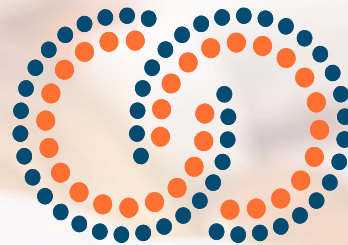


# Acrivon

Therapeutics



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*ACRIVON PREDICTIVE PRECISION PROTEOMICS (AP3)  
OVERCOMING LIMITATIONS OF GENETICS-BASED PRECISION MEDICINE*

*CORPORATE PRESENTATION*

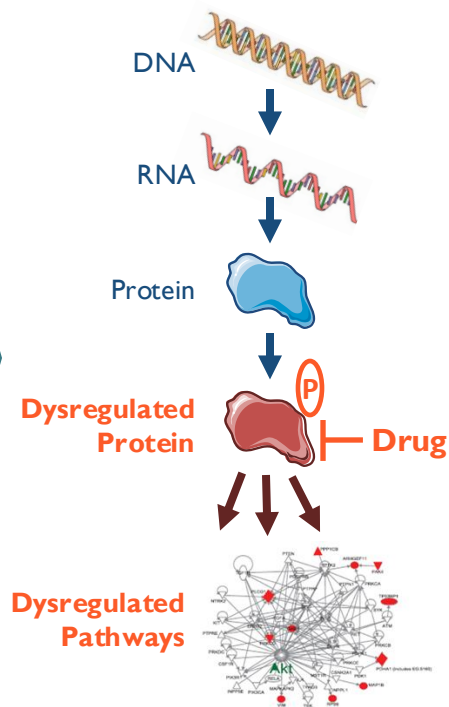
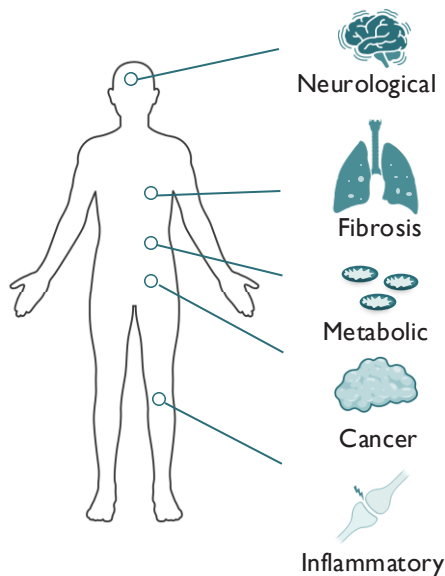
*JANUARY 2025*

# FORWARD-LOOKING STATEMENTS

Certain information contained in this presentation includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 regarding our future results of operations or financial condition, business strategy and plans and objectives of management for future operations. In some cases, you can identify forward-looking statements because they contain words such as “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “will,” or “would” or the negative of these words or other similar terms or expressions. Our forward-looking statements are based primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and results of operations. The outcome of the events described in the forward-looking statements is subject to risks and uncertainties, including the factors described in our filings with the U.S. Securities and Exchange Commission. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this presentation. The results, events, and circumstances reflected in the forward-looking statements may not be achieved or occur, and actual results, events, or circumstances could differ materially from those described in the forward-looking statements.

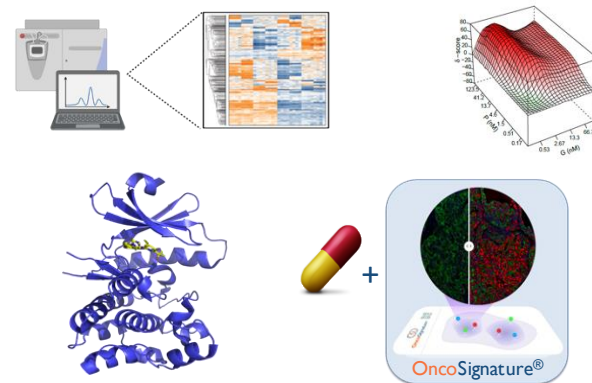
You are cautioned not to place undue reliance on these forward-looking statements, which are made only as of the date of this presentation. We undertake no obligation to update any forward-looking statements or to reflect new information or the occurrence of unanticipated events, except as required by law.

# ACRIVON THERAPEUTICS – A NEXT-GENERATION PRECISION MEDICINE COMPANY



## Acrivon Predictive Precision Proteomics (AP3)

- Enables an exact match between the disease-driving, dysregulated pathways with a drug's mechanism of action (Acrivon meaning  $\approx$  exact, accurate)
- Broadly applicable in R&D (biological SAR, resistance, patient responders); leveraged for internal pipeline



Blume-Jensen, P & Hunter, T: Oncogenic kinase signaling *Nature* (2001)

Olsen, JV et al: Global, in vivo, and site-specific phosphorylation dynamics in signaling networks *Cell* (2006);

Andersen, JN et al: Pathway-based identification of biomarkers for targeted therapeutics: personalized oncology with PI3K pathway inhibitors *Sa Transl Med* (2010)

# ACRIVON THERAPEUTICS FOUNDATION

## Development Site (Boston)

- Drug development and clinical biomarkers
- ML/AI-driven AP3 analyses
- Clinical leadership and trial oversight

HQ LOCATED IN BOSTON - ACCESS TO LEADING DRUG DISCOVERY, BIOTECH, AND PHARMA



**Peter Blume-Jensen,**  
MD, PhD  
CEO, President,  
Co-Founder  
Inventor of AP3



**Kristina Masson**  
PhD, MBA  
EVP, Bus Ops,  
Lund Site Head  
Co-Founder



**Jesper V. Olsen**  
PhD  
Novo-Nordisk Foundation  
Protein Center, Cph.  
Academic Co-Founder.

## Precision-Proteomics Site (Lund/Copenhagen)

- Early pipeline drug programs
- BM identification and drug profiling
- Mass spectrometry

PROTEOMIC HUB LOCATED IN MEDICIN VALLEY - NORTHERN EUROPE'S LEADING LIFE SCIENCE CLUSTER



Founded 2018, IPO November 2022 (NASDAQ:ACRV)

For more information, please visit <https://acrivon.com>

# ACCOMPLISHED LEADERSHIP TEAM



Peter Blume-Jensen, M.D., Ph.D.  
*CEO, President, Founder*

- Executive Serono, Merck & Co., Daiichi Sankyo
- CSO Metamark - Marketed prostate proteomic test ProMark®
- Inventor Acrivon Predictive Precision Proteomics (AP3)



Rasmus Holm-Jorgensen  
*Chief Financial Officer*

- Novo Nordisk Finance and IR
- Syngeva pipeline expansion and \$9bn sale to Alexion
- Kiniksa founding team, IPO and commercial launch



Kristina Masson, Ph.D., M.B.A  
*Site Head Acrivon AB, Co-Founder  
EVP Business Operations*

- Cross-functional Leadership Merrimack Pharmaceuticals, MIT/BROAD
- Founder and CEO, OncoSignature AB (acquired by Acrivon Therapeutics)



Jean-Marie Cuillerot, M.D.  
*Chief Medical Officer*

- Chief Medical Officer, Agenus, Dragonfly
- Global head of clinical development in immuno-oncology at EMD Serono
- Clinical development leadership roles at BMS and Novartis



Eric Devroe, Ph.D.  
*Chief Operating Officer*

- Founder and CEO, Opsonix
- Business executive MD Anderson Cancer Center and Metamark
- EIR Wyss Institute, Harvard
- Associate, Flagship Pioneering



Erick Gamelin, M.D., Ph.D.  
*Chief Development Officer*

- Professor, CEO, large national cancer center and hospital
- Executive Amgen, Pfizer, Dynavax, MacroGenics; CMO STEP Pharma
- >100 ph 1-3 oncology trials



Mary-Alice Miller, J.D.  
*Chief Legal Officer*

- Over 20 years corporate legal experience
- Served as general counsel of 2 companies taken public
- Boston Business Journal "40 Under 40"

# CRITICAL CHALLENGES FACING BIOPHARMA INDUSTRY

## Challenge

## Acrivon Predictive Precision Proteomics (AP3)



Discovering **potent** compounds suitable for **clinical monotherapy**

Optimal target/pathway selectivity for rapid generation of single agent active compounds



Determining **which patients will benefit from** those drugs

Identification of drug-sensitive indications and patients for actionable precision medicine



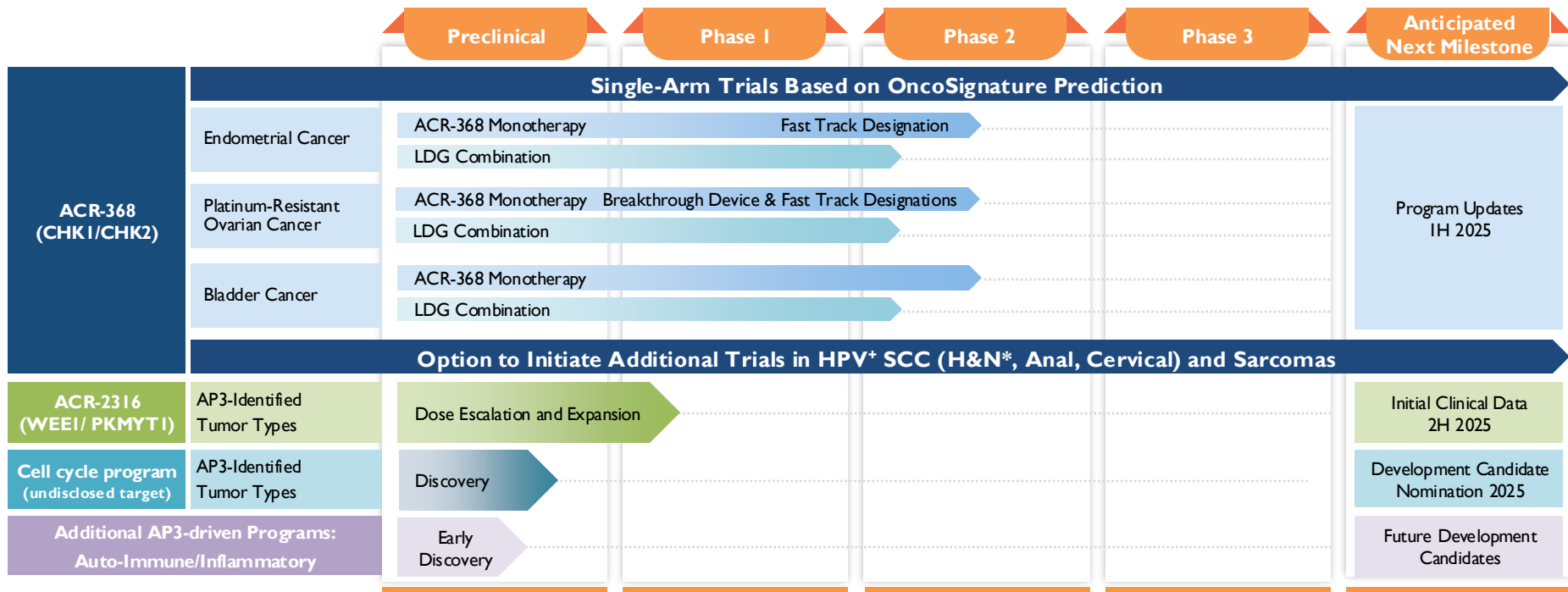
Preventing or reducing resistance to **maximize response durability**

Ability to rapidly identify and overcome resistance mechanisms



**AP3 is a proprietary, machine learning-enabled internal R&D engine that effectively addresses these challenges, driving rapid advancement of our pipeline**

# ACRIVON PIPELINE



ACR-368 Monotherapy

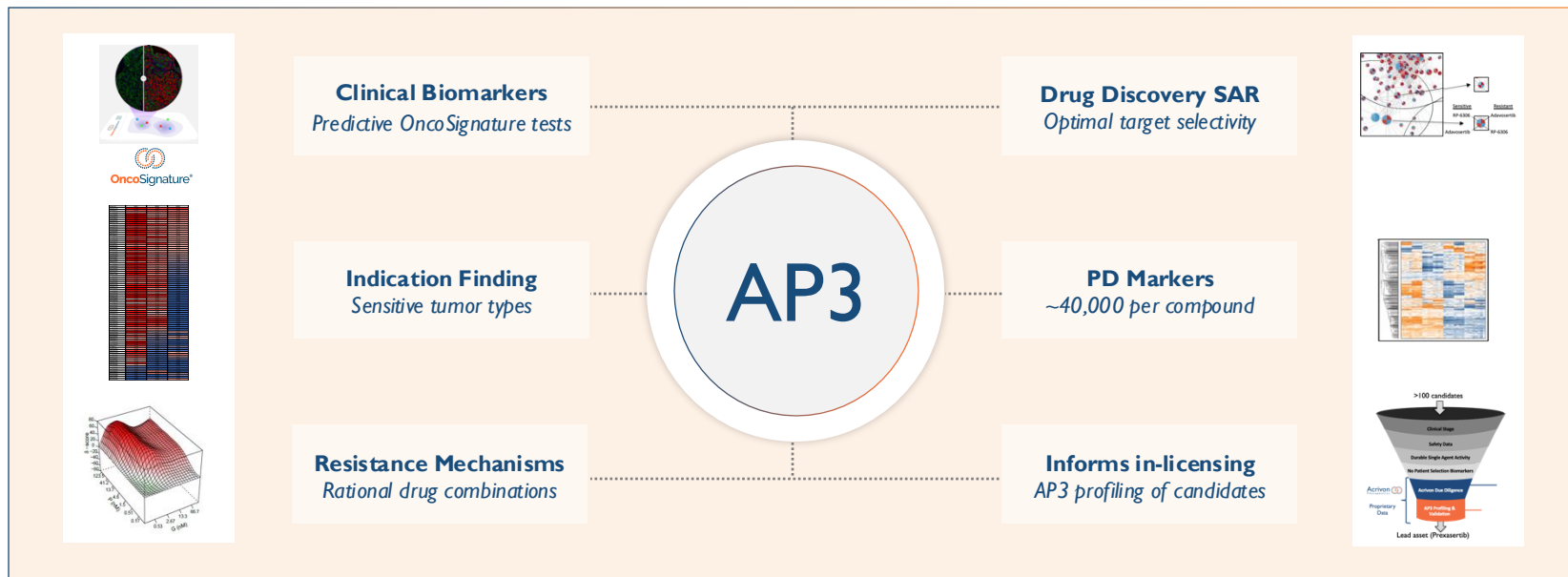
Registrational intent Phase 2 single arm trials based on predicted sensitivity to ACR-368 monotherapy in OncoSignature-positive patients

LDG Combination

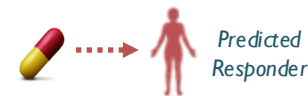
Exploratory Phase 1b/2 single arm trials of ACR-368 in combination with low dose gemcitabine, or LDG, in OncoSignature-negative patients

\*Investigator-Initiated Trial (IIT) activated at Moffitt Cancer Center

# AP3-BASED DRUG DISCOVERY AND CLINICAL DEVELOPMENT IN PREDICTED SENSITIVE SUBJECTS AND TUMOR TYPES



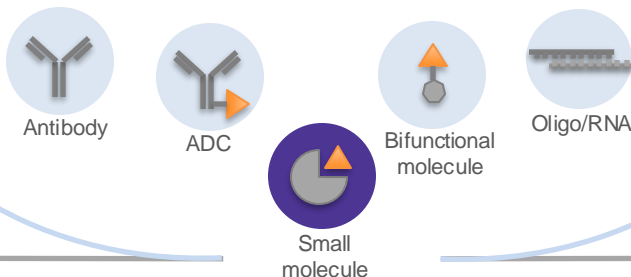
**Streamlined Clinical Development**  
*Predicted sensitive indications with informed dose optimization*



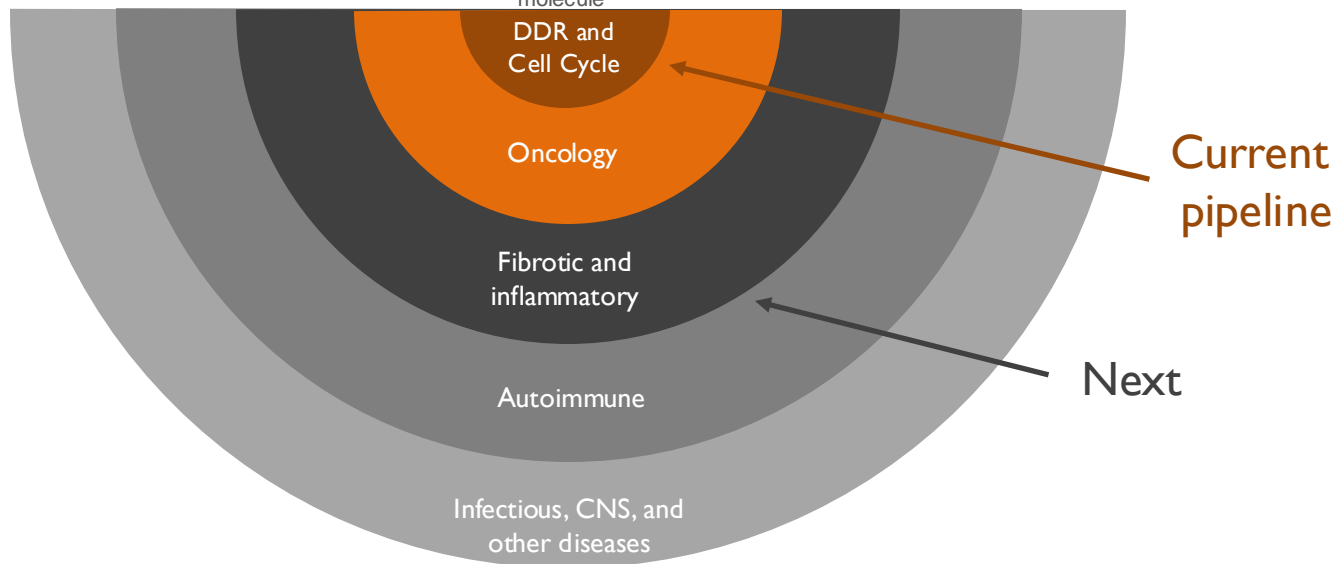


# THE AP3 APPROACH IS MODALITY AND DISEASE AGNOSTIC

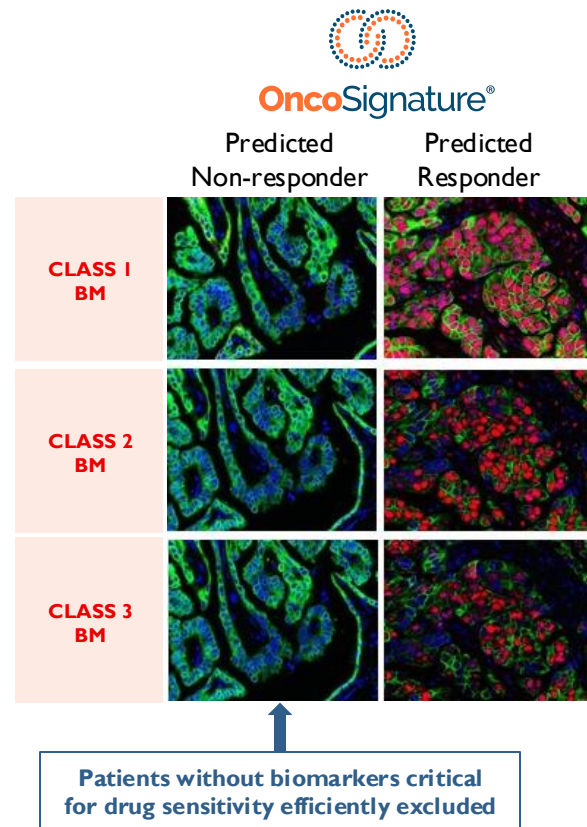
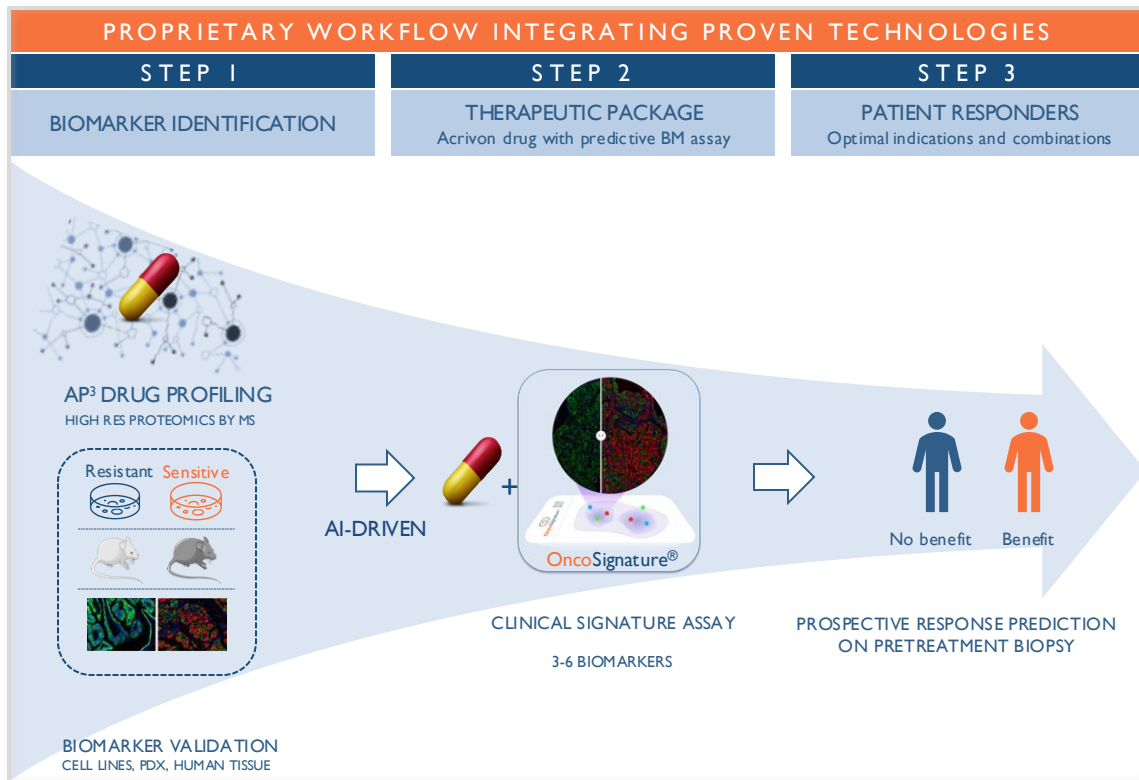
Therapeutic modalities



Therapeutic areas



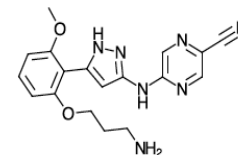
# AP3 PLATFORM: DRUG RESPONSE PREDICTION IN INDIVIDUAL PATIENTS



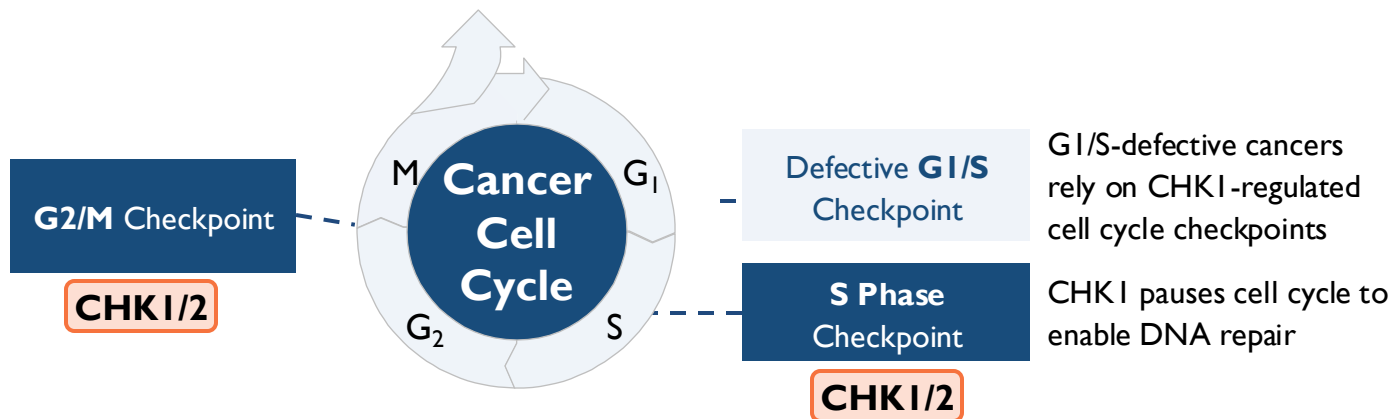
"Disease Pathway-Based Method to Generate Biomarker Panels Tailored to Specific Therapeutics for Individualized Treatments": EP 2 229 589, issued June 10, 2015; US20171006787A9, pending. OncoSignature® is a Registered Trademark: US Reg. No. 5,718,472; Int. Cl. 5, 42. Intl. Reg. 1382289

# ACR-368: A CLINICALLY ACTIVE PHASE 2 CHK1/2 INHIBITOR

- ATP-competitive inhibitor of CHK1 (0.9 nM) and CHK2 (8 nM)
- Exclusively in-licensed from Eli Lilly & Company (WW rights); originally discovered by Array (Pfizer)
- CoM patent exp. Oct., 2030; Salt-form exp. Apr., 2037
- Balanced inhibition of both CHK1 and CHK2 believed important for RECIST monotherapy activity



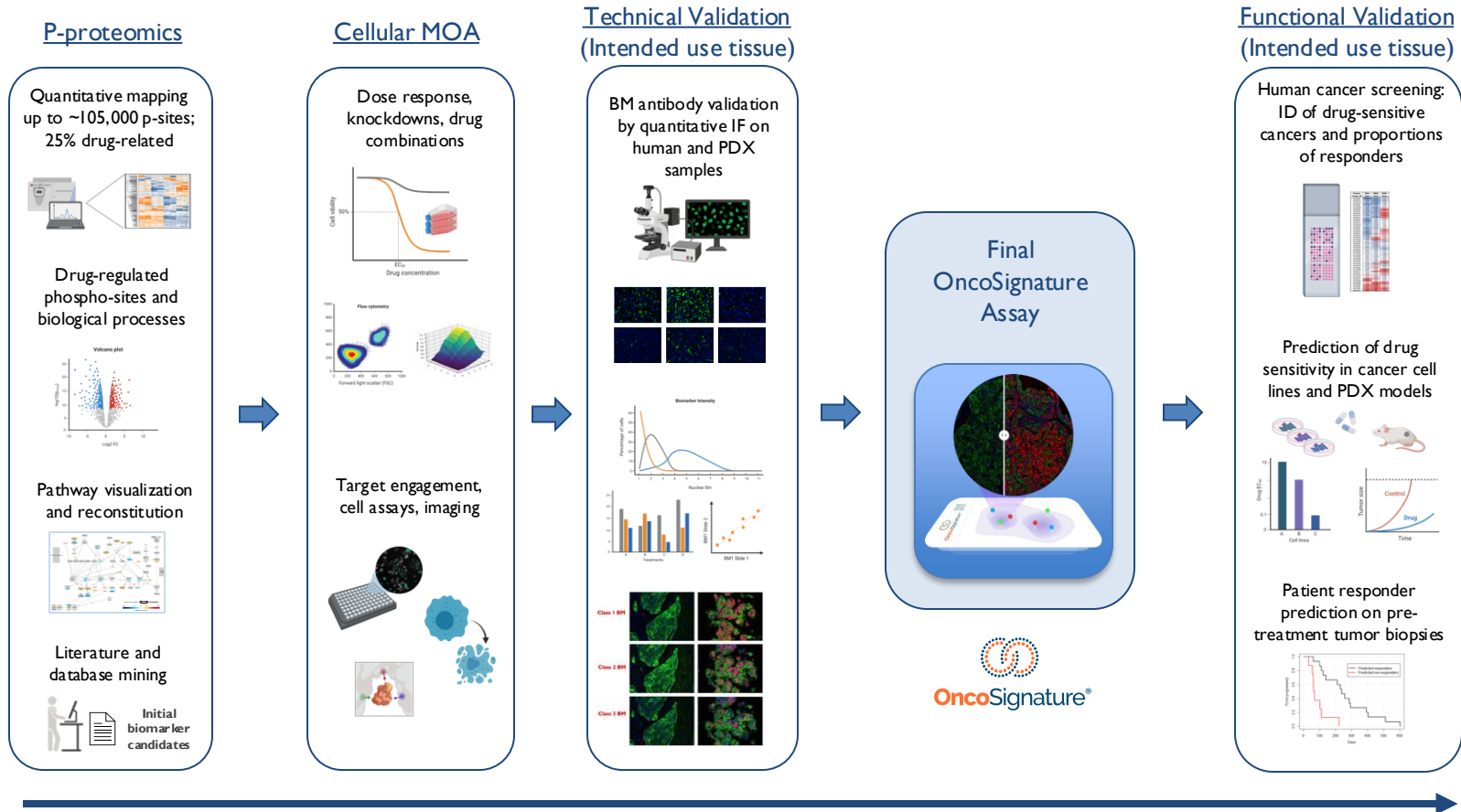
ACR-368 (MW): 365.4



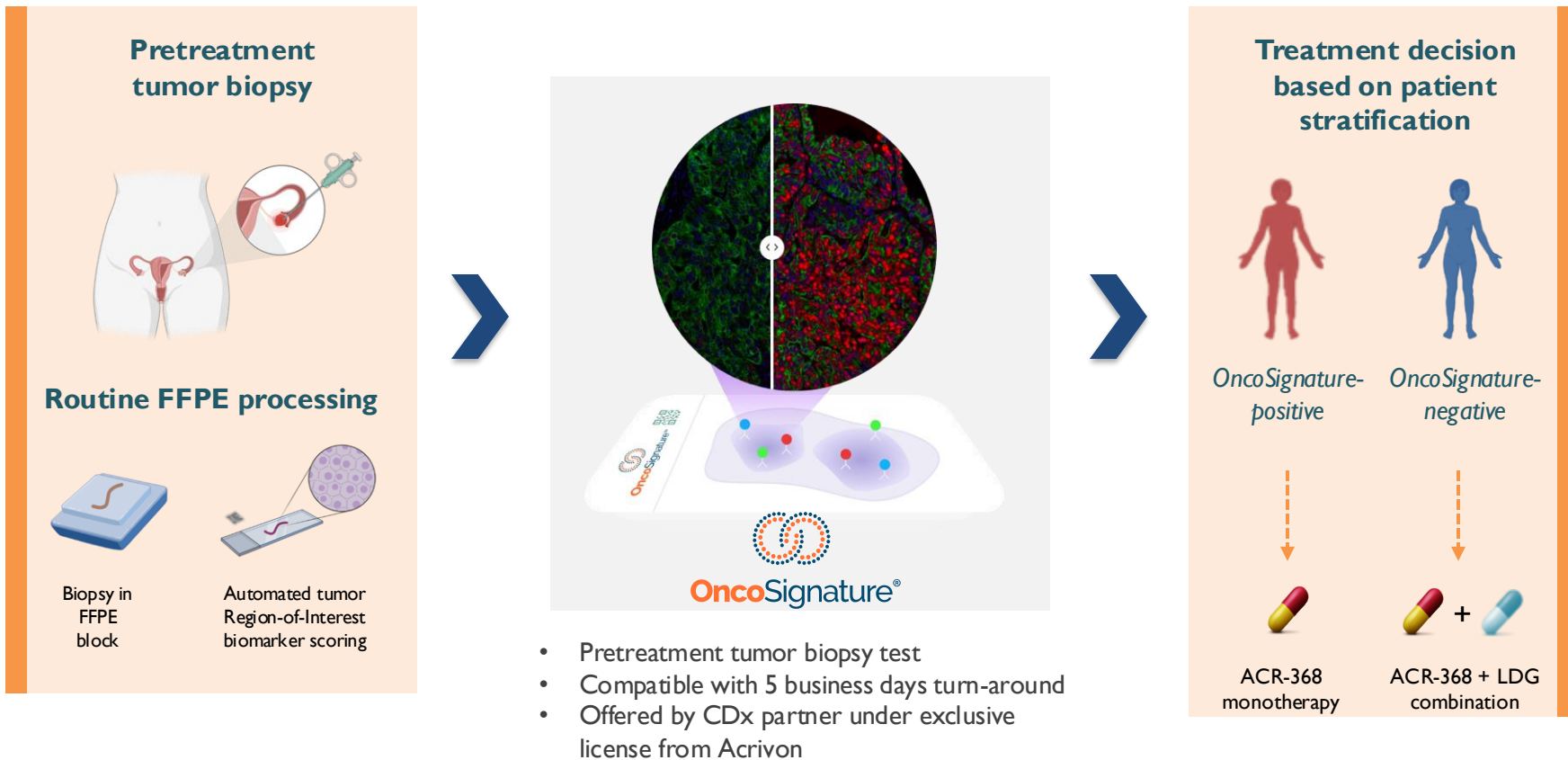
## DRUG TARGET PROFILE AT TIME OF IN-LICENSING

- **Durable monotherapy activity:** Platinum-resistant ovarian and squamous cell cancers (Anal and H&N)
- **Large safety database, favorable safety profile:** > 1,000 patients treated (~50% mono, ~50% in combination)
- **Ideal for AP3 method:** Proven clinical activity, but requires patient responder identification to achieve sufficient ORR

# DEVELOPMENT OF AP3-BASED PATIENT SELECTION ONCOSIGNATURE TESTS

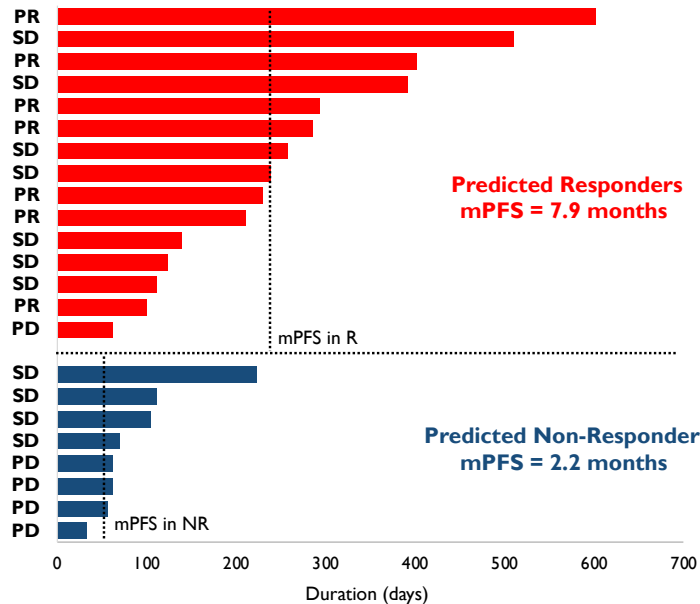
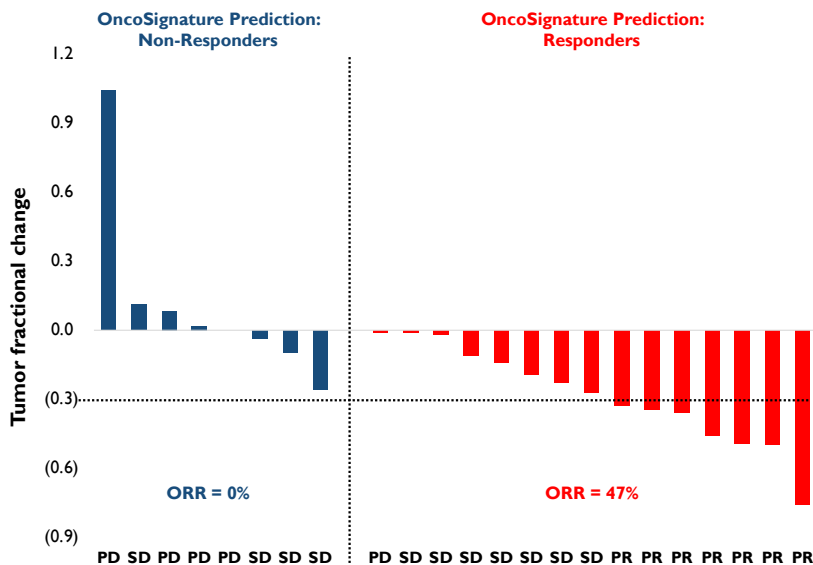


# ACR-368 ONCOSIGNATURE TEST: USAGE IN THE CLINIC



# BIOPSY STUDY I: SUBSTANTIAL RESPONSE AND PFS BENEFIT IN PREDICTED RESPONDERS (BLINDED, PROSPECTIVELY DESIGNED STUDY)

- Available pretreatment tumor biopsies from past phase 2 trials at NCI with ACR-368 in platinum-resistant ovarian cancer were obtained
- OncoSignature scores were generated **blinded to treatment outcome** at Acrivon and analyzed by **3<sup>rd</sup> party biostatistician** in **prospectively designed study**



|                    | mPFS (days) |
|--------------------|-------------|
| All Predicted R    | 238.0       |
| All Predicted NR   | 66.5        |
| SD in predicted R  | 238.0       |
| SD in predicted NR | 108.0       |



**Result: ORR ~47%; mPFS = 7.9 months**

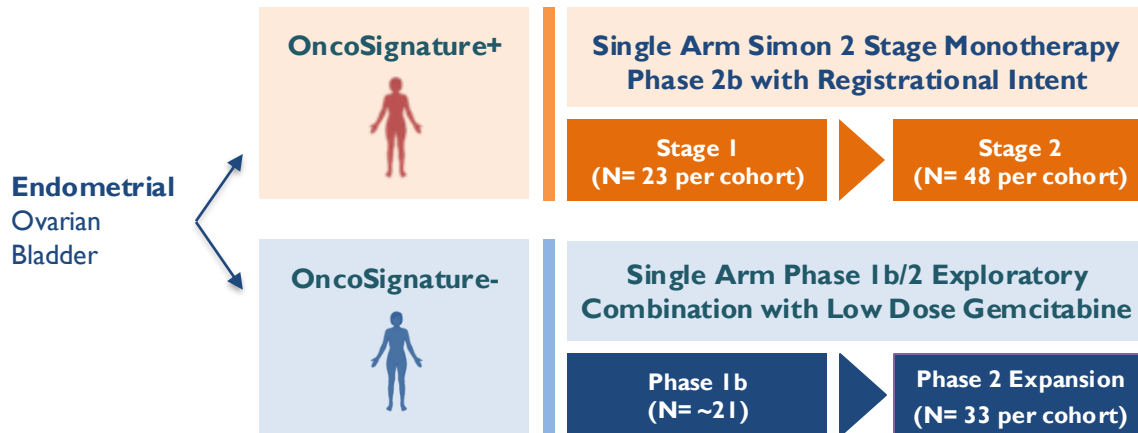
# TWO ADDITIONAL HIGH UNMET NEED SOLID CANCERS PREDICTED ACR-368-SENSITIVE THROUGH HUMAN SAMPLE SCREENING

## HGS Ovarian

| Tissue ID | BM1  | BM2  | BM3    |
|-----------|------|------|--------|
| Exp001719 | 0.68 | 0.68 | 0.76   |
| Exp002076 | 0.54 | 0.54 | 0.51   |
| Exp003069 | 0.31 | 0.39 | 0.38   |
| Exp003809 | 0.89 | 0.85 | 0.83   |
| Exp003920 | 0.83 | 0.48 | 0.32   |
| Exp003997 | 0.87 | 0.87 | 0.87   |
| Exp004002 | 0.58 | 0.42 | 0.79   |
| Exp007274 | 0.60 | 0.72 | 0.71   |
| Exp009464 | 0.64 | 0.68 | 0.69   |
| Exp009776 | 0.50 | 0.18 | 0.19   |
| Exp009784 | 0.77 | 0.35 | 0.17   |
| Exp009880 | 0.78 | 0.58 | 0.17   |
| Exp010117 | 0.85 | 0.81 | 0.11   |
| Exp100051 | 0.92 | 0.41 | 0.16   |
| Exp100142 | 0.58 | 0.66 | 0.14   |
| Exp100160 | 0.68 | 0.48 | 0.14   |
| Exp100292 | 0.65 | 0.21 | 0.14   |
| Exp100317 | 0.60 | 0.10 | 0.10   |
| Exp100380 | 0.78 | 0.49 | 0.13   |
| Exp100386 | 0.89 | 0.38 | 0.13   |
| Exp100509 | 0.86 | 0.45 | 0.12   |
| Exp100526 | 0.50 | 0.15 | 0.12   |
| Exp100529 | 0.60 | 0.21 | 0.11   |
| Exp100536 | 0.48 | 0.48 | 0.09   |
| Exp100586 | 0.58 | 0.08 | 0.08   |
| Exp100596 | 0.48 | 0.48 | 0.08   |
| Exp110030 | 0.92 | 0.39 | 0.13   |
| Exp120129 | 0.64 | 0.44 | 0.10   |
| Exp130004 | 0.56 | 0.46 | 0.09   |
| Exp130005 | 0.67 | 0.44 | 0.09   |
| Exp130006 | 0.67 | 0.40 | 0.09   |
| Exp130007 | 0.70 | 0.38 | 0.09   |
| Exp130017 | 0.60 | 0.38 | 0.09   |
| Exp130100 | 0.80 | 0.17 | 0.03   |
| Exp130152 | 0.43 | 0.19 | 0.03   |
| Exp130226 | 0.48 | 0.38 | 0.02   |
| Exp130258 | 0.66 | 0.68 | 0.02   |
| Exp130382 | 0.28 | 0.17 | 0.02   |
| Exp130396 | 0.81 | 0.09 | 0.01   |
| Exp130419 | 0.69 | 0.27 | 0.01   |
| Exp130509 | 0.97 | 0.37 | 0.01   |
| Exp130682 | 0.49 | 0.09 | 0.01   |
| Exp130720 | 0.69 | 0.18 | 0.01   |
| Exp130730 | 0.88 | 0.81 | 0.01   |
| Exp130844 | 0.81 | 0.58 | 0.00   |
| Exp130846 | 0.16 | 0.16 | 0.00   |
| Exp130848 | 0.81 | 0.54 | 0.00   |
| Exp130862 | 0.10 | 0.17 | 0.00   |
| Exp130963 | 0.74 | 0.74 | 0.00   |
| Exp130993 | 0.82 | 0.09 | 0.00   |
| Exp131019 | 0.40 | 0.40 | 0.00   |
| Exp131082 | 0.81 | 0.09 | 0.00   |
| Exp131153 | 0.84 | 0.84 | 0.00   |
| Exp131417 | 0.72 | 0.35 | 0.00   |
| Exp131895 | 0.82 | 0.81 | 0.00   |
| Exp131911 | 0.81 | 0.81 | 0.00   |
| Exp131924 | 0.19 | 0.31 | 0.00   |
| Exp131918 | 0.99 | 0.99 | 0.00   |
| Exp131987 | 0.81 | 0.58 | 0.00   |
| Exp132000 | 0.81 | 0.17 | 0.00   |
| Exp132010 | 0.48 | 0.22 | 0.00   |
| Exp132036 | 0.88 | 0.67 | 0.11   |
| Exp131338 | 0.27 | 0.09 | 0.08   |
| Exp132002 | 0.87 | 0.06 | 0.08   |
| Exp132111 | 0.16 | 0.16 | 0.01   |
| Exp132872 | 0.31 | 0.08 | 0.01   |
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| Exp134235 | 0.81 | 0.03 | 0.01   |
| Exp134245 | 0.81 | 0.03 | 0.01   |
| Exp134255 | 0.81 | 0.03 | 0.01   |
| Exp134265 | 0.81 | 0.03 | 0.01   |
| Exp134275 | 0.81 | 0.03 | 0.01   |
| Exp134285 | 0.81 | 0.03 | 0.01   |
| Exp134295 | 0.81 | 0.03 | 0.01   |
| Exp134305 | 0.81 | 0.03 | 0.01   |
| Exp134315 | 0.81 | 0.03 | 0.01   |
| Exp134325 | 0.81 | 0.03 | 0.01   |
| Exp134335 | 0.81 | 0.03 | 0.01   |
| Exp134345 | 0.81 | 0.03 | 0.01   |
| Exp134355 | 0.81 | 0.03 | 0.01   |
| Exp134365 | 0.81 | 0.03 | 0.01   |
| Exp134375 | 0.81 | 0.03 | 0.01   |
| Exp134385 | 0.81 | 0.03 | 0.01   |
| Exp134395 | 0.81 | 0.03 | 0.01   |
| Exp134405 | 0.81 | 0.03 | 0.01   |
| Exp134415 | 0.81 | 0.03 | 0.01   |
| Exp134425 | 0.81 | 0.03 | 0.01   |
| Exp134435 | 0.81 | 0.03 | 0.01   |
| Exp134445 | 0.81 | 0.03 | 0.01   |
| Exp134455 | 0.81 | 0.03 | 0.01   |
| Exp134465 | 0.81 | 0.03 | 0.01   |
| Exp134475 | 0.81 | 0.03 | 0.01   |
| Exp134485 | 0.81 | 0.03 | 0.01   |
| Exp134495 | 0.81 | 0.03 | 0.01   |
| Exp134505 | 0.81 | 0.03 | 0.01   |
| Exp134515 | 0.81 | 0.03 | 0.01   |
| Exp134525 | 0.81 | 0.03 | 0.01   |
| Exp134535 | 0.81 | 0.03 | 0.01   |
| Exp134545 | 0.81 | 0.03 | 0.01   |
| Exp134555 | 0.81 | 0.03 | 0.01   |
| Exp134565 | 0.81 | 0.03 | 0.01   |
| Exp134575 | 0.81 | 0.03 | 0.01   |
| Exp134585 | 0.81 | 0.03 | 0.01   |
| Exp134595 | 0.81 | 0.03 | 0.01   |
| Exp134605 | 0.81 | 0.03 | 0.01   |
| Exp134615 | 0.81 | 0.03 | 0.01   |
| Exp134625 | 0.81 | 0.03 | 0.01   |
| Exp134635 | 0.81 | 0.03 | 0.01   |
| Exp134645 | 0.81 | 0.03 | 0.01   |
| Exp134655 | 0.81 | 0.03 | 0.01   |
| Exp134665 | 0.81 | 0.03 | 0.01   |
| Exp134675 | 0.81 | 0.03 | 0.01   |
| Exp134685 | 0.81 | 0.03 | 0.01   |
| Exp134695 | 0.81 | 0.03 | 0.01   |
| Exp134705 | 0.81 | 0.03 | 0.01   |
| Exp134715 | 0.81 | 0.03 | 0.01   |
| Exp134725 | 0.81 | 0.03 | 0.01   |
| Exp134735 | 0.81 | 0.03 | 0.01   |
| Exp134745 | 0.81 | 0.03 | 0.01   |
| Exp134755 | 0.81 | 0.03 | 0.01   |
| Exp134765 | 0.81 | 0.03 | 0.01   |
| Exp134775 | 0.81 | 0.03 | 0.01   |
| Exp134785 | 0.81 | 0.03 | 0.01   |
| Exp134795 | 0.81 | 0.03 | 0.01   |
| Exp134805 | 0.81 | 0.03 | 0.01   |
| Exp134815 | 0.81 | 0.03 | 0.01   |
| Exp134825 | 0.81 | 0.03 | 0.01   |
| Exp134835 | 0.81 | 0.03 | 0.01   |
| Exp134845 | 0.81 | 0.03 | 0.01   |
| Exp134855 | 0.81 | 0.03 | 0.01   |
| Exp134865 | 0.81 | 0.03 | 0.01   |
| Exp134875 | 0.81 | 0.03 | 0.01   |
| Exp134885 | 0.81 | 0.03 | 0.01   |
| Exp134895 | 0.81 | 0.03 | 0.01   |
| Exp134905 | 0.81 | 0.03 | 0.01   |
| Exp134915 | 0.81 | 0.03 | 0.01   |
| Exp134925 | 0.81 | 0.03 | 0.01   |
| Exp134935 | 0.81 | 0.03 | 0.01   |
| Exp134945 | 0.81 | 0.03 | 0.01   |
| Exp134955 | 0.81 | 0.03 | 0.01   |
| Exp134965 | 0.81 | 0.03 | 0.01   |
| Exp134975 | 0.81 | 0.03 | 0.01   |
| Exp134985 | 0.81 | 0.03 | 0.01</ |

# ENROLLING AND DOSING ACR-368 IN THREE HIGH UNMET NEED INDICATIONS: ENDOMETRIAL, OVARIAN, AND BLADDER CANCER

- ACR-368 dosed at RP2D based on prospective response prediction using the ACR-368 OncoSignature Assay run by our CDx partner
- 68 sites activated<sup>1</sup>
- OB-GYN Key Opinion Leaders actively participating



- FDA Fast Track Designation granted May 8, 2023 for ACR-368 monotherapy in OncoSignature-positive patients with platinum-resistant endometrial cancer and ovarian cancer
- FDA Breakthrough Device Designation granted November 16, 2023 for ACR-368 OncoSignature Assay for the identification of ovarian cancer patients who may benefit from treatment with ACR-368

<sup>1</sup><https://clinicaltrials.gov/ct2/show/NCT05548296>



# ENDOMETRIAL CANCER IS AN AP3-PREDICTED TUMOR TYPE

ACR-368 OncoSignature-based indication finding prior to trial entry

Sq. NSCLC

| Sample ID | BM1  | BM2  | BM3  |
|-----------|------|------|------|
| Endo0001  | 0.17 | 0.26 | 0.06 |
| Endo0002  | 0.49 | 0.06 | 0.06 |
| Endo0003  | 0.09 | 0.26 | 0.06 |
| Endo0004  | 0.34 | 0.06 | 0.06 |
| Endo0005  | 0.26 | 0.06 | 0.06 |
| Endo0006  | 0.26 | 0.06 | 0.06 |
| Endo0007  | 0.11 | 0.06 | 0.14 |
| Endo0008  | 0.06 | 0.06 | 0.06 |
| Endo0009  | 0.06 | 0.06 | 0.06 |
| Endo0010  | 0.06 | 0.06 | 0.06 |
| Endo0011  | 0.06 | 0.14 | 0.06 |
| Endo0012  | 0.06 | 0.06 | 0.06 |
| Endo0013  | 0.06 | 0.06 | 0.06 |
| Endo0014  | 0.06 | 0.06 | 0.06 |
| Endo0015  | 0.06 | 0.06 | 0.06 |
| Endo0016  | 0.06 | 0.06 | 0.06 |
| Endo0017  | 0.06 | 0.06 | 0.06 |
| Endo0018  | 0.06 | 0.06 | 0.06 |
| Endo0019  | 0.06 | 0.06 | 0.06 |
| Endo0020  | 0.06 | 0.06 | 0.06 |
| Endo0021  | 0.06 | 0.06 | 0.06 |
| Endo0022  | 0.06 | 0.06 | 0.06 |
| Endo0023  | 0.06 | 0.06 | 0.06 |
| Endo0024  | 0.06 | 0.06 | 0.06 |
| Endo0025  | 0.06 | 0.06 | 0.06 |
| Endo0026  | 0.06 | 0.06 | 0.06 |
| Endo0027  | 0.06 | 0.06 | 0.06 |
| Endo0028  | 0.06 | 0.06 | 0.06 |
| Endo0029  | 0.06 | 0.06 | 0.06 |
| Endo0030  | 0.06 | 0.06 | 0.06 |
| Endo0031  | 0.06 | 0.06 | 0.06 |
| Endo0032  | 0.06 | 0.06 | 0.06 |
| Endo0033  | 0.06 | 0.06 | 0.06 |
| Endo0034  | 0.06 | 0.06 | 0.06 |
| Endo0035  | 0.06 | 0.06 | 0.06 |
| Endo0036  | 0.06 | 0.06 | 0.06 |
| Endo0037  | 0.06 | 0.06 | 0.06 |
| Endo0038  | 0.06 | 0.06 | 0.06 |
| Endo0039  | 0.06 | 0.06 | 0.06 |
| Endo0040  | 0.06 | 0.06 | 0.06 |
| Endo0041  | 0.06 | 0.06 | 0.06 |
| Endo0042  | 0.06 | 0.06 | 0.06 |
| Endo0043  | 0.06 | 0.06 | 0.06 |
| Endo0044  | 0.06 | 0.06 | 0.06 |
| Endo0045  | 0.06 | 0.06 | 0.06 |
| Endo0046  | 0.06 | 0.06 | 0.06 |
| Endo0047  | 0.06 | 0.06 | 0.06 |
| Endo0048  | 0.06 | 0.06 | 0.06 |
| Endo0049  | 0.06 | 0.06 | 0.06 |
| Endo0050  | 0.06 | 0.06 | 0.06 |
| Endo0051  | 0.06 | 0.06 | 0.06 |
| Endo0052  | 0.06 | 0.06 | 0.06 |
| Endo0053  | 0.06 | 0.06 | 0.06 |
| Endo0054  | 0.06 | 0.06 | 0.06 |
| Endo0055  | 0.06 | 0.06 | 0.06 |
| Endo0056  | 0.06 | 0.06 | 0.06 |
| Endo0057  | 0.06 | 0.06 | 0.06 |
| Endo0058  | 0.06 | 0.06 | 0.06 |
| Endo0059  | 0.06 | 0.06 | 0.06 |
| Endo0060  | 0.06 | 0.06 | 0.06 |
| Endo0061  | 0.06 | 0.06 | 0.06 |
| Endo0062  | 0.06 | 0.06 | 0.06 |
| Endo0063  | 0.06 | 0.06 | 0.06 |
| Endo0064  | 0.06 | 0.06 | 0.06 |
| Endo0065  | 0.06 | 0.06 | 0.06 |
| Endo0066  | 0.06 | 0.06 | 0.06 |
| Endo0067  | 0.06 | 0.06 | 0.06 |
| Endo0068  | 0.06 | 0.06 | 0.06 |
| Endo0069  | 0.06 | 0.06 | 0.06 |
| Endo0070  | 0.06 | 0.06 | 0.06 |
| Endo0071  | 0.06 | 0.06 | 0.06 |
| Endo0072  | 0.06 | 0.06 | 0.06 |
| Endo0073  | 0.06 | 0.06 | 0.06 |
| Endo0074  | 0.06 | 0.06 | 0.06 |
| Endo0075  | 0.06 | 0.06 | 0.06 |
| Endo0076  | 0.06 | 0.06 | 0.06 |
| Endo0077  | 0.06 | 0.06 | 0.06 |
| Endo0078  | 0.06 | 0.06 | 0.06 |
| Endo0079  | 0.06 | 0.06 | 0.06 |
| Endo0080  | 0.06 | 0.06 | 0.06 |
| Endo0081  | 0.06 | 0.06 | 0.06 |
| Endo0082  | 0.06 | 0.06 | 0.06 |
| Endo0083  | 0.06 | 0.06 | 0.06 |
| Endo0084  | 0.06 | 0.06 | 0.06 |
| Endo0085  | 0.06 | 0.06 | 0.06 |
| Endo0086  | 0.06 | 0.06 | 0.06 |
| Endo0087  | 0.06 | 0.06 | 0.06 |
| Endo0088  | 0.06 | 0.06 | 0.06 |
| Endo0089  | 0.06 | 0.06 | 0.06 |
| Endo0090  | 0.06 | 0.06 | 0.06 |
| Endo0091  | 0.06 | 0.06 | 0.06 |
| Endo0092  | 0.06 | 0.06 | 0.06 |
| Endo0093  | 0.06 | 0.06 | 0.06 |
| Endo0094  | 0.06 | 0.06 | 0.06 |
| Endo0095  | 0.06 | 0.06 | 0.06 |
| Endo0096  | 0.06 | 0.06 | 0.06 |
| Endo0097  | 0.06 | 0.06 | 0.06 |
| Endo0098  | 0.06 | 0.06 | 0.06 |
| Endo0099  | 0.06 | 0.06 | 0.06 |
| Endo0100  | 0.06 | 0.06 | 0.06 |

Endometrial cancer

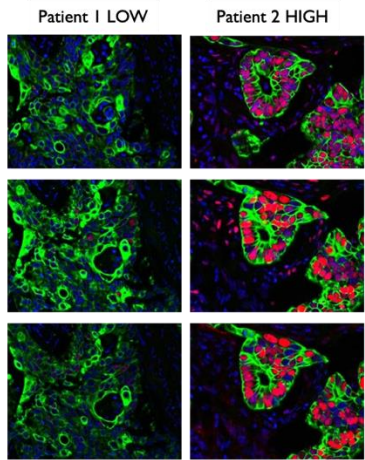
| Sample ID | BM1  | BM2  | BM3  |
|-----------|------|------|------|
| Endo1001  | 0.26 | 0.06 | 0.06 |
| Endo1002  | 0.06 | 0.06 | 0.06 |
| Endo1003  | 0.06 | 0.06 | 0.06 |
| Endo1004  | 0.06 | 0.06 | 0.06 |
| Endo1005  | 0.06 | 0.06 | 0.06 |
| Endo1006  | 0.06 | 0.06 | 0.06 |
| Endo1007  | 0.06 | 0.06 | 0.06 |
| Endo1008  | 0.06 | 0.06 | 0.06 |
| Endo1009  | 0.06 | 0.06 | 0.06 |
| Endo1010  | 0.06 | 0.06 | 0.06 |
| Endo1011  | 0.06 | 0.06 | 0.06 |
| Endo1012  | 0.06 | 0.06 | 0.06 |
| Endo1013  | 0.06 | 0.06 | 0.06 |
| Endo1014  | 0.06 | 0.06 | 0.06 |
| Endo1015  | 0.06 | 0.06 | 0.06 |
| Endo1016  | 0.06 | 0.06 | 0.06 |
| Endo1017  | 0.06 | 0.06 | 0.06 |
| Endo1018  | 0.06 | 0.06 | 0.06 |
| Endo1019  | 0.06 | 0.06 | 0.06 |
| Endo1020  | 0.06 | 0.06 | 0.06 |
| Endo1021  | 0.06 | 0.06 | 0.06 |
| Endo1022  | 0.06 | 0.06 | 0.06 |
| Endo1023  | 0.06 | 0.06 | 0.06 |
| Endo1024  | 0.06 | 0.06 | 0.06 |
| Endo1025  | 0.06 | 0.06 | 0.06 |
| Endo1026  | 0.06 | 0.06 | 0.06 |
| Endo1027  | 0.06 | 0.06 | 0.06 |
| Endo1028  | 0.06 | 0.06 | 0.06 |
| Endo1029  | 0.06 | 0.06 | 0.06 |
| Endo1030  | 0.06 | 0.06 | 0.06 |
| Endo1031  | 0.06 | 0.06 | 0.06 |
| Endo1032  | 0.06 | 0.06 | 0.06 |
| Endo1033  | 0.06 | 0.06 | 0.06 |
| Endo1034  | 0.06 | 0.06 | 0.06 |
| Endo1035  | 0.06 | 0.06 | 0.06 |
| Endo1036  | 0.06 | 0.06 | 0.06 |
| Endo1037  | 0.06 | 0.06 | 0.06 |
| Endo1038  | 0.06 | 0.06 | 0.06 |
| Endo1039  | 0.06 | 0.06 | 0.06 |
| Endo1040  | 0.06 | 0.06 | 0.06 |
| Endo1041  | 0.06 | 0.06 | 0.06 |
| Endo1042  | 0.06 | 0.06 | 0.06 |
| Endo1043  | 0.06 | 0.06 | 0.06 |
| Endo1044  | 0.06 | 0.06 | 0.06 |
| Endo1045  | 0.06 | 0.06 | 0.06 |
| Endo1046  | 0.06 | 0.06 | 0.06 |
| Endo1047  | 0.06 | 0.06 | 0.06 |
| Endo1048  | 0.06 | 0.06 | 0.06 |
| Endo1049  | 0.06 | 0.06 | 0.06 |
| Endo1050  | 0.06 | 0.06 | 0.06 |
| Endo1051  | 0.06 | 0.06 | 0.06 |
| Endo1052  | 0.06 | 0.06 | 0.06 |
| Endo1053  | 0.06 | 0.06 | 0.06 |
| Endo1054  | 0.06 | 0.06 | 0.06 |
| Endo1055  | 0.06 | 0.06 | 0.06 |
| Endo1056  | 0.06 | 0.06 | 0.06 |
| Endo1057  | 0.06 | 0.06 | 0.06 |
| Endo1058  | 0.06 | 0.06 | 0.06 |
| Endo1059  | 0.06 | 0.06 | 0.06 |
| Endo1060  | 0.06 | 0.06 | 0.06 |
| Endo1061  | 0.06 | 0.06 | 0.06 |
| Endo1062  | 0.06 | 0.06 | 0.06 |
| Endo1063  | 0.06 | 0.06 | 0.06 |
| Endo1064  | 0.06 | 0.06 | 0.06 |
| Endo1065  | 0.06 | 0.06 | 0.06 |
| Endo1066  | 0.06 | 0.06 | 0.06 |
| Endo1067  | 0.06 | 0.06 | 0.06 |
| Endo1068  | 0.06 | 0.06 | 0.06 |
| Endo1069  | 0.06 | 0.06 | 0.06 |
| Endo1070  | 0.06 | 0.06 | 0.06 |
| Endo1071  | 0.06 | 0.06 | 0.06 |
| Endo1072  | 0.06 | 0.06 | 0.06 |
| Endo1073  | 0.06 | 0.06 | 0.06 |
| Endo1074  | 0.06 | 0.06 | 0.06 |
| Endo1075  | 0.06 | 0.06 | 0.06 |
| Endo1076  | 0.06 | 0.06 | 0.06 |
| Endo1077  | 0.06 | 0.06 | 0.06 |
| Endo1078  | 0.06 | 0.06 | 0.06 |
| Endo1079  | 0.06 | 0.06 | 0.06 |
| Endo1080  | 0.06 | 0.06 | 0.06 |
| Endo1081  | 0.06 | 0.06 | 0.06 |
| Endo1082  | 0.06 | 0.06 | 0.06 |
| Endo1083  | 0.06 | 0.06 | 0.06 |
| Endo1084  | 0.06 | 0.06 | 0.06 |
| Endo1085  | 0.06 | 0.06 | 0.06 |
| Endo1086  | 0.06 | 0.06 | 0.06 |
| Endo1087  | 0.06 | 0.06 | 0.06 |
| Endo1088  | 0.06 | 0.06 | 0.06 |
| Endo1089  | 0.06 | 0.06 | 0.06 |
| Endo1090  | 0.06 | 0.06 | 0.06 |
| Endo1091  | 0.06 | 0.06 | 0.06 |
| Endo1092  | 0.06 | 0.06 | 0.06 |
| Endo1093  | 0.06 | 0.06 | 0.06 |
| Endo1094  | 0.06 | 0.06 | 0.06 |
| Endo1095  | 0.06 | 0.06 | 0.06 |
| Endo1096  | 0.06 | 0.06 | 0.06 |
| Endo1097  | 0.06 | 0.06 | 0.06 |
| Endo1098  | 0.06 | 0.06 | 0.06 |
| Endo1099  | 0.06 | 0.06 | 0.06 |
| Endo1100  | 0.06 | 0.06 | 0.06 |

OncoSignature-positive = 0%  
(ORR in past trial: 0%)

OncoSignature-positive = 30-40%

ACR-368 OncoSignature imaging demonstrates addition to CHK1/2 DDR axis

Endometrial patient samples

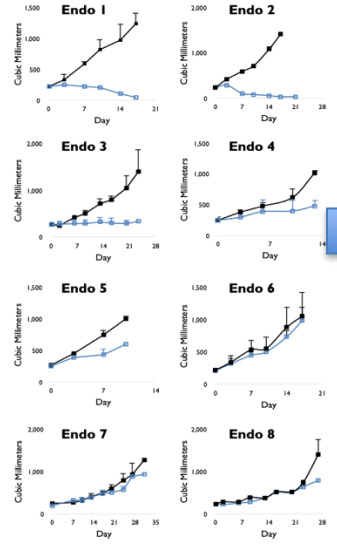


Predicted Non-Responders

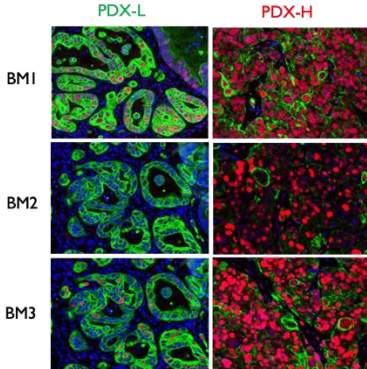
Predicted Responders

Confirmation of predicted sensitivity in genetically non-modified PDX models

Endometrial PDX



Confirmation of ACR-368 OncoSignature prediction in PDX tumor tissues pretreatment

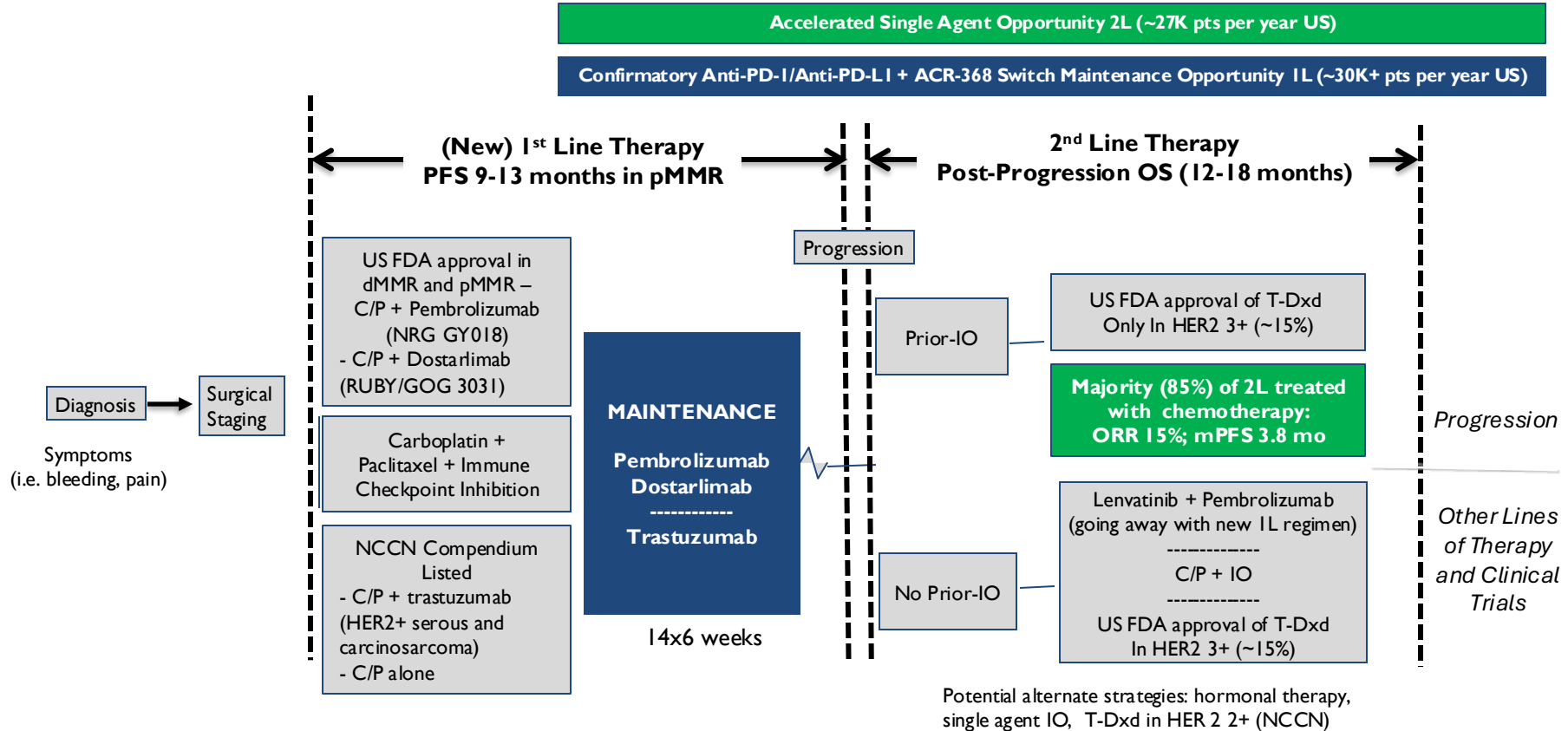


Predicted Non-Responders

Predicted Responders

In >1,000 cancer patients treated with ACR-368 in Lilly-sponsored trials, endometrial cancer was not tested

# EVOLVING TREATMENT LANDSCAPE FOR THE MANAGEMENT OF ADVANCED STAGE OR RECURRENT ENDOMETRIAL CANCER



Adapted from Dr. R. Eskander

# HIGH GRADE ADVANCED STAGE ENDOMETRIAL CANCER POTENTIAL FOR ACCELERATED APPROVAL $\geq 2^{\text{ND}}$ LINE (POST ANTI-PD-1)

## ACR-368 Target Indication

- High grade, locally advanced or metastatic, recurrent endometrial cancer
- Must have progressed after prior chemo and anti-PD-1/PD-L1 therapy<sup>1</sup>
- Irrespective of molecular alterations (MMR, p53, other) and subtype (serous, endometrioid, clear cell, carcinosarcoma)
- Significant unmet need, attractive commercial potential

## SOC:

- $\geq 2^{\text{nd}}$  line (post-PD-1 + chemo) ~14.7% ORR, mPFS 3.8 months<sup>2</sup>; patients in the control arm were not previously treated with anti-PD-1 therapy, only platinum, thus potentially overestimating the 2<sup>nd</sup> line ORR
- $\geq 3^{\text{rd}}$  line ~9% ORR, mPFS 2.8 months<sup>3</sup>

## ACR-368 Target Product Profile:

- $\geq 25\%$  ORR with CI lower bound  $>20\%$ ; mDoR  $\geq 5.5$  months

<sup>1</sup>Unless ineligible for PD-1/PD-L1 therapy

<sup>2</sup>Eskander R et al, NEJM, 2023; Mirza MR et al, NEJM, 2023; Makker V et al, NEJM, 2022

<sup>3</sup>Ray-Coquard I et al, BJC, 2013

# SIGNIFICANT ACR-368 ENDOMETRIAL PATIENT RESPONDER ENRICHMENT IN EFFICACY-EVALUABLE SUBJECTS<sup>1</sup> (N=23) IN REGISTRATIONAL INTENT PHASE 2 TRIAL

**Meaningful positive data** maturation since **April R&D Event<sup>2</sup>**

- **Prospective initial validation of the AP3-based ACR-368 OncoSignature now achieved for endometrial cancer (P = 0.009 vs P = 0.083)**
- **Confirmed ORR in BM+ subjects now 62.5% with the lower bound of 95% C.I. 30.4% (vs. 22.9%)**
- **Confirmed ACR-368 responders still on therapy; mDoR not yet reached (~6 months at time of data-cut vs ~2 months)**

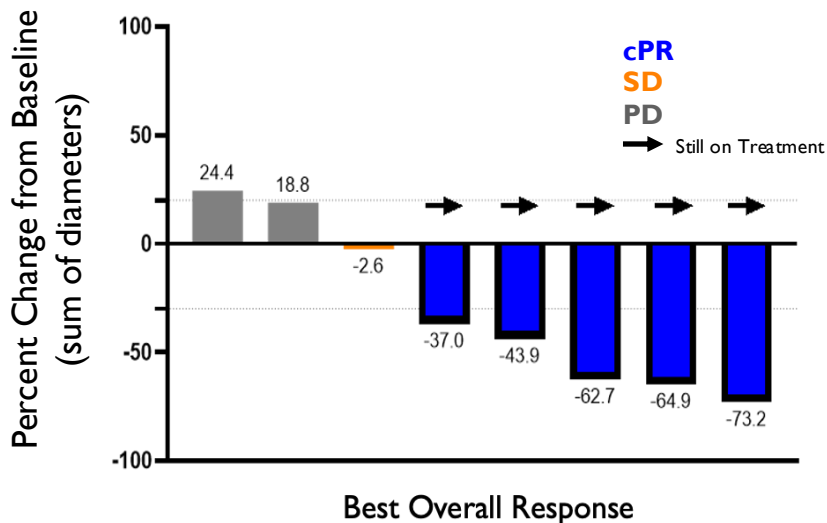
| <b>Endometrial Cancer</b> (data cut 25 July 2024)    |                           |                           |                         |
|--|---------------------------|---------------------------|-------------------------|
| <b>Overall Response</b>                              | <b>BM+ Monotherapy</b>    | <b>BM-LDG Combination</b> | <b>Total</b>            |
|  | N = 8                     | N = 15                    | N=23                    |
|  | N (%)                     | N (%)                     | N (%)                   |
| CR   | 0 (0)                     | 1 (7)                     | 1 (4)                   |
| cPR  | 5 (63)                    | 0 (0)                     | 5 (22)                  |
| uPR  | 0 (0)                     | 1 (7)                     | 1 (4)                   |
| SD   | 1 (13)                    | 6 (40)                    | 7 (30)                  |
| PD   | 2 (25)                    | 7 (47)                    | 9 (39)                  |
| <b>cORR (95% CI)</b>                                 | <b>62.5% (30.4, 86.5)</b> | <b>6.7% (0.84, 31.8)</b>  | <b>26% (12.3, 46.8)</b> |
| <b>OncoSignature BM+ vs BM-Segregation P = 0.009</b> |                           |                           |                         |

<sup>1</sup>Subjects with ≥1 on-treatment scan

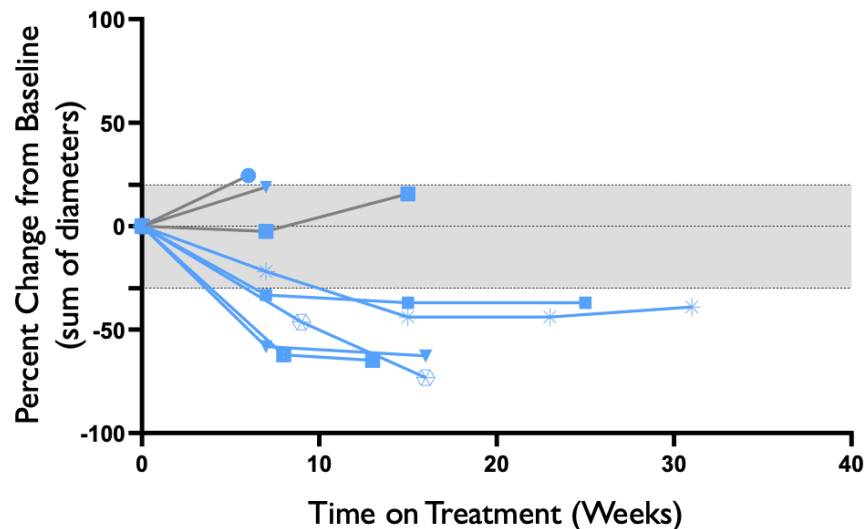
<sup>2</sup><https://ir.acrivos.com/news-events/events-presentations>

# CLINICAL ACTIVITY IN BM+ ENDOMETRIAL SUBJECTS WHO HAVE ALL PROGRESSED ON PRIOR ANTI-PD-1 THERAPY

**Confirmed ORR = 62.5%**  
**95% C.I. (30.4%, 86.5%)**

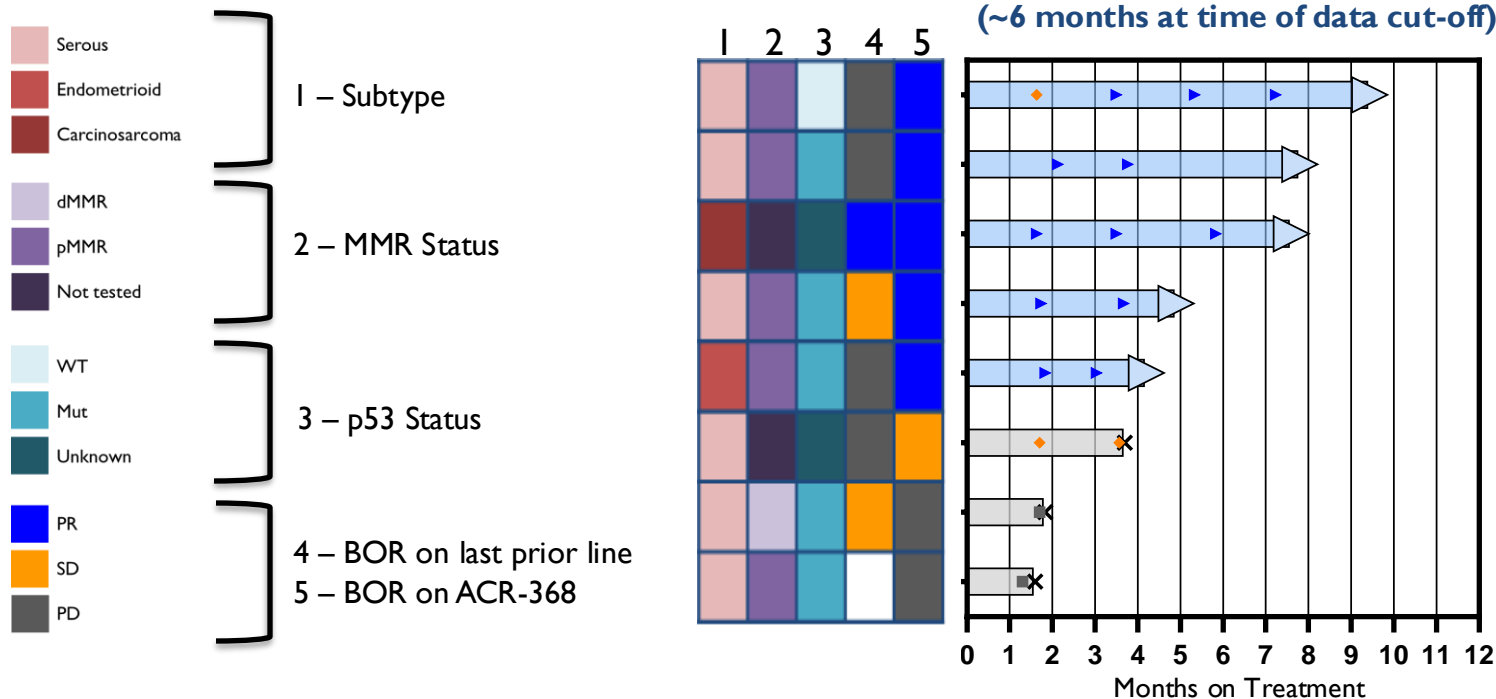


**Significant disease control (75%) with most RECIST responses occurring early**



Data cut as of 25 July 2024, includes all BM+ subjects

# ONGOING CONFIRMED RESPONSES IN BM+ ENDOMETRIAL SUBJECTS ACROSS SUBTYPES



- Durable responses in patients who all progressed on prior anti-PD-1 and whose BOR in last prior line was mostly PD
- Most patients are pMMR and p53 mutant, consistent with their prevalence in high grade endometrial cancer
- ACR-368 OncoSignature prediction is independent of molecular (incl. MMR) and histological subtype

Data current as of 25 July 2024

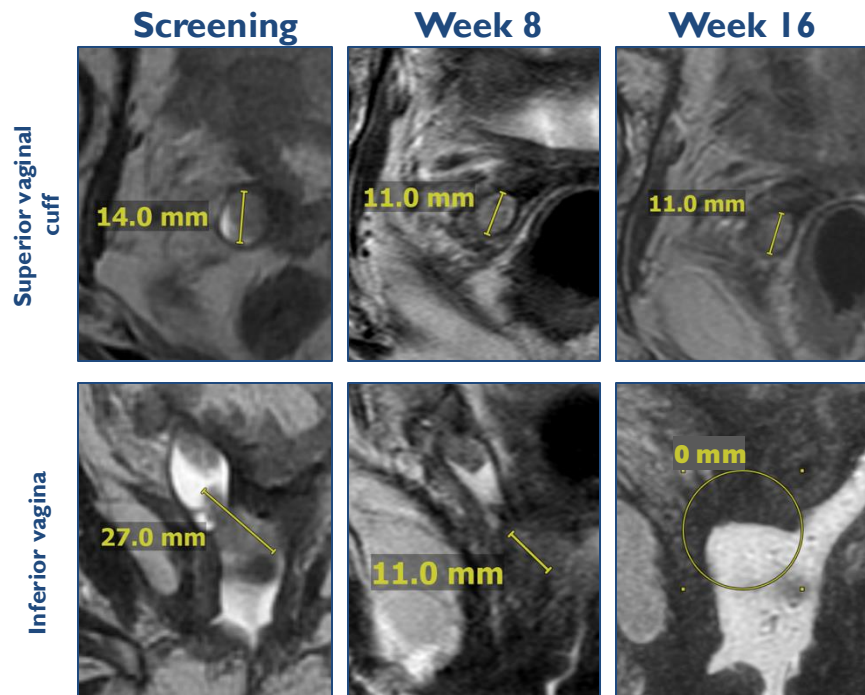
# CONFIRMED RESPONSES IN ENOMETRIAL SUBJECTS WHO ALL PROGRESSED ON PRIOR ANTI-PD-1

| Endometrial subtype | # Prior Lines | Last Prior Therapy (LPT) | BOR on LPT | BOR on ACR-368 |
|---------------------|---------------|--------------------------|------------|----------------|
| Serous              | 3             | Pembrolizumab/Lenvatinib | PD         | cPR            |
| Serous              | 2             | Pembrolizumab/Lenvatinib | PD         | cPR            |
| Endometrioid        | 4             | Cisplatin                | PD         | cPR            |
| Serous              | 1             | Pembrolizumab            | SD         | cPR            |
| Carcinosarcoma      | 2             | Pembrolizumab/Lenvatinib | PR         | cPR            |
| Serous              | 4             | Liposomal doxorubicin    | PD         | SD             |
| Serous              | 3             | Pembrolizumab/Lenvatinib | UNK        | PD             |
| Serous              | 3             | Pembrolizumab/Lenvatinib | NA         | PD             |

- All confirmed responders progressed on prior PD-1 therapy and majority had BOR = PD on last prior line of therapy
- Only 1 RECIST response amongst 6 patients with BOR data from LPT

BOR = Best Overall Response, UNK = unknown, NA = not applicable, NT = not tested  
 Data shown current as of 25Jul2024 and includes all efficacy-evaluable (at least one scan on-treatment) BM+ subjects

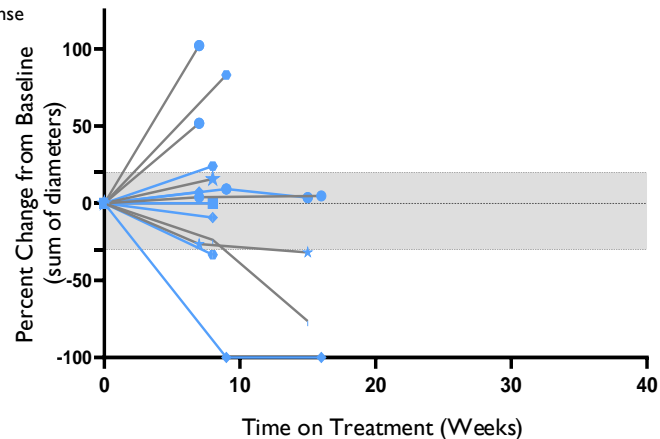
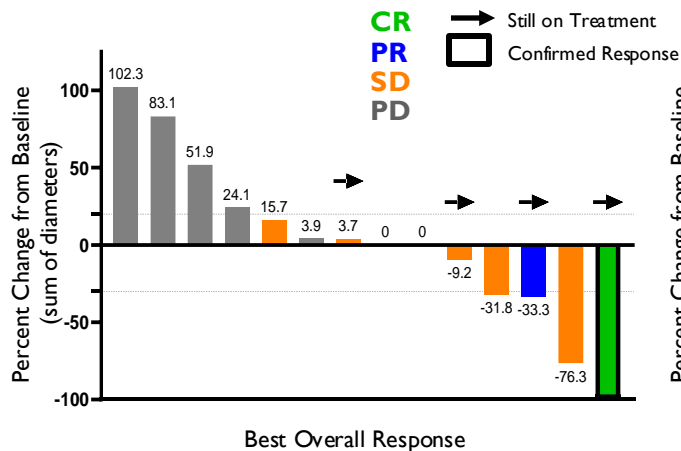
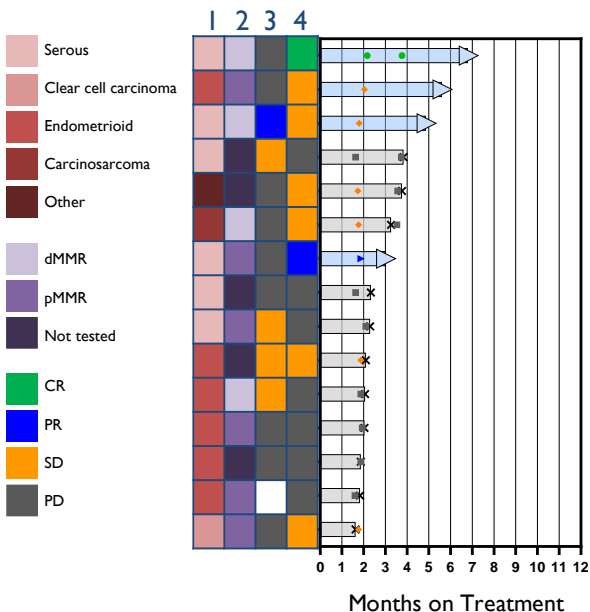
# DEEP, RAPID RESPONSES SEEN IN PATIENTS WITH LARGE TUMOR LESIONS



- 72-yo female with Stage III serous endometrial carcinoma (pMMR)
- PD on last prior line (pembrolizumab/lenvatinib)
- Confirmed PR at Week 16
- 73% overall decrease in sum of target lesions from baseline



# EVIDENCE OF LDG SENSITIZATION IN PROPORTION OF BM- ENDOMETRIAL SUBJECTS IN EXPLORATORY PHASE 1B/2 TRIAL



- Initial disease control (1 cCR, 1 uPR, and 6 SD) observed in a proportion of BM- subjects
- LDG sensitization may potentially increase ORR across BM+ and BM- patients

Data current as of 25 July 2024, includes all BM- subjects enrolled at RP2D for LDG (10 mg/m<sup>2</sup>).  
 1 – Histology; 2 – MMR; 3 – BOR on most recent prior line; 4 – BOR on ACR-368 + LDG

# ENCOURAGING SAFETY PROFILE IN ENDOMETRIAL SUBJECTS

- Limited, predominantly transient, reversible, mechanism-based hematological AEs, which typically occurred during the first 1-2 cycles of therapy
- Notable absence of long-lasting myelosuppression or the typical more severe non-hematological AEs commonly seen with ADCs and chemotherapy

| Treatment-Related Adverse Events of Note | ACR-368 (BM+) |            | ACR-368 + LDG (BM-) |            |
|--|---------------|------------|---------------------|------------|
|  | N = 12        |            | N = 23              |            |
|  | All (%)       | Gr 3/4 (%) | All (%)             | Gr 3/4 (%) |
| Thrombocytopenia                         | 6 (50)        | 2 (17)     | 12 (52)             | 8 (35)     |
| Anemia                                   | 4 (33)        | 3 (25)     | 12 (52)             | 9 (39)     |
| Neutropenia                              | 3 (25)        | 3 (25)     | 7 (30)              | 7 (30)     |
| Febrile Neutropenia                      | 0             | 0          | 3 (13)              | 3 (13)     |
| Fatigue                                  | 3 (25)        | 0          | 7 (30)              | 0          |
| Vomiting                                 | 3 (25)        | 0          | 2 (9)               | 0          |
| Diarrhea                                 | 2 (17)        | 0          | 2 (9)               | 0          |
| Infusion Reaction                        | 0             | 0          | 1 (4)               | 0          |
| Hypertension                             | 0             | 0          | 1 (4)               | 1 (4)      |
| Dyspnea                                  | 0             | 0          | 2 (9)               | 0          |

ACR-368 data current as of 25 July 2024 and includes the safety population of endometrial carcinoma subjects (any subject who has received at least one dose of ACR-368) enrolled (BM+ and BM-) and at the RP2D for LDG (BM-). Prophylactic G-CSF encouraged in BM+ and mandated in BM- subjects (compatible with q14d dosing regimen).

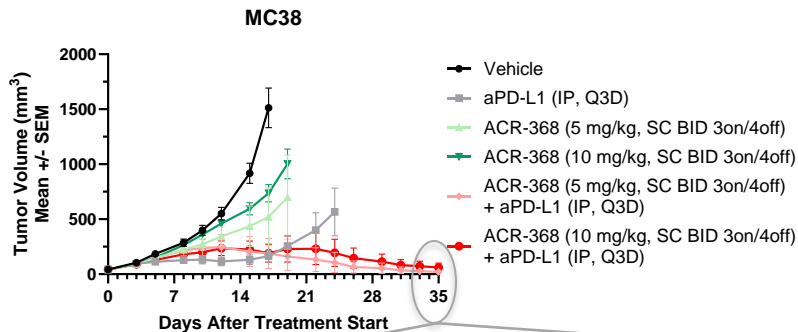
# DEVELOPMENT PATH FOR ACR-368 IN ENDOMETRIAL CANCER

- Accelerated approval pathway
  - Ongoing single arm registrational intent Phase 2 monotherapy endometrial cancer trial represents the first potential approval opportunity for ACR-368
- Confirmatory trial strategy
  - Evaluating options to potentially move towards new front line setting
    - Randomization anti-PD-I vs [anti-PD-I/anti-PD-L1 + ACR-368] post [C/P + anti-PD-I] (sub-group analysis; MMR status in all-comer)\*
  - Potential  $\geq 2$ nd line options:
    - ACR-368 + ULDG in all-comer patients

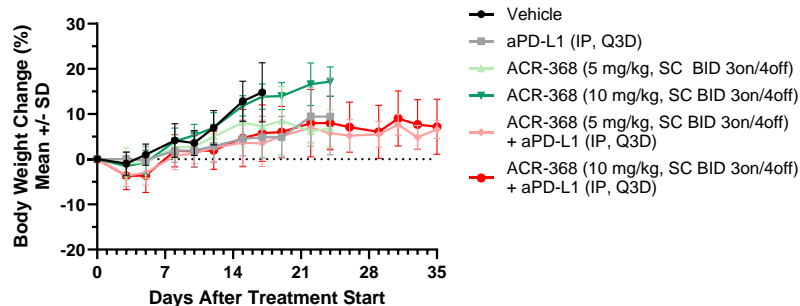
\*Based on current clinical data showing cPRs in patients progressing on prior anti-PD-I, clinical safety data on ACR-368 + anti-PD-I, and strong rationale and preclinical data demonstrating additive/synergistic activity of ACR-368 and anti-PD-I (Refs: Do KT et al, Cancer Immunol Immunother, 2021; Lyer et al, Cancer Disc 2021; McGrail et al, Sci Transl Med 2021; Sen et al, Cancer Disc 2019)

# POTENT SYNERGY OF ACR-368 WITH ANTI-PD-L1 IN MC38 SYNGENEIC MOUSE TUMOR MODEL (DEEP PR'S AND CR'S)

## Tumor Volume

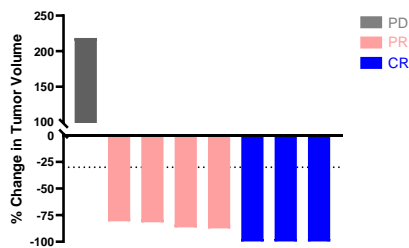
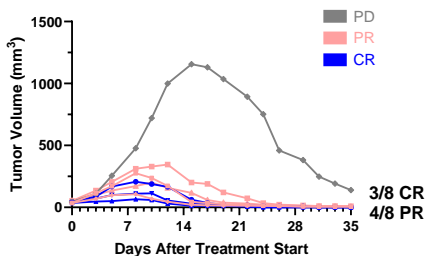


## Body Weight Change



Average TV at start of treatment 43 mm<sup>3</sup>

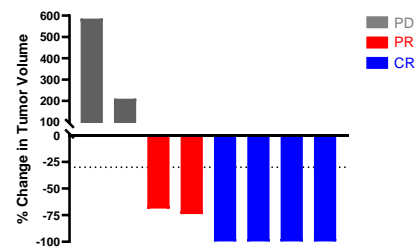
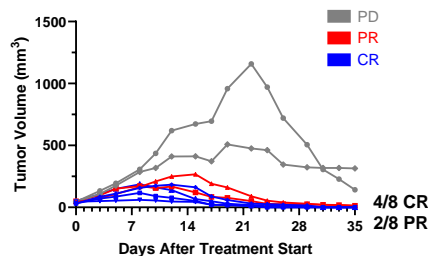
## ACR-368 (5 mg/kg) + anti-PD-L1



Dosing stopped in Day 34.

4/8 PRs (TV < 10 mm<sup>3</sup>) showed no sign of tumor regrowth after 12 days off-treatment, suggesting 7/8 total CRs.

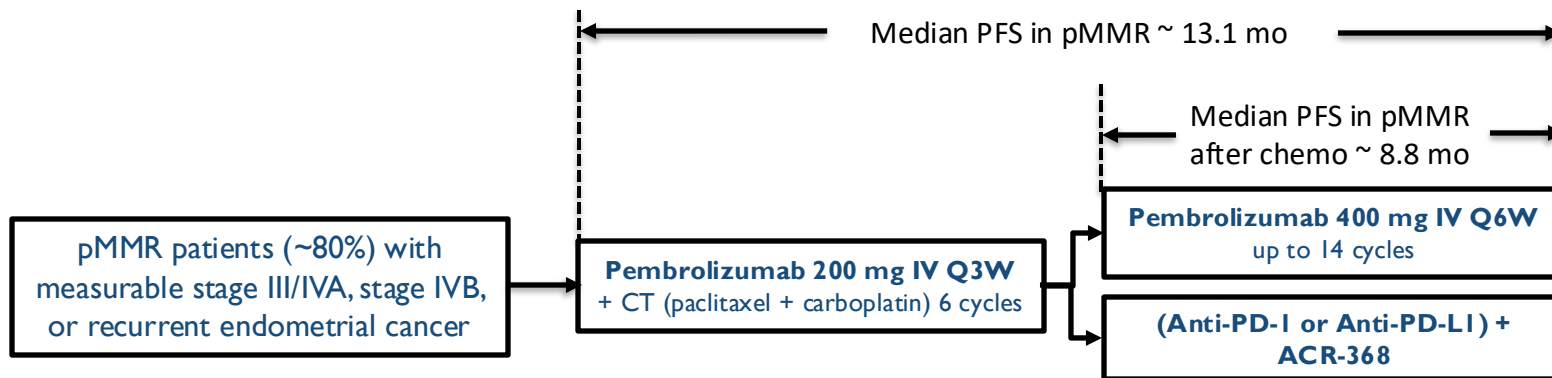
## ACR-368 (10 mg/kg) + anti-PD-L1



Dosing stopped in Day 34.

3/8 CRs showed no sign of tumor regrowth after 12 days off-treatment.

# CONFIRMATORY TRIAL OPTION: FIRST LINE LABEL EXPANSION OPPORTUNITY WITH ACR-368 AS SWITCH MAINTENANCE



## Large addressable total annual market (TAM) opportunity (US only)

- OncoSignature+ patients:  $\sim(30,000 \text{ EC} \times 80\% \text{ pMMR} \times 30\% \text{ BM+} \times >10 \text{ months mPFS})$
- All-comer patients:  $\sim(30,000 \text{ EC} \times 80\% \text{ pMMR} \times >10 \text{ months mPFS})$

# ACR-368 POTENTIAL IN HIGH UNMET TUMOR TYPES BEYOND ENDOMETRIAL, OVARIAN, AND BLADDER CANCER

- Myelodysplastic Syndrome (MDS) and Myeloproliferative Neoplasms (MPN):
  - Prevalent (~50%) mutations in splicing factor (SF) genes (SF3BI, U2AF1, SRSF2) resulting in hyperactivated CHK<sup>1,2</sup>
  - Preclinical murine transplant studies of SF3BI-mutated human HSCs show potent ACR-368 single agent activity
  - High unmet need and prevalence (>400K in the US), decades of blood transfusion dependency, fatal myelofibrosis
  
- Squamous Cell Cancer (SCC):
  - ACR-368 has also shown promising clinical activity in HPV+ SCC and sarcomas<sup>3</sup>
  - HPV+ SCC increasing incidence (~50K+/y/US); ~75% oropharyngeal H&N, ~20% of esophageal, ~90% of cervical, and 95% of anal cancers<sup>4</sup>
  - SCCHN: Dr. Chung, Moffitt Cancer Center has begun an IIT (ACR-368 + ULDG post anti-PD-I

**RECRUITING** ⓘ

**A Phase II Study of ACR-368 and Low Dose Gemcitabine in R/M HNSCC**

ClinicalTrials.gov ID ⓘ NCT06597565

Sponsor ⓘ H. Lee Moffitt Cancer Center and Research Institute

Information provided by ⓘ H. Lee Moffitt Cancer Center and Research Institute (Responsible Party)

Last Update Posted ⓘ 2024-09-19

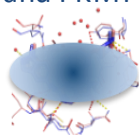
<sup>1</sup>Sarchi et al, Blood Cancer Discovery 2024; <sup>2</sup>Malcovati et al, NEJM 2011

<sup>3</sup>Hong et al, CCR 2018, Slotkin et al, ASCO Annual Meeting 2022; <sup>4</sup>CDC 2023; ICO/IARC Information Centre on HPV and Cancer 2023; Gribb et al, Dela J Public Health 2023, NCI 2023

# INTERNAL PIPELINE: AP3-BASED DRUG DISCOVERY

## Program 1: ACR-2316, a novel dual WEE1/PKMYT1 inhibitor

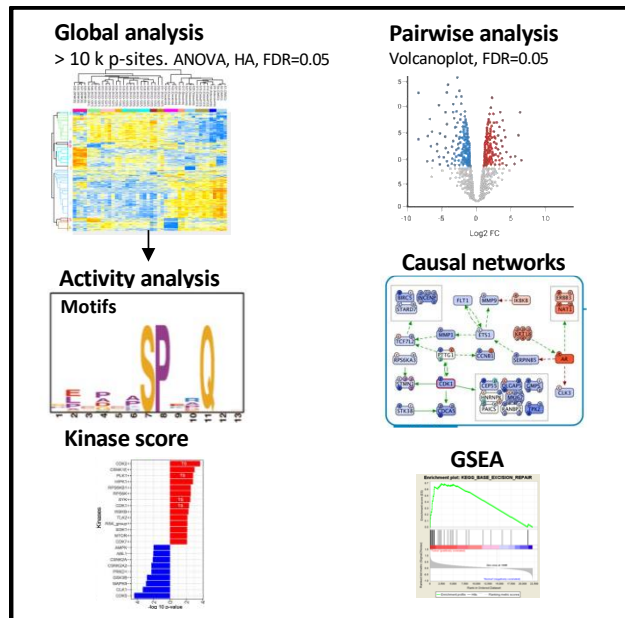
- >40 high resolution co-crystals (1.5-3.1 Å) and novel WEE1- and PKMYT1-selective structural series and lead candidates
- ACR-2316 a novel, potent, selective dual inhibitor
- Designed by AP3 to overcome WEE1 and PKMYT1 single inhibitor resistance
- IND cleared and clinical sites activated Q3 2024
- First in human dosing started October 2024



## Program 2: Cell cycle inhibitor with an undisclosed target

- Anticipated development candidate 2025

## High throughput AP3 profiling



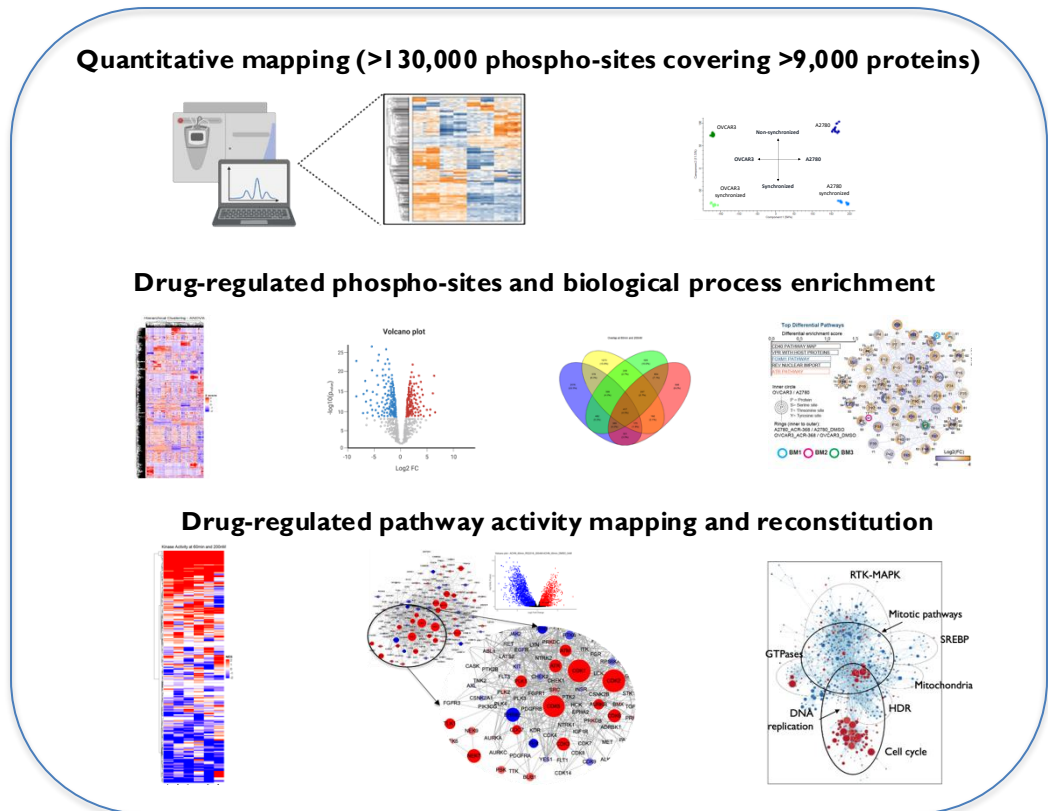
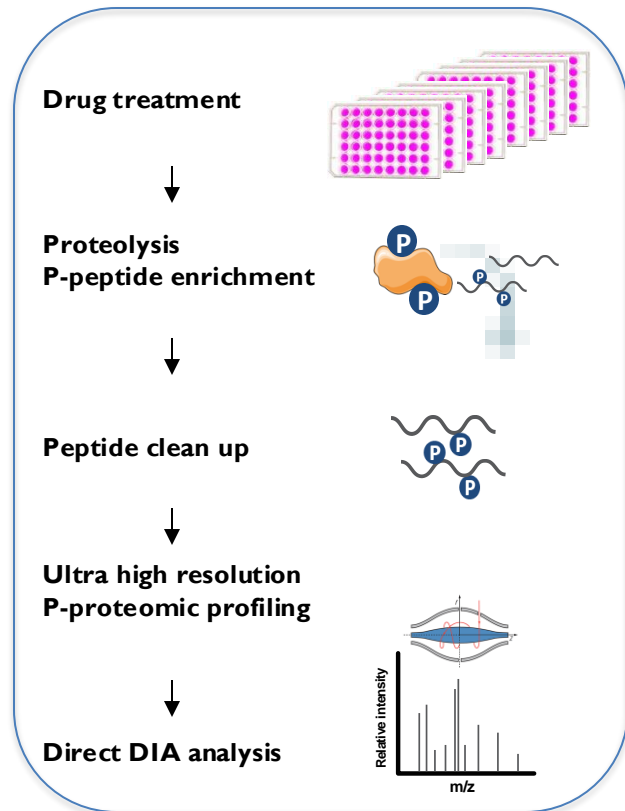
AP3 used for biologically relevant selectivity profiling

# ACR-2316, A NOVEL WEE1/PKMYTI INHIBITOR UNIQUELY ENABLED BY AP3

- *Optimized for superior single agent activity and therapeutic index*
- *Streamlined development: Internally discovered and advanced in 15 months from initial lead to first patient dosed in phase I*



# AP3 MASS SPECTROMETRY: STREAMLINED WORKFLOW WITH MACHINE LEARNING-AMENABLE, STRUCTURED ANALYSES



Week 0

Turn-around  
<2 weeks

Week2

High resolution and throughput MS-based P-proteomics

Proprietary pipe for automated AP3 analyses with actionable results

# AP3: TIGHT, HIGH-RESOLUTION DATA WITH DEEP COVERAGE

117,200 p-sites

43,000 p-sites

QC MS Data

Data Clean Up

QC Processed Data

Volcano Plots

Hierarchical Clustering

Consensus Sequence Motif

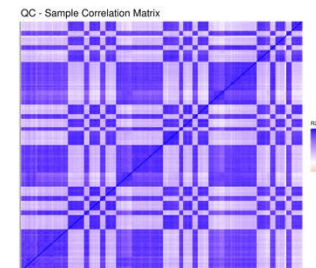
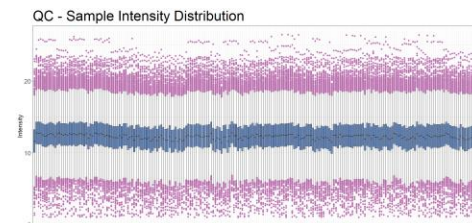
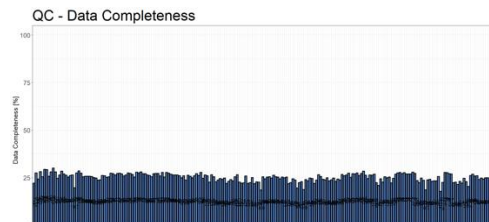
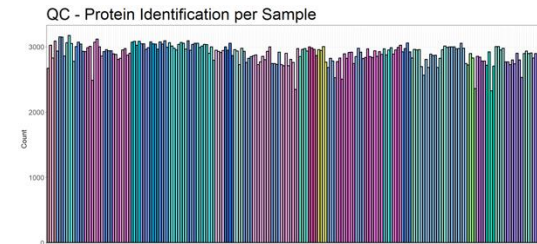
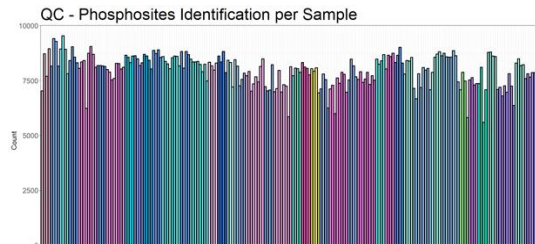
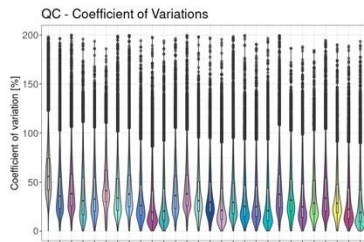
Kinase Inference

Pathway Enrichment

Functional Annotation

Network Mapping

Biomarkers

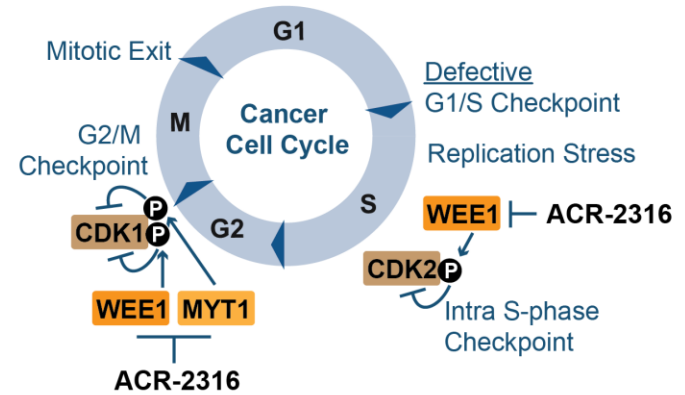


- ✓ Acrivon proprietary compound data (>150 million data points per experiment)
- ✓ Several hundred samples (quadruplicates) in each experiment; >100 compounds profiled
- ✓ Miniaturized, high throughput, scalable: <2 week turn-around, automated AI computational analyses in 1 day

Actionable AP3 results: Resistance mechanisms, rational combinations, indication finding, response prediction

# INHIBITORS OF EITHER WEE1 OR PKMYT1 HAVE SHOWN LIMITED SINGLE AGENT ACTIVITY AND NARROW THERAPEUTIC INDEX

- WEE1 and PKMYT1 regulate S and G2-M cell cycle checkpoints to ensure proper DNA replication and mitotic completion
- Defective DNA repair is highly prevalent in cancers, creating a dependency on checkpoint proteins
- WEE1 inhibition propagates genomic instability by premature DNA replication and cell cycle progression
- PKMYT1 inhibition results in premature mitotic entry



- Several WEE1 inhibitors and a PKMYT1 inhibitor have demonstrated anti-tumor activity in clinical trials across solid tumor types
- Current clinical agents challenged by lack of predictive biomarkers and narrow therapeutic index, limiting safety and efficacy

# ACR-2316: UNIQUELY ENABLED BY AP3 TO OVERCOME LIMITATIONS OF CURRENT WEE1 AND PKMYT1 INHIBITORS

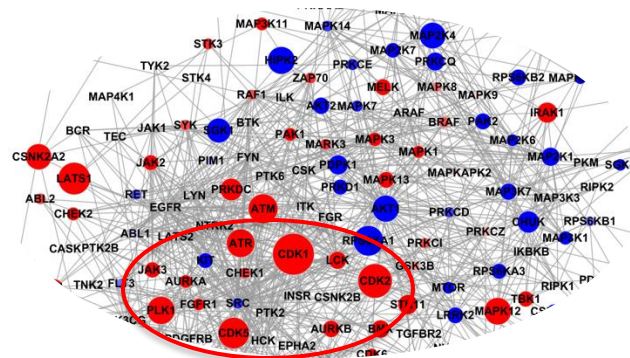
## Program goals (superior therapeutic index):

- **Superior single agent activity (AP3)**
  - Potent activation of CDK1, CDK2, and PLK1 and quenching of resistance through balanced WEE1/PKMYT1 inhibition to ensure robust pro-apoptotic tumor death
- **High selectivity for minimal AEs (co-crystallography)**
  - Structure-guided design to limit adverse events (AEs) to be strictly mechanism-based, transient, short-lived
- **Streamlined clinical development (ACR-2316 OncoSignature)**
  - To identify/prioritize sensitive indications prior to clinical start and for drug target engagement-based dose optimization during Phase I

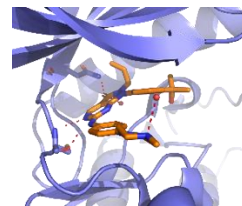
### ACR-2316: Rationally designed WEE1/PKMYT1 inhibitor

- ✓ Superior anti-tumor efficacy with complete tumor regression across models
- ✓ High selectivity ensures transient, short-lived, mild AEs
- ✓ Potent WEE1 inhibition, balanced PKMYT1 inhibition, overcomes resistance and enables robust activation of CDK1, CDK2, and PLK1 for mitotic catastrophe

AP3 used for pathway-based optimization to achieve superior single agent activity



Co-crystallography for drug design and selectivity



Zhu et al, J. Med. Chem. (2017)

# ACR-2316 IS A POTENTIALLY BEST- AND FIRST-IN-CLASS AGENT DESIGNED USING ACRIVON'S AP3 PLATFORM

## Program Goals

- 1 Superior single agent activity
- 2 High selectivity and potency
- 3 Favorable ADME-PK, Therapeutic Index, and safety profile
- 4 Streamlined clinical development

AP3-Enabled SAR

## Demonstrated Preclinical Results

- Superior\* single agent anti-tumor activity through robust CDK1, CDK2, and PLK1 activation and elimination of dominant PKMYT1 resistance
- 5-20-fold more potent\* in preclinical models than clinical benchmarks; complete tumor regression
- Potent tumor cell killing, short elim.  $T_{1/2}$ , and high selectivity at weekly on-off schedule results in only transient, reversible, mechanism-based AEs
- Broad preclinical therapeutic index and anti-tumor activity across all dosing regimens
- AP3-based identification of PD biomarkers and prioritization of promising indications

\*Head-to-head preclinical studies against benchmarks with clinical data

# ACR-2316 SHOWS SUPERIOR PRECLINICAL POTENCY VS BENCHMARK WEE1/PKMYT1 INHIBITORS<sup>1</sup>

|                     |                       | ACR-2316 <sup>2</sup> | SGR-3515 <sup>3</sup> | Azenosertib <sup>2</sup>     | Lunresertib <sup>2</sup>      | Adavosertib <sup>2</sup> | Debio0123 <sup>2</sup> |
|---------------------|-----------------------|-----------------------|-----------------------|------------------------------|-------------------------------|--------------------------|------------------------|
| Binding (nM)        | WEE1                  | 1                     | 0.06                  | 2<br>vs 1.2                  | 31<br>vs ND                   | 1                        | 1                      |
|                     | PKMYT1                | 27                    | 15                    | 337<br>vs 300                | 10<br>vs 0.02                 | 155                      | >2000                  |
| Cellular TE (nM)    | WEE1                  | 2                     | 65                    | 16<br>vs 280                 | > 5000<br>vs 4200             | 19                       | 109                    |
|                     | PKMYT1                | 145                   | 230                   | > 5000<br>vs 4600            | 11<br>vs 54                   | 4000                     | >5000                  |
| Viability IC50 (nM) | A427<br>(Mean)        | 30                    | 80                    | 289<br>vs 200                | 352<br>vs 280                 | 180                      | 541                    |
|                     | All Lines<br>(Median) | 50<br>(n=27)          | 92<br>(n=139)         | 340 (n=27)<br>vs 319 (n=120) | 281<br>vs 782 (n=91)          | 249 (n=27)               | 680 (n=23)             |
|                     | All Lines<br>(Range)  | 10-286<br>(n=27)      | 15-716<br>(n=139)     | 53 to > 1000<br>(vs 10-7913) | 33 to > 1000<br>(vs 10-10000) | 52 to 920<br>(n=27)      | 184 to >1000<br>(n=23) |

Black text = Acrivon Data; Grey text = Schrodinger Data

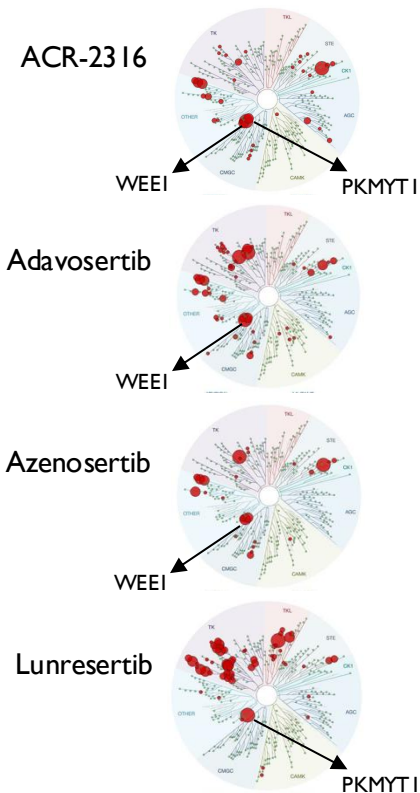
<sup>1</sup>Head-to-head preclinical studies against benchmarks with clinical data

<sup>2</sup>Binding and cellular target engagement data for ACR-2316 vs. azenosertib, lunresertib, adavosertib and Debio 0123 presented at AACR 2024

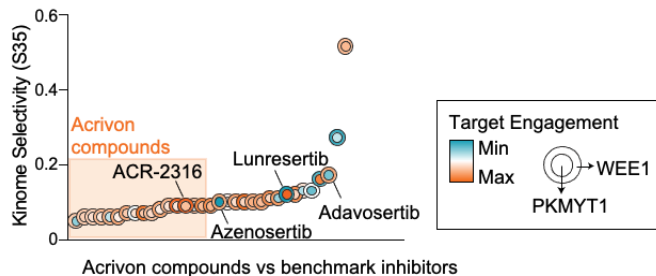
<sup>3</sup>SGR-3515 preclinical data presented at ENA-2024

# DUAL WEE1/PKMYT1 INHIBITOR ACR-2316 DEMONSTRATES STRONG POTENCY AND SELECTIVITY

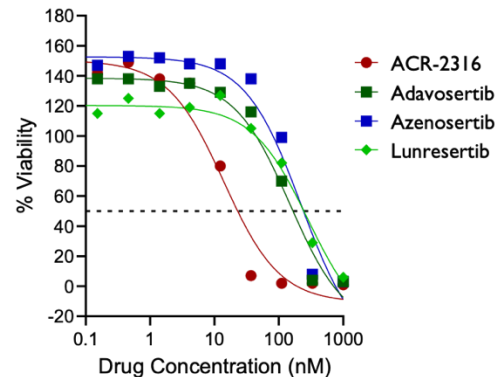
KinomeScan (468 kinases @ 1  $\mu$ M)



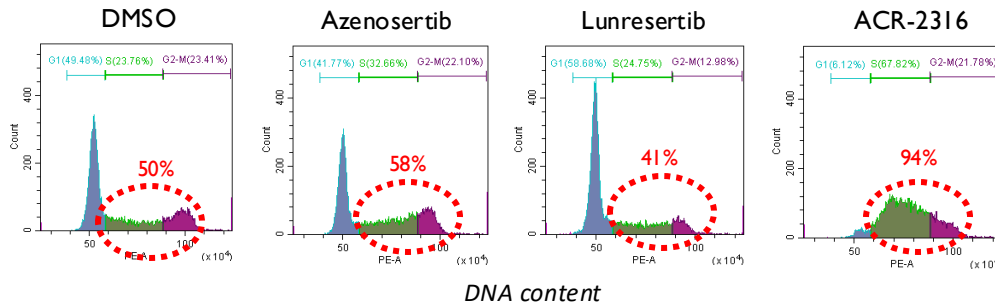
ACR-2316 is highly selective (KinomeScan)



ACR-2316 potently inhibits cancer cell viability

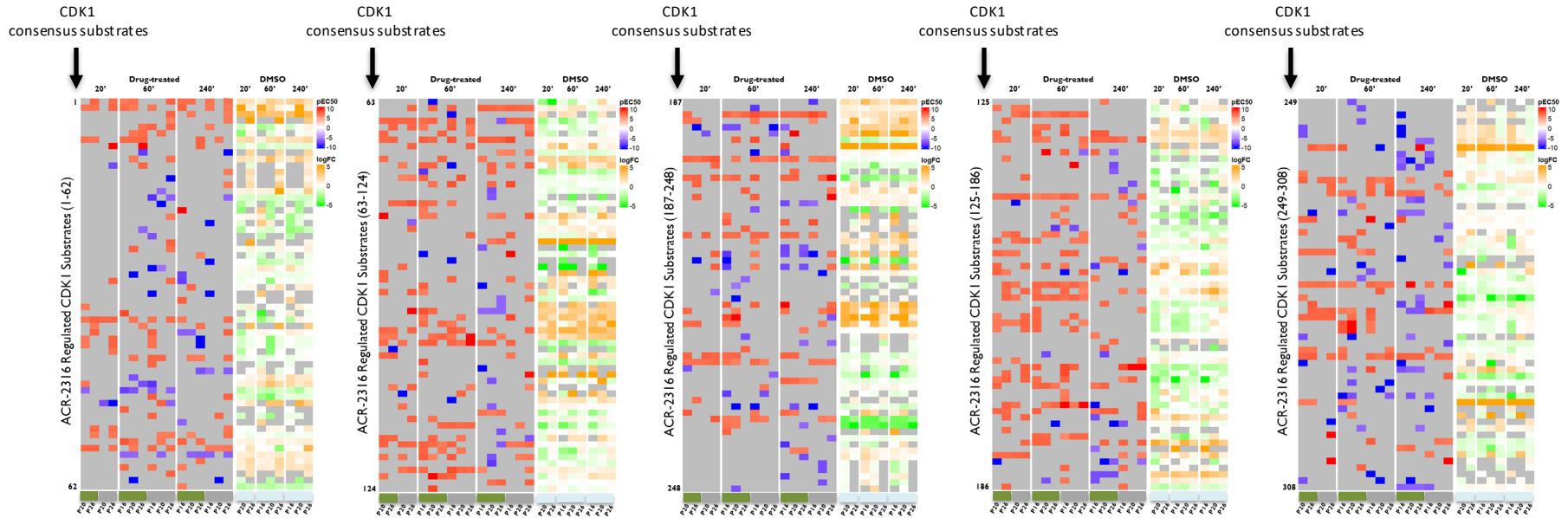


ACR-2316 exerts potent cell cycle effects with pronounced S-G2/M accumulation



100 nM, 24 hour

# ACR-2316 RESULTS IN STRONG ACTIVATION OF CDKI ACROSS CELL LINES



- Unbiased quantitation of ACR-2316-regulated CDK1 substrate p-sites (308) in intact cells based on CDK1 consensus recognition motif (Acrivon proprietary hybrid database approach) across multiple experiments
- Actionable insight into drivers of mitotic catastrophe and on-target CDK1-driven pathways

Sens.

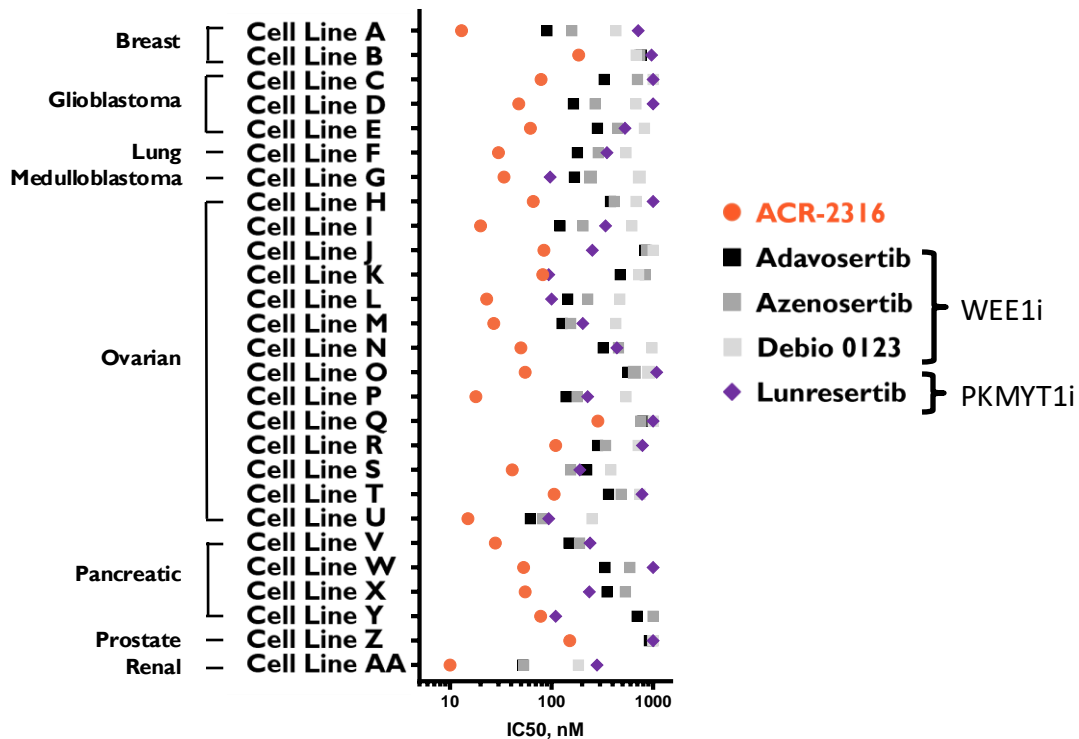
Res.

DMSO

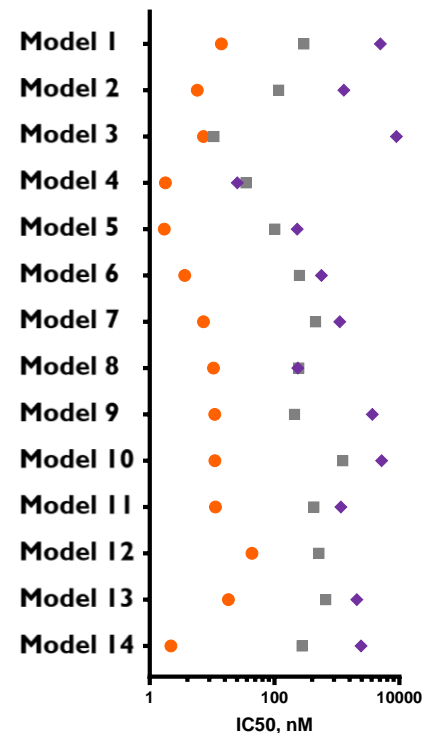


# ACR-2316 IS HIGHLY POTENT ACROSS HUMAN TUMOR CELL LINES AND PATIENT-DERIVED *EX VIVO* TUMOR MODELS

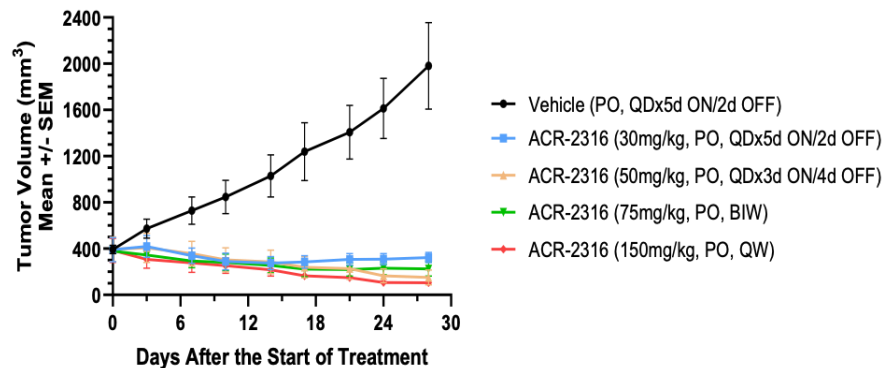
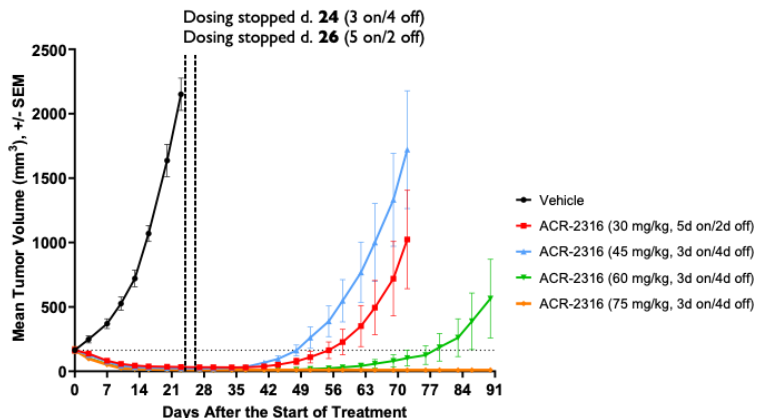
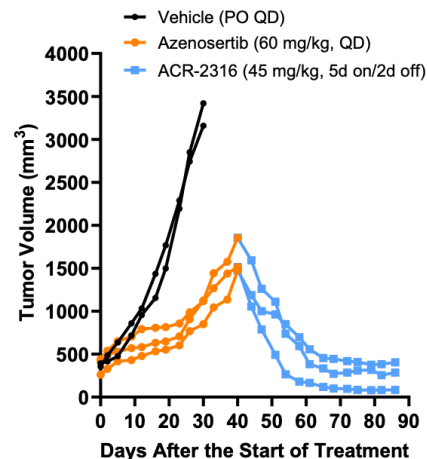
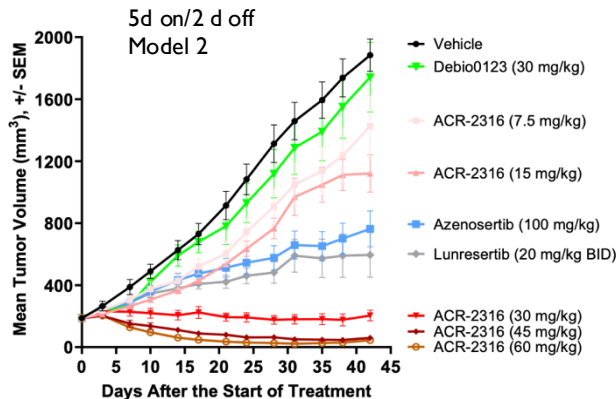
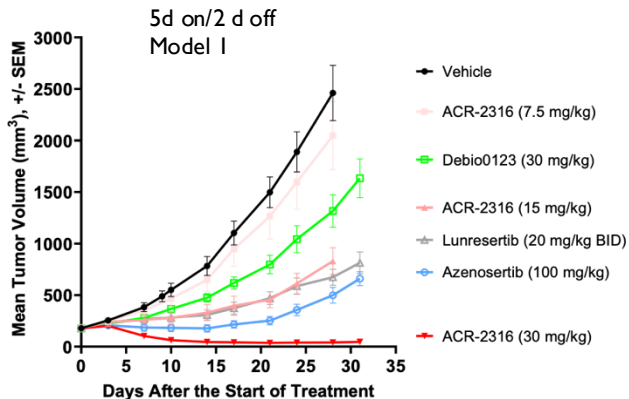
## Human tumor cell lines (not genetically selected)



## Patient-derived *ex vivo* ovarian tumor models



# ACR-2316 INDUCES COMPLETE TUMOR REGRESSION ACROSS MODELS AND DOSING REGIMENS



# ACR-2316 - FAVORABLE PRECLINICAL SAFETY PROFILE

## Mice:

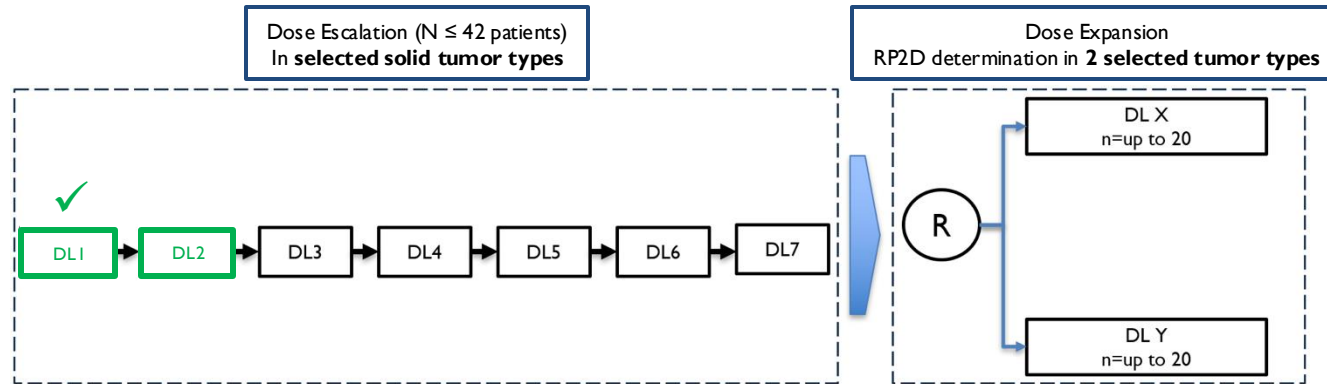
- ACR-2316 was well-tolerated, resulting in tumor regression in xenograft mouse models at multiple dosing regimens (qw, 2qw, 3d on/4d off, 5d on/2d off, and qd)
- Transient, reversible, mechanism-based hematological adverse events

## Rat and dog MTD, DRF, and GLP tox studies:

- GLP tox studies (31 days) completed in rat and dog with the same dosing regimen that is used in the ongoing trial and achieving exposure required for tumor regression
- Adverse events were mechanism-based, short-lived, reversible and limited to dividing myeloid progenitors and gastrointestinal tract

The broad therapeutic index observed across all our preclinical studies conducted with the same dosing regimen used in our ongoing Phase I trial is consistent with the predicted target human exposure required for anti-tumor activity and anticipated reversibility of mechanism-based AEs

ACR-2316-101: Phase I study of ACR-2316 in subjects with advanced solid tumors

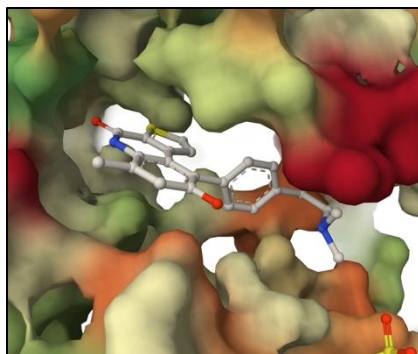
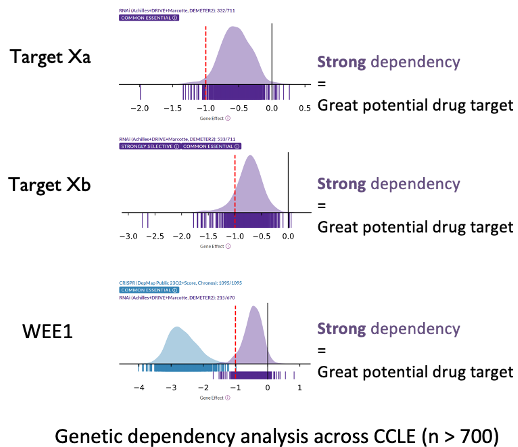


Aiming for streamlined clinical development:

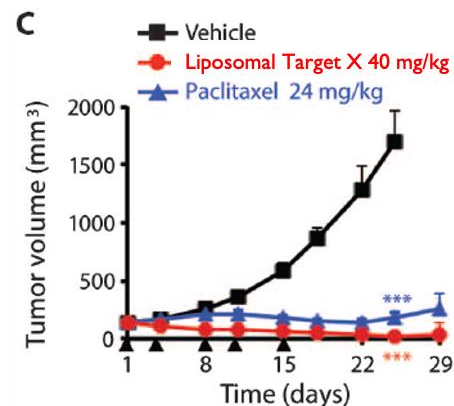
- ACR-2316 advanced in 15 months from initial lead into Phase I uniquely enabled by AP3
- AP3-based indication finding has identified highly commercially attractive indications
- Dose optimization guided by drug target engagement aligned with Project Optimus

## PROGRAM 2: CELL CYCLE REGULATOR (UNDISCLOSED TARGET)

- Target X – an exciting cancer drug target, no/minimal competitor programs, perfectly suited for AP3 platform
- DepMap data suggest suggest target X is an essential gene for cancer cell viability
- Strong mechanistic target rationale for role in oncogenesis
- Highly selective tool compound shows strong anti-tumor efficacy in rodent models
- Tool compound AP3 profiling supports selectivity
- New preclinical program leveraging co-crystallography and AP3 infrastructure successfully built for ACR-2316



Tool compound is a selective target X inhibitor  
(originally believed to be inhibitor for another target)



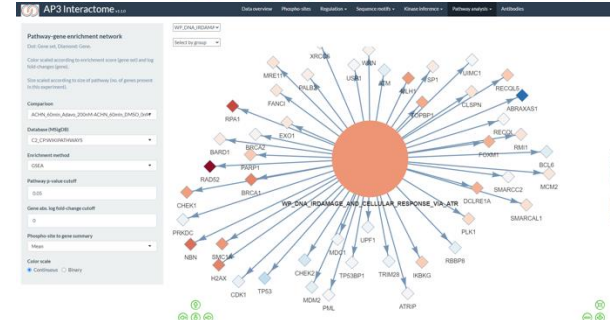
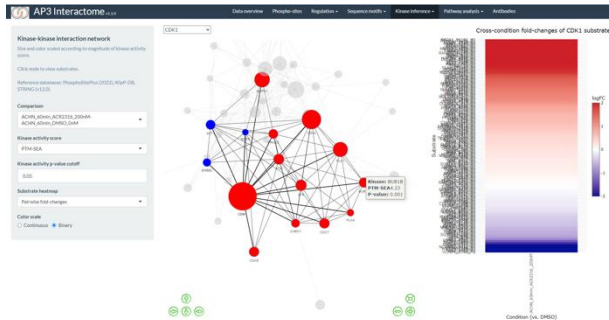
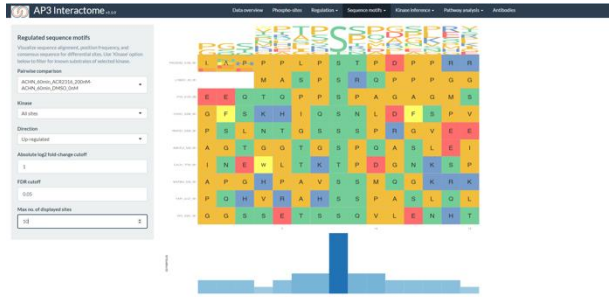
Development candidate 2025

# AP3 INTERACTOME V.2: PROPRIETARY INTERACTIVE DATA ANALYSIS INFRASTRUCTURE

Actionable data across all AP3 experiments accessible for all Acvion scientists  
Fully scripted, algorithm-based machine learning-enabled pathway and biomarker analyses

~150,000 phosphosites

~50,000 phosphosites

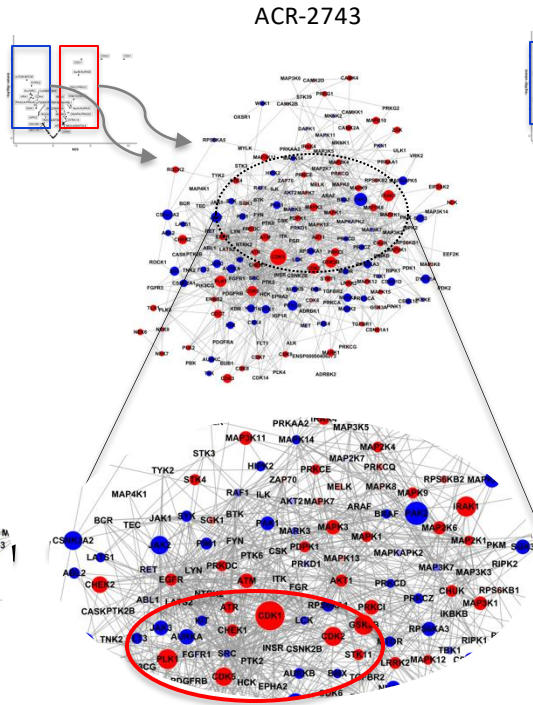
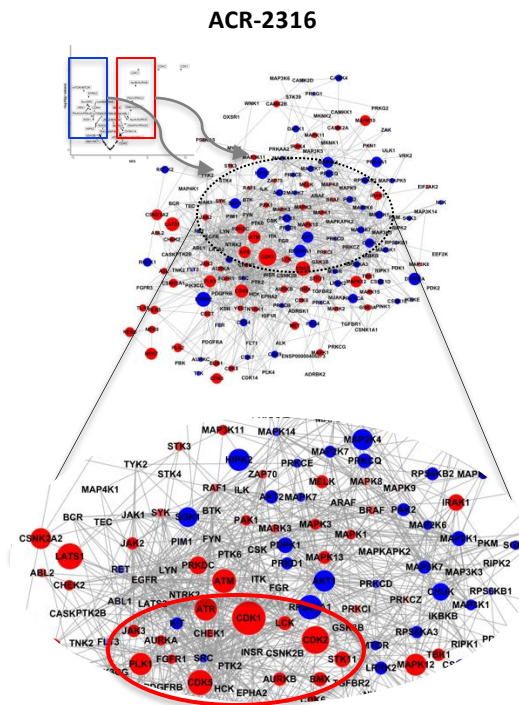
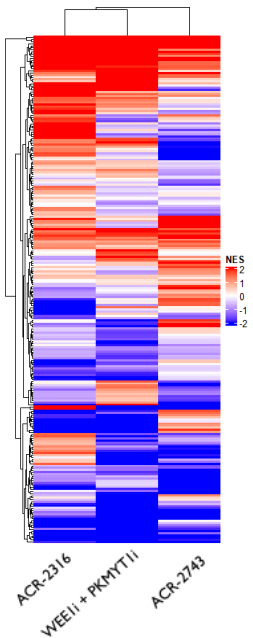




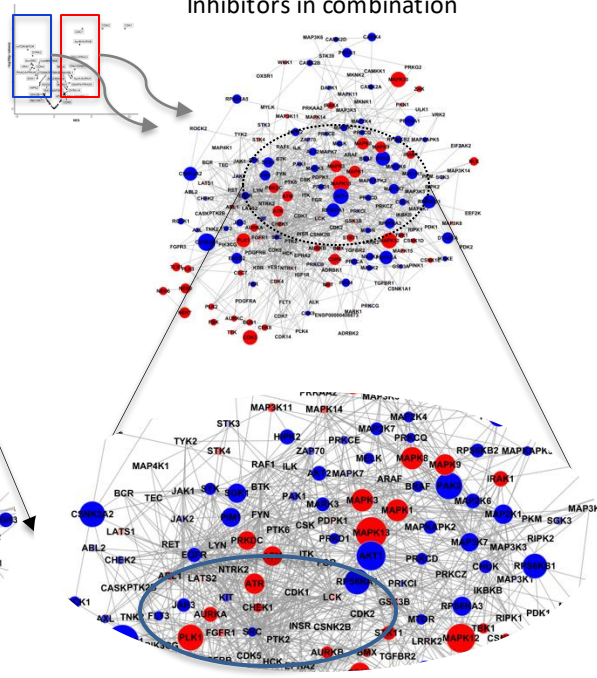
# OPTIMIZED DUAL INHIBITORS SHOW DESIRABLE PATHWAY EFFECTS

Optimized dual WEE1 and PKMYT1 inhibitors affect cell cycle and canonical MAPK pathways in desirable manner

Substrate motif-inferred kinase activities



Benchmark\* WEE1 + PKMYT1 Inhibitors in combination

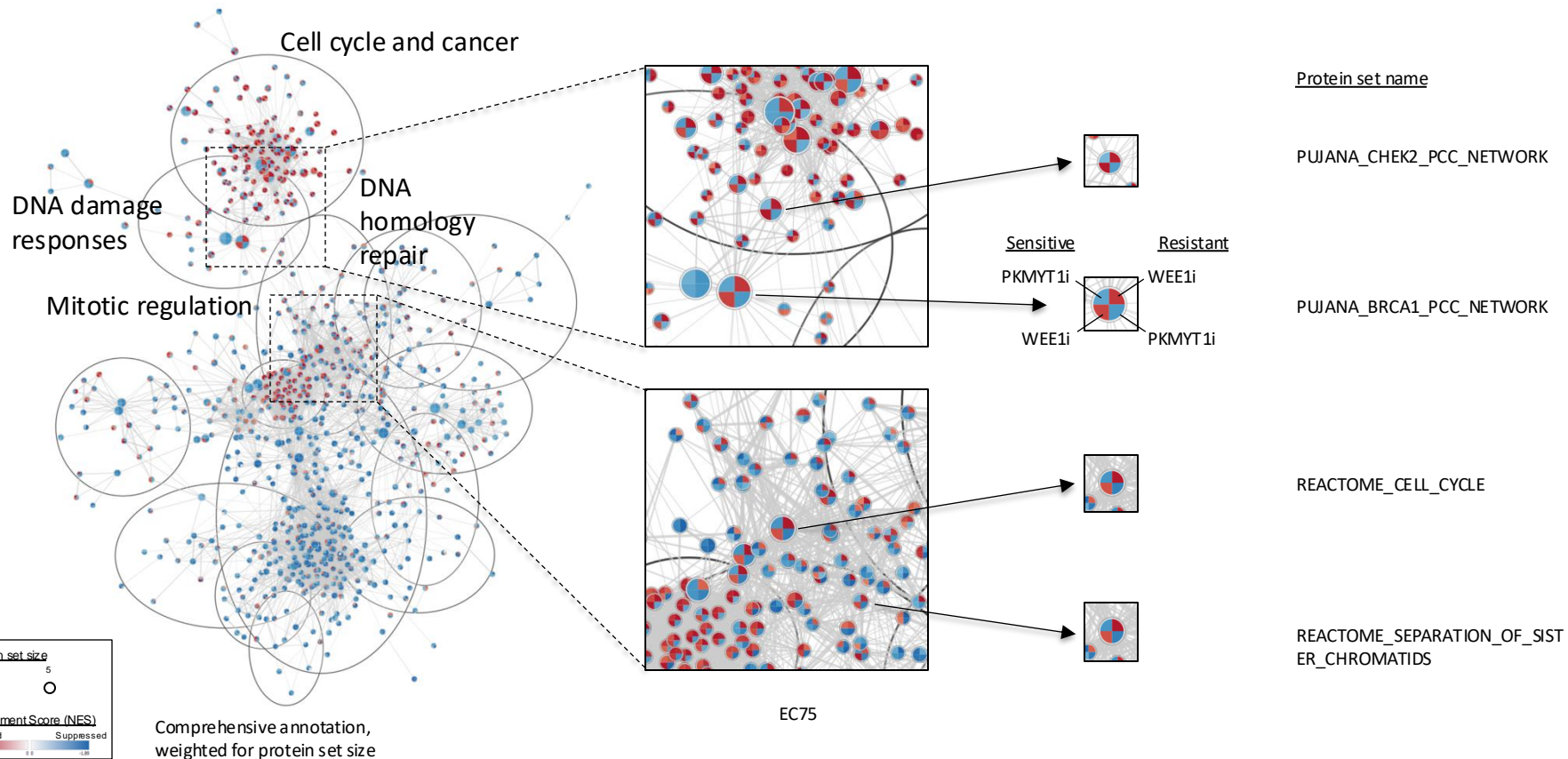


Kinase activity based on proprietary PTM-SEA-based hybrid workflow and analyses

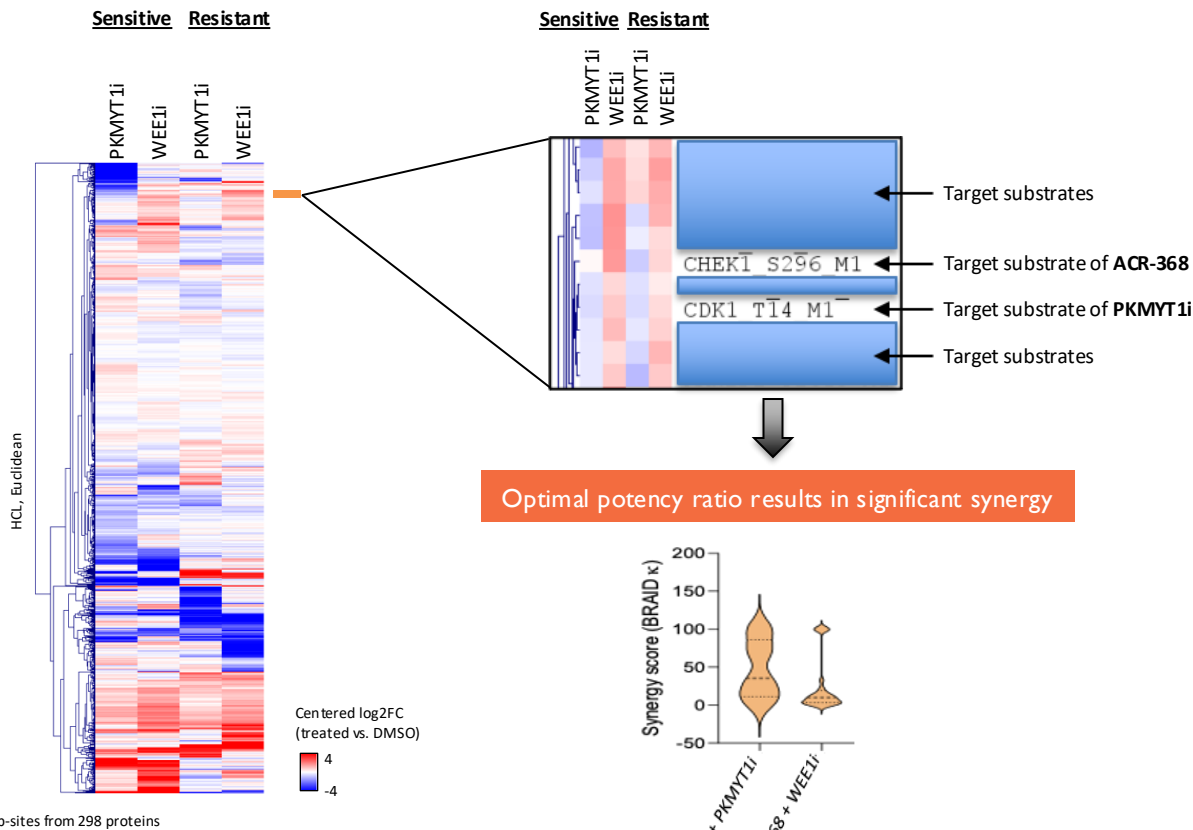
\*Clinical-stage selective WEE1 and PKMYT1 inhibitors



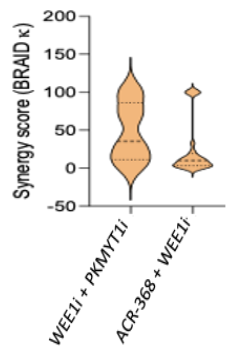
# AP3-DERIVED DUAL POTENCY OPTIMIZATION TO OVERCOME WEE1 INHIBITOR RESISTANCE: RECIPROCAL QUENCHING



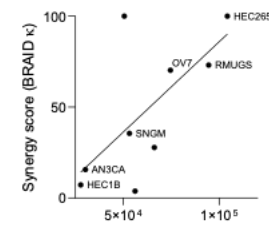
# AP3 RECIPROCAL QUENCHING REVEALS OPTIMAL TARGET POTENCY PROFILE FOR DUAL WEE1/PKMYT1 INHIBITOR



Optimal potency ratio results in significant synergy

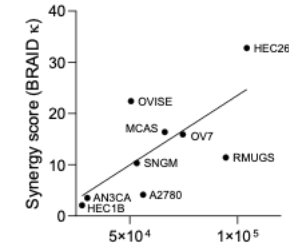


WEE1i and PKMYT1i dual inhibition synergy



WEE1 inhibitor sensitivity (Mean AUC)  
Pearson  $r = 0.68$   
p value = 0.0459

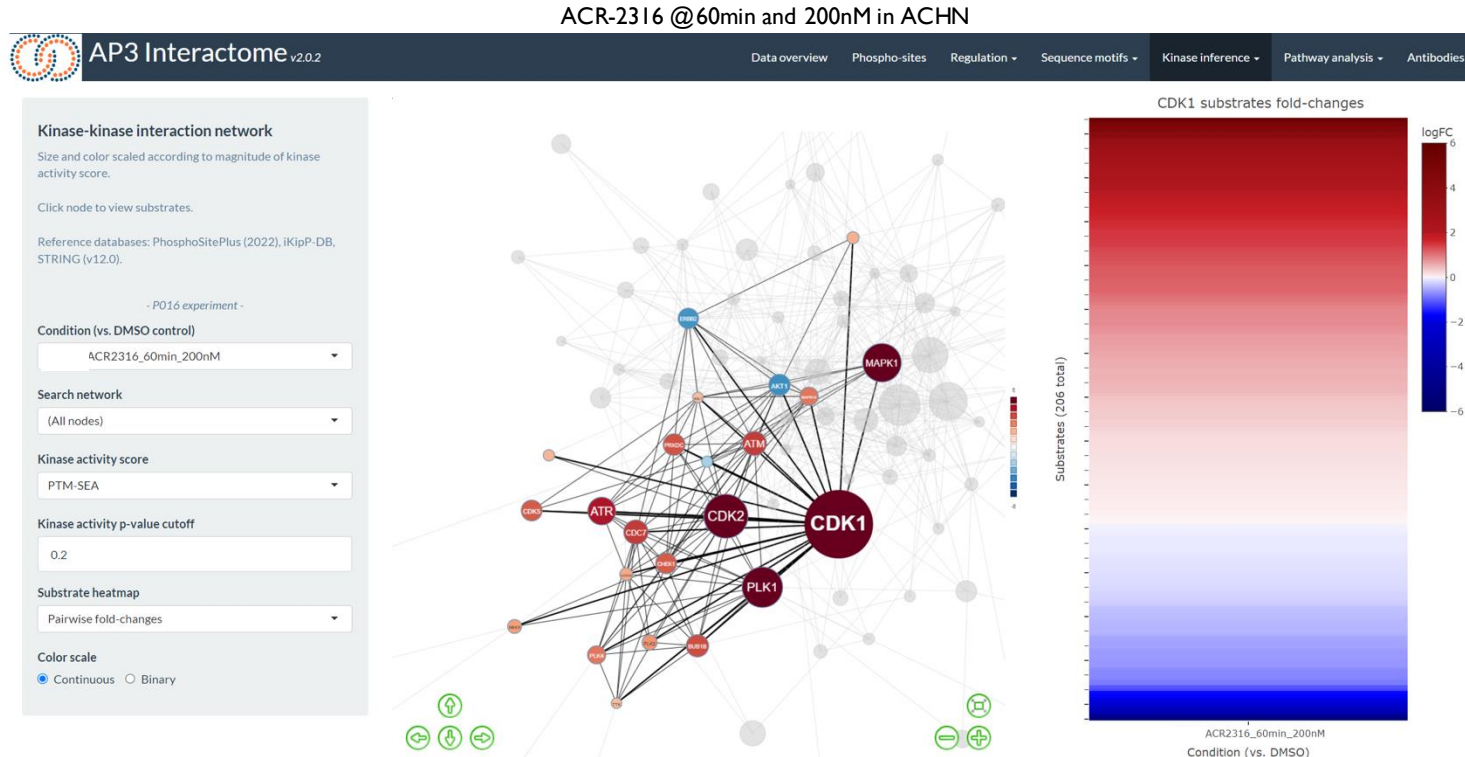
WEE1i and ACR-368



WEE1 inhibitor sensitivity (Mean AUC)  
Pearson  $r = 0.71$   
p value = 0.0324

# ACR-2316 INDUCES POTENT ACTIVATION OF PRO-APOPTOTIC MITOTIC KINASES IN SENSITIVE TUMOR CELLS

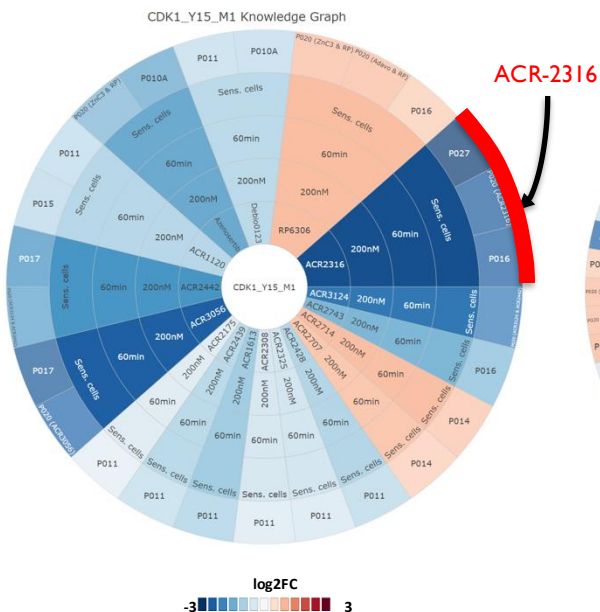
- Robust activation of CDK1 with ACR-2316 exemplified by enrichment of 206 upregulated substrates of CDK1



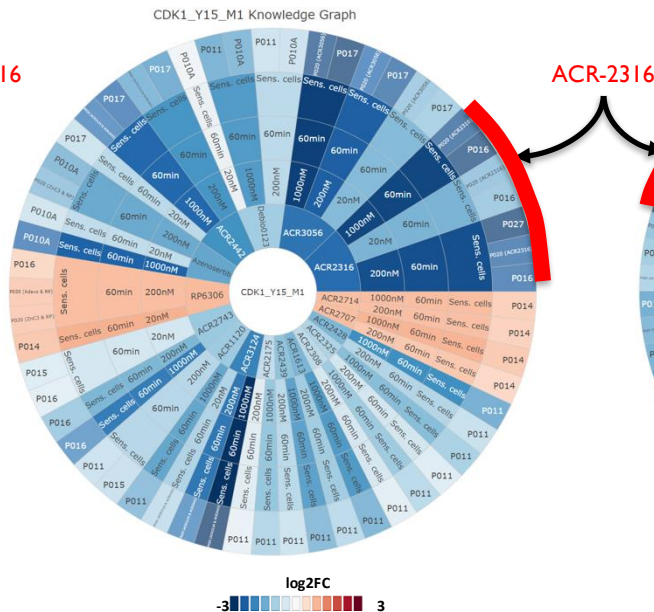
# ROBUST POTENT INHIBITION OF CDKI CONSENSUS SUBSTRATE Y15 BY ACR-2316

- AP3 interactome enables real time quantitative computational analyses of proprietary AP3 drug profiling data across different conditions and experiments

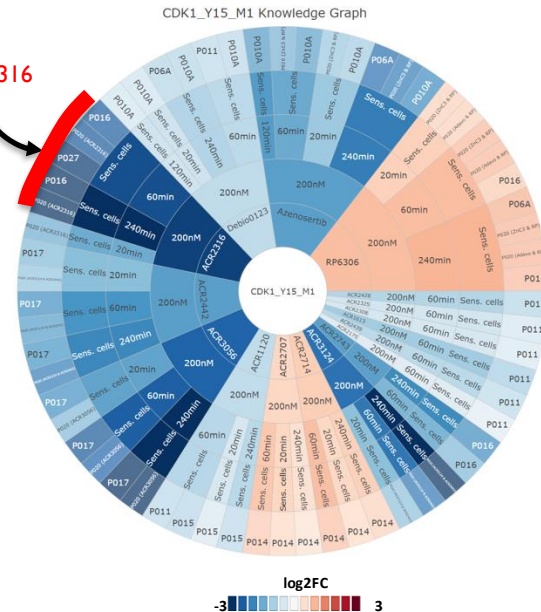
Comparison  
@60min and 200nM in ACHN



Dose-dependent comparison  
@ 60min in ACHN



Time-dependent comparison  
@ 200nM in ACHN



# AP3-BASED COMPOUND DESIGN IN INTACT CELLS: OPTIMAL ACTIVATION AND INHIBITION OF CRITICAL PATHWAYS

Home

**ACR2316**  
Profiled in 12 experiments.

Features  
Kinases

No. of top features  
10

Filter fully-imputed sites

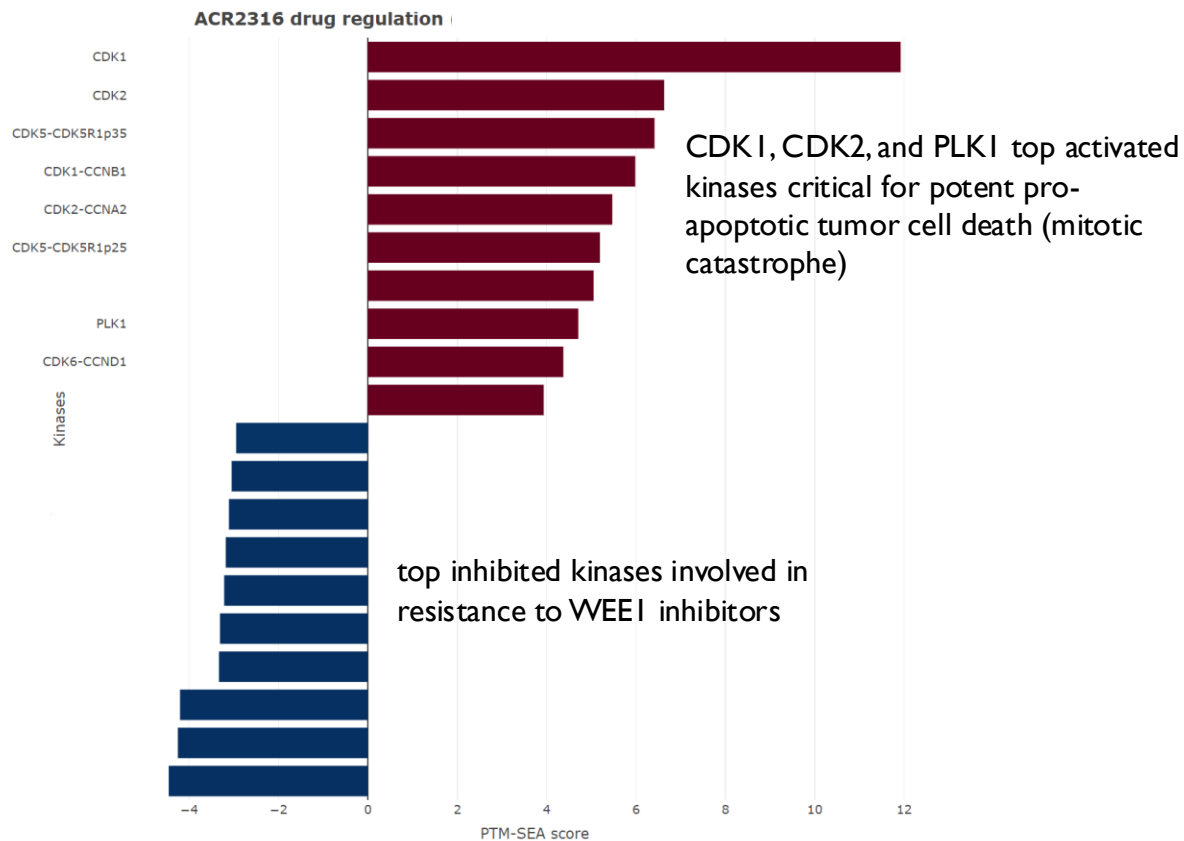
Antibody-available only (sites)

Dosage  
200nM

Timepoint  
60min

Cell line

Export



# DATA DRIVEN EXECUTION AND VALUE CREATION

## Recent Accomplishments (Last 12 Months)

- ✓ Positive ACR-368 data (ESMO 2024) in registrational intent endometrial cancer trial (ORR >60%; OncoSignature validation  $p = 0.009$ )
- ✓ Positive initial ACR-368 clinical data in ovarian and endometrial cancer patients (ORR = 50%) in Q2 2024
- ✓ IND clearance for ACR-2316 (Q3 2024) and first patient dosed in Q4 2024 (2 quarters ahead of schedule) with initial lead to Phase I initiation achieved in 15 months, uniquely enabled by AP3
- ✓ Corporate R&D Events (Q2 and Q3 2024) presenting positive clinical and preclinical pipeline data and AI/ML-driven AP3 Interactome
- ✓ Presented preclinical data on ACR-2316 and ACR-368 resistance mechanisms uncovered by AP3 (AACR Q2 2024)
- ✓ Completed Phase Ib and initiated Phase 2 study of ACR-368 + LDG for OncoSignature-negative patients Q1 2024
- ✓ Completed oversubscribed \$130M PIPE financing at premium Q2 2024

## Anticipated Next Milestones (2025)

- Phase 2 program updates for ACR-368 IH 2025
- Initial clinical data for ACR-2316 Phase I trial 2H 2025
- Development candidate nomination for novel cell cycle program with an undisclosed target 2025
- Target/compound validation and indication finding for new program in autoimmune/inflammatory diseases leveraging AP3

# FINANCIAL HIGHLIGHTS

Cash and marketable securities

**\$202.8M**

Balance sheet  
30-Sept-2024

Projected runway into

**H2'26**

Current operating plan, assuming  
no additional financing

Fully Diluted Shares Outstanding

**43.7M**

Including shares, pre-funded  
warrants and equity grants  
outstanding 30-Sept-2024

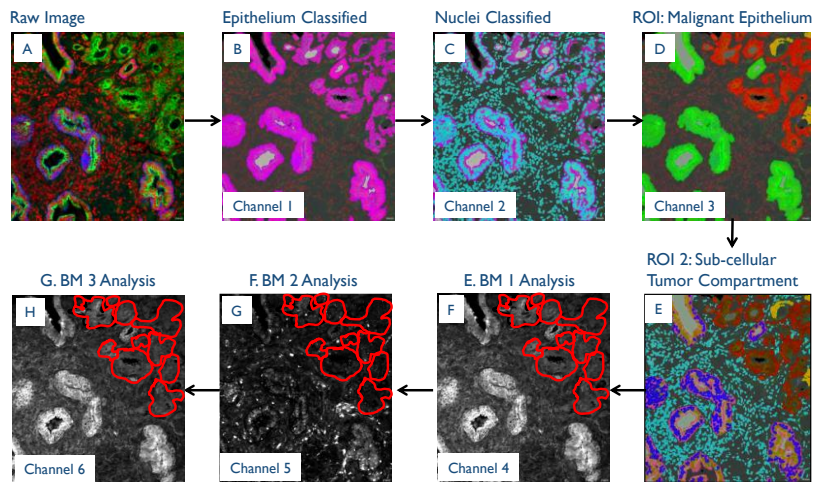
Note: Unaudited.





# TEAM HAS PIONEERED OUTCOME-PREDICTIVE QUANTITATIVE PROTEOMIC MULTIPLEX IN SITU TEST

Prostate cancer 8-marker biopsy test developed and launched by Founding team



- **ProMark®:** Marketed, automated *in situ* proteomic test for human outcome prediction included under NCCN guidelines
- **Founding team:** Has pioneered p-proteomics and quantitative multiplex imaging including double-blinded clinical validation\*

| Ideal test   | Protein multiplex <i>in situ</i> test | Current CDx tests |
|--|---------------------------------------|-------------------|
| Quantitative and automated                             | ✓                                     | (✓)               |
| Validated Abs and reagents                             | ✓                                     | (✓)               |
| Drug target and pathway activation context             | ✓                                     |                   |
| Biomarkers measured in relevant region on tumor biopsy | ✓                                     |                   |
| Imaging algorithm (tissue pattern)                     | ✓                                     |                   |
| Addresses tumor heterogeneity                          | ✓                                     |                   |
| Double-blinded, prospective validation                 | ✓                                     | (✓)               |

\*Blume-Jensen et al: Development and clinical validation of an *in situ* biopsy-based multimarker assay for risk stratification in prostate cancer. Clinical Cancer Research (2015)

# PROOF-OF-CONCEPT FOR PROTEIN BIOMARKER SIGNATURE: MARKETED, OUTCOME-PREDICTIVE MULTIPLEX CANCER TEST

Biology of Human Tumors

Clinical  
Cancer  
Research

## Development and Clinical Validation of an *In Situ* Biopsy-Based Multimarker Assay for Risk Stratification in Prostate Cancer

(2015)

Peter Blume-Jensen<sup>1</sup>, David M. Berman<sup>2</sup>, David L. Rimm<sup>3</sup>, Michail Shipitsin<sup>1</sup>, Mathew Putzi<sup>4</sup>, Thomas P. Nifong<sup>1</sup>, Clayton Small<sup>1</sup>, Sibgat Choudhury<sup>1</sup>, Teresa Capela<sup>1</sup>, Louis Coupal<sup>5</sup>, Christina Ernst<sup>1</sup>, Aeron Hurley<sup>1</sup>, Alex Kaprelyants<sup>1</sup>, Hua Chang<sup>1</sup>, Eldar Giladi<sup>1</sup>, Julie Nardone<sup>1</sup>, James Dunyak<sup>1</sup>, Massimo Loda<sup>6</sup>, Eric A. Klein<sup>7</sup>, Cristina Magi-Galluzzi<sup>8</sup>, Mathieu Latour<sup>9</sup>, Jonathan I. Epstein<sup>10</sup>, Philip Kantoff<sup>6</sup>, and Fred Saad<sup>9</sup>

- Third-party blinded clinical validation, bioinformatic analysis (U. Montreal)
- Validation of locked ProMark™ test on single institution biopsy cases (N=274)
- Secondary validation on multi-center biopsy cohort (N=359) for clinical use indication
- Marketed test included under NCCN Guidelines and Medicare coverage

# PIONEERING PHOSPHO-PROTEOMICS STUDY IDENTIFIES NOVEL PI3K PATHWAY INHIBITOR BIOMARKERS

Science  
Translational  
Medicine



Sci Transl Med  
2: 1-14 (2010)

RESEARCH ARTICLE

CANCER DRUG DEVELOPMENT

## Pathway-Based Identification of Biomarkers for Targeted Therapeutics: Personalized Oncology with PI3K Pathway Inhibitors

Jannik N. Andersen,<sup>1\*</sup> Sriram Sathyanarayanan,<sup>1\*</sup> Alessandra Di Bacco,<sup>1</sup> An Chi,<sup>1</sup> Theresa Zhang,<sup>1</sup> Albert H. Chen,<sup>1</sup> Brian Dolinski,<sup>1</sup> Manfred Kraus,<sup>1</sup> Brian Roberts,<sup>1</sup> William Arthur,<sup>2</sup> Rich A. Klinghoffer,<sup>1†</sup> Diana Gargano,<sup>1‡</sup> Lixia Li,<sup>1</sup> Igor Feldman,<sup>1</sup> Bethany Lynch,<sup>1</sup> John Rush,<sup>3</sup> Ronald C. Hendrickson,<sup>4§</sup> Peter Blume-Jensen,<sup>1§||</sup> Cloud P. Paweletz<sup>1</sup>

### Editorial Highlights:

VOLUME 28 NUMBER 10 OCTOBER 2010 NATURE BIOTECHNOLOGY

## Tracing cancer networks with phosphoproteomics

David B Solit & Ingo K Mellingshoff

A mass-spectrometry approach for identifying downstream events in cancer signaling pathways may help to tailor therapies to individual patients.

Science  
Translational  
Medicine



## TOWARD CUSTOMIZING TUMOR TREATMENT

Just as our view of Earth has become increasingly global, cells are now seen as complex networks of interacting and intersecting signaling pathways rather than a collection of regulated genes.

Nature Reviews Cancer | AOP, published online 19 August 2010; doi:10.1038/nrc2922



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A discovery strategy for novel cancer biomarkers

# OLSEN LAB-EXAMPLES OF DEEP PROTEOMICS DRUG PROFILING

## Science Signaling (2018)

**ALK-i : LDK378, TAE684, crizotinib, lorlatinib.**

SCIENCE SIGNALING | RESEARCH RESOURCE

### CANCER

**Integrated proximal proteomics reveals IRS2 as a determinant of cell survival in ALK-driven neuroblastoma**

Kristina B. Emdal<sup>1,2,3</sup>, Anna Kathrine Pedersen<sup>1,2</sup>, Dorthe B. Bekker-Jensen<sup>1</sup>, Alicia Lundby<sup>1,2,3</sup>, Shaya Chayka<sup>1</sup>, Kathleen De Preter<sup>1</sup>, Frank Spelteman<sup>1</sup>, Chiara Francavilla<sup>1,2,3</sup>, Jesper V. Olsen<sup>1,2,3</sup>

## Cell Reports (2018)

**SHP2-i: SHP099 -allosteric inhibitor.**

**Large-Scale Phosphoproteomics Reveals Shp-2 Phosphatase-Dependent Regulators of Pdgfr Receptor Signaling**

Tawee S. Bath<sup>1,2</sup>, Moreno Papetti<sup>1,2</sup>, Anamarija Pfeiffer<sup>1</sup>, Maxim A.X. Tolboom<sup>1</sup>, Chiara Francavilla<sup>1,2,3</sup> and Jesper V. Olsen<sup>1,2,3</sup>  
<sup>1</sup>Proteomics Program, Novo Nordisk Foundation Center for Protein Research, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3B, 2200 Copenhagen, Denmark  
<sup>2</sup>Cellular Stress Signaling Group, Department of Cellular and Molecular Medicine, Center for Healthy Aging, University of Copenhagen, 2200 Copenhagen, Denmark  
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 Correspondence: chiara.francavilla@proteomics.au.dk (C.F.), jesper.olse@proteomics.au.dk (J.V.O.)  
<https://doi.org/10.1016/j.celrep.2018.02.038>

## Cell Reports (2017)

**CHK1-i: SCH900776, ATM-i: KU55933**

**Proteomics Reveals Global Regulation of Protein SUMOylation by ATM and ATR Kinases during Replication Stress**

Stephanie Maek<sup>1,2,3</sup>, Jin Ogi Saitoh<sup>1,2,3</sup>, Zhanyu Xia<sup>1,2</sup>, Tawee Singh Bath<sup>1,2</sup>, Chiara Francavilla<sup>1,2,3</sup>, Loulou von Stoschew<sup>1</sup>, Andres Joaquin Lopez-Cortines<sup>1</sup>, Alfred Cornelis Otsa Verhage<sup>1,2</sup> and Jesper Olsen<sup>1,2,3</sup>  
<sup>1</sup>Proteomics Program, Novo Nordisk Foundation Center for Protein Research, Faculty of Health and Medical Sciences, University of Copenhagen, 2200 Copenhagen, Denmark  
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 Correspondence: s.o.verhage@lumc.nl (A.C.O.V.), jesper.olse@proteomics.au.dk (J.V.O.)  
<https://doi.org/10.1016/j.celrep.2017.09.059>

## Cell Reports (2017)

**CDK7-i: THZ-1**

**Phosphoproteomics of Primary Cells Reveals Druggable Kinase Signatures in Ovarian Cancer**

Chiara Francavilla<sup>1,2,3</sup>, Michela Lepia<sup>1,2</sup>, Kallopi Tselou<sup>1,2,3</sup>, Alessandra Villa<sup>1,2,3</sup>, Katarzyna Kowalczyk<sup>1,2</sup>, Flavia Rakewicz-Janus-Christiansen<sup>1</sup>, Giovanni Bertoli<sup>1</sup>, Stefano Corbellini<sup>1</sup>, Steven Brankic<sup>1</sup>, Lars J. Jensen<sup>1</sup>, Ugo Cavallaro<sup>1,2,3</sup> and Jesper V. Olsen<sup>1,2,3</sup>  
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<https://doi.org/10.1016/j.celrep.2017.09.015>

## Cell Systems (2017)

**Deepest proteome resolution of a human cell to date**

**An Optimized Shotgun Strategy for the Rapid Generation of Comprehensive Human Proteomes**

Dorte B. Bekker-Jensen<sup>1,2</sup>, Christian D. Kelstrup<sup>1,2,3</sup>, Tawee S. Bath<sup>1</sup>, Sara C. Larsen<sup>1</sup>, Christa Hedrup<sup>2</sup>, Jesper B. Branssen<sup>1</sup>, Karina D. Sorensen<sup>1</sup>, Steen Hoyer<sup>1</sup>, Torben F. Omland<sup>1</sup>, Claus L. Andersen<sup>1</sup>, Michael L. Nielsen<sup>1</sup> and Jesper V. Olsen<sup>1,2,3</sup>  
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<http://dx.doi.org/10.1016/j.celsys.2017.05.009>

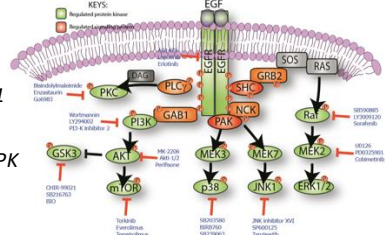
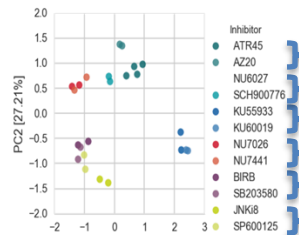
## Cell (2019)

**Functional mapping of differential signaling by RPTK mutants**

**Oncogenic Mutations Rewire Signaling Pathways by Switching Protein Recruitment to Phosphotyrosine Sites**

Alicia Lundby<sup>1,2,3</sup>, Giulia Franciosa<sup>1</sup>, Kristina B. Emdal<sup>1</sup>, Jan C. Refsgaard<sup>1</sup>, Sebastian P. Gnosa<sup>4</sup>, Dorthe B. Bekker-Jensen<sup>1</sup>, Anna Secher<sup>1</sup>, Svetlana R. Masuya<sup>1</sup>, Indrani Paul<sup>1</sup>, Bianca L. Mendez<sup>1</sup>, Christian D. Kelstrup<sup>1</sup>, Chiara Francavilla<sup>1</sup>, Marie Kiviborg<sup>1</sup>, Guillermo Montoya<sup>1</sup>, Lars J. Jensen<sup>1</sup>, and Jesper V. Olsen<sup>1,2,3</sup>  
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<https://doi.org/10.1016/j.cell.2019.08.009>

## ONGOING (MULTICENTER): Profiling of DDR and core kinase pathway inhibitors (>45)



## Nature Communications (2020)

**Highest throughput, sensitivity, and scalability to date**

ARTICLE  
<https://doi.org/10.1038/s41467-020-16609-9> OPEN

Rapid and site-specific deep phosphoproteome profiling by data-independent acquisition without the need for spectral libraries

Dorte B. Bekker-Jensen<sup>1</sup>, Oliver M. Bernhardt<sup>2</sup>, Alexander Hogrebe<sup>1</sup>, Ana Martinez-Val<sup>1</sup>, Lynn Verbeke<sup>1</sup>, Tejas Gandhi<sup>2</sup>, Christian D. Kelstrup<sup>1</sup>, Lukas Reiter<sup>2</sup> & Jesper V. Olsen<sup>1</sup>\*

## Nature Communications (2021)

**Subcellular compartmental proteomics**

ARTICLE  
<https://doi.org/10.1038/s41467-021-27399-y> OPEN

Spatial-proteomics reveals phospho-signaling dynamics at subcellular resolution

Ana Martinez-Val<sup>1</sup>, Dorthe B. Bekker-Jensen<sup>1</sup>, Sophia Steigerwald<sup>1</sup>, Claire Koenig<sup>1</sup>, Ole Østergaard<sup>1</sup>, Aditi Mehta<sup>1</sup>, Trung Tran<sup>1</sup>, Krzysztof Sikorski<sup>1</sup>, Estefania Torres-Vega<sup>1</sup>, Ewa Kwasniewska<sup>1</sup>, Solveig Hilin Brynjólfsson<sup>1</sup>, Lisa B. Franke<sup>1,2,3</sup>, Rasmus Kjøbsted<sup>1,2</sup>, Nicolai Krogh<sup>1</sup>, Alicia Lundby<sup>1,2,3</sup>, Simon Bekker-Jensen<sup>1</sup>, Frithjof Lund-Johansen<sup>4,1,5</sup> & Jesper V. Olsen<sup>1,2,3</sup>\*

## Nature Communications (2021)

**Clinically actionable resistance mechanisms**

ARTICLE  
<https://doi.org/10.1038/s41467-021-27382-9> OPEN

Proteomics of resistance to Notch1 inhibition in acute lymphoblastic leukemia reveals targetable kinase signatures

Giulia Franciosa<sup>1</sup>, Jos G. A. Smits<sup>1,2</sup>, Sonia Minuzzo<sup>1</sup>, Ana Martinez-Val<sup>1</sup>, Stefano Indraccolo<sup>3,4</sup> & Jesper V. Olsen<sup>1,2,3</sup>\*

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Queen's Cancer Res. Inst.,  
Ontario Canada

- GU Pathologist; bladder cancer expert
- Expert on protein biomarkers and quantitative tissue imaging
- Academic lead on ProMark®



Jesper V. Olsen, Ph.D.

*Academic Co-Founder*

Professor, Novo-Nordisk  
Foundation Protein  
Center, Cph. University

- Recognized pioneer and leading authority in phosphoproteomics and proteomic systems analyses
- Top 0.1% most cited scientist in protein sciences



Jung-Min Lee, M.D.

*NCI Collaborator*

Investigator, Lasker  
Clinical Research  
Scholar, NCI

- Expert on women's cancers and DNA damage response (DDR)
- Lead and co-PI on numerous HGSOC & TNBC trials
- Lead PI on ACR-368 platinum-resistant ovarian trials

# CLINICAL OVERVIEW OF PAST LILLY-SPONSORED MULTI-CENTER ACR-368 MONOTHERAPY STUDIES

| Indication  | Trial                                | ORR <sup>#</sup> (confirmed)    | Median DoR <sup>°</sup>                      | Reference                                    |
|---|--------------------------------------|---------------------------------|--|--|
| HGSOC* (BRCA wild type and mutant; platinum-resistant and refractory) | Phase 2 (46-center, 8-country study) | 12.1% (platinum-resistant)      | 5.6 months                                   | Konstantinopoulos et al; Gynec. Oncol.: 2022 |
| Squamous cell cancer (anal cancer, head & neck cancer [H&N])          | Phase 1b multi-center                | 19% HPV+ H&N<br>15% anal cancer | 7 months (HPV+ H&N)<br>12 months anal cancer | Hong et al, CCR, 2018                        |

## Dosing and Administration

- IV q14d (RP2D = 105 mg/m<sup>2</sup>)

## Safety summary

- Acceptable safety profile in >1,000 patients
  - No clinical or regulatory holds imposed across all clinical studies to date
- Primary adverse events ≥ grade 3 were hematological (manageable neutropenia and thrombocytopenia)
- Limited ≥ grade 3 non-hematological toxicities (≤7% for all AEs)
- Drug-related discontinuations <1-2%

Despite significant efforts, no predictive biomarkers were identified, need for alternative biomarker approach

\*High grade serous ovarian cancer; # Overall response rate; °Duration of Response

# OVARIAN CANCER TREATMENT LANDSCAPE BECOMING INCREASINGLY CROWDED

- $\geq 2^{\text{nd}}$  line SOC segmented with 2 ADCs (Elahere and Enhertu), chemo (Doxyl, topotecan, gem) +/-Bev, and PARPi maintenance (BRCA mutated)
- Estimated new addressable cases of  $\geq 2^{\text{nd}}$  line platinum-resistant cancer cases  $\sim 7,600$  (90% x60% x 14,000) new cases/year (excluding Elahere and Enhertu)
- $> 10$  emerging therapies, including ADCs, targeted agents (including DDRi), and various combinations

Exhibit 2 - Notable Ovarian Cancer Presentations at ESMO'24

| Company  | Drug                     | Modality              | Target                | Population                       | Abstract | Title  |
|--|--------------------------|-----------------------|-----------------------|----------------------------------|----------|--|
| IMGN   | Mirvetuximab             | ADC                   | FR $\alpha$           | PSOC                             | 718MO    | Mirvetuximab soravansine (MIRV) in recurrent platinum-sensitive ovarian cancer (PSOC) with high folate receptor-alpha (FR $\alpha$ ) expression: Results from the PICCOLO trial  |
| G1AB   | Rina-S                   | ADC                   | FR $\alpha$           | Endometrial/Ovarian              | 719MO    | A phase III study of rinabart sesutecan (Rina-S) in patients with advanced ovarian or endometrial cancer   |
| STRO   | Luveltamab tazevivulin   | ADC                   | FR $\alpha$           | High-grade EOC                   | 749P     | Luveltamab tazevivulin, an antifolate receptor alpha (FR $\alpha$ ) antibody-drug conjugate (ADC), in combination with bevacizumab (bev) in patients with recurrent high-grade epithelial ovarian cancer (EOC): STRO-002-GM2 phase I study                         |
| AZN  | AZD5335                  | ADC                   | FR $\alpha$           | PRROC                            | 754P     | Initial results from a first-in-human study of AZD5335, a folate receptor $\alpha$ (FR $\alpha$ )-targeted antibody-drug conjugate, in patients (pts) with platinum-resistant recurrent ovarian cancer (PRROC)   |
| Coherent Biopharma                                 | CBP-1008                 | Bi-XDC                | FR $\alpha$ /TRPV6    | Solid tumors (PROC)              | 787P     | First-in-human, phase I study of CBP-1008, a first-in-class bi-specific ligand drug conjugate (Bi-XDC), in patients with advanced solid tumors   |
| IMGN   | Mirvetuximab             | ADC                   | FR $\alpha$           | FR $\alpha$ high OC              | 746P     | Phase III MIRASOL trial: Updated overall survival results of mirvetuximab soravansine (MIRV) vs. investigator's choice chemotherapy (ICC) in patients (pts) with platinum-resistant ovarian cancer (PROC) and high folate receptor-alpha (FR $\alpha$ ) expression |
| AZN  | Datopotamab              | ADC                   | TROP-2                | Endometrial/Ovarian              | 714MO    | Datopotamab deruxtecan (Dato-DXd) in patients with endometrial (EC) or ovarian cancer (OC): Results from the phase II TROPION-PanTumor03 study   |
| MRK/Kelun  | Sacituzumab tirumotecan  | ADC                   | TROP-2                | Endometrial/Ovarian              | 715MO    | Safety and efficacy of sacituzumab tirumotecan (sac-TMT) in patients (pts) with previously treated advanced endometrial carcinoma (EC) and ovarian cancer (OC) from a phase II study   |
| Hengrui  | SHR-A1921                | ADC                   | TROP-2                | PROC                             | 717MO    | SHR-A1921 in platinum-resistant ovarian cancer (PROC): data from a first-in-human (FIH) phase I study  |
| TORL   | TORL-1-23                | ADC                   | CLDN6                 | Ovarian, endometrial, testicular | 721MO    | Phase I, two-part, multicenter first-in-human (FIH) study of TORL-1-23: A novel claudin 6 (CLDN6) targeting antibody drug conjugate (ADC) in patient with advanced solid tumors  |
| Alphamab Oncology                                  | JSKN003                  | ADC                   | HER2 x TOP1           | PROC                             | 759P     | JSKN003, a HER2-targeting antibody-drug conjugate, in patients with platinum-resistant ovarian cancer: A pooled analysis of two studies  |
| IMCR   | Brenetafusp              | TCER                  | PRAME x CD3           | PROC                             | 750P     | Phase I safety and efficacy of brenetafusp, a PRAME x CD3 ImmTAC T cell engager, in platinum resistant ovarian cancer (PROC)   |
| INCY   | INCB123667               | Small molecule        | CDK2                  | Advanced Solid tumours (49% OC)  | 617MO    | Safety and tolerability of INCB123667, a selective CDK2 inhibitor, in patients (pts) with advanced solid tumors: A phase I study   |
| ASND   | TransCon IL-2 $\beta$ y  | IL-2 pro-drug + chemo | IL-2 $\beta$ y-R      | PROC                             | 762P     | First results from phase II dose expansion cohort of transcon IL-2 $\beta$ y in combination with standard of care chemotherapy for platinum resistant ovarian cancer (PROC) in the IL Believe trial  |
| BNTX/ OncoC4                                       | Golistobarb              | mAb                   | CTLA-4                | PROC                             | LBA32    | A randomized, phase II, dose optimization of gotisobarb, a pH-sensitive anti-CTLA-4, in combination with standard dose pembrolizumab in platinum-resistant recurrent ovarian cancer: Safety, efficacy and dose optimization (PRESERVE-004/GOG-3081)                |
| Hengrui  | Fuzuloparib + apatinib   | Small molecule combo  | PARP/VEGF             | Ovarian                          | 786P     | A phase II trial of fuzuloparib in combination with apatinib vs. fuzuloparib alone for recurrent ovarian cancer (OC)   |
| Academic   | Olaparib + cediranib     | Small molecule combo  | PARP/VEGF             | PSOC                             | LBA33    | ICON9: International phase III randomized study to evaluate the efficacy of maintenance therapy with olaparib and cediranib or olaparib alone in patients with relapsed platinum-sensitive ovarian cancer following a response to platinum-based chemotherapy      |
| <b>Other Notable Long-Term Maintenance Studies</b> |                          |                       |                       |                                  |          |  |
| GSK  | Niraparib                | Chemo                 | PARP                  | Newly-diagnosed advanced OC      | LBA29    | Final overall survival (OS) in patients (pts) with newly diagnosed advanced ovarian cancer (aOC) treated with niraparib (nr) first-line (1L) maintenance: Results from PRIMA/ENGOT-OV26/GOG-3012   |
| Pharma& GmbH                                       | Rucaparib+ nivo          | Chemo+IO              | PARP/PD-1             | Newly-diagnosed advanced OC      | LBA30    | ATHENA-COMBO, a phase III, randomized trial comparing rucaparib (RUC) + nivolumab (NIVO) combination therapy vs RUC monotherapy as maintenance treatment in patients (pts) with newly diagnosed ovarian cancer (OC)  |
| Academic   | Ganetespib + carboplatin | Small molecule combo  | DNA repair inhibition | Ovarian                          | LBA34    | ENGOT-ov48/EUDARIO: European trial on enhanced DNA repair inhibition in ovarian cancer   |

Source: Jefferies research; ESMO 2024

# APRIL 2024 UPDATE: PROSPECTIVE ONCOSIGNATURE RESPONSE PREDICTION (CONFIRMED ORR 50%) IN GYN CANCER PATIENTS

## Registrational intent Phase 2b trial

| Overall Response                                      | Total <sup>1</sup> |                    |              | Ovarian             |                    | Endometrial         |                    |
|---|--------------------|--------------------|--------------|---------------------|--------------------|---------------------|--------------------|
|   | BM+ Monotherapy    | BM-LDG Combination | Total        | BM+ Monotherapy     | BM-LDG Combination | BM+ Monotherapy     | BM-LDG Combination |
|   | N = 10             | N = 16             | N=26         | N = 5               | N = 11             | N = 5               | N = 5              |
|   | N (%)              | N (%)              | N (%)        | N (%)               | N (%)              | N (%)               | N (%)              |
| CR  | 0 (0)              | 0 (0)              | 0 (0)        | 0 (0)               | 0 (0)              | 0 (0)               | 0 (0)              |
| cPR   | 5 (50)             | 0 (0)              | 5 (19)       | 2 (40)              | 0 (0)              | 3 (60)              | 0 (0)              |
| uPR   | 0 (0)              | 0 (0)              | 0 (0)        | 0 (0)               | 0 (0)              | 0 (0)               | 0 (0)              |
| SD  | 3 (30)             | 8 (50)             | 11           | 2 (40)              | 6 (55)             | 1 (20)              | 2 (40)             |
| PD  | 2 (20)             | 8 (50)             | 10           | 1 (20)              | 5 (45)             | 1 (20)              | 3 (60)             |
| <b>cORR (95% CI)</b>                                  | <b>50.0%</b>       | <b>0%</b>          | <b>19.2%</b> | <b>40% (12, 77)</b> | <b>0%</b>          | <b>60% (23, 88)</b> | <b>0%</b>          |
| <b>OncoSignature BM+ vs BM-Segregation P = 0.0038</b> |                    |                    |              | <b>P = 0.083</b>    |                    | <b>P = 0.083</b>    |                    |

<sup>1</sup>Subjects with ≥1 on-treatment scan

<sup>2</sup><https://ir.acrivos.com/news-events/events-presentations>

Data cut as of 1 April 2024



# BLINDED KOL MARKET RESEARCH UNDERSCORES ENDOMETRIAL CANCER REPRESENTS SIGNIFICANT OPPORTUNITY FOR ACR-368 (US NUMBERS)

- Endometrial cancer (EC) projected to be the third most prevalent cancer and the fourth leading cause of cancer-related death among women by 2040
  - Incidence = 67,880, prevalence = 865,000 (US - 2023)\*; Incidence increasing by 1-3% per year
  - Mortality = 13,250 (US - 2023); 5-year survival ~ 80%\*
  - High grade EC accounts for majority of EC deaths each year
- 2L now of high unmet need and opportunity for accelerated single agent approval
  - **90% of cases believed to progress to 2L therapy (~27,000 patients in the US/year)**
  - Recent front-line approvals of anti-PD-I plus chemo<sup>1,2</sup> for high grade EC reduces/eliminates pembro + lenvatinib<sup>3</sup> as viable 2L option for most patients
  - **Reported chemotherapy efficacy in 2L : ORR = 10-15% and mPFS = 2.8 – 3.8 months]**<sup>3,4</sup>
  - Limited number of early emerging therapies; Enhertu approved for ~15% of Her2(+++)
- 1L potential opportunity for label expansion in confirmatory trial (maintenance with ACR-368 + anti-PD-I)
  - **New cases of high grade, recurrent EC (progressed on ICI + chemo) ~30K patients/year**
  - Leverage ACR-368 clinical activity in patients progressing on prior anti-PD-I therapy and anti-PD-I combo synergy
  - **mPFS in anti-PD-I maintenance phase ~9 months in pMMR (>27 months in dMMR)**

\*SEER database

<sup>1</sup>Eskander et al, NEJM 2023; <sup>2</sup>Mirza et al, NEJM 2023; <sup>3</sup>Makker et al, NEJM 2022; <sup>4</sup>Ray-Coquard I et al, BJC, 2013

# DEMOGRAPHICS AND SUBJECT DISPOSITION—ENDOMETRIAL SUBJECTS (N=35)

| Subject Demographics        | BM+<br>N = 12 | BM-<br>N = 23 |
|-----------------------------|---------------|---------------|
| Median Age (range)          | 66 (60-76)    | 68 (42-78)    |
| Race (%)                    |               |               |
| White                       | 8 (67)        | 16 (70)       |
| Black/African American      | 3 (25)        | 3 (13)        |
| Asian                       | 0 (0)         | 3 (13)        |
| Other                       | 0 (0)         | 1 (4)         |
| Unknown                     | 1 (8)         | 0 (0)         |
| Current Stage (%)           |               |               |
| III                         | 3 (25)        | 12 (52)       |
| IV                          | 9 (75)        | 10 (43)       |
| unk                         | 0 (0)         | 1 (4)         |
| Histology (%)               |               |               |
| Serous                      | 8 (67)        | 7 (30)        |
| Endometrioid                | 3 (25)        | 7 (30)        |
| Carcinosarcoma              | 1 (8)         | 3 (13)        |
| Clear Cell Carcinoma        | 0 (0)         | 2 (9)         |
| Other                       | 0 (0)         | 4 (17)        |
| ECOG Status at Baseline (%) |               |               |
| 0                           | 5 (42)        | 10 (43)       |
| I                           | 7 (58)        | 13 (57)       |

| Subject Disposition                     | BM+<br>N = 12 | BM-<br>N = 23 |
|---|---------------|---------------|
| Median Prior Lines (range)              | 2 (1-4)       | 3 (1-4)       |
| Prior PD-1/PD-L1 Therapy (%)            |               |               |
| Yes                                     | 12 (100)      | 22 (96)       |
| No                                      | 0 (0)         | 1 (4)*        |
| Discontinued Study Drug (%)             | 3 (25)        | 13 (57)       |
| Reason for Discontinuing Study Drug (%) |               |               |
| PD                                      | 2 (17)        | 10 (43)       |
| PI Decision                             | 1 (8)         | 0 (0)         |
| Unacceptable Tox                        | 0 (0)         | 1 (4)         |
| Subject Decision                        | 0 (0)         | 1 (4)         |
| Subject Withdrawal of Consent           | 0 (0)         | 1 (4)         |
| Survival Status (%)                     |               |               |
| Alive <sup>^</sup>                      | 10 (83)       | 14 (61)       |
| Deceased                                | 2 (17)        | 7 (30)        |
| Unknown                                 | 0 (0)         | 2 (9)         |

\*Subject deemed ineligible for anti-PD-1 therapy.

<sup>^</sup>1 BM+ and 4 BM- subjects are still on study for follow-up, but no longer receiving study drug.

Data current as of 25 July 2024 and includes all subjects enrolled with registrational intent.

BM- includes all subjects treated with ACR-368 + low dose gemcitabine (LDG) at RP2D (105 mg/m<sup>2</sup> and 10 mg/m<sup>2</sup>, respectively).

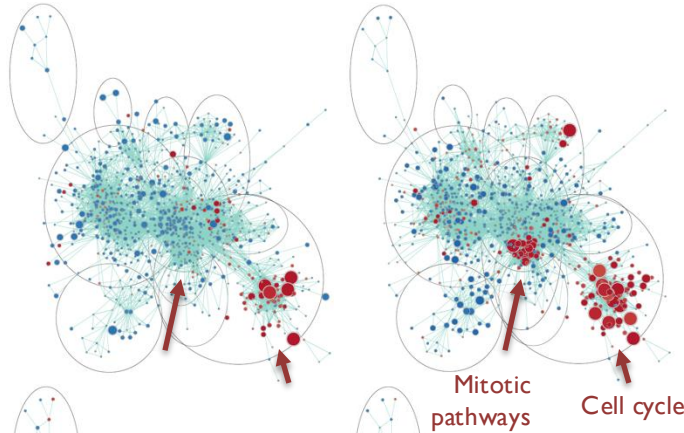
# AP3 ANALYSIS: ACR-2316 REGULATES CELL CYCLE AND MITOSIS MORE POTENTLY THAN BENCHMARK WEE1 INHIBITOR

60min  
200nM

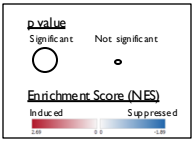
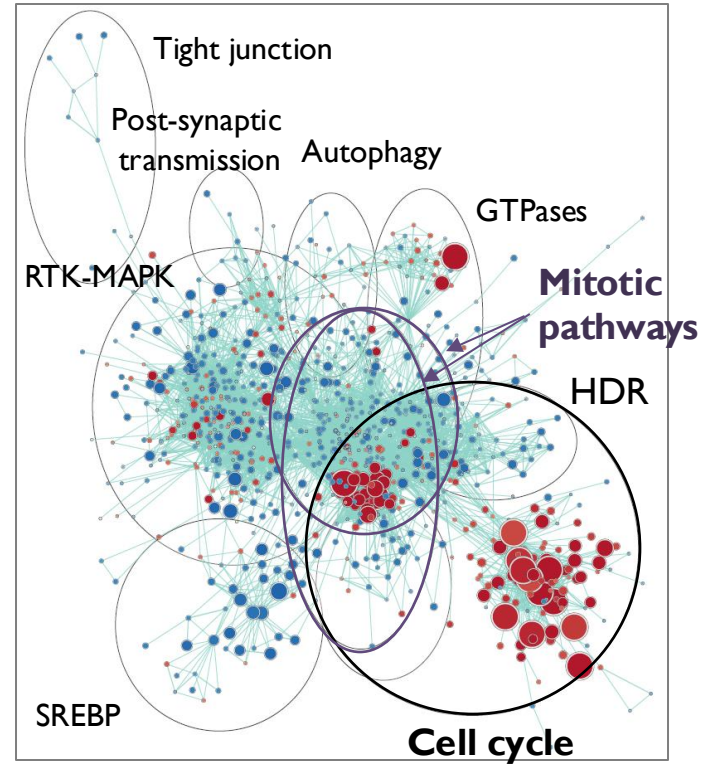
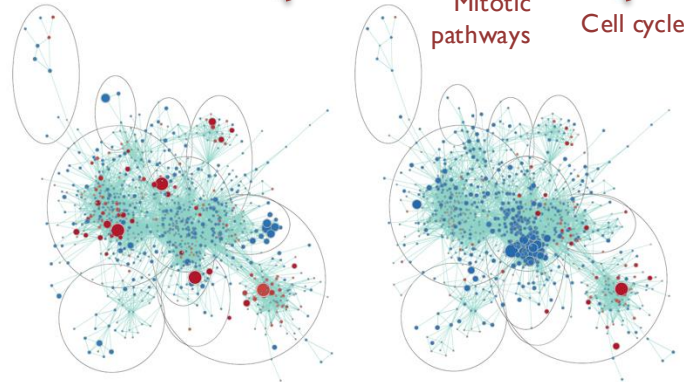
WEE1 inhibitor

ACR-2316

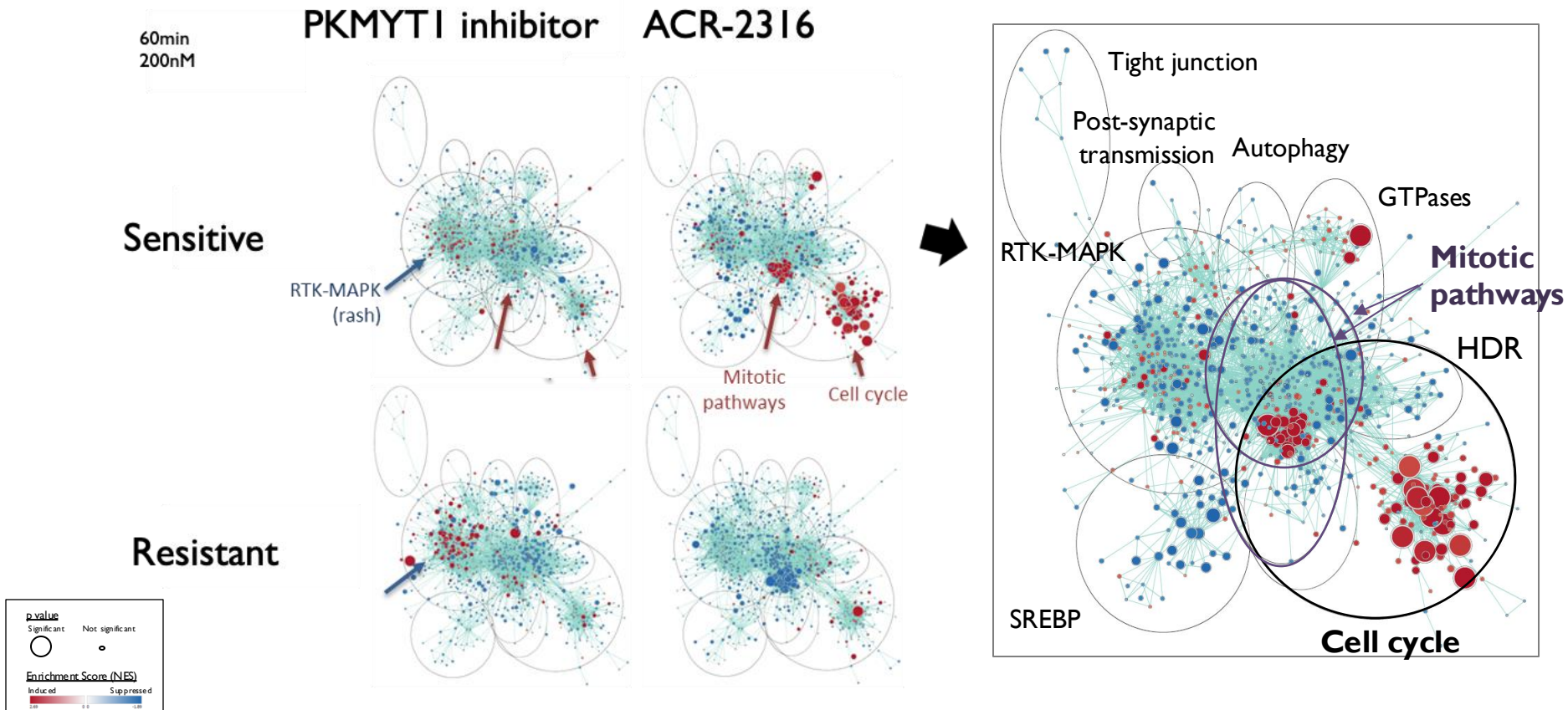
Sensitive



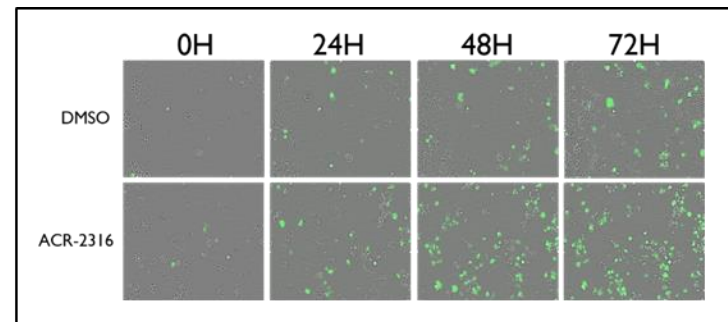
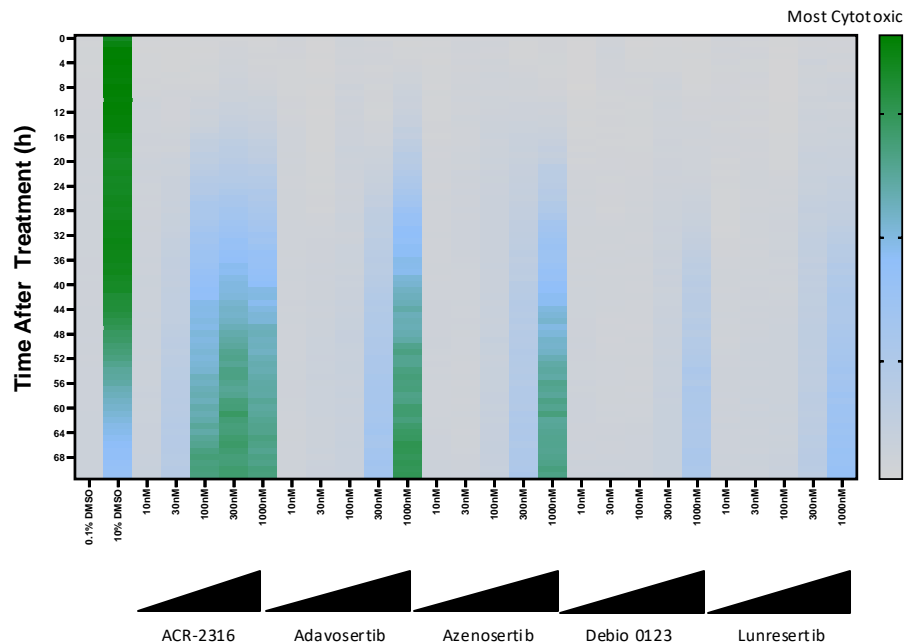
Resistant



# AP3 ANALYSIS: ACR-2316 REGULATES CELL CYCLE AND MITOSIS MORE POTENTLY THAN BENCHMARK PKMYTI INHIBITOR



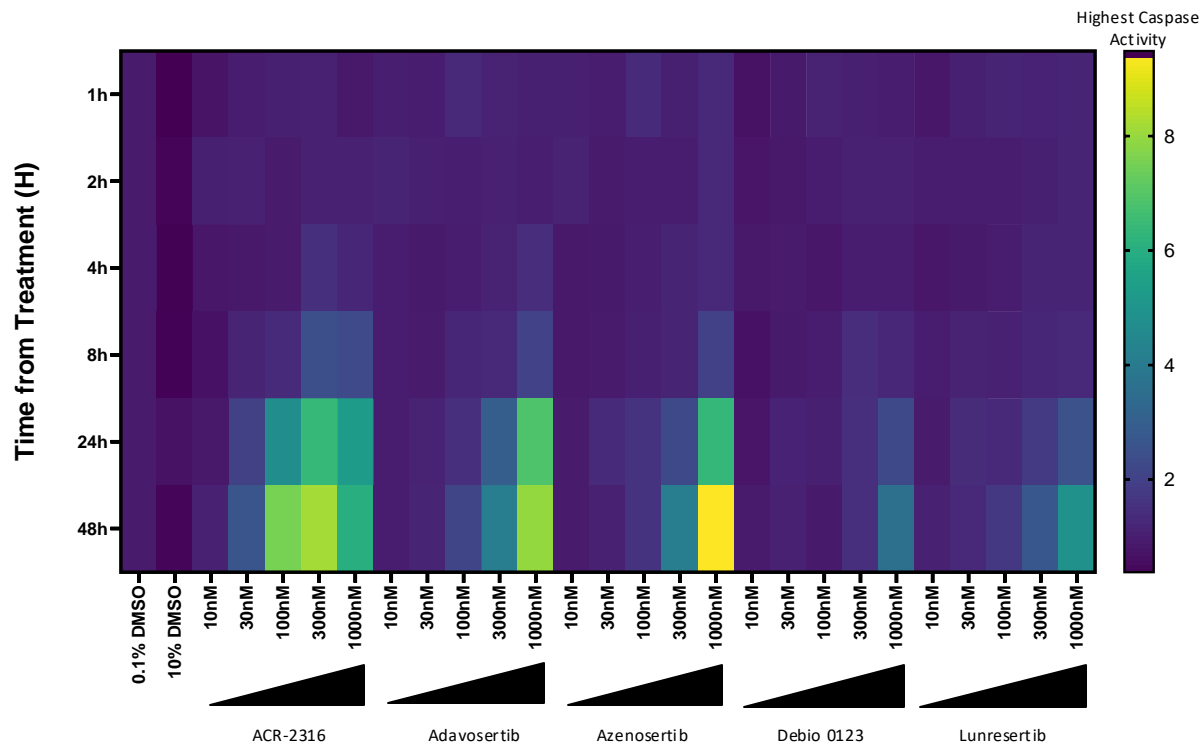
# ACR-2316 INDUCES POTENT CELL DEATH COMPARED TO BENCHMARK WEE1 AND PKMYTI INHIBITORS



Representative images of OVCAR3 cells treated with 0.1% DMSO or 100 nM ACR-2316 (green fluorescence = dead cells)

CellTox-Green Assay

# ACR-2316 INDUCES POTENT CASPASE 3/7 CLEAVAGE COMPARED TO BENCHMARK WEE1 OR PKMYTI INHIBITORS



Caspase 3/7-Glo Assay

# COMPREHENSIVE KINOME SELECTIVITY PROFILING

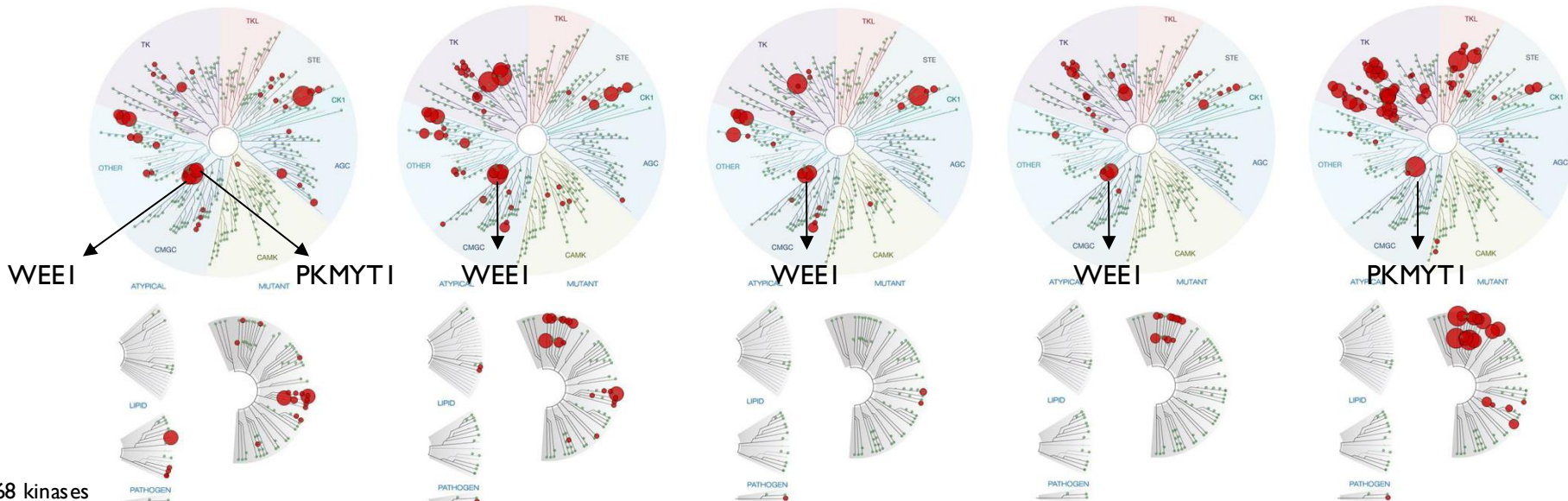
ACR-2316

Adavosertib

Azenosertib

Debio0123

Lunresertib



468 kinases  
@ 1  $\mu$ M

- Percent Control
- 0%
  - 0.1%
  - 0.1-1%
  - 1-5%
  - 5-10%
  - 10-35%
  - > 35%

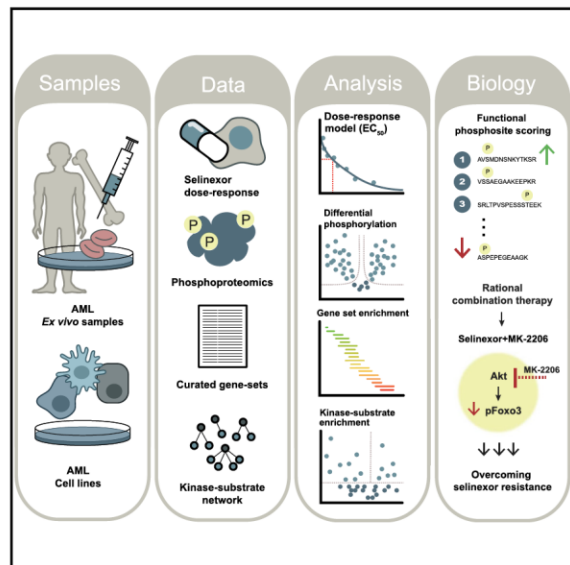
KinomeScan

## Cell Reports

Article

### Phosphoproteomics of primary AML patient samples reveals rationale for AKT combination therapy and p53 context to overcome selinexor resistance

Graphical abstract



Authors

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In brief

Emdal et al. combine phosphoproteomics of samples from patients with AML and functional phosphosite scoring to uncover clinically actionable molecular context for selinexor efficacy. Sensitivity to selinexor correlates with functional p53 and is enhanced with nutlin-3a, while resistance is associated with dysregulated AKT-FOXO3 signaling and overcome by combining with MK-2206.

Using spatial phosphoproteomics (*Nat. Commun.*, 2021) Acrivon's AP3 platform can uncover single agent sensitivity and rational drug combinations for targets with complicated mechanism of action

*Cell Reports*, August 9, 2022



# ELI LILLY ACR-368 HIGH LEVEL LICENSE TERMS (RIGHT OF FIRST NEGOTIATION)

- In-licensing completed 27 January 2021
  - WW exclusive rights with rights to sub-license
  - \$5M up front and low single digit percentage equity subject to ordinary dilution going forward
  - Aggregate development and commercial milestone payments of up to \$168M, of which \$5M is due prior to NDA
  - Tiered percentage royalty on annual net sales ranging from low single-digit up to a maximum of 10% subject to certain specified reductions
  - Drug product as well as drug substance sufficient to treat several hundred patients
  - Limited right of first negotiation expiring 45 days upon completion of certain clinical milestones