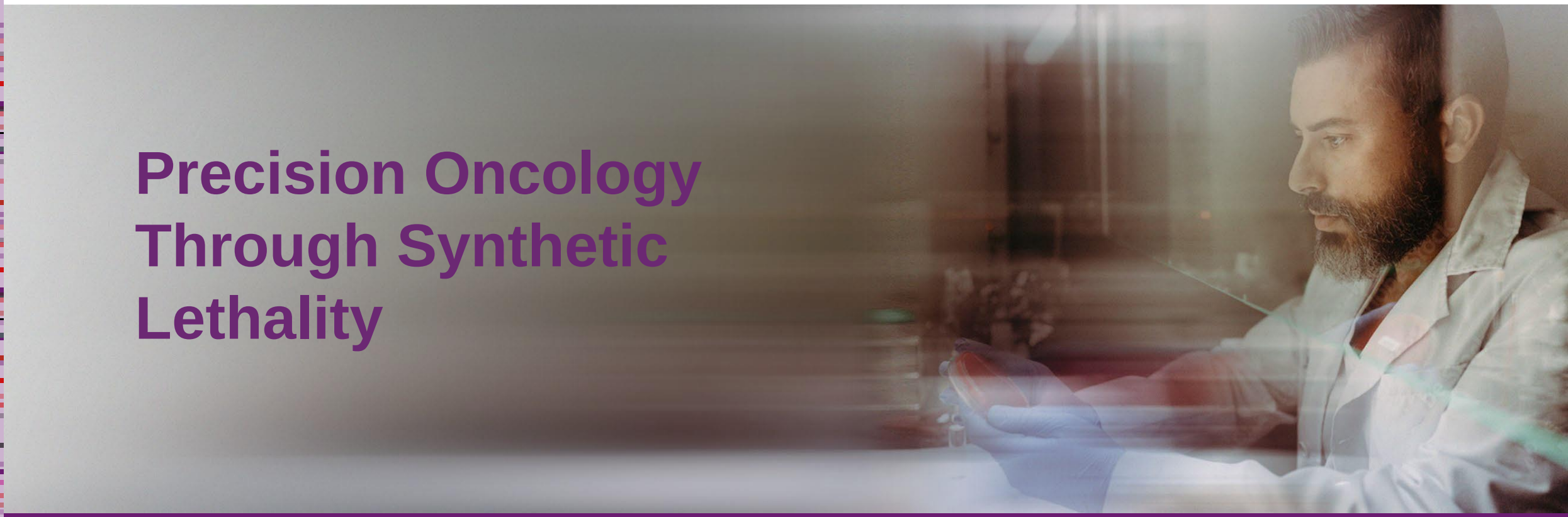
APREA THERAPEUTICS

# Precision Oncology Through Synthetic Lethality



April 2024

# Forward-Looking Statements

Certain information contained in this presentation includes “forward-looking statements”, within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, related to our clinical trials, regulatory submissions and strategic plans. We may, in some cases use terms such as “predicts,” “believes,” “potential,” “continue,” “anticipates,” “estimates,” “expects,” “plans,” “intends,” “may,” “could,” “might,” “likely,” “will,” “should” or other words that convey uncertainty of the future events or outcomes to identify these forward-looking statements. The forward-looking statements are based on current beliefs and expectations of our management team that involve risks, potential changes in circumstances, assumptions, and uncertainties. Any or all of the forward-looking statements may turn out to be wrong or be affected by inaccurate assumptions our management team might make or by known or unknown risks and uncertainties. These forward-looking statements are subject to risks and uncertainties including, without limitation, risks related to the success and timing of our clinical trials or other studies and the other risks set forth in our filings with the U.S. Securities and Exchange Commission, including our Annual Reports on Form 10-K and Quarterly Reports on Form 10-Q. Forward-looking statements regarding our product candidates are also subject to additional risks and uncertainties, including without limitation, with respect to: our dependence on additional financing to fund our operations and complete the development and commercialization of our product candidates, and the risks that raising such additional capital may restrict our operations or require us to relinquish rights to our technologies or product candidates; our limited history and preclinical status of the assets we acquired from Atrin Pharmaceuticals Inc.; our business plan or the likelihood of the successful implementation of such business plan; the timing of initiation of planned clinical trials for our product candidates; the future success of such trials; the successful implementation of our research and development programs and collaborations and the interpretation of the results and findings of such programs and collaborations and whether such results are sufficient to support the future success of our product candidates; the success, timing and cost of our anticipated clinical trials for our current product candidates; the timing of initiation, futility analyses, data presentation, reporting and publication and receipt of interim results (including, without limitation, any preclinical results or data); any statements about our understanding of product candidates mechanisms of action and interpretation of preclinical and early clinical results from its clinical development programs and any collaboration studies; and other factors, including legislative, regulatory, political and economic developments not within our control. For all these reasons, actual results and developments could be materially different from those expressed in or implied by our 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 such forward-looking statements to reflect subsequent events or circumstances, except to the extent required by law or regulation.

# Aprea Therapeutics (NASDAQ: APRE)

## Precision Oncology via Novel Synthetic Lethality Therapeutics

All programs address significant unmet medical need, are synergistic with other anticancer therapies, and potentially differentiated in safety and tolerability

### ATR Inhibitor: ATRN-119

- First macrocyclic ATR inhibitor
- Highly selective with continuous daily dosing targeted
- Phase 1/2a – Ongoing Dose Escalation
  - Readout 1Q 2025
  - Solid tumor with DDR mutation
- Pre-clinical proof-of-principle
  - Anti-tumor activity at nanomolar concentration
  - Preserved hematologic safety profile

### WEE1 Inhibitor: APR-1051

- Best in class, next generation
- Pre-clinical proof-of-principle
  - Highly potent and selective anti-tumor activity
  - Limited off target effect
  - Ovarian cancer with Cyclin E over expression (OVCAR-3)
  - Stable hematologic function
  - Favorable pharmacokinetics
- IND cleared March 2024
- Phase 1 planned for 1H 2024

### DDR Inhibitor: Undisclosed

- Lead optimization
- Target identified from our RepliBiom discovery platform

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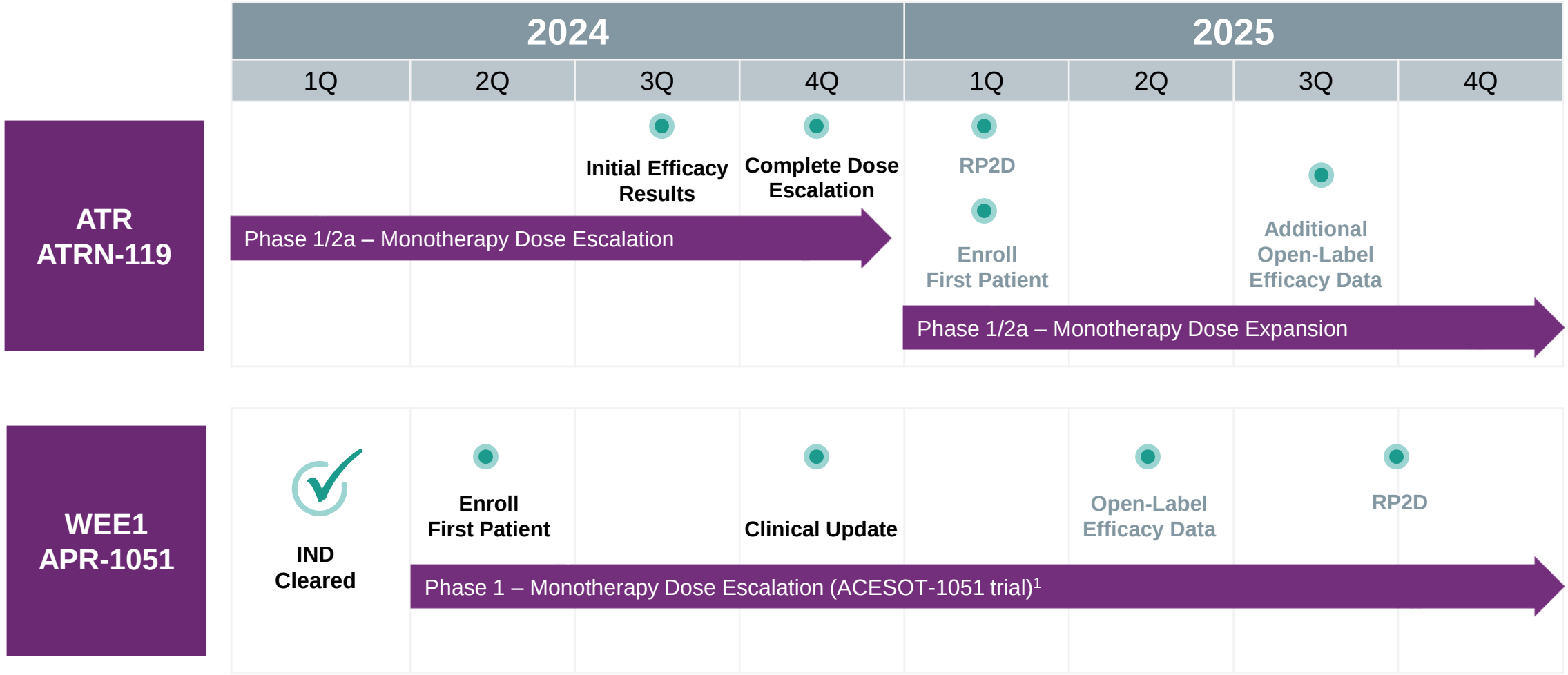
ATR - Ataxia telangiectasia and Rad3-related
DDR – DNA Damage Response

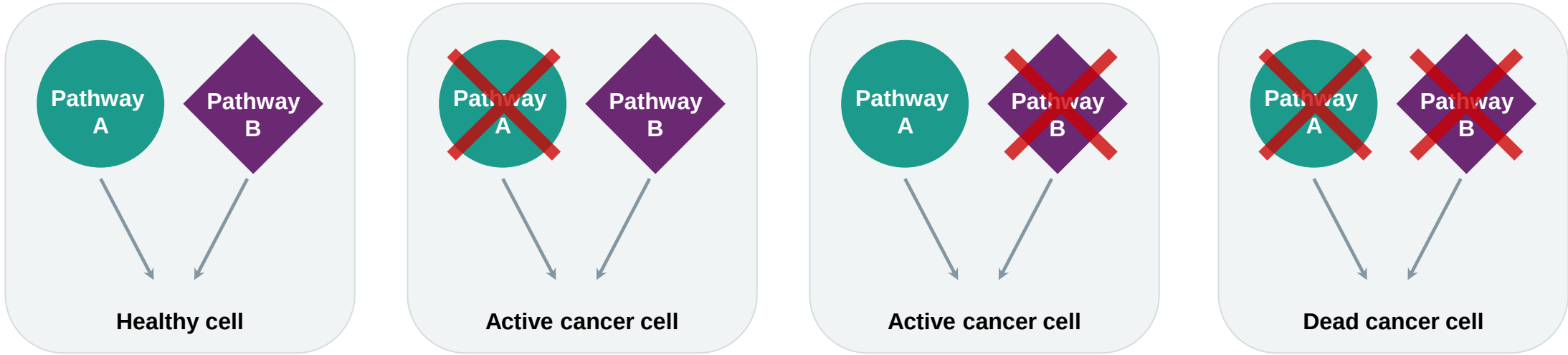
# Robust DDR Development Pipeline Milestones

## 2024-2025 Anticipated Clinical Milestones




1. **A** Multi-**C**enter **E**valuation of WEE1 Inhibitor in Patients with Advanced **So**lid **T**umors, APR-**1051**

# Synthetic Lethality




- Cancer cell death only upon the loss of function of two codependent pathways
- DNA Damage Response (DDR) allows cells to pause and self repair during replication (mitosis)
- Inhibition of DDR leads to mitotic catastrophe and cell death
- ATR and WEE1 inhibitors are integral to stopping DDR and are emerging targets for cancer cell death
- Builds on scientific innovation led by Aprea founder and key personnel[1]

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[1] Gilad et al, (2010) Cancer Res.

# Leadership with Strong Drug Development and Commercial Expertise

## Pioneers in Synthetic Lethality

## Management

| **Oren Gilad, Ph.D.**<br>President and CEO | **John Hamill**<br>Sr. Vice President and CFO | **Nadeem Mirza, M.D., MPH**<br>Senior Medical Advisor | **Ze'ev Weiss, CPA, B.Sc.**<br>Chief Business Advisor | **Mike Carleton, Ph.D.**<br>Translational Medicine Advisor | **Brian Wiley**<br>SVP, Corporate Strategy |
|---|---|---|---|---|---|
| ATRIN Pharmaceuticals<br>Perelman School of Medicine | WINDTREE THERAPEUTICS<br>Trevena<br>SAVIENT PHARMACEUTICALS, INC.<br>NephroGenex<br>pharmanet | Salarius PHARMACEUTICALS<br>TRIGR THERAPEUTICS<br>Verastem Oncology<br>abbvie<br>sanofi | ATRIN Pharmaceuticals<br>INTEC PHARMA<br>pwc | inipharm<br>ATRIN Pharmaceuticals<br>MERCK<br>Bristol Myers Squibb<br>presage<br>Mavu PHARMA | Boston BioConsulting<br>NewLink GENETICS<br>Gloucester PHARMACEUTICALS<br>Celgene<br>MILLENNIUM |

## Board of Directors

| | | |
|---|---|---|
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# ATR Inhibitor: ATRN-119

## Clinical Proof-of-Concept

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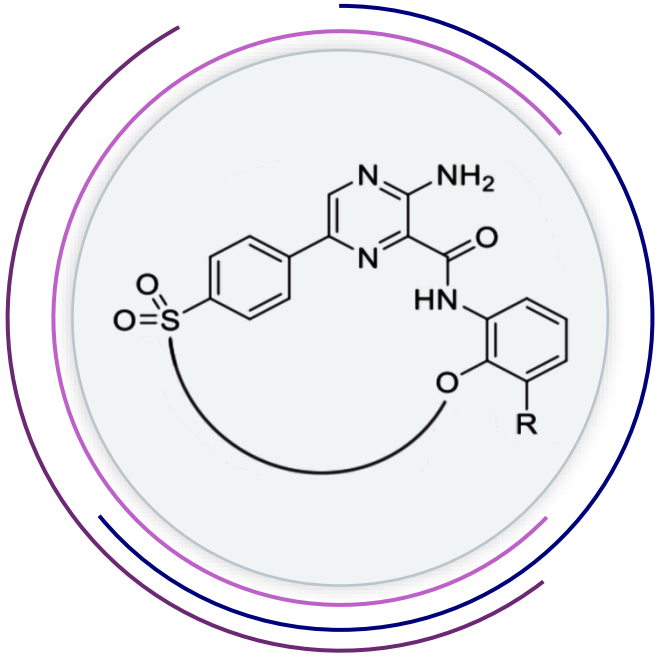
# ATRN-119: First and Only Macrocyclic ATR Inhibitor[1]

## Macrocycles: A Well-Evolved Approach for PIK-Related Kinase Inhibition (e.g., rapamycin and mTOR)[2-4]




**Benefits of Unique Cyclic Skeleton Structure vs Competitors' First-Generation Acyclic Structure**

**Macrocycles restrict the number of conformations that can be formed, which can:**

- Increase potency
- Increase selectivity

**These effects can then promote:**

- Increased tolerability by decreasing off-targeting
- Permit more efficacious dosing

[1] Based on company knowledge
[2] Brown, EJ et al, (1994) Nature
[3] Brown, EJ et al, (1995) Nature
[4] Brown, EJ and SL Schreiber, (1996) Cell

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# AR-276-01: Aprea Phase 1/2a - Study Overview

## A Phase 1/2a, Open-Label, Safety, Pharmacokinetic, and Preliminary Efficacy Study of Oral ATRN-119 in Patients with Advanced Solid Tumors

**Sites:**
**4 US sites for dose escalation**

- University of Pennsylvania
- Mary Crowley Cancer Research
- University Hospitals Cleveland Medical Center
- Yale Cancer Center

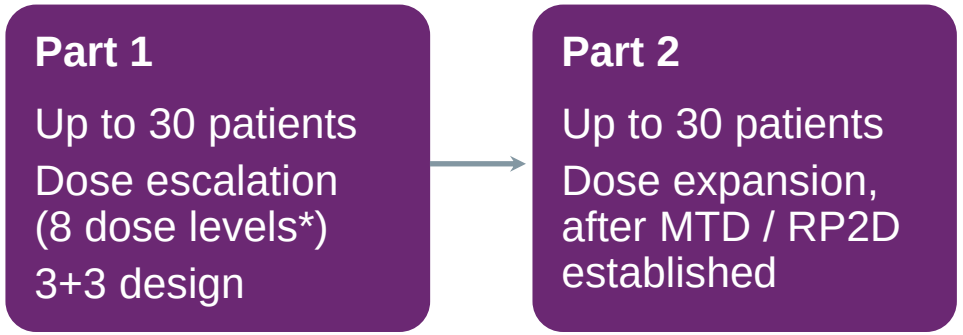
**Patient enrollment:**
**60 patients in total**

- Escalation phase: up to 30 patients
- Expansion phase: up to 30 patients

**IMP: ATRN-119 is an oral ATR kinase inhibitor given daily**

**Patient Population:**

Male or female subjects 12 years of age or older with solid tumors harboring specific DDR mutations per NGS




**Primary objectives:**

- Safety, MTD, RP2D
- Pharmacokinetics

**Secondary objectives:**

- Antitumor activity (RECIST/PCWG3)

**Exploratory objectives:**

- Association between identified mutations and clinical outcomes

*Planned protocol amendment adding cohorts 7 and 8

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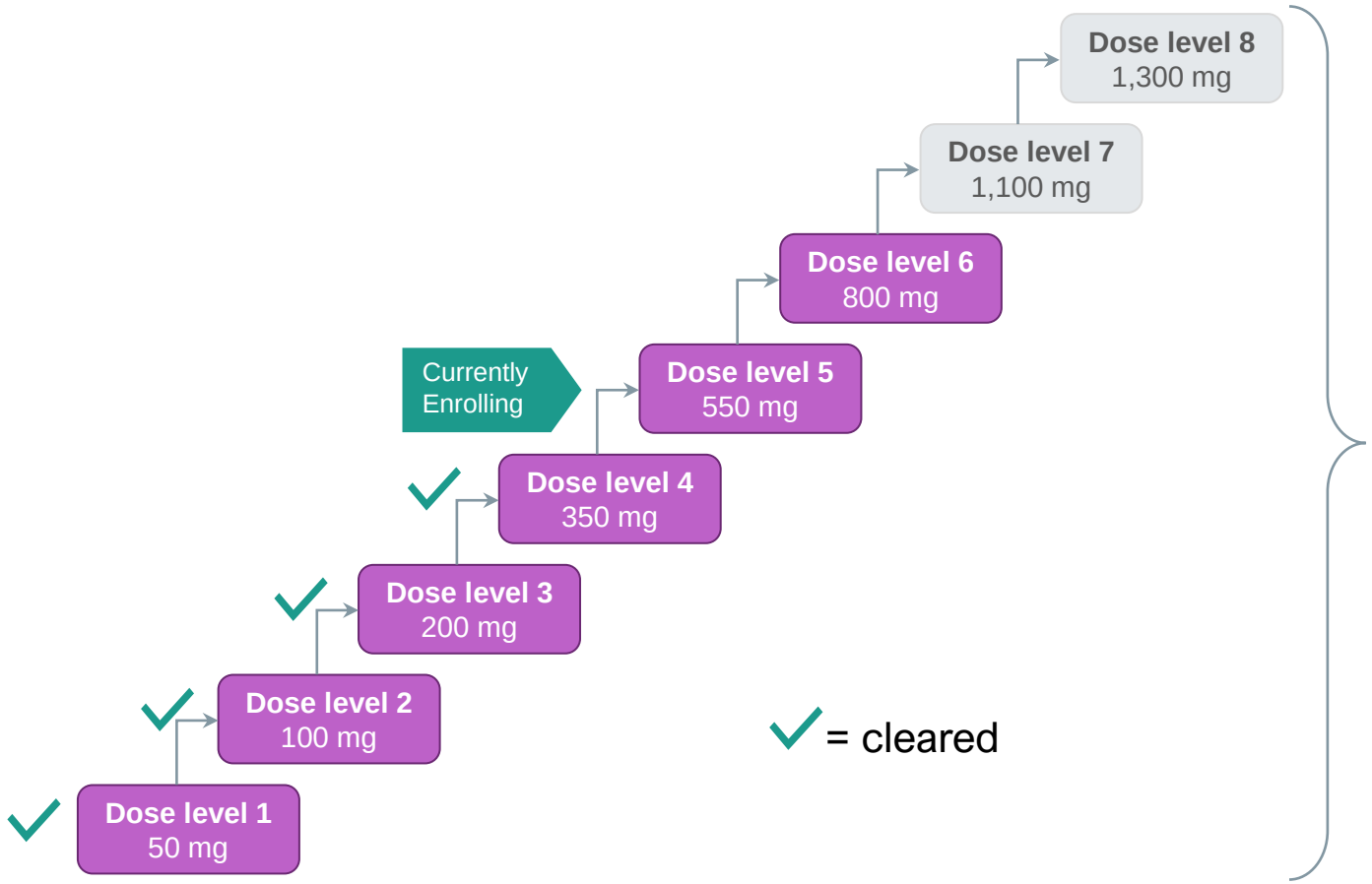
# Aprea AR-276-01 Study

## 3+3 dose escalation with once-daily dosing (up to 30* patients)




MTD/RP2D

## Dose expansion (up to 30 patients)

**Potential indications**

Colorectal
Prostate
Gastric
Endometrial

**Mutations**

Undisclosed RepliBiom biomarkers

*Planned protocol amendment adding cohorts 7 and 8

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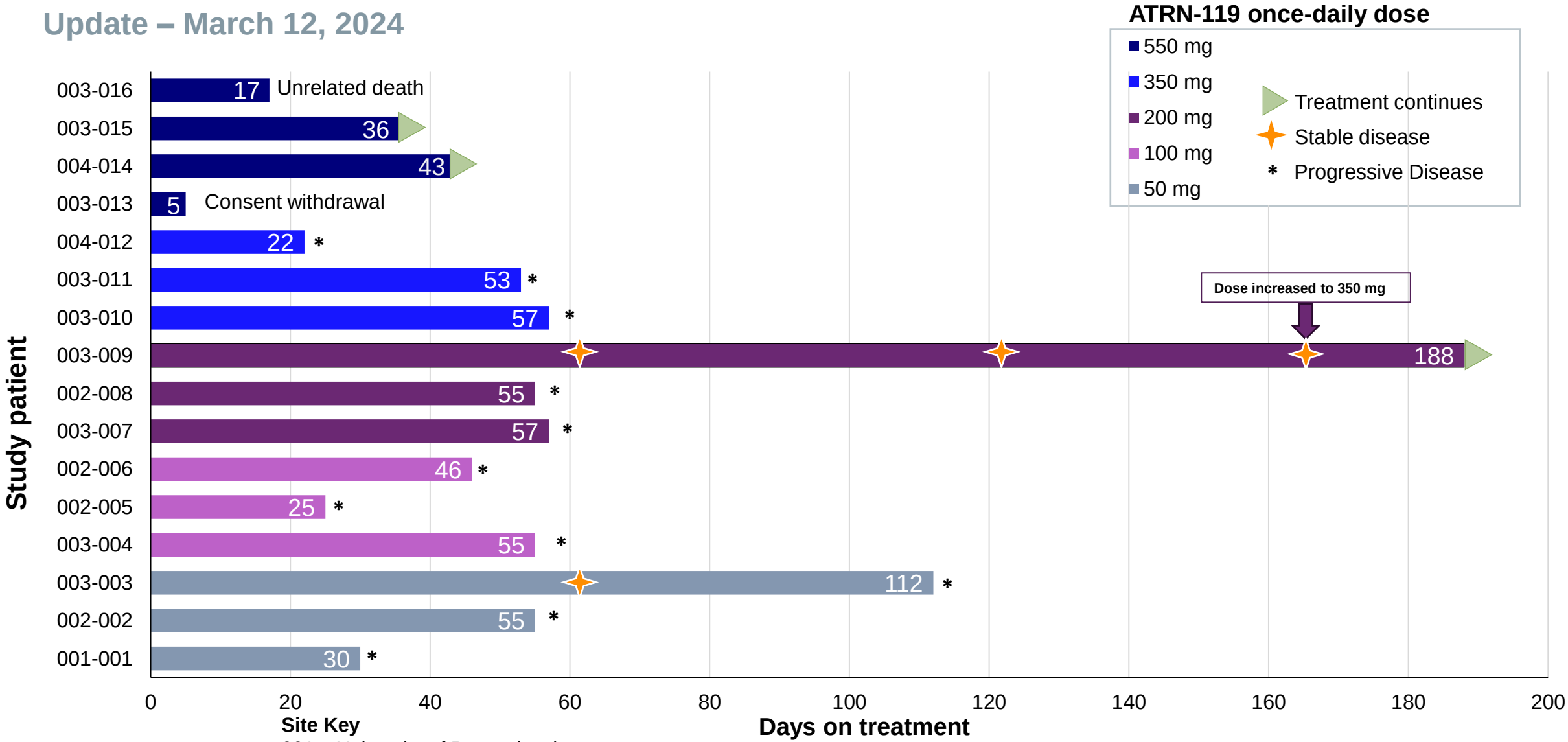
# AR-276-01 Summary of Duration of Treatment

## Update – March 12, 2024




**Site Key**

001 - University of Pennsylvania
002 - Mary Crowley Cancer Research
003 - University Hospitals Cleveland Medical Center
004 - Yale Cancer Center

Not all data source verified

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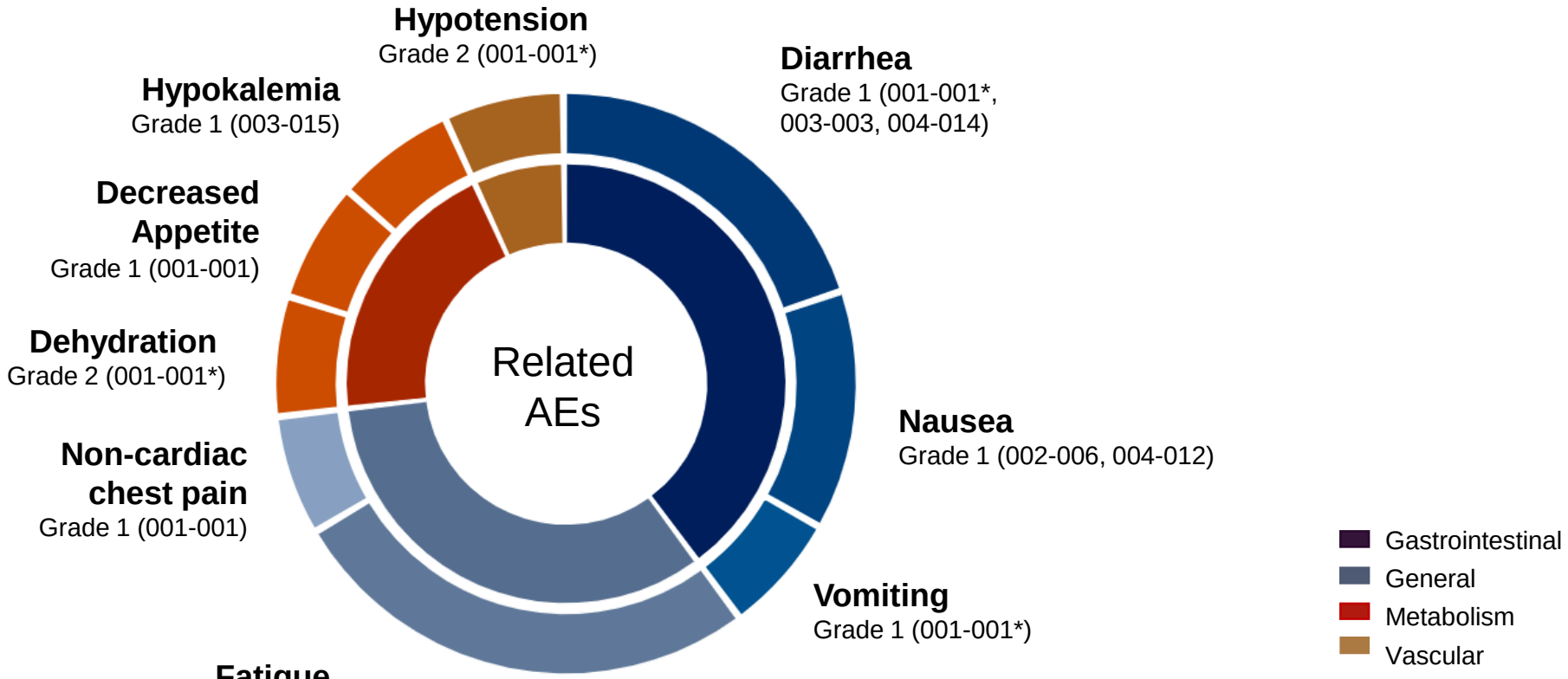
# No ATRN-119 Related SAE or Grade 4 Adverse Events Reported

## As of March 12, 2024: Ten Of Sixteen Patients Experienced AEs# Possibly/probably Related to ATRN-119




# No grade 4 AEs were observed
* Resulted in treatment interruption
Not all data source verified

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# ATRN-119
# 2024-2025 Anticipated Clinical Milestones

| Milestone | Timeline |
|---|---|
| **Phase 1/2a – Monotherapy Dose Escalation** | |
| Potential efficacy data | 2H 2024 |
| Complete Dose Escalation | 4Q 2024 |
| RP2D | 1Q 2025 |
| | |
| **Phase 1/2a – Monotherapy Dose Expansion** | |
| First Patient Enrolled | 1Q 2025 |
| Additional Open-Label Efficacy Data | 3Q 2025 |

Planned protocol amendment adding cohorts 7 and 8 to monotherapy dose escalation 1Q2024

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# ATR Inhibitor: ATRN-119

Preclinical

Proof-of-Principal

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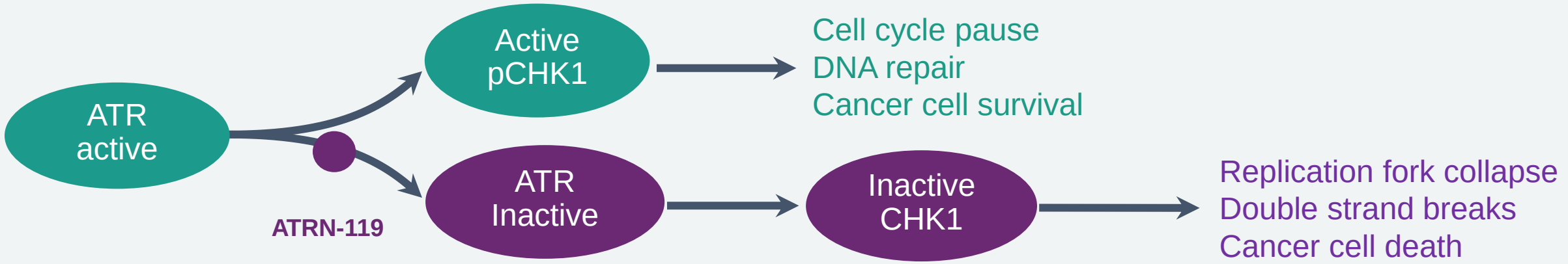
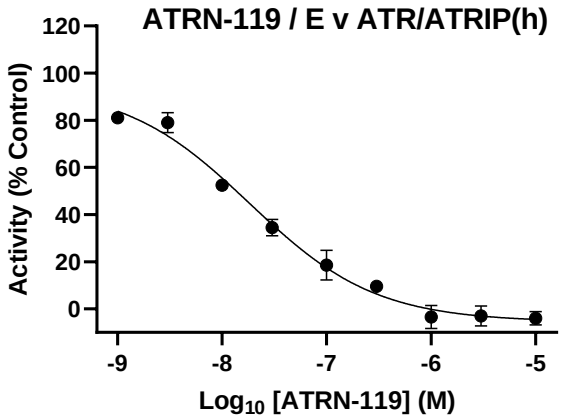
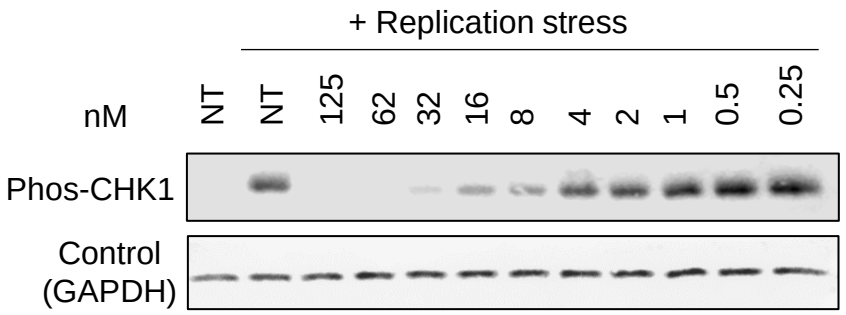
# ATR Inhibitor – ATRN-119
# Mechanism of Action – Prevent CHK1 Phosphorylation by ATR Kinase



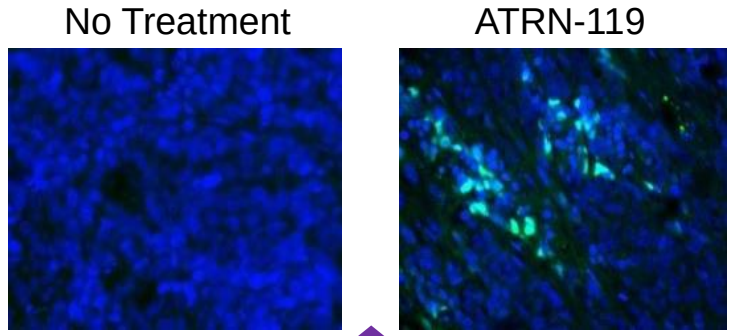




ATRN-119 binds to ATR




…inhibits its biological activity…

Tumor Samples
Pharmacodynamics - γH2AX (green)




…and triggers replication fork collapse and double-strand breaks (γH2AX)

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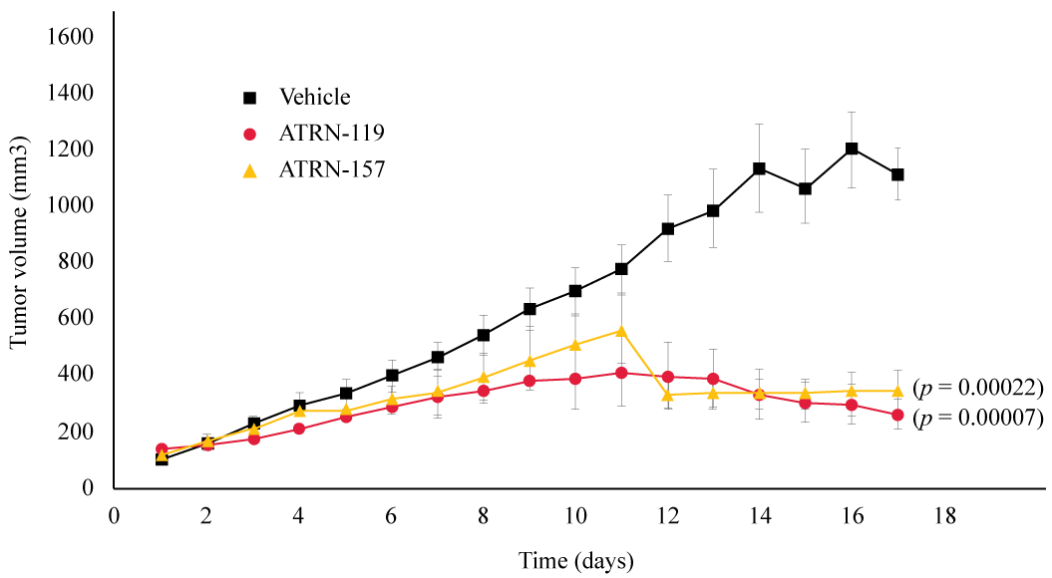
pCHK1 – Phosphorylated Checkpoint kinase 1
Data on file

# ATRN-119 Preclinical Profile

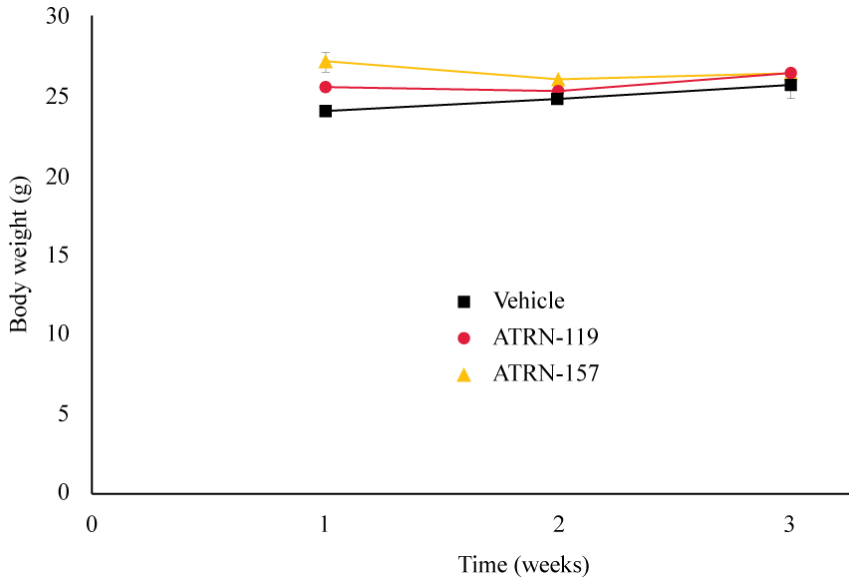
Nanomolar potency in vitro across a broad spectrum of cancer cell lines

Strong tumor control observed in vivo, including in challenging genetic backgrounds

## Tumor Growth Inhibition
## HCT-116 ($KRAS^{G13D}$, p53 null)




## Body Weight
## HCT-116 ($KRAS^{G13D}$, p53 null)




N=4 female mice per group, ATRN-119 - 100 mg/kg/day P.O, ATRN-157 - 20 mg/kg/day SQ.
ATRN-157 is an active metabolite identified in dogs receiving ATRN-119 P.O.. In vitro metabolism studies in dog and human hepatocytes and liver microsomes indicated formation of ATRN-157 in both species. Potency and selectivity of ATRN-157 was comparable to ATRN-119.
Pre-clinical studies with ATRN-119 and ATRN-157.

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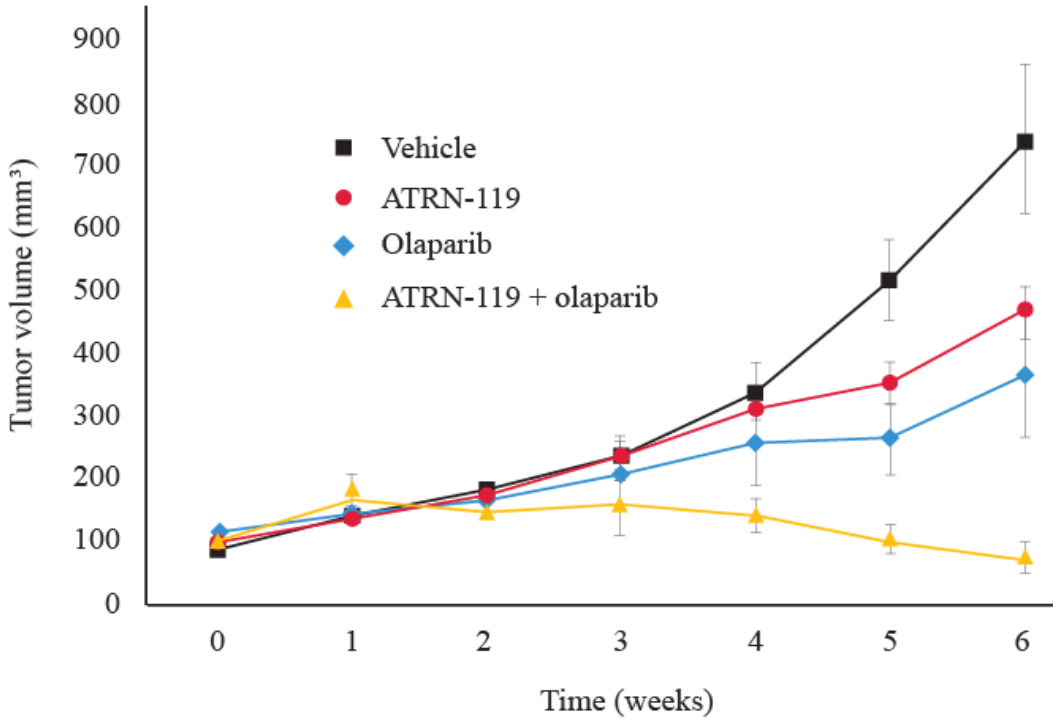
# ATRN-119 + Olaparib:
# Regression of BRCA2-Deficient Ovarian (HGSOC) Tumors

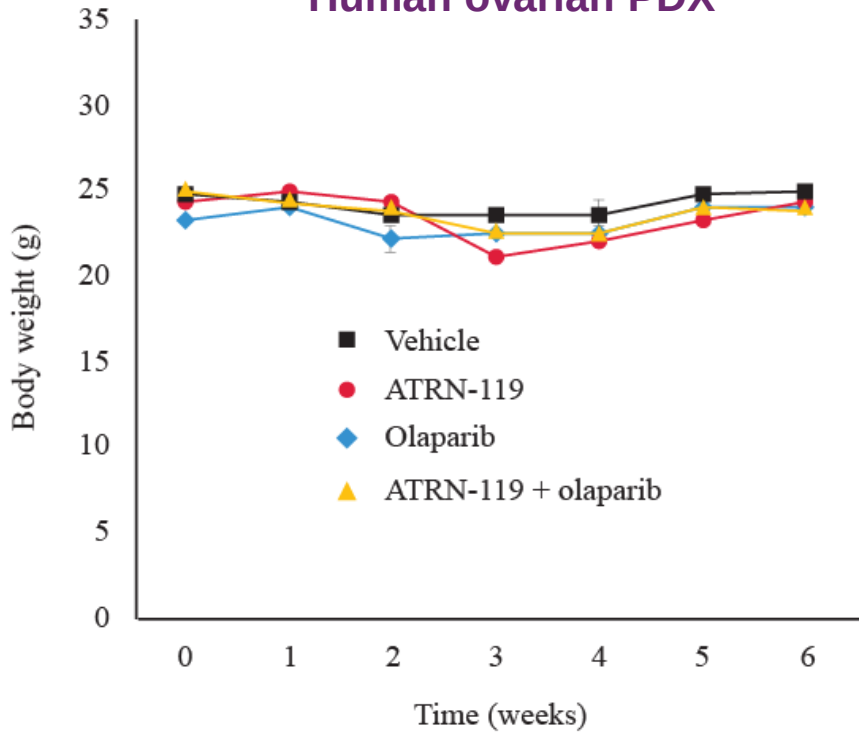
## ATRN-119 + Olaparib Inhibits Ovarian Tumor Growth Over Time

### Tumor Growth Inhibition
### Human ovarian PDX




## ATRN-119 + Olaparib Shows Negligible Weight Loss Over Time

### Body Weight
### Human ovarian PDX




N=6-8 mice per group, ATRN-119 - 90 mg/kg P.O BID, Olaparib - 50 mg/kg/day P.O, ATRN-119+Olaparib at the same doses and schedules.
Pre-clinical studies with ATRN-119.
Data on file

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# ATR Inhibitor: ATRN-119

## A Potentially Differentiated ATRi

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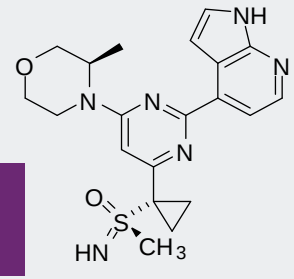
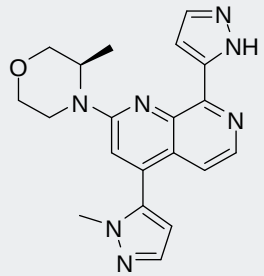
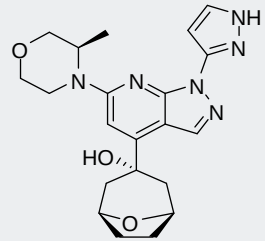
# Reported Challenges with Other ATR Inhibitors

## First Generation Compounds Share Similar Core, Backbone, Toxicity, and Intermittent Dosing Schedule

| Parameter | AstraZeneca AZD6738[1,2]  | Bayer BAY1895344[3]  | Repare / Roche[4] RP-3500[5]  |
|---|---|---|---|
| **Route of Administration** | **Oral** | **Oral** | **Oral** |
| **MTD/RP2 Dose Schedule** | 160mg BID, **2-weeks-on, 2-weeks-off**, or: Continuous dosing[1] | 40mg BID, **3-days-on/4-days-off** | 160mg QD, **3-days-on/4-days-off** |
| **Main Grade ≥3 Hematological toxicities** | Patriot 1, Escalation Phase, 160mg, BID[2]: **Anemia** (1/6, 17%)<br><br>Patriot 2, Expansion Phase[1]: **Fatigue, anemia, nausea, and thrombocytopenia (not differentiated)** (4/6, 67%) with continuous dosing (3/15, 20%) with 2-week-on, 2-week-off | **Anemia** (2/2, 100%)<br><br>**Neutropenia** (1/2, 50%) | **Anemia** (23/95, 24%)<br><br>**Neutrophil count decreased** (10/95, 11%)<br><br>**Platelet count decreased** (5/95, 5%) |

Note: Head-to-head studies with ATRN-119 have not been conducted

[1] Phase I study of ATR inhibitor, AZD6738, as monotherapy in advanced solid tumors (PATRIOT part A, B), Dillon et al, Volume 30, October 2019, Pages v165-v166

[2] Poster CT084: A Phase I dose-escalation study of ATR inhibitor monotherapy with AZD6738 in advanced solid tumors (PATRIOT Part A), AACR 2017

[3] First-in-Human Trial of the Oral Ataxia Telangiectasia and RAD3-Related (ATR) Inhibitor BAY 1895344 in Patients with Advanced Solid Tumors, Yap et al, Cancer Discov 2021;11:80-91 and 2019 ASCO Poster, De-Bono et al.

[4] Repare announced a worldwide license and collaboration agreement with Roche on June 1, 2022

[5] Preliminary Phase 1 Data From Ongoing First-in-Human Phase 1/2 TRESR Study of RP-3500, AACR 2022

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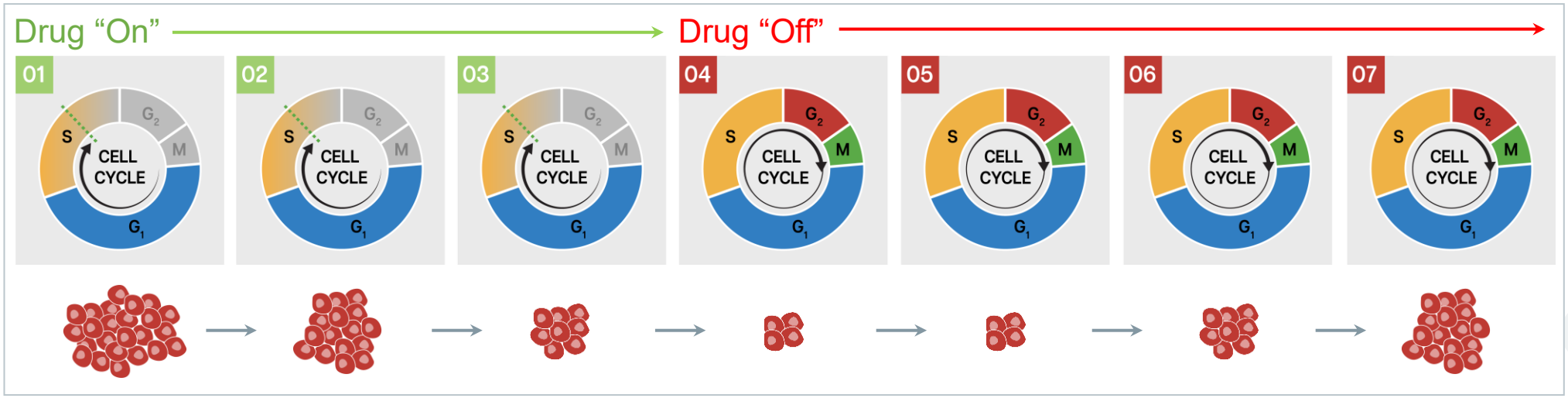
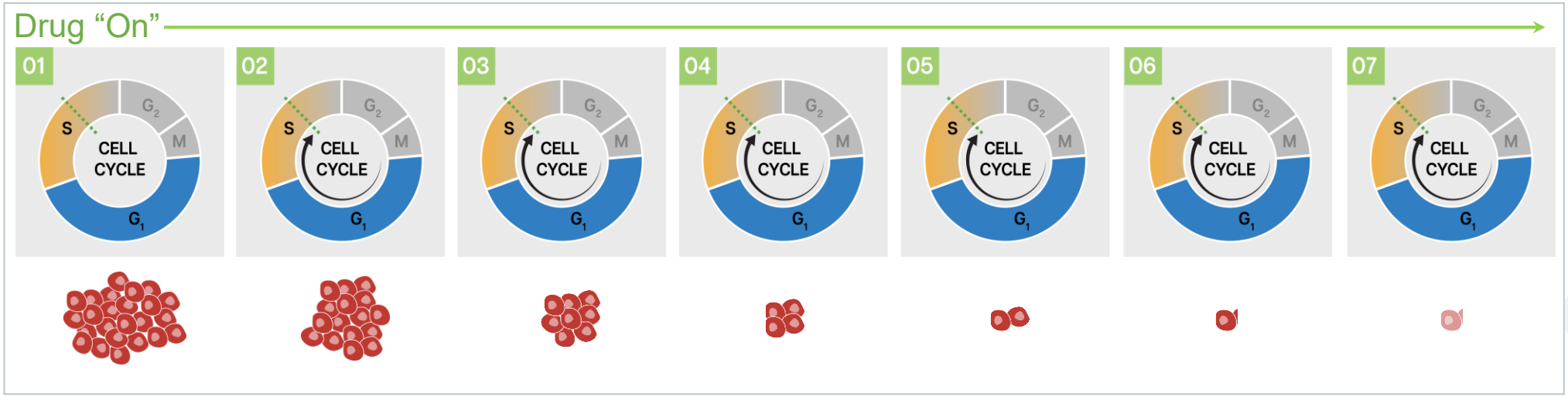
# ATRN-119 Daily Dosing Means Continuous Tumor Reduction

## Intermittent Dosing May Lead to Tumor Resistance




**Tumor reduction and regrowth**




**Continuous tumor reduction**

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# Daily Dosing Is Clinically Superior Based on Other ATRi in Development

## Artios ATR Inhibitor: ART0380
## Initial Results From Phase 1 Dose Escalation[1]

| | |
|---|---|
| **Dose Escalation Phase** | • 49 patients<br>• Continuous dosing: QD; Range 200-400mg, (n=10)<br>• Intermittent dosing: 3D on/4D off; Range 100 - 1,200mg, (n=39) |
| **RP2D** | • Continuous = 200mg<br>• Intermittent dosing = 600mg |
| **Efficacy Among Measurable Patients** | • Continuous – **ORR 29%** (2/7). One of two responders treated at twice the RP2D.<br>• Intermittent – **ORR 8%** (2/26). One of two responders treated at twice the RP2D. |
| **Safety** | • 36% Anemia Grade 3 at doses considered tolerable |

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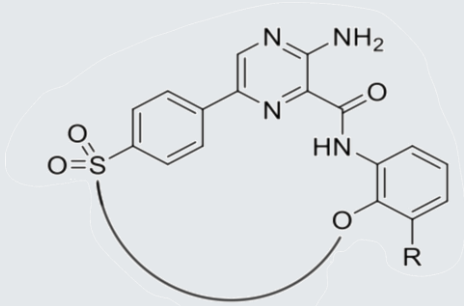
[1]ART0380-ESMO-Poster-2023

# ATRN-119: Potential Best-in-Class Oral ATR Inhibitor with Structurally Differentiated Core, Backbone, and Toxicity Profile

| Parameter | ATRN-119 (1)  |
|---|---|
| **Route Of Administration** | **Oral** |
| Clinical Studies Chosen (MTD/RP2D), Dose Schedule | Continuous daily dosing (RP2D TBD in Phase 1)[1] |
| Hematological toxicities in **preclinical studies** | **Pre-Clinical, Toxicology Studies:**<br>• In 28-day GLP tox study in dogs, hematological changes were of small magnitude and within normal ranges<br>• In a head-to-head comparative tolerability study, ATRN-119 demonstrated significantly less toxicity than another oral ATRi that is currently in clinical development[2] |

**ATRN-119 potential for reduced toxicity could make it a preferred ATR inhibitor as a single agent, as well as a candidate for combination with standard-of-care therapies.**

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Note: ATRN-119 has not yet been tested clinically
[1] ATRN-119, Phase 1/2a Clinical Study Protocol
[2] Internal pre-clinical head-to-head tolerability study in male beagle dogs.

# WEE1 Inhibitor: APR-1051

## **ACESOT-1051**:

First-in-human phase 1 study of WEE1 inhibitor APR-1051 in patients with advanced solid tumors harboring cancer-associated gene alterations

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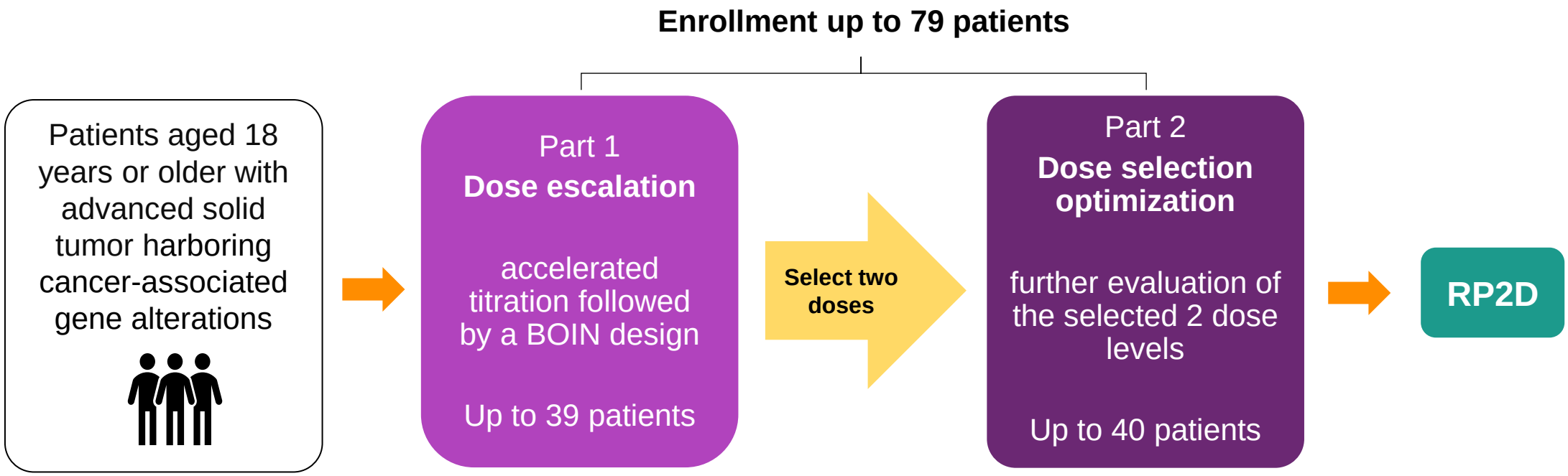
# APR-1051: Study Design

## Multi-center, open-label Phase 1 single-agent APR-1051 dose escalation and dose selection optimization

Assess the safety, pharmacokinetics, pharmacodynamics, and preliminary efficacy of single-agent APR-1051 in advanced solid tumors harboring cancer-associated gene alterations




**Oral APR-1051 will be administered once-daily for 28-day cycles**

**Primary objectives:** Safety, DLT, MTD/MAD, RP2D

**Secondary objectives:** Pharmacokinetics, Antitumor activity (RECIST/PCWG3)

**Exploratory objectives:** Pharmacodynamics

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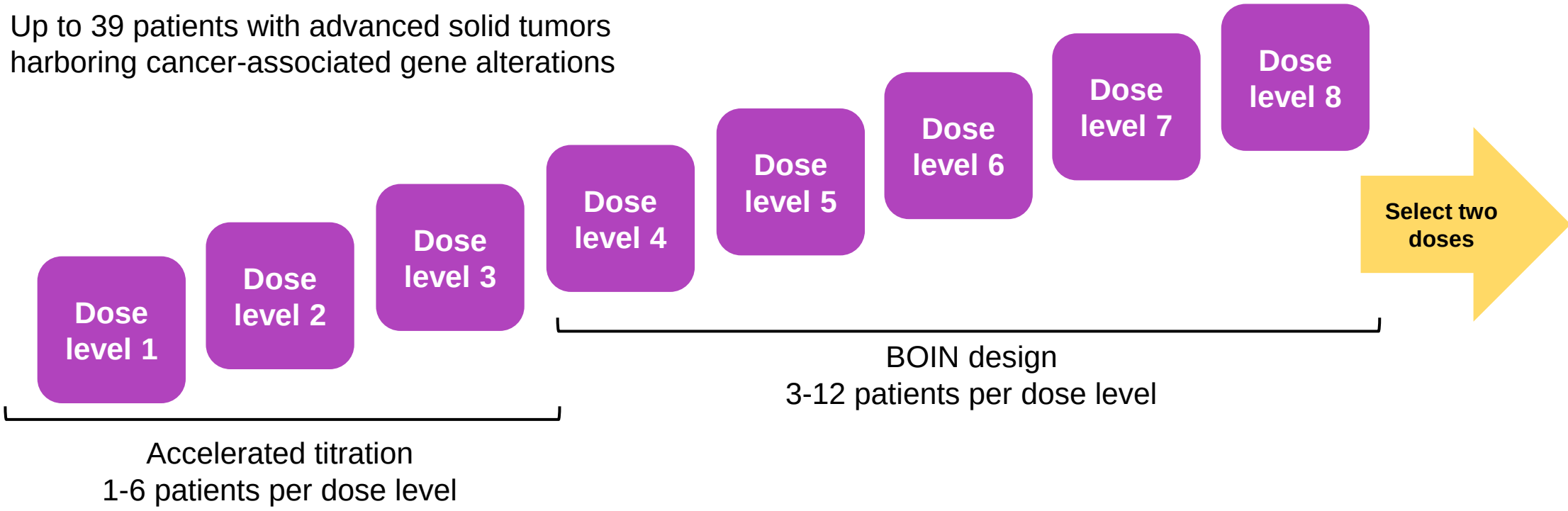
# APR-1051: Study Design

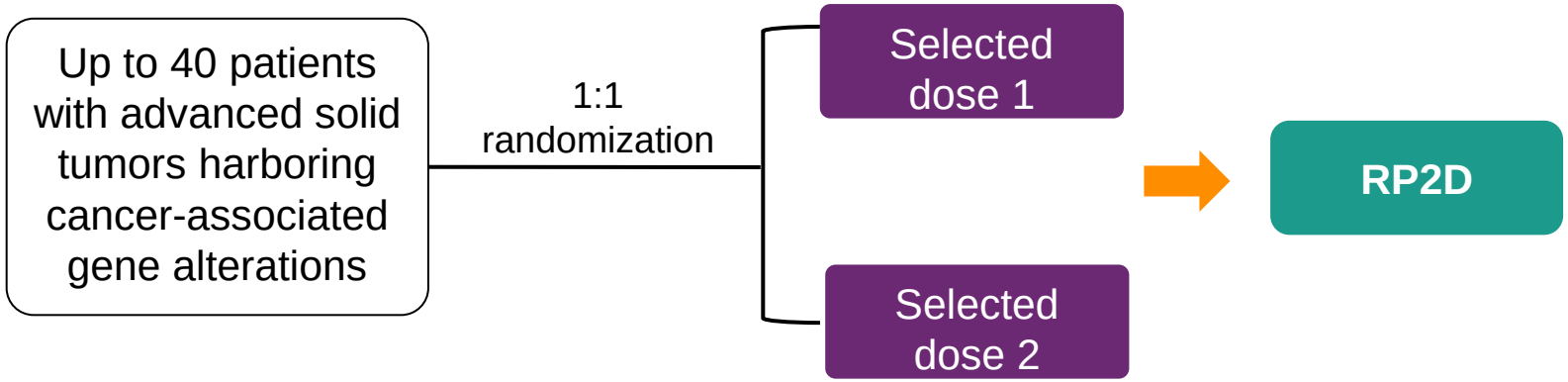
## Single-agent APR-1051 dose escalation study schema

Up to 39 patients with advanced solid tumors harboring cancer-associated gene alterations



# APR-1051: Study Design

## Single-agent APR-1051 dose selection optimization study schema & key eligibility criteria




**INCLUSION CRITERIA**

- Age 18 years or older with ECOG PS 0 or 1 (or KPS ≥ 70)
- Diagnosis of advanced/metastatic solid tumor that is either locally advanced and not amenable to curative therapy or stage 4 disease with:
  - Amplification/overexpression of *CCNE1* or *CCNE2* regardless of tumor type, or
  - Deleterious mutations in *FBXW7* or *PPP2R1A* regardless of tumor type, or
  - Colorectal cancer with *KRAS-GLY12* and *TP53* co-mutation, or
  - Uterine serous carcinoma regardless of biomarker status
- Measurable disease per RECIST version 1.1 (PCWG3 criteria for patients with mCRPC)
- Recovered to Grade 1 or baseline from prior treatment-related toxicity/AEs
- Adequate bone marrow and organ function

# WEE1 Inhibitor: APR-1051

## Preclinical Proof-of-Principle

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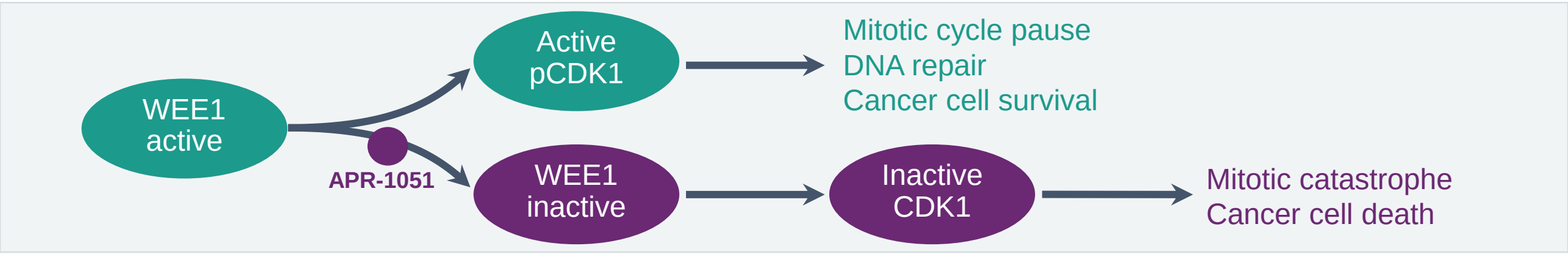
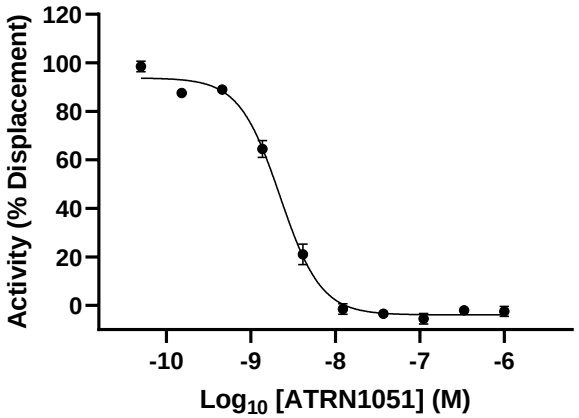
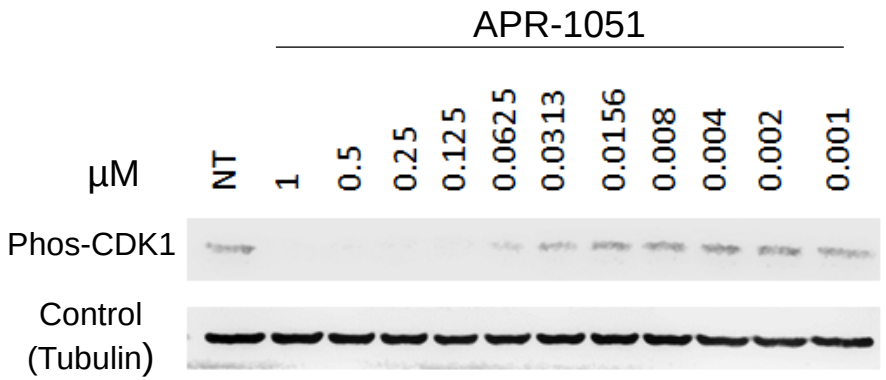
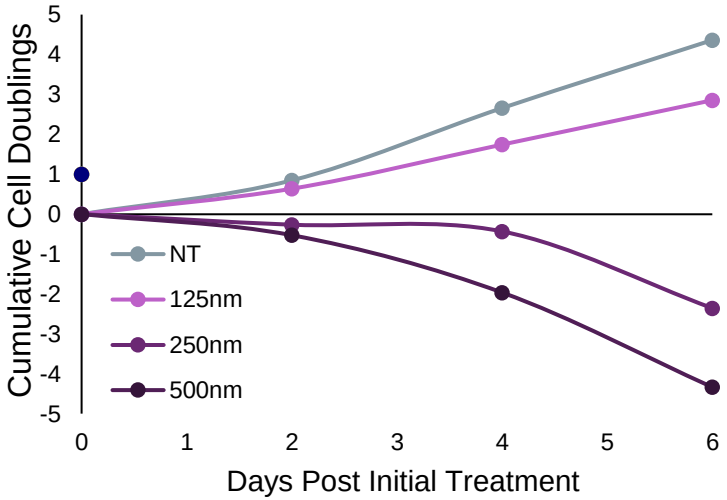
# WEE1 Inhibitor – APR-1051
# Mechanism of Action – Prevent CDK1 Phosphorylation by WEE1 Kinase




APR-1051 binds to WEE1

…inhibits its biological activity…

…and triggers mitotic catastrophe and cancer cell death

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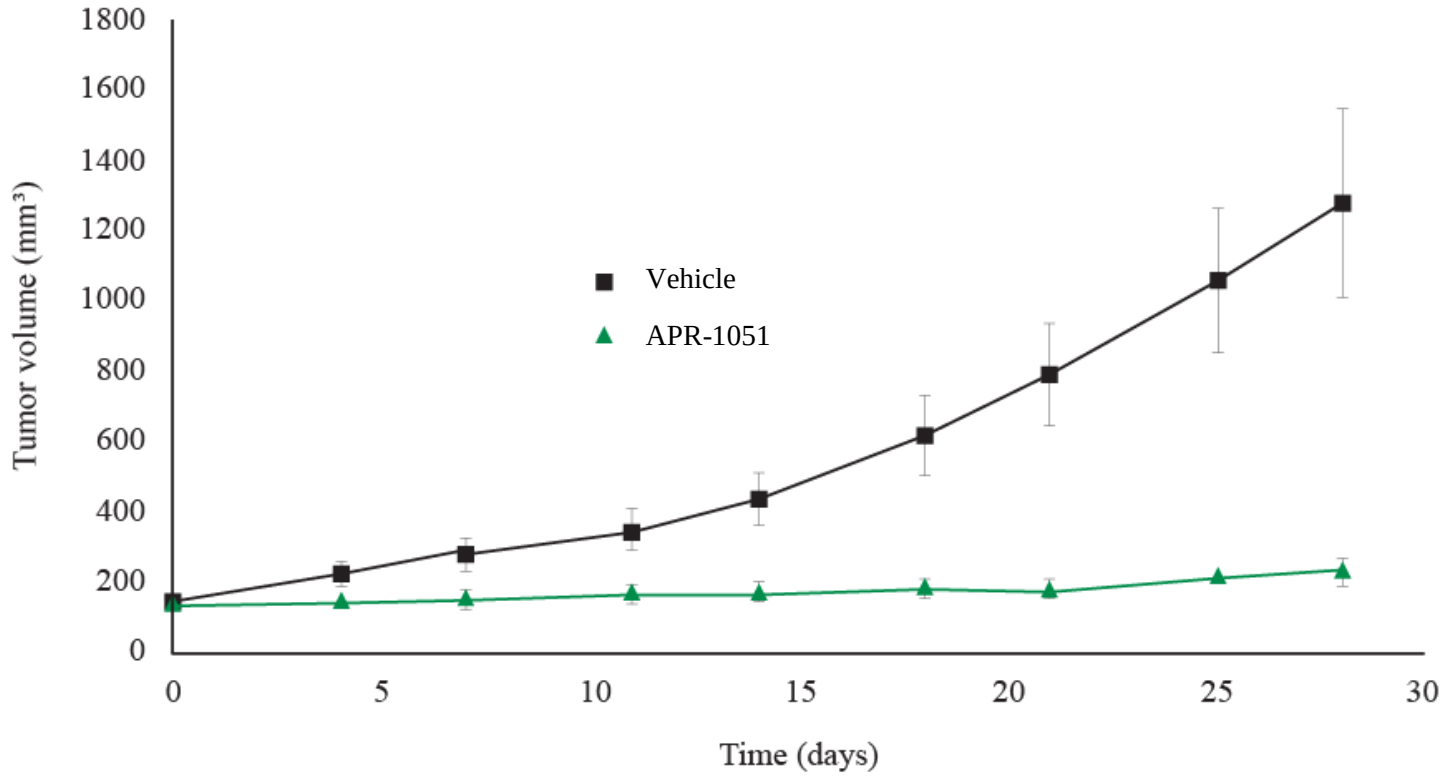
pCDK1- Phosphorylated Cyclin Dependent Kinase 1
Data on file

# APR-1051 Demonstrated Potentially Compelling Anti-tumor Activity

## IND Cleared March 2024

**Tumor Growth Inhibition**
**OVCAR-3**




N=7 mice per group, APR-1051, exploratory formulation - 30 mg/kg/day

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Pre-clinical studies with APR-1051
Data on file

# WEE1 Inhibitor: APR-1051

## A Potentially Differentiated Wee1i

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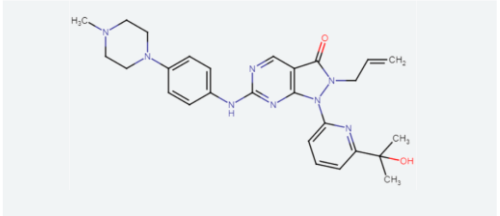
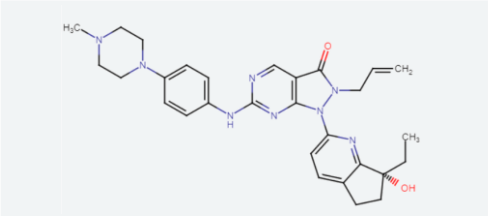
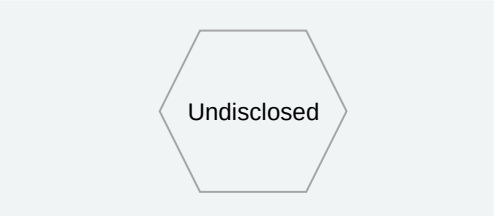
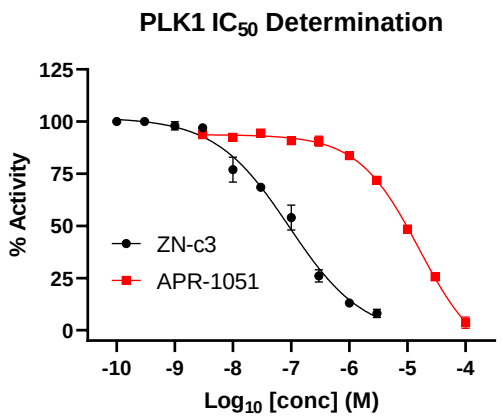
# APR-1051 Potentially Differentiated from Other WEE1 Inhibitors

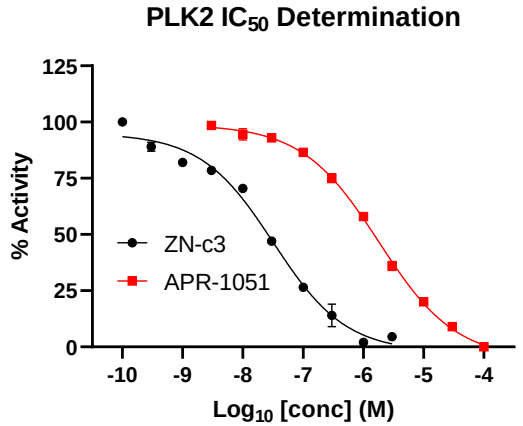
## APR-1051 Potent and Structurally Differentiated, with High Selectivity to Limit Off-target Toxicity

| | |  AstraZeneca Adavosertib (AZD-1775)[1,2] |  Zentalis Azenosetrib (ZN-c3)[1] |   Aprea APR-1051 |
|---|---|---|---|---|
| On-Target $IC_{50}$ (nM) | **WEE1** | 3.8 | 3.8 | 1.9 |



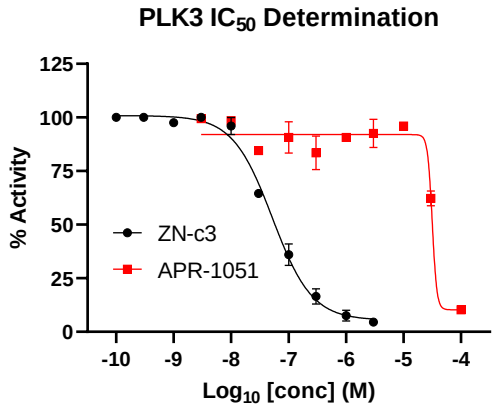

**ZN-c3 = 92.1 nM**
**APR-1051 = 15,900 nM**

PLK1 Inhibition
IC50 values show >150-fold




**ZN-c3 = 32.0 nM**
**APR-1051 = 1,800 nM**

PLK2 Inhibition
IC50 values show >50-fold




**ZN-c3 = 52.2 nM**
**APR-1051 = 31,600 nM**

PLK3 Inhibition
IC50 values show >600-fold

Note: Head-to-head studies have not been conducted
[1] Huang et al, (2021) J Med Chem
[2] AstraZeneca announced in July 2022 the discontinuation of development of AZD-1775



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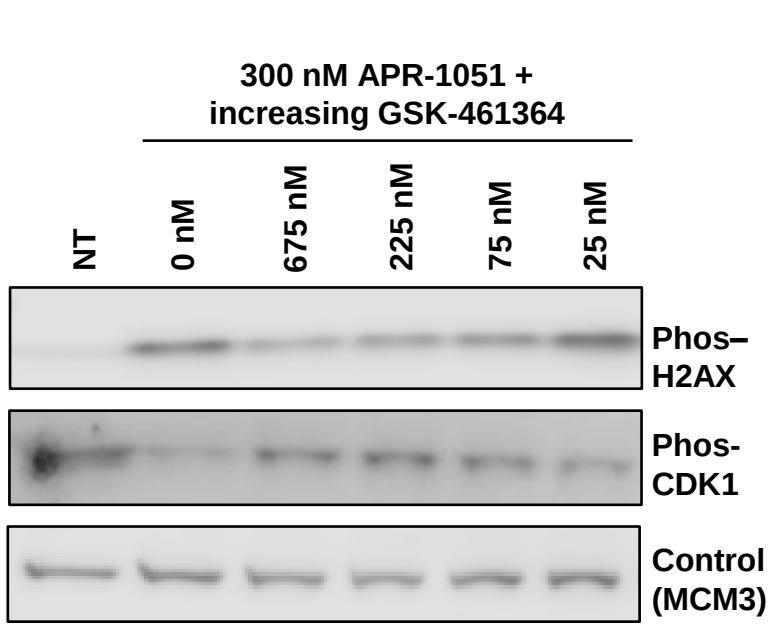
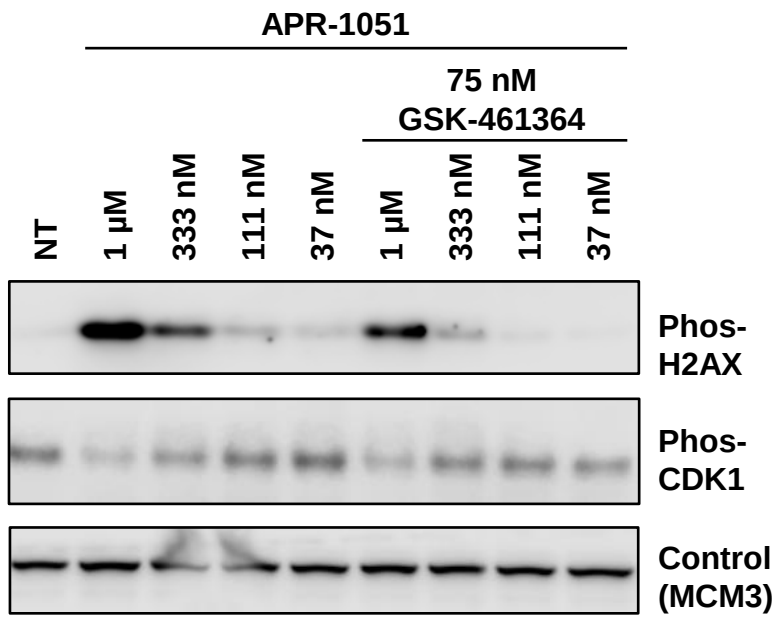
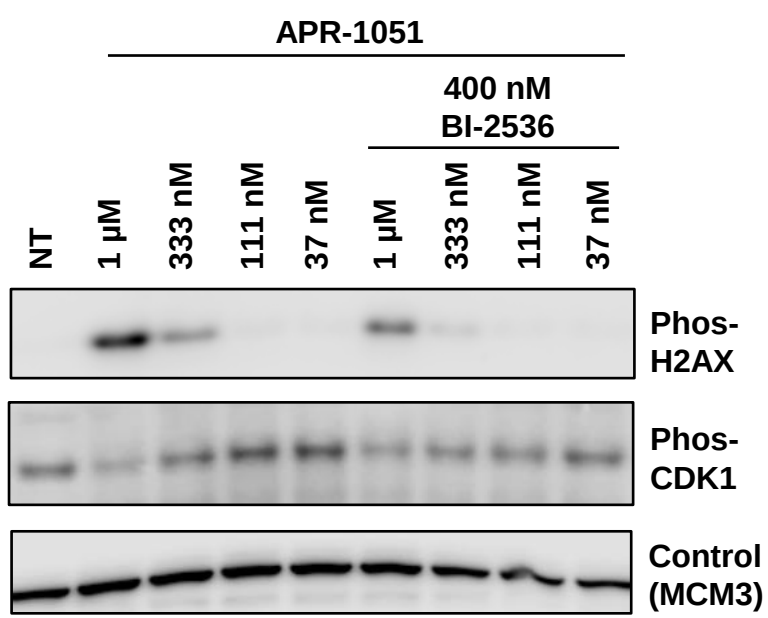
# PLK1 Inhibition Reduces Cytotoxic Effects of WEE1 Inhibitors

## Minimal PLK1 Co-inhibition Enables Full Therapeutic Potential APR-1051




Dose range of PLK inhibitor GSK-461364 in combination with a single dose of APR-1051 in OVCAR-3 cells

PLK inhibitor, GSK-461364 interferes with the effects of APR-1051 in OVCAR-3 cells

PLK inhibitor, BI-2536, interferes with the effects of APR-1051 in OVCAR-3 cells

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# APR-1051 Preclinical Data Highlight Potentially Favorable PK Properties

## Based on Pre-clinical Studies, APR-1051 Shows Potentially Favorable Drug Exposure

| | APR-1051[1] | Zentalis Azenosertib (ZN-c3)[2] | | | AstraZeneca Adavosertib (AZD-1775)[2] | | |
|---|---|---|---|---|---|---|---|
| Dose (mg/kg/d) | **10** | 20 | **40** | 80 | 20 | 40 | **80** |
| $C_{max}$ ng/ml | 1,460 | 1,167 | 1,997 | 5,100 | 635 | 2,460 | 4,703 |
| $T_{max}$ hr | 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| $AUC_{0-24}$, ng*hr/ml | **16,739** | 4,863 | **17,088** | 39,722 | 1,494 | 6,313 | **13,408** |

Note: Head-to-head studies have not been conducted

[1] Data from an exploratory formulation of APR-1051 administered to fasted Balb/c mice

[2] Data from study in A-427 NSCLC xenograft model as reported in Zentalis Corporate Overview, March 2022

# APR-1051 Shows Negligible Inhibition of hERG Channels

**QT prolongation AEs were reported with some competitor WEE1 inhibitors**

| In vitro kinase assays IC50 | | Average WEE1 kinase IC50 | hERG inhibition IC50 | | Average hERG IC50 | Fold difference between kinase IC50 and hERG IC50 |
|---|---|---|---|---|---|---|
| LanthaScreen (Thermo) | Hotspot (Reaction Biology) | | HEK293 cells (Medicilon) | CHO cells (WuXi) | | hERG inhibition over WEE1 kinase inhibition |
| 2.2 nM | 41.4 nM | **21.8 nM** | 8,840 nM | 660 nM | **4,750 nM** | **218-fold (range 16- to 3,946-fold)** |

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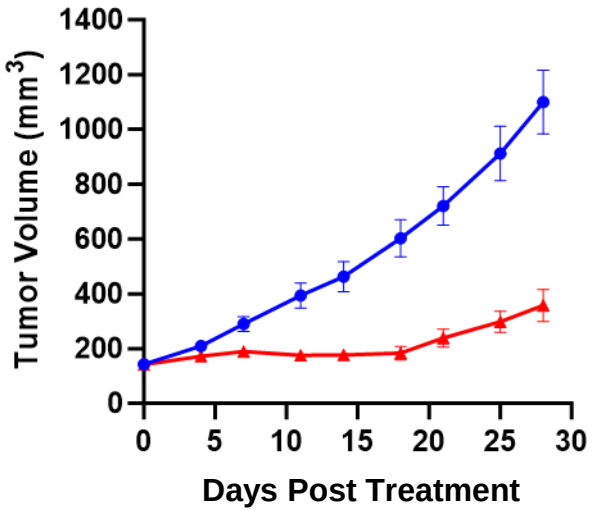
APREA THERAPEUTICS

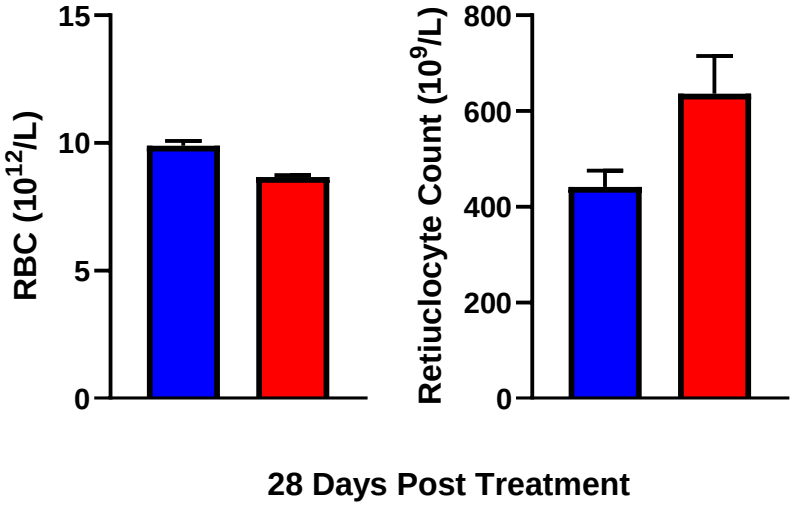
# APR-1051 Suppresses Tumor Growth While Causing Little Effect on RBCs and Body Weight

## OVCAR Xenograft Tumor Model in Female Nude Mice

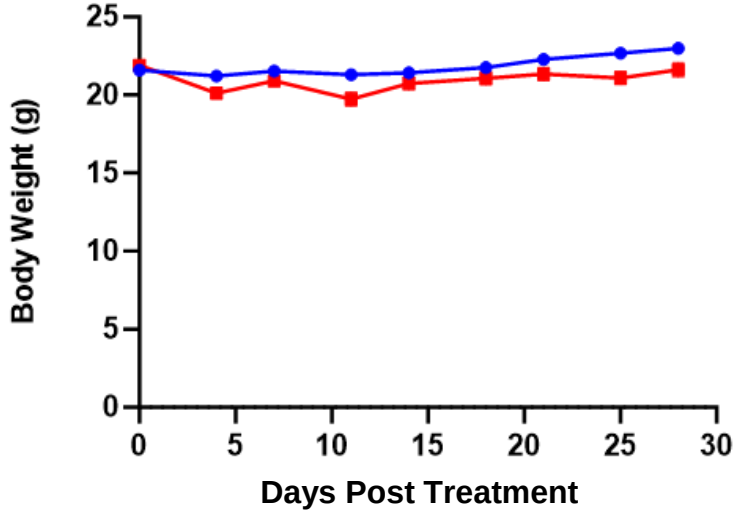
**Tumor Volume ($mm^3$) (Mean±SEM)**




**Heme Toxicity (Mean±SEM)**




**Body Weight (g) (Mean±SEM)**




**Vehicle**
10mL/kg, PO,
QD x 28 days

**APR-1051**
15mg/kg, PO, BID,
5 on/2 off x 28 days

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APREA THERAPEUTICS

# APR-1051
# 2024-2025 Anticipated Clinical Milestones

| Milestone | Timeline |
|---|---|
| **Phase 1 – Monotherapy Dose Escalation** | |
| Enroll first patient | 1H 2024 |
| Clinical Update | 4Q 2024 |
| Open-Label Efficacy Data | 2Q 2025 |
| RP2D | 2H 2025 |

APREA THERAPEUTICS

# Strong Intellectual Property Portfolio

**Family 1: Ataxia Telengiectasia and Rad3-Related (ATR) Protein Kinase Inhibitors**

- Macrocyclic inhibitors of ATR & methods of using them to treat various cancers, filed on Oct. 13th, 2015
- Patents granted in AU, CA, CN, EP, IL, JP, MX, HK. National phase examinations ongoing in BR, IN, KR
- 1.1: Issued on May 30, 2017 as U.S. Patent 9,663,535
- 1.2: Issued on May 29, 2018 as U.S. Patent 9,981,989
- 1.3: Issued on Feb. 5, 2019 as U.S. Patent 10,196,405

**Family 2: ATR Inhibitors and Methods of Use**

- Carboxylic acid-containing macrocyclic ATR inhibitors, and prodrugs; methods of using these inhibitors to treat various cancers; filed on Apr. 12th, 2017
- Issued on May 28th, 2019 as U.S. Patent 10,301,324

**Family 3: ATR Inhibitor Pharmaceutical Composition and Methods**

- International application filed on Apr. 14th, 2023
- Pharmaceutical formulation and composition of our lead molecule in the clinic

**Family 4: WEE1 Inhibitor Pharmaceutical Compositions and Methods**

- International Application filed on Jun. 3rd, 2022
- Composition of our lead WEE1 inhibitor compounds

**Family 5: Methods of Treating Cancer**

- U.S. Provisional Application filed on Oct. 20th, 2023
- Clinical methods of treating advanced solid cancer tumors using lead molecule



Four issued US patents protecting lead molecule and analogs

# Aprea Therapeutics (NASDAQ: APRE)
# Financial Summary & Capitalization

Cash & Equivalents of $21.6M as of December 31, 2023

Closed approximately $16.0M (before deducing placement agent fees and offering costs of approximately $1.4 million) from our private placement of our common stock in March 2024 with the potential to receive up to an additional $18.0 million upon cash exercise of accompanying warrants at the election of the investors.

| Securities | Common Equivalents as of April 8, 2024 |
|---|---|
| Preferred Stock (as converted) | 28,112 |
| Common Stock | 5,430,215 |
| Warrants: | |
| Pre-Funded | 507,076 |
| Tranche A | 1,097,394 |
| Tranche B | 1,097,394 |
| Total | 2,701,864 |
| Options | 682,101 |
| Restricted Stock Units | 28,130 |
| Fully Diluted Equivalents | 8,870,422 |

APREA THERAPEUTICS

# Investment Highlights

## Technology developed by pioneers in synthetic lethality

- Management with strong drug development and commercial expertise

## Diversified portfolio with best in class, de-risked clinical and preclinical programs

- Highly potent and selective ATR and WEE1 inhibitors
- Opportunities in ovarian, colorectal, prostate, and breast cancers
- Single agent and combination therapies

## Near term catalysts

- Phase 1/2a ATRN-119 potential efficacy 2H 2024; complete dose escalation 4Q 2024
- Initiate Phase 1 for APR-1051 1H 2024

## Financed into 3Q 2025

- Reach short term inflection points and catalysts
- Evaluate optimal strategic partnerships

APREA THERAPEUTICS