KAIROS PHARMA

INVESTOR PRESENTATION

NYSE American: KAPA

kairospharma.com

FORWARD LOOKING STATEMENTS

This presentation may contain "forward-looking statements" regarding the current expectations and projections about future events of Kairos Pharma, Ltd. ("Kairos Pharma" or the "Company"). "Forward-looking statements" (statements as to matters other than historical facts) as defined in the Private Securities Litigation Reform Act of 1995 can be identified by terminology such as: "will," "potential", "could," "can," "believe," "intends," "continue," "plans," "expects," "projects," "estimates," "anticipates," "believes," or similar language. These statements are based upon current beliefs and expectations and are subject to many risks and uncertainties which are difficult to foresee and predict. No forward-looking statements can be guaranteed, and actual results may differ materially from such statements. The information in this presentation is provided only as of the date of this presentation and Kairos Pharma takes no obligation to update any forward-looking statements contained in this presentation based on new information of future events and/or results. These forward-looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors that could cause the Company's actual results, performance or achievements to be materially different than any future results, performance or achievements expressed or implied by the forward-looking statements. Actual results may differ materially from those indicated by these forward-looking statements as a result of various important factors, including the Company's ability to discover and develop its novel product candidates and successfully demonstrate the efficacy and safety of its product candidates; the pre-clinical and clinical results for its product candidates, which may not support further development of product candidates; actions of the Company's collaborators regarding continued product development and product commercialization; actions of regulatory authorities, which may affect the initiation, timing and progress of clinical trials or the ability of the Company to obtain marketing authorization for its product candidates; the Company's ability to obtain, maintain and protect its intellectual property; the Company's ability to enforce its patents against infringers and defend its patent portfolio against challenges from third parties; competition from others using technology similar to the Company's and others developing products for similar uses; the Company's ability to manage operating expenses; the Company's ability to obtain additional funding to support its business activities and establish and maintain its existing and future collaborations and new business initiatives; the Company's dependence on collaborators and other third parties for development, manufacture, marketing, sales and distribution of products; the outcome of litigation; and unexpected expenditures. Any forward-looking statements represent the Company's views only as of today and should not be relied upon as representing its views as of any subsequent date. The Company explicitly disclaims any obligation to update any forward-looking statements.

OUR MISSION

Kairos Pharma is dedicated to advancing therapies to overcome critical challenges in cancer drug resistance and immune suppression.

KAIROS HIGHLIGHTS

- Three clinical programs already in progress
  - **LEAD DRUG ENV105** in **Phase 2 trial** treating Prostate Cancer - with NIH grant funding
  - **ENV105 Phase 1 trial** treating Non-Small Cell Lung Cancer –with non-dilutive, donor funding
  - **KROS201** cleared IND for Glioblastoma
- Strategic relationship with Cedars-Sinai Medical Center (ranked #2 hospital nationally and #1 in California*) drives clinical trial efficiency (Costs and Enrollment), and streamlines therapeutic innovations
- Our *drugs to* ***reverse* cancer *drug resistance*** *are derisked with extensive safety studies and a biomarker identified to treat the most responsive patients*
- *Our extensive pipeline of drugs have been shown to* ***reverse immune suppression***
- Extensive IP portfolio valid until 2035 to 2040
- Our technologies target a large market - a fast growing $11.3 billion anti-androgen therapy prostate cancer market, $14 billion lung cancer market, and $118 billion immunotherapy market

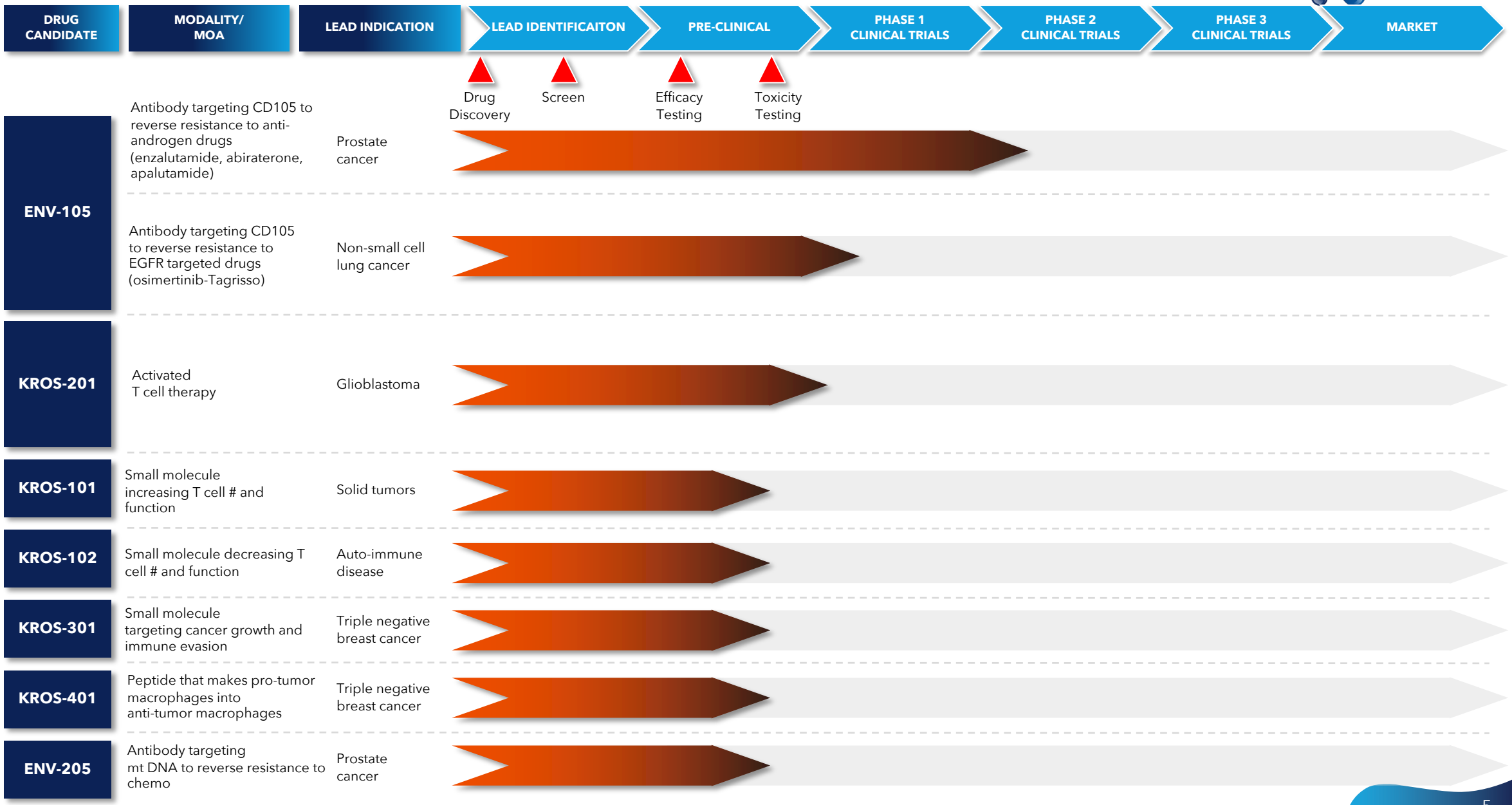
INNOVATIVE CANCER THERAPEUTICS

New technologies reverse key mechanisms of drug resistance and immune suppression of cancer.

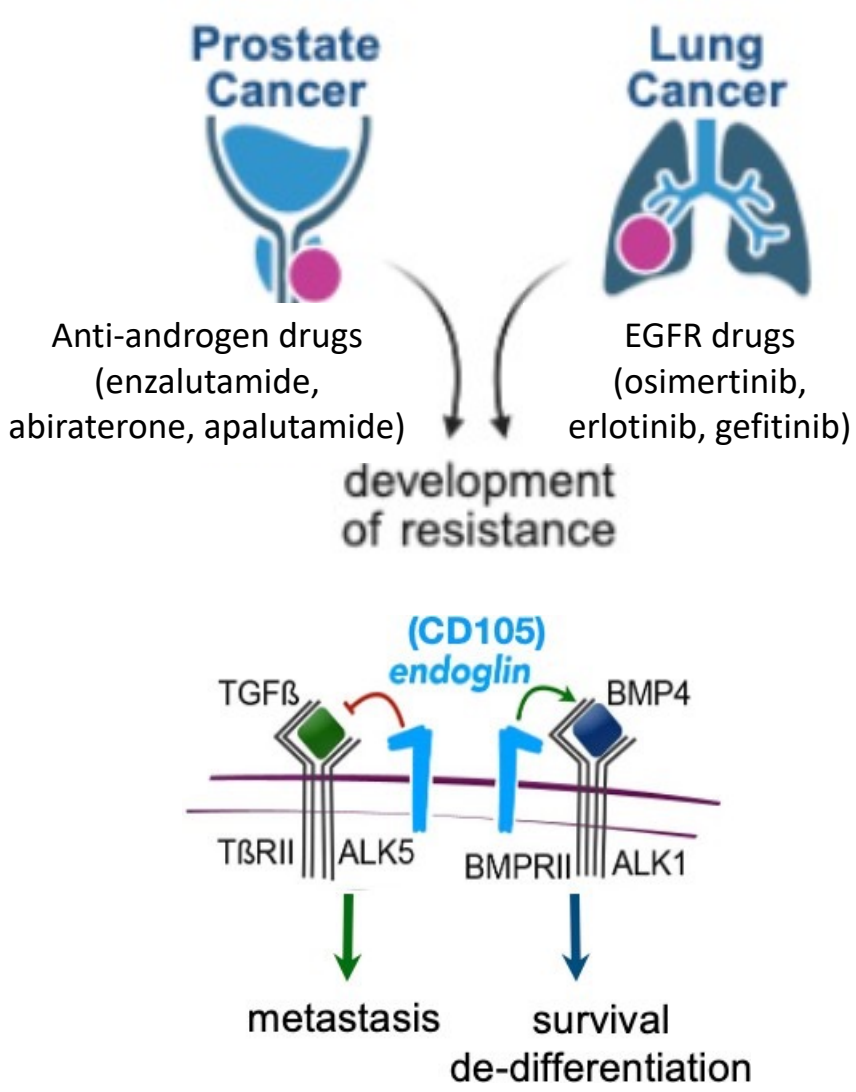
* 2022-2023 and 2024-2025 US News and World Report

PORTFOLIO OF INNOVATIVE DRUGS

KAIROS PHARMA



ENV105
OVERCOMING CANCER DRUG RESISTANCE



THE PROBLEM:

Cancers become resistant to the drugs that are used to treat them.

Kairos discovered a central resistance mechanism. As patients are treated with cancer drugs, their cancer cells start to make **CD105** on the surface which makes them resistant to the drug.

THE SOLUTION:

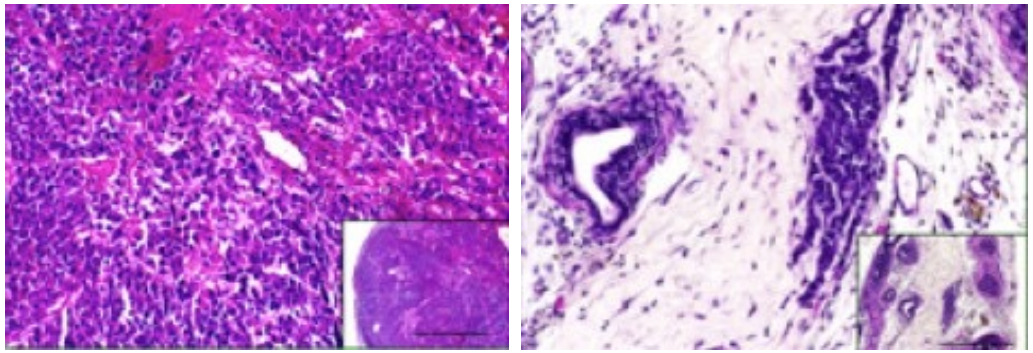
ENV105 blocks CD105 and reverses this resistance mechanism of prostate and lung cancer drugs (entire class of anti-androgen therapies for prostate cancer like enzalutamide, abiraterone and apalutamide or anti-EGFR therapies like osimertinib [Tagrisso from Astra Zeneca] as well as Tarceva/ Iressa).

REVERSING RESISTANCE IN CANCER:

Although prostate and lung cancer are the first indications for ENV 105, this drug has been shown to be effective in models of colon, breast cancers, and head & neck cancers in the resistance developed against radiation and chemotherapy.

ENV105
IN PROSTATE CANCER

ENV105 reverses resistance to enzalutamide.



Enzalutamide

Enzalutamide+ ENV105

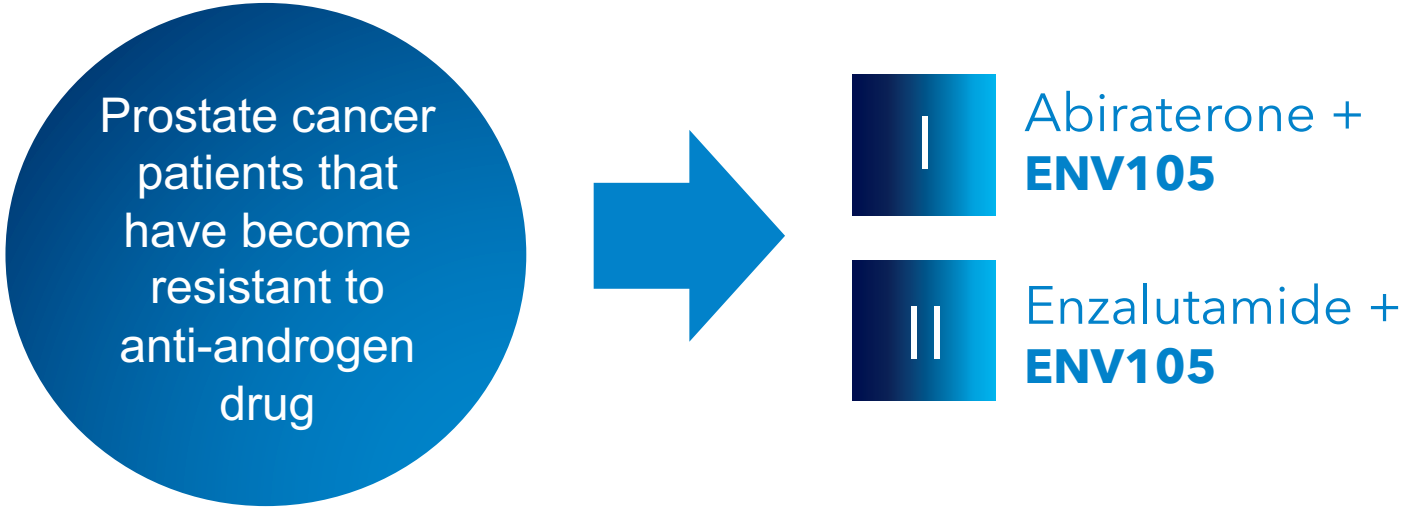
ENV105 allows anti-androgen standard of care drug enzalutamide to work again to kill prostate cancer cells
Left figure: Growing cancer cells with enzalutamide alone after resistance developed.
Right figure: Dramatic reduction of cancer cells when ENV105 is added to enzalutamide

PHARMACEUTICAL COMPANIES NEED TO ADDRESS THE RESISTANCE THAT DEVELOPS TO THEIR DRUGS.

ENV105
IN PROSTATE CANCER

PREVIOUS PHASE 2 TRIAL RESULTS: **62% CLINICAL BENEFIT RATE**

Previous phase 2 trial tested whether ENV 105 could make prostate anti-androgen drugs work again when the cancer became resistant to abiraterone or enzalutamide



Primary endpoint: change in PSA and radiographic response at two months

ENV105 CLINICAL BENEFIT RATE OF 62% OBSERVED VS 0% EXPECTED AFTER RESISTANCE

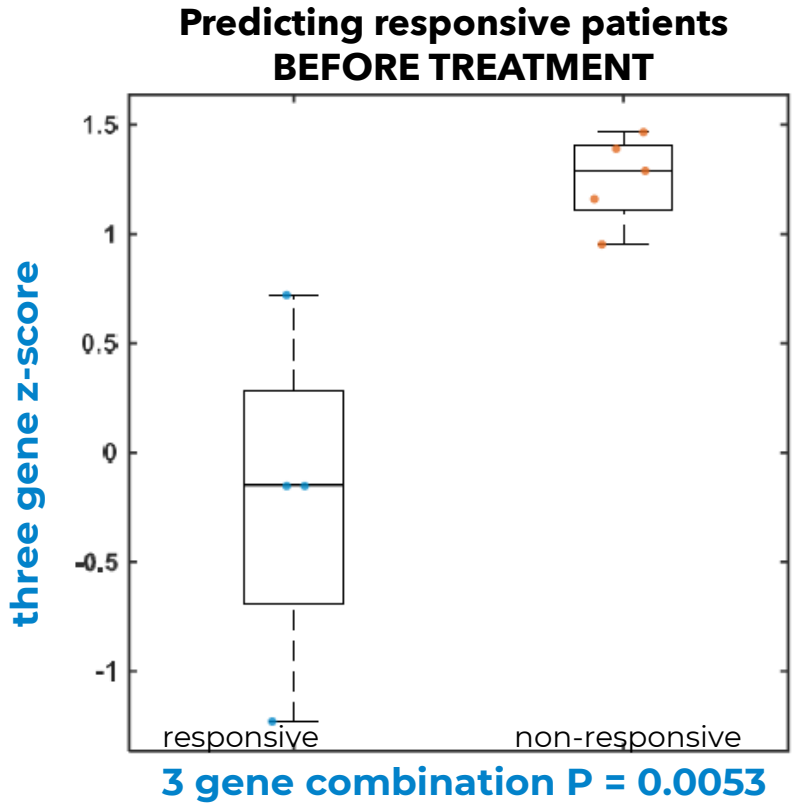
ENV105 is well tolerated

NO GRADE 3-4 TOXICITIES WERE OBSERVED FROM ENV105

ENV105
IN PROSTATE CANCER

BIOMARKER TO PREDICT RESPONSIVENESS TO THERAPY

- Biomarker is a genetic test that distinguishes between responsive and non-responsive patients
- Identified biomarkers ensure more successful outcomes in new drug approval (NDA) success
- $3.2 Million NIH grant to our CSO supports biomarker confirmation study in present phase 2 trial

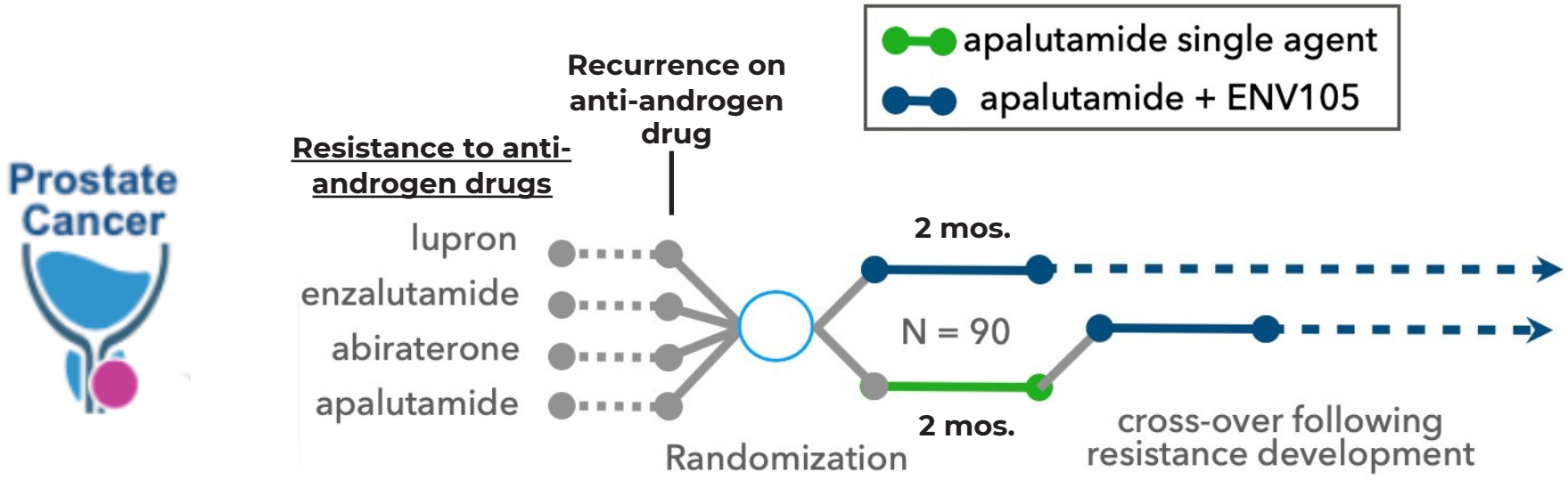


NEW DRUG APPROVAL SUCCESS

55% vs. 76% with biomarker

ENV105
IN PROSTATE CANCER

PRESENT RANDOMIZED PHASE 2 TRIAL
Apalutamide with or without ENV105

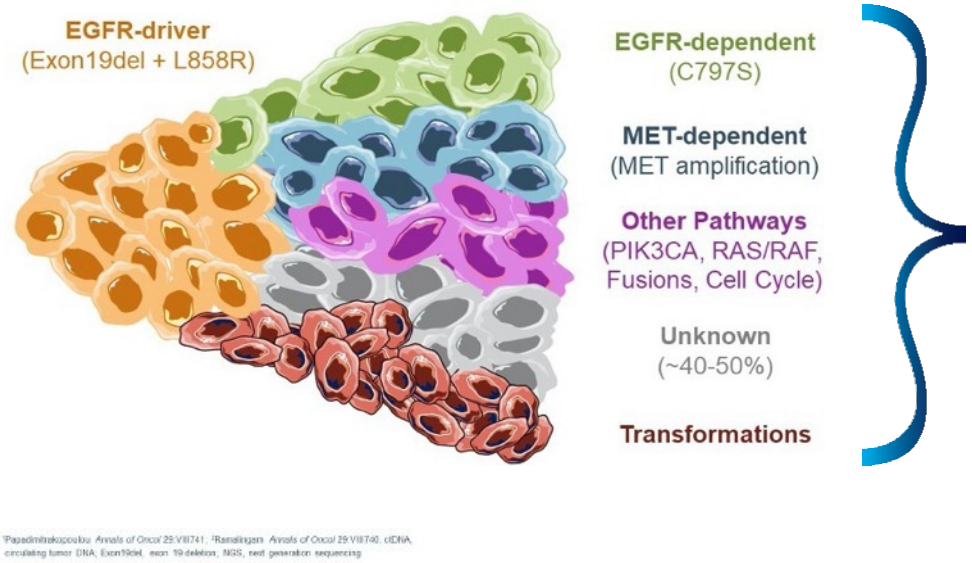


PRIMARY ENDPOINT: Progression free survival

SECONDARY ENDPOINT: Companion biomarker confirmation

ENV105
IN LUNG CANCER

NON-SMALL CELL LUNG CANCER BECOMES RESISTANT TO OSIMERTINIB (TAGRISSO)



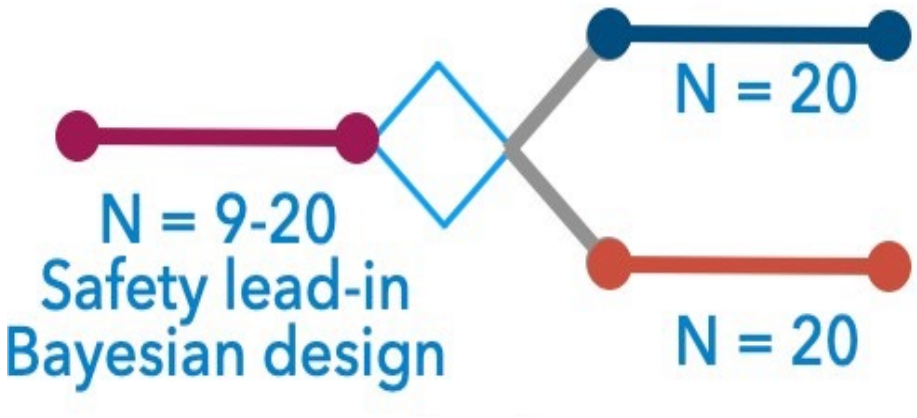
'Papadimitrakopoulou. *Annals of Oncol* 29:VIII741; 'Ramalingam. *Annals of Oncol* 29:VIII740. ctDNA, circulating tumor DNA; Exon19del, exon 19 deletion; NGS, next generation sequencing

OSIMERTINIB RESISTANCE IS DEPENDENT ON CD105

- Tagrisso treats EGFR driven NSCLC
- 45,000 EGFR driven NSCLC diagnosed last year
- ENV 105 use dto overcome NSCLC resistance to Tagrisso (Osimertinib)

ENV105
IN LUNG CANCER

PHASE 1 TRIAL FOR EGFR-DRIVEN LUNG CANCER: Osimertinib (Tagrisso) + ENV105



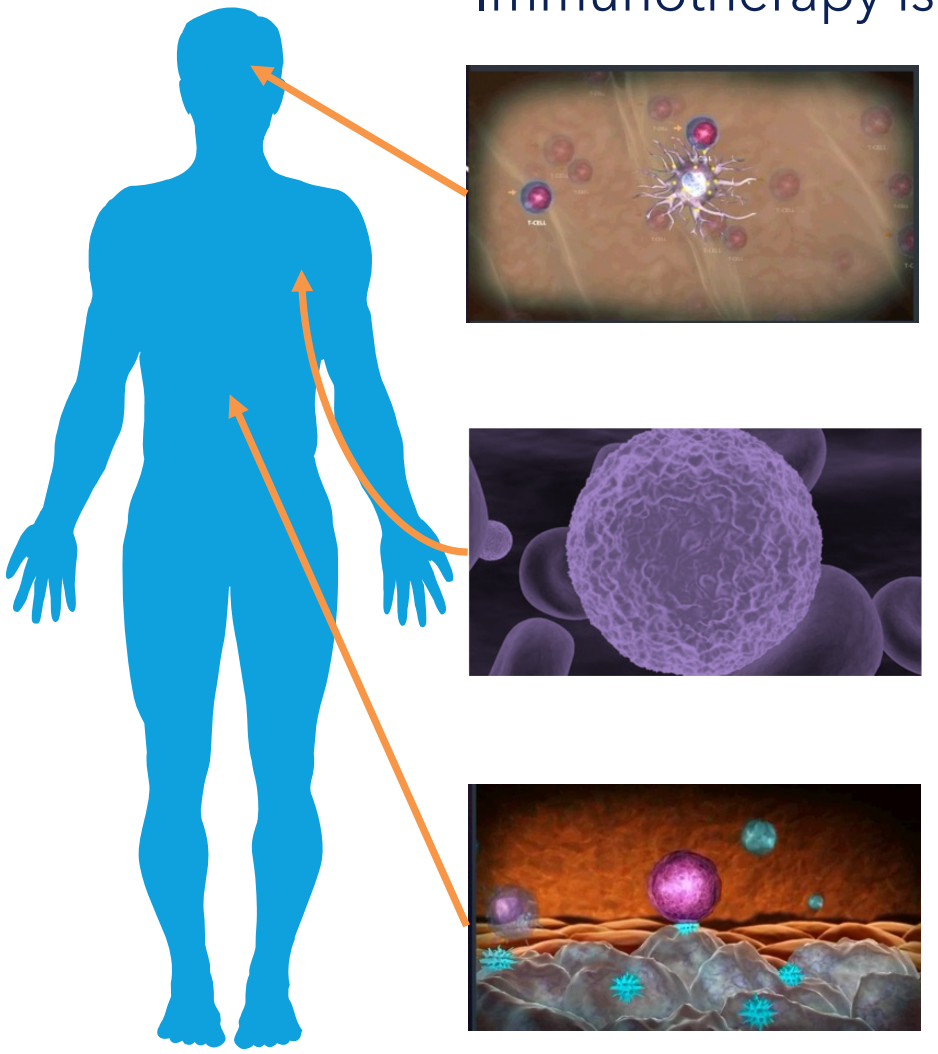
Patients that have become resistant to Tagrisso

Patients that are incompletely treated with Tagrisso (persistent ctDNA)

PRIMARY ENDPOINT: Determine safety and effective dose of ENV105 in patients with EGFR lung cancer

SECONDARY ENDPOINT: Identify biomarkers for patients most responsive to ENV105

KROS DRUG CANDIDATES
OVERCOMING IMMUNE SUPPRESSION



Immunotherapy is a $115b market with only a 17% response rate.

THE PROBLEM:

Cancer is comprised of billions of growing cells. However, our immune system seldom generates enough T cells to kill all the cancer cells.

THE SOLUTION: KROS drug candidates allows regulation of the immune response by increasing T cells or by generating T cells outside of the immunosuppressed patient's body.

KROS 101 Using our novel mechanism through GITR ligand, increases the number of T cells and renders them more effective at killing cancer cells.

KROS 201 Generates T cells outside of the body and delivers to cancer stem cells.

KROS 401 Converts pro-tumor macrophages into cancer-killing macrophages.

KROS101 expands T cells for cancer
KROS102 decreases T cells for autoimmune diseases

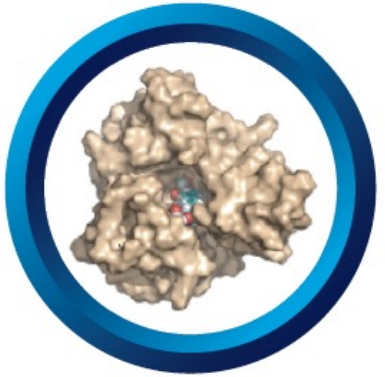
- **KROS101** targets the GITR ligand and enables T cells to increase in numbers and kill cancer cells more effectively.
- By increasing T cell numbers and function **KROS101** may complement checkpoint inhibitors like pembrolizumab (Merck) and nivolumab (Bristol-Myers Squibb).
- By using the same mechanism of controlling T cell growth as KROS101, but in the OPPOSITE direction, **KROS102** reduces T cell numbers and activity to potentially become a new class of agents for autoimmune diseases and transplant rejection.

KROS101 GITR AGONIST

Immunity

KROS 101: GITR (glucocorticoid-induced tumor necrosis factor receptor) ligand is a powerful checkpoint that increases the T cell response against cancer.

Kairos Pharma developed a small molecule that increases T cell numbers and anti-tumor killing activity by acting as a GITR agonist.



KROS-101 pictured here in the center of the GITR protein

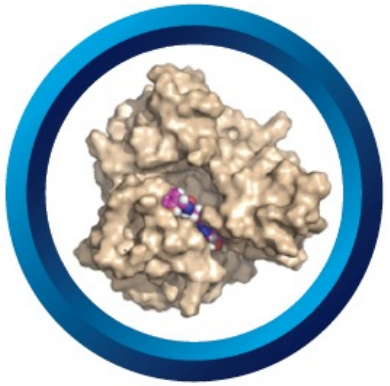
OTHER DRUGS TARGETING GITR RECEPTOR

COMPANY	DRUG	ACTIVITY
Kairos Pharma	**KROS101**	• Targets the GITR ligand (the signal for the receptor) enabling expansive growth of T cells • Small molecule has shorter half-life allows for more fine tuning of dose to limit side effects • Having both agonist (KROS101) and antagonist (KROS102) molecules allows reversal of side effects
AstraZeneca	**MEDI1873**	• Hexameric GITR ligand fusion protein does not enable significant T cell response
Merck	**MK4166**	• Agonist antibody has significant toxicity including autoimmune gastritis

KROS102 GITR ANTAGONIST

Immunity

- **KROS102:** GITR antagonist that decreases T cell numbers and activity.
- KROS-102 has been shown to decrease T effector cells (killer T cells) and increase Treg cells (inhibitory T cells) which could reduce overactive immune response in autoimmune diseases.



KROS-102 pictured here in the center of the GITR protein

OTHER AUTOIMMUNE DRUGS

Corticosteroids and chemotherapy are the main inhibitors of an immune response, but they have many side effects such as hip necrosis, gastritis and infections.

ADVANTAGE OF KROS102:

- KROS102 is a novel GITR inhibitor that we believe can impact the abnormal immune responses against one's own body without the serious side effects of current drugs.
- Treatment for autoimmune diseases such as Crohn's disease, multiple sclerosis, and rheumatoid arthritis as well as organ transplantation may be targets for such a molecule.

WHY KAIROS?

Addressing oncologic failures due to cancer drug resistance and immune suppression

UNMET MEDICAL NEED	DRUG	HOW KAIROS ADDRESSES UNMET MEDICAL NEED
Development of resistance to many, otherwise effective, cancer drugs (hormone based therapies, EGFR-based therapies, radiation, and other specific chemotherapies)	ENV105	• ENV105 inhibits CD105 (CD105 is the protein responsible for cancer drug resistance in various forms of cancer) • Currently in Phase 2 trial in prostate cancer and Phase 1 trial in lung cancer
T cells drastically reduced by cancer	KROS101	• KROS101 uses a novel dual mechanism to increase killer T effector cells and reduce suppressor T reg cells (T cells have 2 types cells: those that kill cancer cells and those that inhibit the killer T cell response)
In autoimmune diseases, T cells are overactive against normal cells	KROS102	• KROS102 has the opposite effect of KROS101, by decreasing the number of overactive T effector cells and increasing suppressor T reg cells
Immunosuppression from cancer	KROS201	• KROS201 are killer T cells generated outside of the immunosuppressed body which then is delivered directly to the cancer stem cells that drive cancer growth. • Currently cleared for IND (investigational new drug application) by FDA
Chemotherapies are untargeted and immunosuppressive	KROS301	• By targeting the NF-kB molecular pathway, KROS 301 kills tumors and inhibits the mechanism of PD-L1 expression on tumor cells (PD-L1 is a "checkpoint inhibitor" that prevents T cells from killing the cancer)
Tumor environment is immunosuppressive from macrophages (a type of white cell that can be either anti-cancer or pro-cancer)	KROS401	• KROS401 targets pro-cancer macrophages to convert them into anti-cancer macrophages

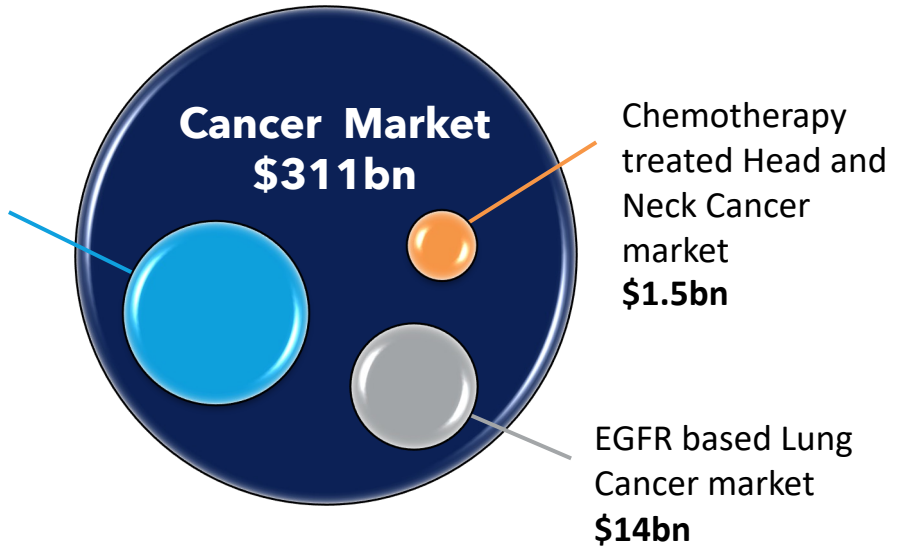
Cancer Drug Resistance Market

ENV105 MARKET OPPORTUNITY BY DISEASE - 2024

- Anti-androgen therapy prostate cancer market of **$11.3 billion**[1].
- EGFR based lung cancer therapy market of **$14 billion**[2]. **Tagrisso** generated total revenue of $5.8 billion in 2023.
- Chemotherapy treated head & neck cancer market is estimated at approximately **$1.5 billion**[2].

NOTES:
1. Grandview Research
2. Researchandmarkets.com

ENV105 MARKET OPPORTUNITY BY DISEASE



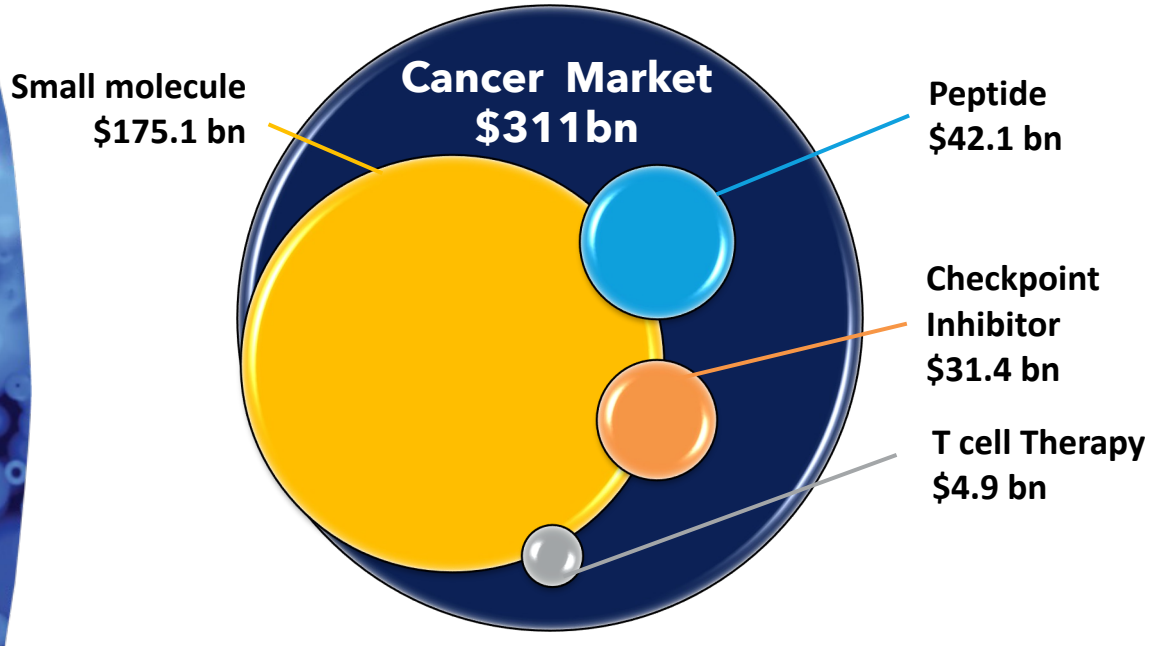
Immuno-Oncology Market

Global immunotherapy market estimates show significant compounded growth with sales expectations ranging from USD 94.7 - 126.9 Billion by 2026, exhibiting a CAGR of up to 20.2% from 2020.[2]

MARKET DRIVERS

- Increasing patient pool and higher mortality rate are augmenting the need for cancer immunotherapy globally.
- Increasing number of approvals for new immunotherapeutic drugs is driving the global oncology market.

KROS MARKET OPPORTUNITY BY DRUG TYPE



KROS MARKET OPPORTUNITY BY DRUG CANDIDATE

KROS **101 & 102**	Global immune checkpoint inhibitor market size was $31.4 billion in 2021, **growing to $148 billion in 2030** resulting in a **CAGR of $18.8%**[1].
KROS **201**	Global T cell therapy market was $4.9 billion in 2021, **growing to $20.8 billion by 2030** resulting in a **CAGR of 20.4%**[2].
KROS **301**	Global small-molecule cancer therapies market was $175.1 billion in 2021, growing to $268 billion by 2030 resulting in a CAGR of 5.4%[3].
KROS **401**	Global peptide therapeutics market was estimated at **$42.1 billion in 2022**[3].

NOTES:

1. Precedence Research
2. Vision Research Reports
3. Grandview Research

MILESTONES

2013-2021

June 2013 – Spun-off from Cedars-Sinai Medical Center

July 2016 –Name changed to Kairos Pharma and licensed immunotherapy technology from Cedars-Sinai Medical Center

November 2019 – Merged with AcTcell Biopharma

July 2021– Merged with Enviro Therapeutics

Non-dilutive grants from NIH and Pennsylvania fund research

2022

- Preclinical work for ENV105 Prostate Cancer Phase II, ENV105 Non-Small Cell Lung Cancer Phase I, KROS-201 Glioblastoma Phase I
- IND for KROS 201 cleared for recurrent glioblastoma

2023

- KROS-101 GITR agonist molecule and KROS-102 antagonist GITR molecule Preclinical studies
- IND approved for Phase II Prostate Cancer Trial and for Phase I Non-Small Cell Lung Cancer for ENV 105

2024

- Phase I and II multi-center trials with ENV 105 enrolling
- Preclinical development of KROS 101, 102, 301, 401
- Safety data from Phase II trial and Phase I trial

2025+

- Interim data of Phase II prostate cancer trial
- Efficacy data from Phase II trial and Phase I trial
- 5-year Horizon for ENV105 FDA Approval with a Maturing Pipeline of Broader Prospective Applications
- Phase I trials for KROS 101

STRONG INTELLECTUAL PROPERTY FOUNDATION

IP extends to 2040

Key IP generated from Murali, Bhowmick and Yu labs

Published patents executed internationally

Exclusive, worldwide rights to IP licensed from Cedars Sinai Medical Center

Pub #	KROS**101** **PCT/US2019/045478**	KROS**201** **PCT/US2020/045570**	KROS**301** **PCT/US2015/050906**	KROS**401** **PCT/US2016/035318**	ENV**105** **PCT/US2017/037558**
Title	Compositions And Methods For Treating Cancer And Autoimmune Diseases	Method Of Generating Activated T Cells For Cancer Therapy	Compositions And Methods For Treating Fibrosis	Methods And Use Of Compounds That Bind To RELA Of NF-KB	Sensitization Of Tumors To Therapies Through Endoglin Antagonism

LEADING TEAM

John S. Yu, MD
CEO & CHAIRMAN

Professor of Neurosurgery, Director Surgical Neuro-Oncology at Cedars-Sinai Medical Center

- BAS from Stanford, MD from Harvard Medical School and MIT
- Numerous immunotherapies and nanotechnologies from his NIH funded laboratory
- Developed 8 new investigational drugs with the FDA and has led numerous clinical trials
- Most recently CEO and Chairman of AcTcell, and Director of Enviro Therapeutics
- Immunology Fellowship at the Institute Pasteur, Paris, Neurosurgery Residency at Massachusetts General Hospital/Harvard Medical School

Doug Samuelson
CHIEF FINANCIAL OFFICER

- 25+ year finance and accounting professional
- Former CFO of .Wellness Center USA
- Former Director of Accounting of Second Sight Medical Products, Inc .
- Former Chief Financial Officer of AdvaVet, Inc. and Chief Financial Officer of Solis Tek, Inc.
- CPA in State of California

Ramchandran Murali, Ph.D
VP, RESEARCH AND DEVELOPMENT

Professor, Biomedical Sciences and Research in Immunology at Penn/Cedars-Sinai Medical Center.

- Leading expert in X-ray crystallography, biophysical, biochemical, and immunology fields, having made significant advances in molecular engineering and cell surface receptors by developing pharmacological agents which include new paradigms in structure-based peptidomimetics drug discovery
- Developed numerous technologies that reverse key mechanisms of immune suppression of cancer. Previous technologies from Penn licensed by Ception (bought by Teva) and Nidus.

Neil Bhowmick, Ph.D
CHIEF SCIENTIFIC OFFICER & PRESIDENT, ENVIRO THERAPEUTICS

Professor of the Department of Medicine and Director of the Cancer Biology Program at Cedars-Sinai Medical Center

- Fellowship at Vanderbilt University Medical Center Research Director, Oppenheimer Urologic Reference Laboratory (OURLab)
- Holds 6 patents for biomarker detection platforms and stromal targeted therapeutics (inclusive of ENV105 and ENV205)
- Consultant at Xencor Inc. (NASDAQ: XNCR) and Tracon Pharma (NASDAQ: TCON)
- NCI/NIH funded for over 15 years and cited over 11,700 times

INDEPENDENT DIRECTORS

Rosemary Mazanet MD, Ph.D

Internal Medicine and Oncology at the Brigham and Women's Hospital/ Harvard Dana Farber Cancer Institute

- 30+ year career as a celebrated Biotech investor, advisor, capital markets and C-suite executive at several biopharma companies including former head of clinical research at Amgen, Inc.
- As one of the first US trained clinician scientists in her field, she led multiple successful product development initiatives (4 INDs and sBLAs, one BLA, CE mark and IDE) including FDA panel presentations
- Held subsequent executive positions at NY-based firms Argenis LP and Oracle Partners LP, one of the first health-care focused hedge fundsa
- Chief Scientific Officer at Columbia Care, Trustee at the University of Pennsylvania Health System (her alma mater) and Chair, Executive Advisory Board for the Wharton Leonard Davis Institute

Hyun W. Bae, MD

BS in Biomechanics from Columbia, MD cum laude from Yale, former NIH Howard Hughes Research Fellow Bethesda, MD.

- Professor of Surgery in Orthopaedic Surgery at CSMC, Director of Education and clinical partner of the Orthopaedic Stem Cell and Tissue Engineering Laboratory
- 10+ years experience in drug development, PI for 3-4 FDA-approved randomized clinical trials with over 30 clinical studies, 60+ published scientific papers, 5 review articles and 30 patents
- Chief Medical Officer and Director of Prosidyan, Scientific Advisory Board Member of Mesoblast, Tissuegene, Spine Biopharma and Engage Surgical

Michael Keyoung, MD, Ph.D

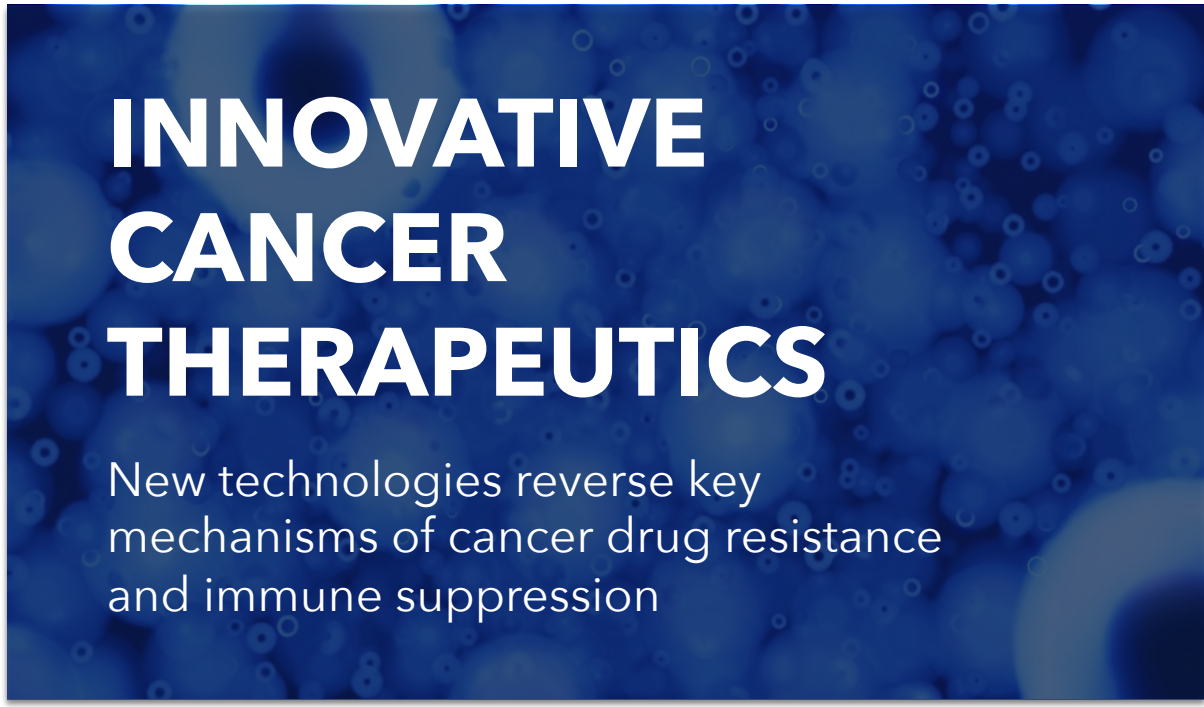
VP, RESEARCH AND DEVELOPMENT

MD and Ph.D. in Neuroscience and Neurology from Cornell and Sloan Kettering (MSKCC), UCSF Health, Biomedical Fellow at Rockefeller and MSKCC

- Senior ME, Head of N.A. for CBC Group, a healthcare-dedicated PE firm with over US$9 Billion AUM
- 20+ year career as a physician, executive and institutional investor in US, Europe and Asia advising Eli Lilly, Bausch & Lomb, and Samsung Electronics/Biologics on Asian expansion, global drug development and commercial/partnership strategies
- Former CEO of Genexine (KOSDAQ: 095700 w/ $1 Billion MC), led clinical development in Europe and Asia, raised $100M and created partnerships with Merck, Fosun Pharma, Tasly Pharma and Kalbe Pharma valued at over $250M
- Former President of Catalyst Biosciences, (NASDAQ: CBIO) a clinical stage hemophilia and ophthalmology company partnered with Pfizer, MedImmune and Isu Abxis
- Previous Board Chair of AffaMed Therapeutics and Director of Graybug Vision and InxMed
- Board member of Hugel Inc. (kosdaq: 145020.KQ)

Kairos Pharma SUMMARY

- Clinical stage company with an antibody that impacts a central mechanism of **CANCER DRUG RESISTANCE**
- Extensive pipeline targets **IMMUNE SUPPRESSION**
- Enrolling in phase 1 and 2 trials with interim efficacy data in 2025
- Strategic relationship with Cedars-Sinai Medical Center (ranked #2 in the nation) provides access to medical expertise, drives clinical trial efficiency and accelerates therapeutic innovations
- Small company with technology that could impact large pharma therapeutics in widespread cancers



KAIROS PHARMA

INVESTOR RELATIONS

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