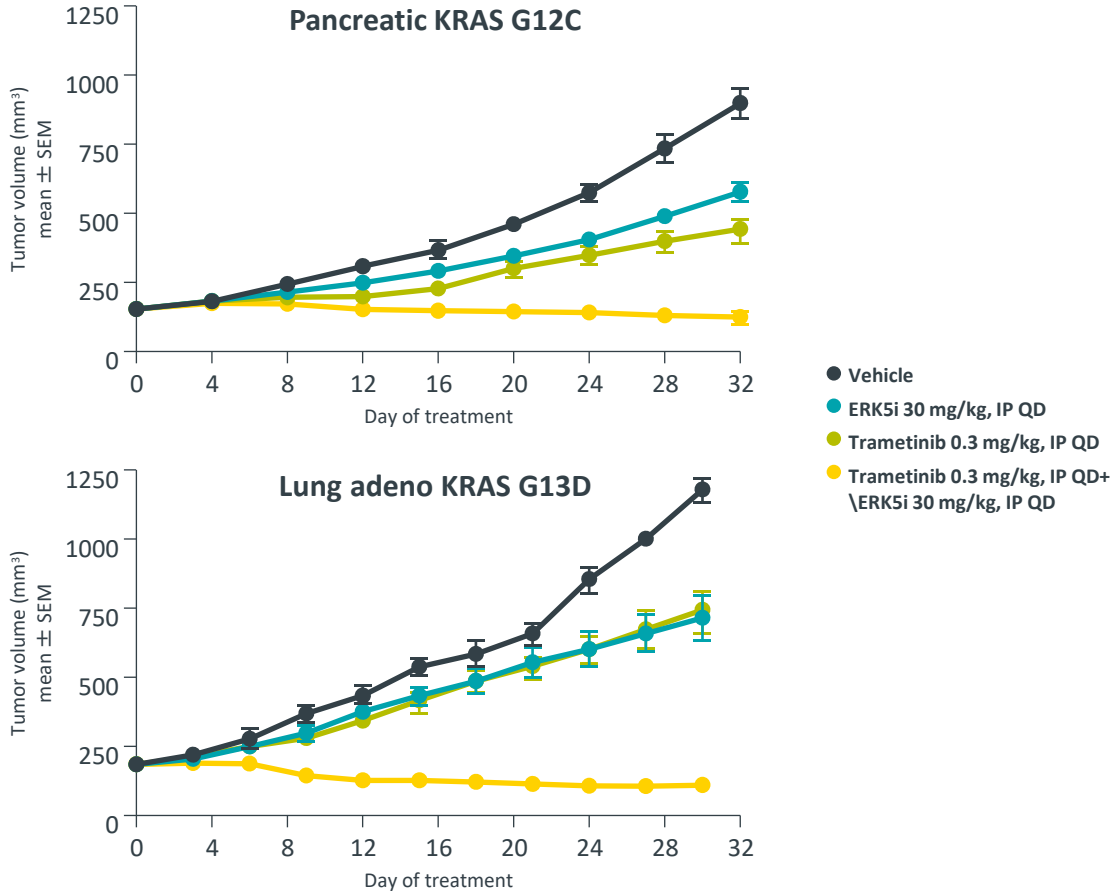
- ERK5i is Potent, Selective Tool Compound with Short T1/2

Potential for Synergistic Combination of MEKi and ERK5i in KRAS Mutant Cancers

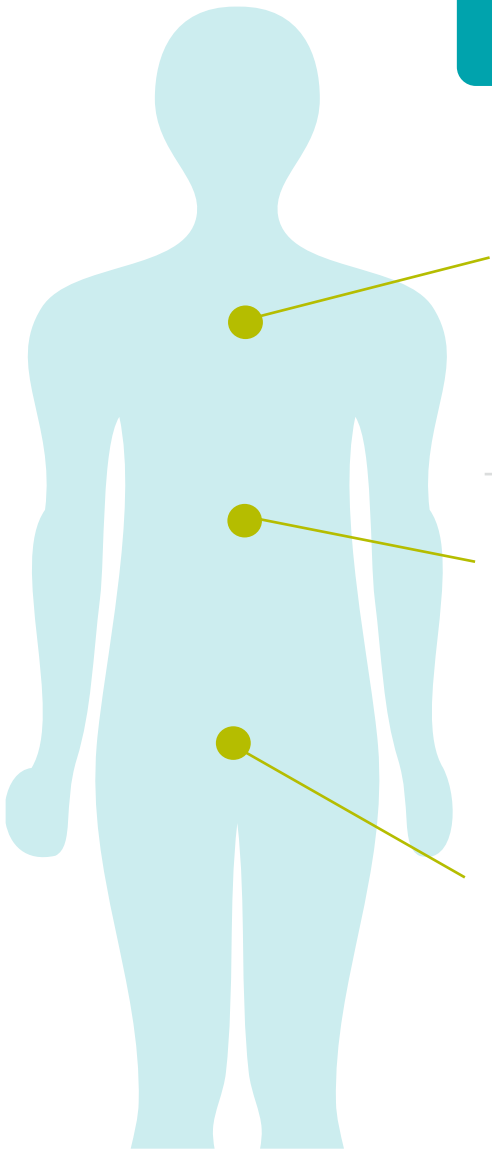
Synergy in Mutant but Not Wild Type Cells in 3D Cell Culture



In KRAS Mutant Pancreatic and Lung Primary Human Tumor Xenografts



ERK5 Opportunity and Disease Overview



Plan to initially focus on NSCLC, pancreatic cancer and CRC, which are indications where there is strong biologic rationale for ERK5 inhibition and significant unmet medical need

NSCLC

- ~48,000 new patients with KRAS mutations per year in the US alone
- Even with the emergence of KRAS G12C inhibitors, most will eventually progress and die due to their disease
- Potential opportunity for development both as monotherapy and combination therapy

Pancreatic

- ~52,000 new patients with KRAS mutations in 2020
- Unfortunately, in spite of the development of new treatments for pancreatic cancer, deaths due to this tumor are on the rise
- NCI identified targeting oncogenic RAS as one of the four major priorities for pancreatic cancer research
- Potential opportunity for development both as monotherapy and combination strategies

CRC

- Between ~40,000-82,500 new patients with KRAS mutations in 2020
- ~40% of patients have a mutation in the KRAS gene that renders cetuximab ineffective

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IK-175, an AHR Antagonist

- BMS-partnered program
- Encouraging PD and tolerability data in ongoing Phase 1a clinical trial
- Potential opportunity to achieve near-term financial milestones

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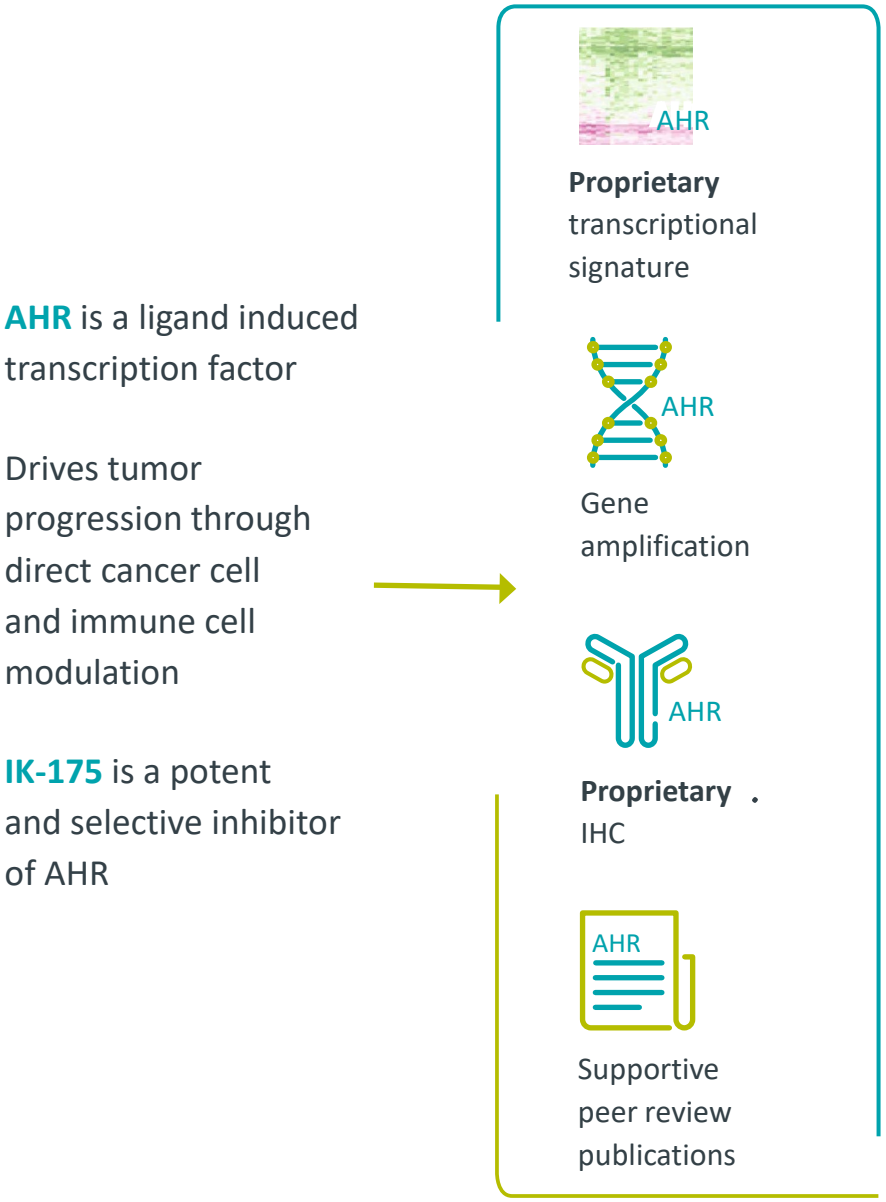
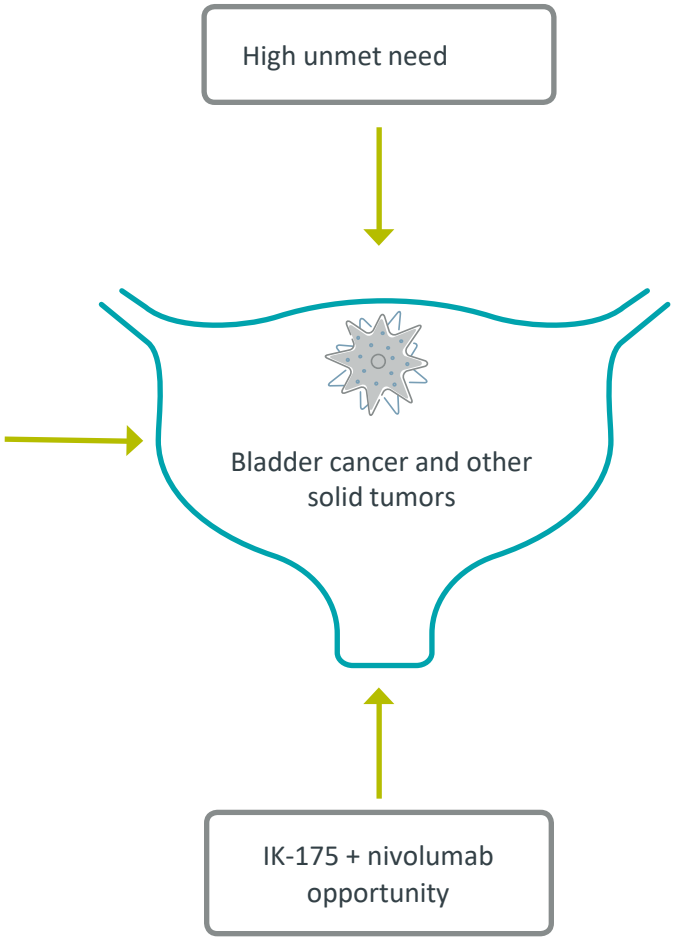
Internally discovered IK-175 being developed in bladder cancer and other cancers

- **AHR** is a ligand induced transcription factor
- Drives tumor progression through direct cancer cell and immune cell modulation
- **IK-175** is a potent and selective inhibitor of AHR





2.5 years from concept to clinic

IK-175 Has Been Well-Tolerated and Demonstrated Target Modulation in Patients

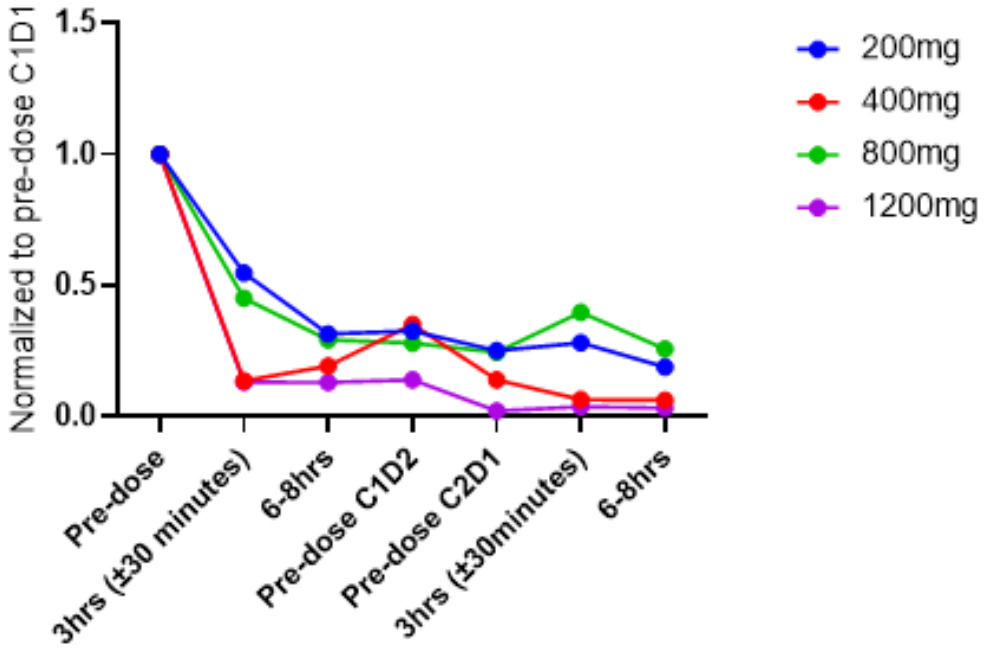
Study Status

- Enrolling in open-label Phase 1a clinical trial evaluating IK-175 as a monotherapy
- Enrolled 5 dose escalation cohorts
- In monotherapy expansion at 1200 mg in bladder cancer patients with prospective screening of nuclear AHR positive patients using Ikena-developed assay

Tolerability Summary

- No dose limiting toxicities, or DLTs, to date
- Maximum tolerated dose not observed to date

PD Modulation of AHR at First Dose for First Four Cohorts



- Dose responsive target gene inhibition in whole blood assay
- Peripheral immunoprofiling and tumor immunophenotyping ongoing

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IK-175 Clinical Development Strategy

Mono:	**Solid tumors** (enrolled 5 dose escalation cohorts)	**Bladder cancer** (at selected dose)
Combo:	**Dose escalation with nivolumab**	**Bladder cancer with nivolumab** (at selected dose)
Combo enriched:	**AHR activated bladder cancer with nivolumab**	
Additional combo:	**Solid tumor**	

Novel Biomarker Approaches

Pharmacodynamics:

AHR target gene expression Tumor immune cells

Peripheral immune cells, cytokines

Patient selection:

AHR gene amplification

Prospective Nuclear AHR IHC

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Pipeline Targeting Cancer from Multiple Angles

PROGRAMS			UPCOMING MILESTONES
TARGETED ONCOLOGY			
IK-930 TEAD Targeting	Hippo-mutated cancers		• Indication selection and pre-clinical combo data at **EORTC 2021** • Complete IND-enabling studies and **submit IND in 2H 2021**
ERK5 Targeting	ERK5		• Initiate IND-enabling studies in 2H 2021 • **Submit IND in 2H 2022**
Multiple RAS Targets	Multiple		• Nominate **development candidate in 2022**
TUMOR MICROENVIRONMENT			
IK-007 + Pembro EP4	MSS-CRC	Phase 1b	• Initiate Phase 1b combination arm in 1H 2021 • **Complete Phase 1 enrollment in 2H 2022**
IK-175 AHR	Bladder Cancer	Phase 1a	• Complete IND-enabling studies
IK-412 Kynerenine	Multiple Solid Tumors		• Complete Phase 1b enrollment in 2H 2021

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Financial Highlights

$264M

Cash and cash equivalents

BALANCE SHEET
30-JUN-2021

35.9M

40.8M fully diluted[1]

SHARES OUTSTANDING
30-JUN-2021

Current cash will be sufficient to fund operating expenses and capital expenditure requirements through 2023

[1] Includes all stock options outstanding (exercisable and unvested) as of March 31, 2021 (10Q filing).

Thank you!

Nasdaq: IKNA

www.ikenaoncology.com