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CORPORATE PRESENTATION

October 2021

Forward-Looking Statements and Disclaimer

Zentalis Pharmaceuticals, Inc. (“we,” “us,” “our,” “Zentalis” or the “Company”) cautions that this presentation (including oral commentary that accompanies this presentation) contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this presentation that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements regarding our future financial or business performance, plans, prospects, trends or strategies, objectives of management, competition and other financial and business matters, the potential, safety, efficacy, and regulatory and clinical progress of our current and prospective product candidates, plans and timing for the initiation of and release of data from our clinical trials and our ability to meet other key milestones, planned preclinical activities, our current and prospective collaborations, the estimated size of the market for our product candidates, and the timing and success of our development and commercialization of our anticipated product candidates and the market acceptance thereof are forward-looking statements, as well as statements that include the words “expect,” “intend,” “plan,” “believe,” “project,” “forecast,” “estimate,” “may,” “should,” “anticipate” and similar statements of a future or forward-looking nature. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, the following: the outbreak of the novel coronavirus disease, COVID-19, has adversely impacted and may continue to adversely impact our business, including our preclinical studies and clinical trials; our limited operating history, which may make it difficult to evaluate our current business and predict our future success and viability; we have and expect to continue to incur significant losses; our need for additional funding, which may not be available; our substantial dependence on the success of our lead product candidate; failure to identify additional product candidates and develop or commercialize marketable products; the early stage of our development efforts; potential unforeseen events during clinical trials could cause delays or other adverse consequences; risks relating to the regulatory approval process or ongoing regulatory obligations; failure to obtain U.S. or international marketing approval; our product candidates may cause serious adverse side effects; interim, initial, “topline”, and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data; inability to maintain our collaborations, or the failure of these collaborations; our reliance on third parties; effects of significant competition; the possibility of system failures or security breaches; risks relating to intellectual property; our ability to attract, retain and motivate qualified personnel; and significant costs as a result of operating as a public company. These and other important factors discussed under the caption “Risk Factors” in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021 filed with the U.S. Securities and Exchange Commission (SEC) and our other filings with the SEC could cause actual results to differ materially from those indicated by the forward-looking statements made in this presentation. Any such forward-looking statements represent management’s estimates as of the date of this presentation. New risks and uncertainties may emerge from time to time, and it is not possible to predict all risks and uncertainties. While we may elect to update these forward-looking statements at some point in the future, we assume no obligation to update or revise any forward-looking statements except to the extent required by applicable law. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. Accordingly, readers are cautioned not to place undue reliance on these forward-looking statements. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data and estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk. Neither we nor our affiliates, advisors or representatives makes any representation as to the accuracy or completeness of that data or undertake to update such data after the date of this presentation.

Data of Fulvestrant, RAD1901, Abemaciclib, Alpelisib, AZD1775, Venetoclax and Osimertinib presented in this presentation is based on evaluation of comparable proxy chemical compounds purchased from commercial sources rather than the pharmaceutical company commercializing or developing, as applicable, the compound.

Company Overview

Lead Program: WEE1i (ZN-c3) potentially first- and best-in-class

- Monotherapy responses seen in 4 solid tumor types, with 3 Exceptional Responders and an additional 2 confirmed in USC, 1 unconfirmed PRs in USC thus far
- Potential accelerated approval paths for USC and biomarker-driven trials
- Orphan drug and rare pediatric disease designations granted in osteosarcoma

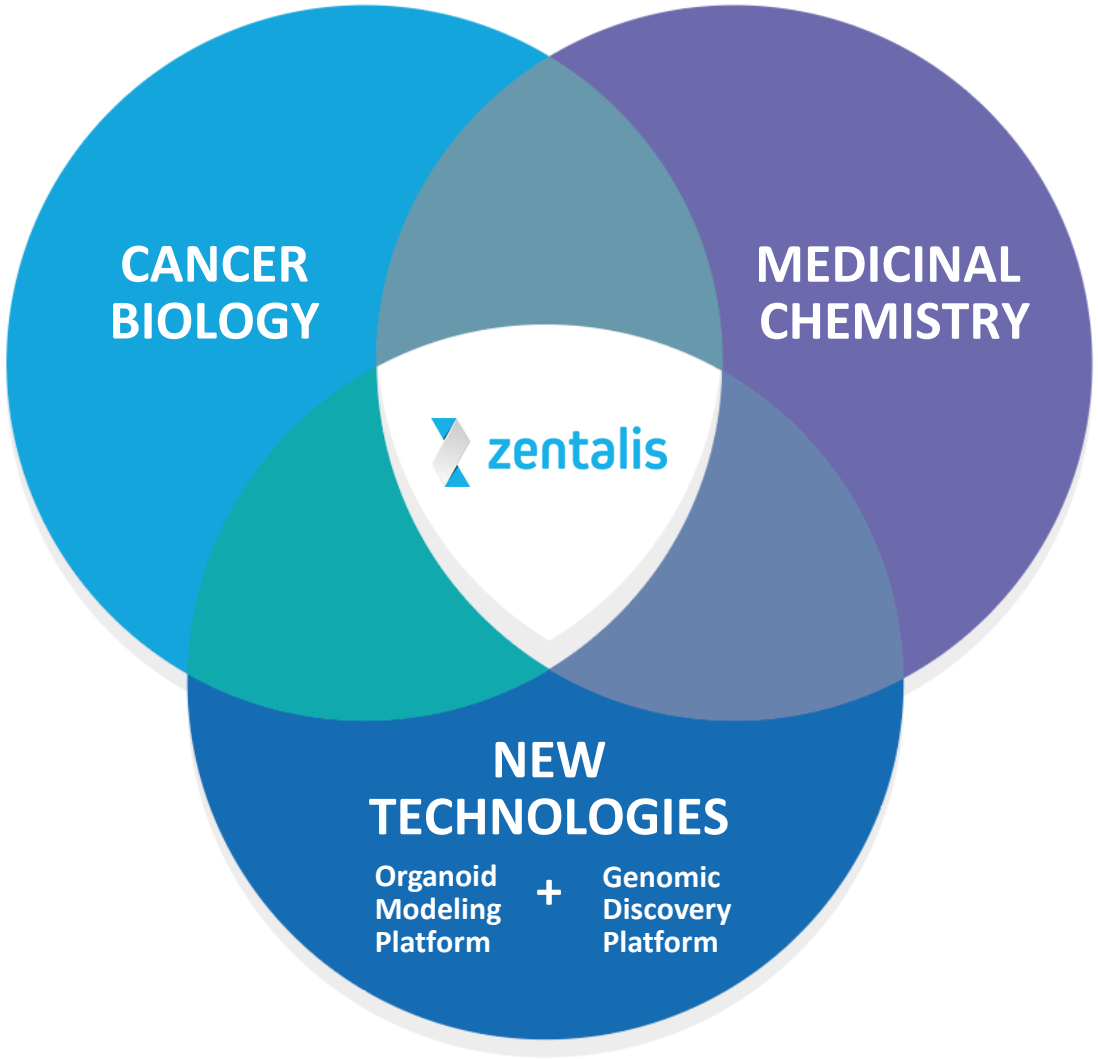
Oral SERD (ZN-c5) potentially best-in-class profile as monotherapy and in combination

Additional programs targeting fundamental cancer pathways: BCL-2 inhibitor (ZN-d5) & EGFR inhibitor (ZN-e4)

Investigating internal and third-party combination strategies

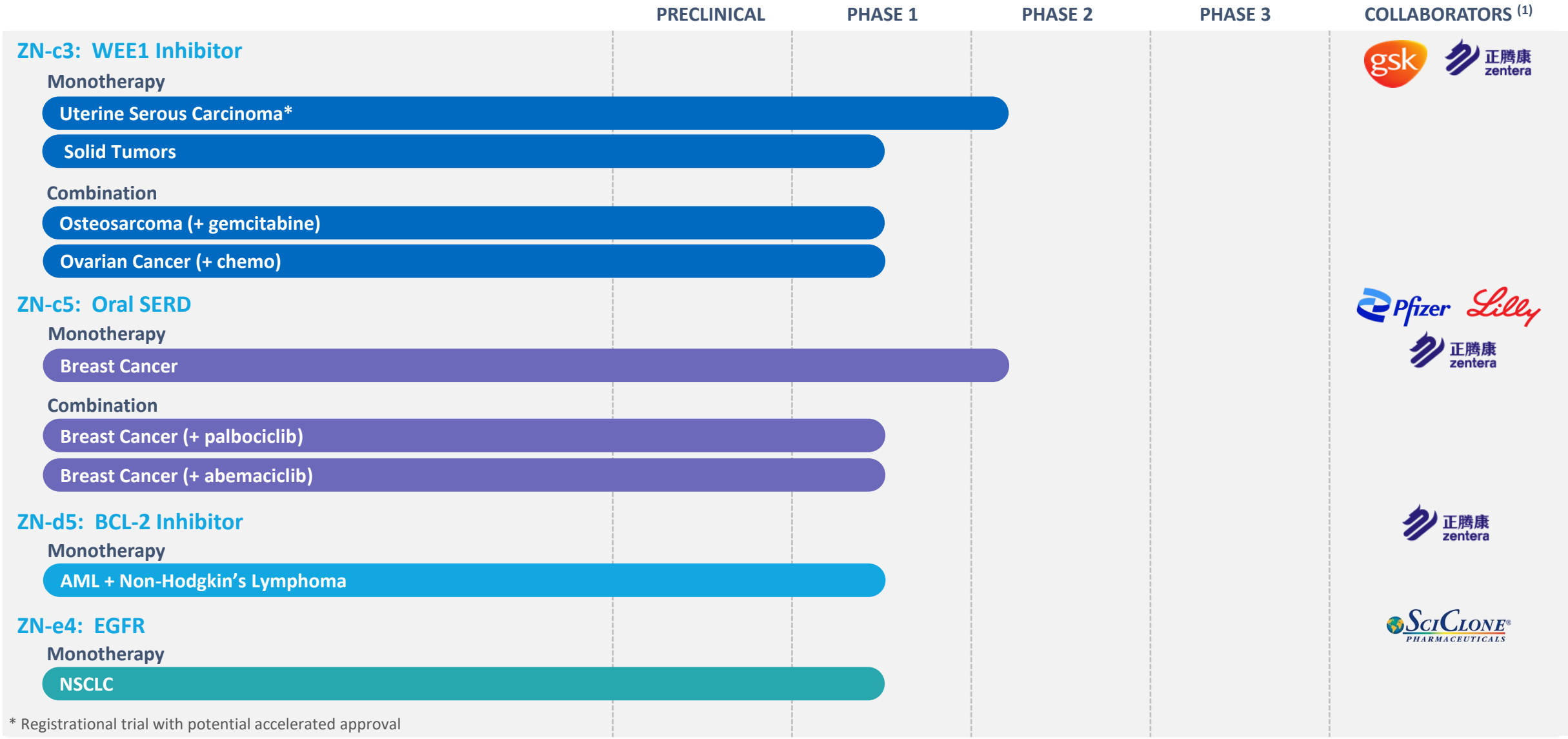
Integrated Discovery Engine: 4 FDA-cleared INDs within the first 5 years

Highly Efficient ‘Integrated Discovery Engine’ Fueling Pipeline



1. **IDENTIFY** fundamental biological pathways of cancers
2. **ANALYZE** key compounds targeting these pathways and assess their limitations
3. **CREATE** proprietary NCEs designed to address observed limitations
4. **GENERATE** strong preclinical evidence to support potentially differentiated development profiles

Broad Oncology Pipeline Designed to Improve Patient Outcomes



* Registrational trial with potential accelerated approval

(1) Zentalis is currently evaluating ZN-c5 in combination with palbociclib (Ibrance®), as part of a clinical research collaboration with Pfizer, evaluating ZN-c5 in combination with abemaciclib (Verzenio®), as part of a clinical research collaboration with Lilly. Zentalis intends to evaluate ZN-c3 in combination with niraparib (ZEJULA®), as part of a clinical research collaboration with GlaxoSmithKline. Zentalis maintains full ownership of ZN-c5 and ZN-c3 in each such collaboration. SciClone has development and commercial rights to ZN-e4 in Greater China (including Macau and Hong Kong), South Korea, Taiwan and Vietnam. Zentera, our majority-owned joint venture, has development and commercial rights to ZN-c5, ZN-c3 and ZN-d5 in select Asian countries (including China). Zentera has submited four CTAs and three have received approval to date, one for each of for ZN-c5, ZN-c3, and ZN-c3 in combination. The fourth CTA for ZN-d5 was submitted in early May 2021.

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ZN-c3

WEE1 Inhibitor

ZN-c3: Oral WEE1 Inhibitor for Solid Tumors

1 IDENTIFY: WEE1

- Highly attractive DNA damage response target
- Active across multiple tumor types with potential for combination
- **Opportunity: no approved WEE1 inhibitor;** only a few in development (i.e., AstraZeneca's AZD1775)

2 ANALYZE: AZD1775

- Promising efficacy across tumor types (ovarian and pancreatic cancer)
- Potentially limited by **narrow therapeutic window** and **toxicity profile**

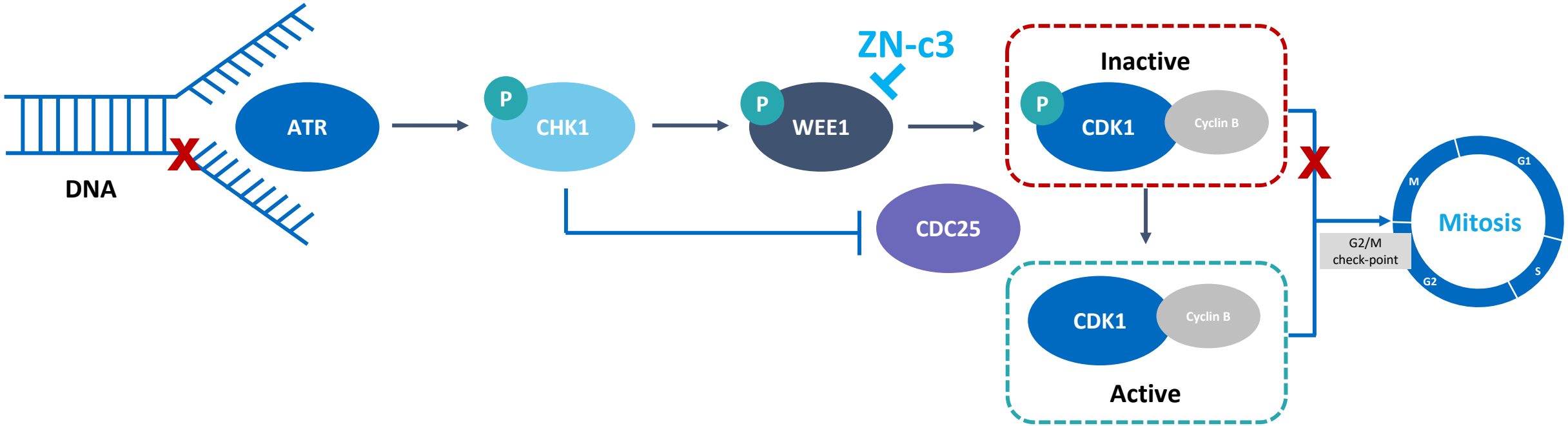
3 CREATE: ZN-c3

- Designed to have improved:
  - Potency
  - Solubility
  - Selectivity
  - PK properties
- **Goal: broader therapeutic window**
- Potential to have broad applicability as monotherapy and in combination

4 GENERATE: Preclinical Evidence

- 117x higher tumor concentration compared to AZD1775
- Greater selectivity for WEE1 compared to AZD1775
- Induced prolonged tumor growth delay in human NSCLC tumor xenograft model

WEE1 Inhibition: Clinically Proven DDR Target for Cancer

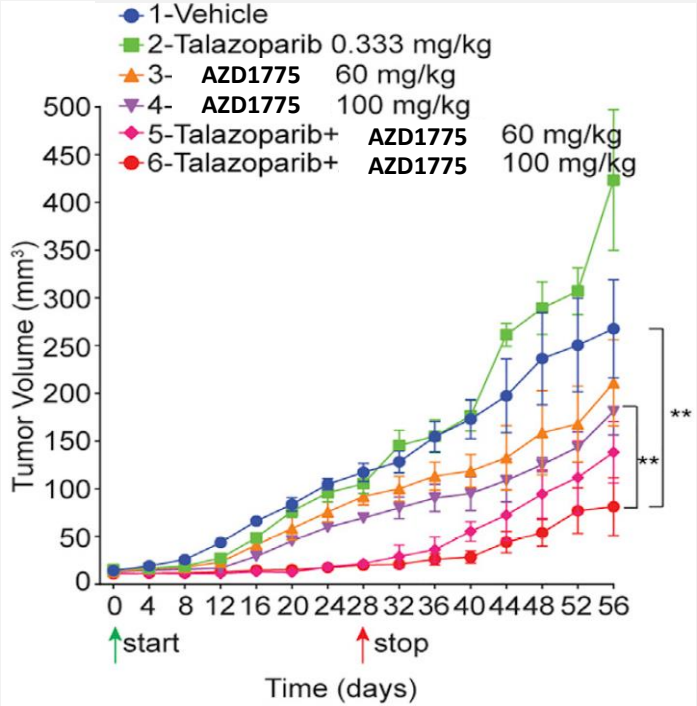


- WEE1 is a protein kinase expressed at high levels in many cancer types that prevents entry into mitosis in response to DNA damage by regulating the G2 checkpoint
- WEE1 inhibition causes cancer cells to proceed to mitosis without repairing DNA damage, resulting in premature mitotic entry and apoptosis
- ZN-c3 has demonstrated significant growth inhibition and induced apoptosis *in vitro* and anti-tumor activity *in vivo*

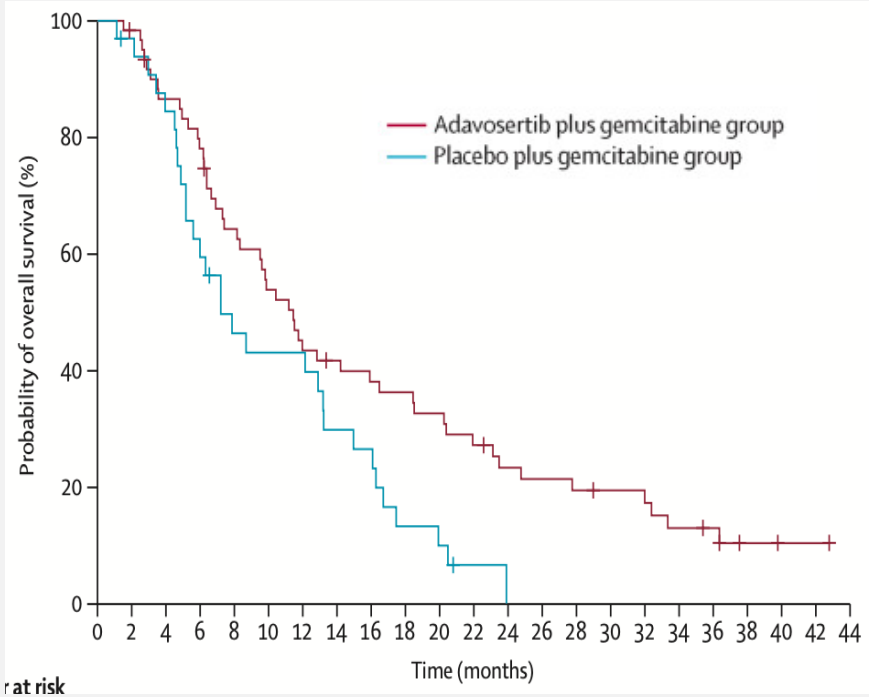
Source: Drawing based on Targeting WEE1 Kinase in Cancer. Matheson CJ, et al. Trends Pharmacol Sci. 2016

WEE1 Inhibitors: Strong Preclinical Activity and Clinical Responses

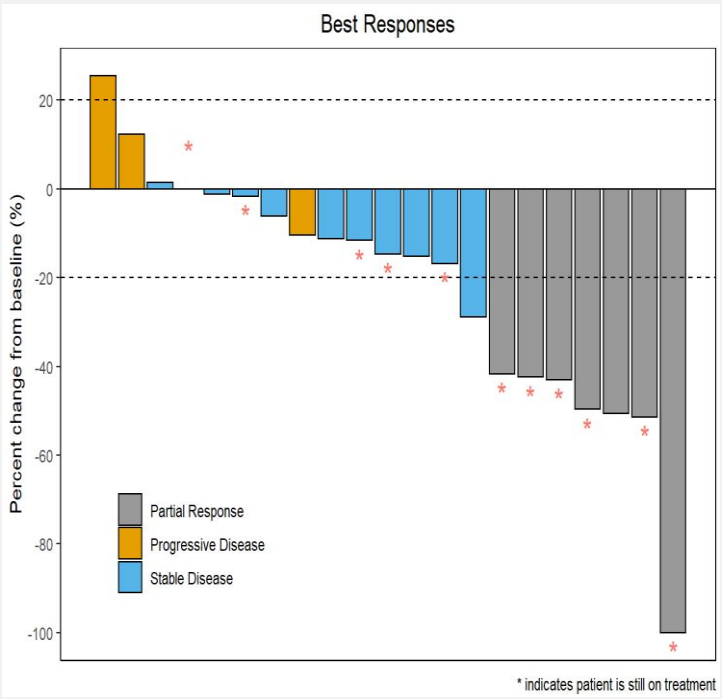
Combination of WEE1 and PARP Inhibitors Showed Improved Anti-Tumor Activity Compared to the Use of Each as Monotherapy (1)



Phase II Study of WEE1 Inhibitor Plus Gemcitabine for Platinum-Refractory Recurrent Ovarian Cancer: Double-Blind, Randomized, Placebo-Controlled (2)



Phase II Trial of WEE1 Inhibitor in Recurrent Uterine Serous Carcinoma (USC) (3,4)



(1) Fang, Y. Cancer Cell (2019). A total of 2 x 10^6 OVCAR8 ovarian cancer cells were injected subcutaneously (s.c.) and grown for 2 weeks in nude mice. Mice were randomized with six in each group and treated as indicated. Average tumor volume ± SEM are displayed. p value: one-way ANOVA. **p < 0.01

(2) Lheureux S., Lancet (2021). Addition of a WEE1 to Gemcitabine shows a statistically significant improvement in mOS over Gemcitabine with placebo (HR=0.56, P=0.017)

(3) Liu, J.F. AZD1775 SGO Presentation (2020)

(4) An aggressive subtype of endometrial carcinoma characterized by frequent TP53 mutations (>90%)

ZN-c3: Excellent Potency, PK and Preclinical Activity

ZN-c3 Anti-Proliferative Activity in a Panel of Cell Lines

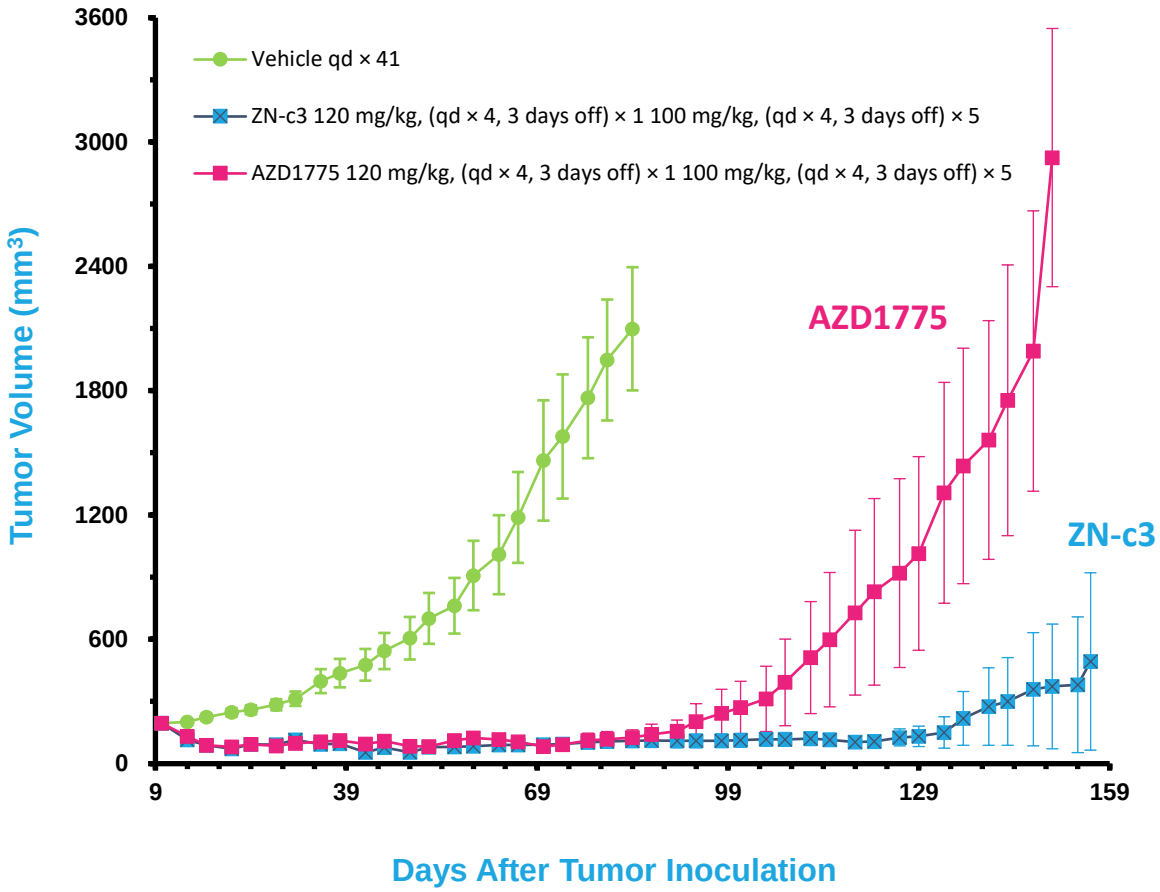
Compound ID	CTG IC_{50}(nM)							
	NSCLC		SCLC		TNBC		Ovarian cancer cells	
	NCI-H23	A-427	DMS-53	NCI-H1048	MDA-MB-231	HCC 1806	OVCAR 3	UWB 1.289
ZN-c3	**124**	**88**	**118**	**92**	**190**	**95**	**69**	**54**
AZD1775 (1)	108	94	130	97	233	94	124	57

Improved Tumor Concentration in Preclinical Models

Study (A-427 NSCLC)	ZN-c3			AZD1775 (1)		
Dose (mg/kg/day)	**20**	**40**	**80**	20	40	80
C_{max} (ng/mL)	**1,167**	**1,997**	**5,100**	635	2,460	4,703
T_{max} (hr)	**1**	**1**	**1**	1	1	1
$AUC_{0\text{-}24hr}$ (ng·hr/mL)	**4,863**	**17,088**	**39,722**	1,494	6,313	13,408
Tumor Conc. (ng/mL)	**10.5**	**48.0**	**811**	**BQL(2)**	**BQL**	**6.95**

ZN-c3 Induced Prolonged Tumor Growth Delay

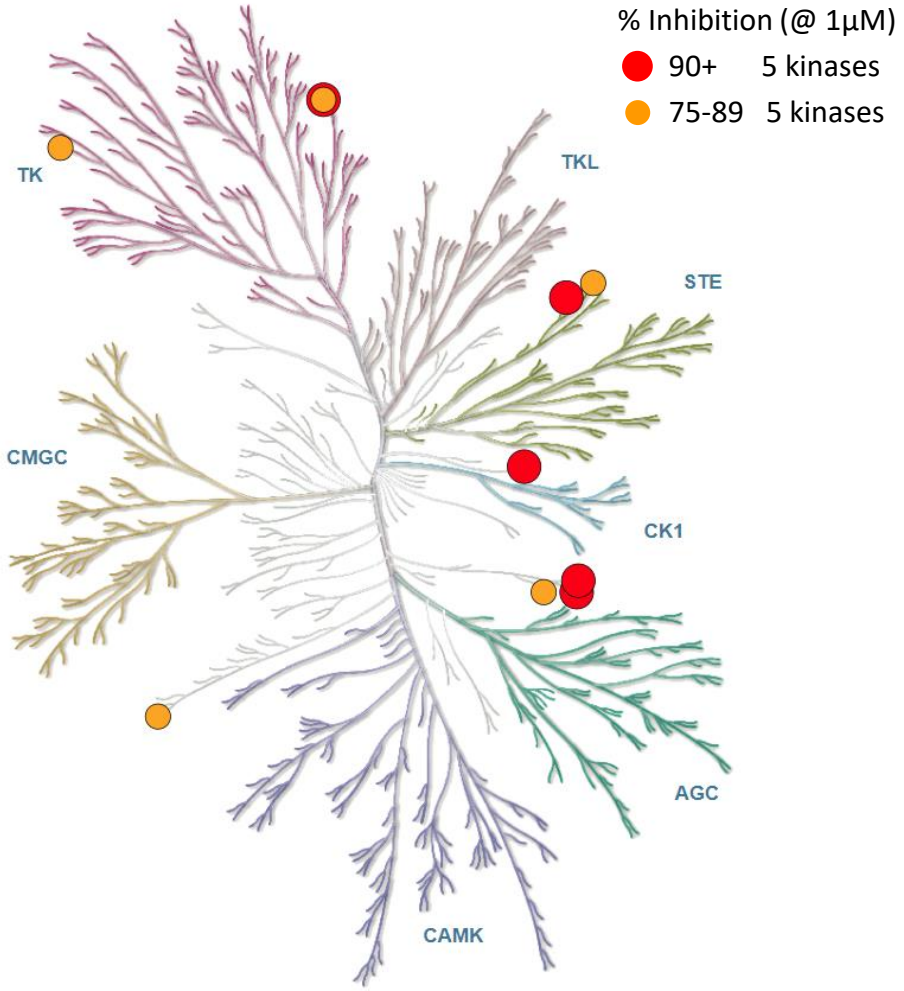
A427 Human NSCLC Tumor Xenograft Model



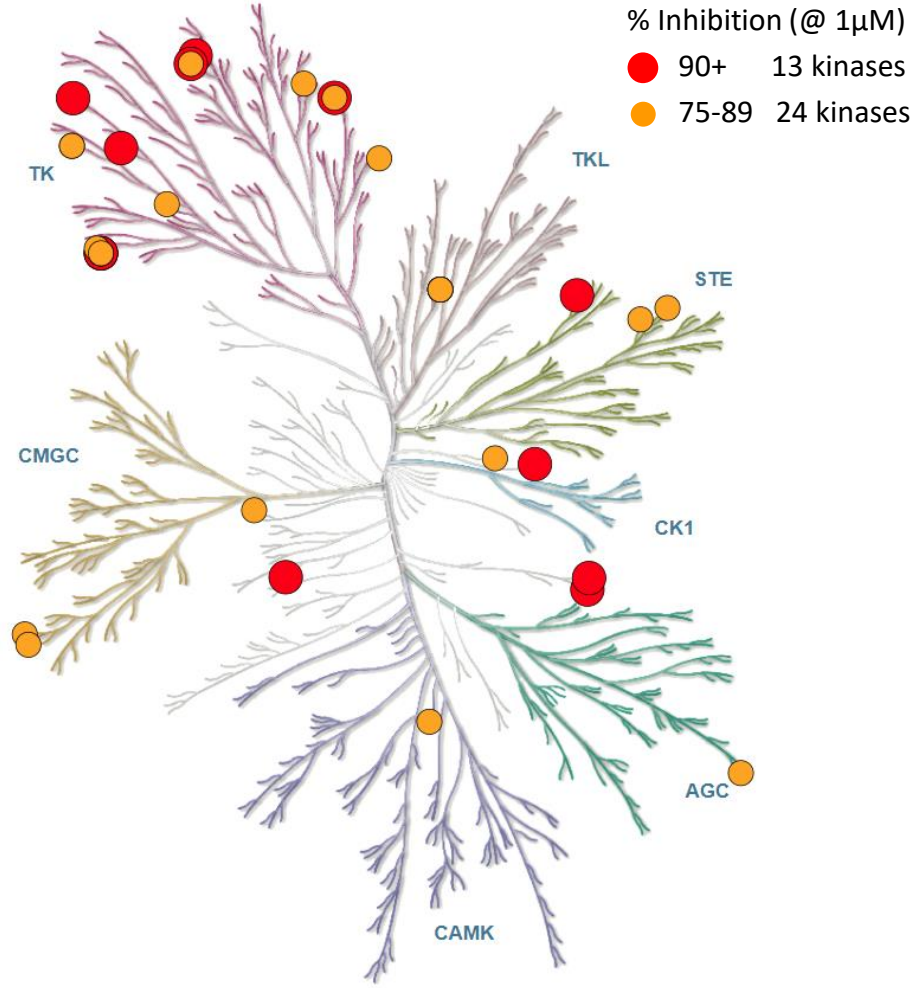
(1) AZD1775 data based on evaluation of comparable proxy chemical compound purchased from commercial sources rather than obtained from the pharmaceutical company developing the compound.
(2) BQL: Below Quantifiable Level
Note: ZN-c3 has excellent thermodynamic solubility of 2132 µM (vs. 60 µM for AZD1775) based on internal data

ZN-c3: Differentiated Selectivity Profile

ZN-c3



AZD1775 (1)



(1) AZD1775 data based on evaluation of comparable proxy chemical compound purchased from commercial sources rather than obtained from the pharmaceutical company developing the compound

Illustrations reproduced courtesy of Cell Signaling Technology, Inc. (www.cellsignal.com)

ZN-c3: Clinical Development Plan

Ongoing and Planned Clinical Programs

Phase 1

Solid Tumors Monotherapy
Dose Escalation and Expansion
Initial data presented at AACR 2021

Ovarian Cancer Combination
Ph 1b Study (+ chemo)
Initiated

Osteosarcoma Combination
Ph 1/2 Study (+ gemcitabine)
Initiated

Ovarian Cancer Combination gsk
Ph 1/2 Study (+ niraparib)
Expected Initiation 4Q 2021

Phase 2

★ **Uterine Serous Carcinoma Monotherapy** Ph 2 Study
Initiated

★ **Predictive Biomarker Monotherapy** Ph 2 Study
Expected Initiation 4Q 2021

Additional Monotherapy and Combination Studies

★ Registrational Study with Potential Accelerated Approval

Overview

- **Updated interim Phase 1 monotherapy dose escalation and expansion data** (1)
  - Generated new, deepening and durable tumor responses
  - ZN-c3 was well-tolerated; improved hematological tolerability
- **Key FDA designations for osteosarcoma for combo with chemo:**
  - Orphan drug designation
  - Rare pediatric disease designation
- **Planned investigator-initiated trials:**
  - A trial with the Ivy Brain Center in glioblastoma multiforme
  - A trial with immunotherapy with Dana Farber in TNBC

(1) As of May 15, 2021

ZN-c3: Exceptional Responders with Single Agent Treatment

Who is an Exceptional Responder?

Exceptional Responses are generally observed randomly and the underlying driver of response is often unknown

Exceptional Responses **observed in 3 non-USC patients** who had up to 19 prior lines of treatment and no recent responses

RP2D: 300 mg QD with continuous dosing

Interim Results from Phase 1 Dose Escalation Trial

Overview of Confirmed Exceptional Responders (2)

Patient	Prior lines of therapy	Tumor reduction (%)	Duration on study
CRC, Stage IV	5	51%	169 days
Ovarian cancer, Stage IV	19	68%	221 days and remains on study
NSCLC, Stage IV	5	50%	154 days

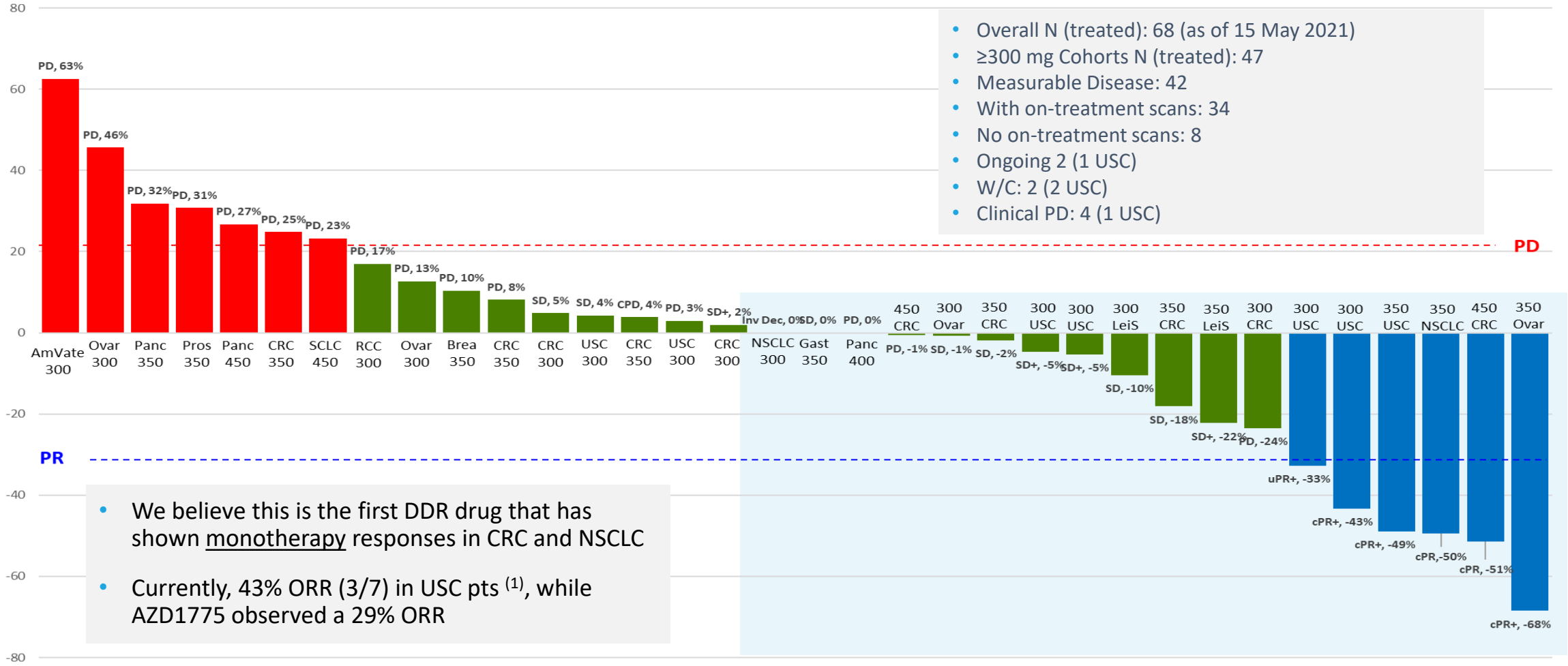
Overview of PRs in USC (2)

Patient	Prior lines of therapy	Tumor reduction (%)	Duration on study
USC, Stage IV (confirmed PR)	2	49%	158 days and remains on study
USC, Stage IV (confirmed PR)	4	43%	123 days and remains on study
USC, Stage IV (unconfirmed PR)	2	33%	31 days and remains on study

(1) *JNCI J* Natl Cancer Inst (2021) 113(1)
(2) As of May 15, 2021

ZN-c3: Displayed Multiple PRs Across Tumor Types

ZN-c3 Dose Escalation and Expansion Study – 300 mg QD and Above Dose Cohorts
Best % Change in Target Lesion Size and Best Overall Response



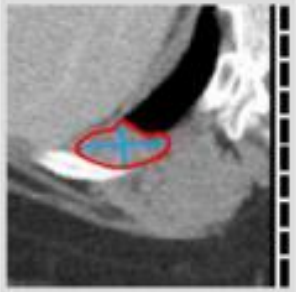
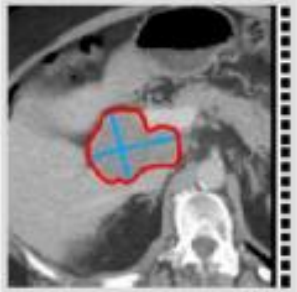
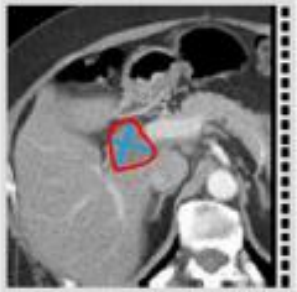
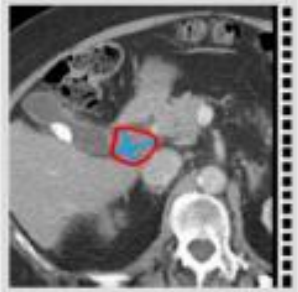
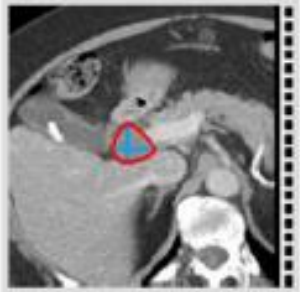
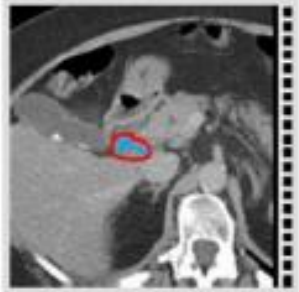
- Overall N (treated): 68 (as of 15 May 2021)
- ≥300 mg Cohorts N (treated): 47
- Measurable Disease: 42
- With on-treatment scans: 34
- No on-treatment scans: 8
- Ongoing 2 (1 USC)
- W/C: 2 (2 USC)
- Clinical PD: 4 (1 USC)

- We believe this is the first DDR drug that has shown <u>monotherapy</u> responses in CRC and NSCLC
- Currently, 43% ORR (3/7) in USC pts [(1)], while AZD1775 observed a 29% ORR

3 subjects with no treatment scans (CRC, USC, Pancreas), and experienced clinical progressive disease (CPD) + denotes treatment ongoing

(1) Waterfall as of 05/15/2021; both uPRs reported at AACR 2021 in USC are confirmed PRs. Newly reported uPR in USC is included. ORR based on radiographic responses.

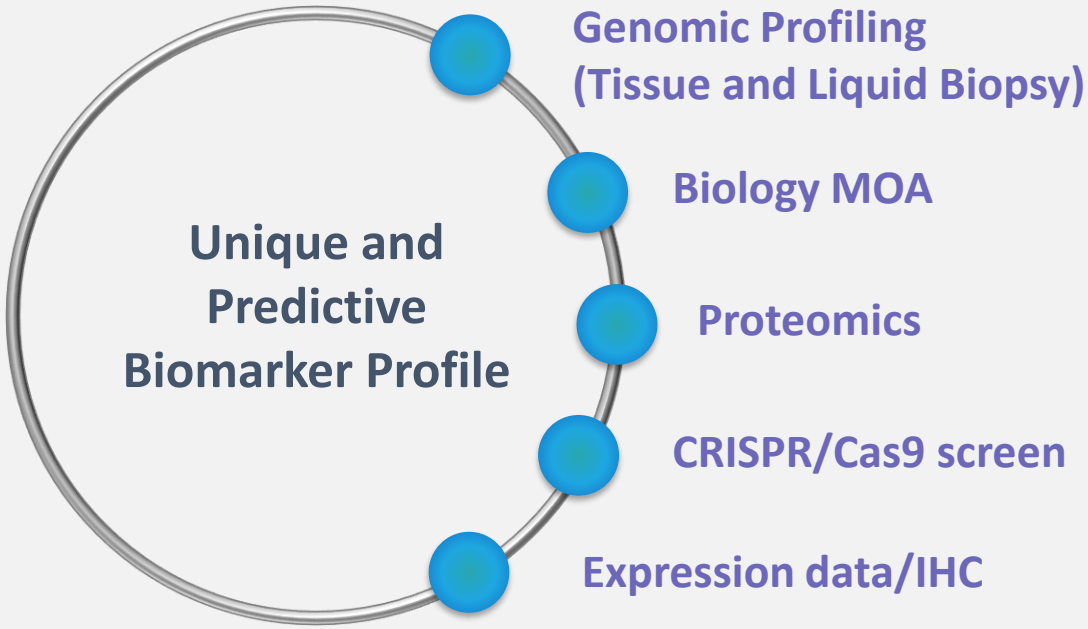
Ovarian Cancer Exceptional Responder Clinical Update

	Baseline (09/22/2020)	Follow-Up 1 (11/24/2020)	Follow-Up 2 (12/28/2020)	Follow-Up 3 (03/01/2021)	Follow-Up 4 (05/17/2021)
Target Lesions					
T01 Pleura Pleura Size	 LA: 32.9 mm SA: 16.6 mm	Disappeared	Disappeared	Disappeared	Disappeared
T02 Peritoneum Pleritoneum Size	 LA: 65.7 mm SA: 51.1 mm	 LA: 36.3 mm (-44.7% ΔP) SA: 34.0 mm (-33.5% ΔP)	 LA: 33.2 mm (-8.5% ΔP) SA: 27.2 mm (-20.0% ΔP)	 LA: 29.7 mm (-10.5% ΔP) SA: 27.6 mm (+1.5% ΔP)	 LA: 27.4 mm (-7.7% ΔP) SA: 18.9 mm (-31.5% ΔP)

All progress values are relative to their previous value (ΔP)

Exceptional Responders Exhibit Unique Biological Features

Zentalis Predictive Biomarker Approach



Confirming Biomarker Profile

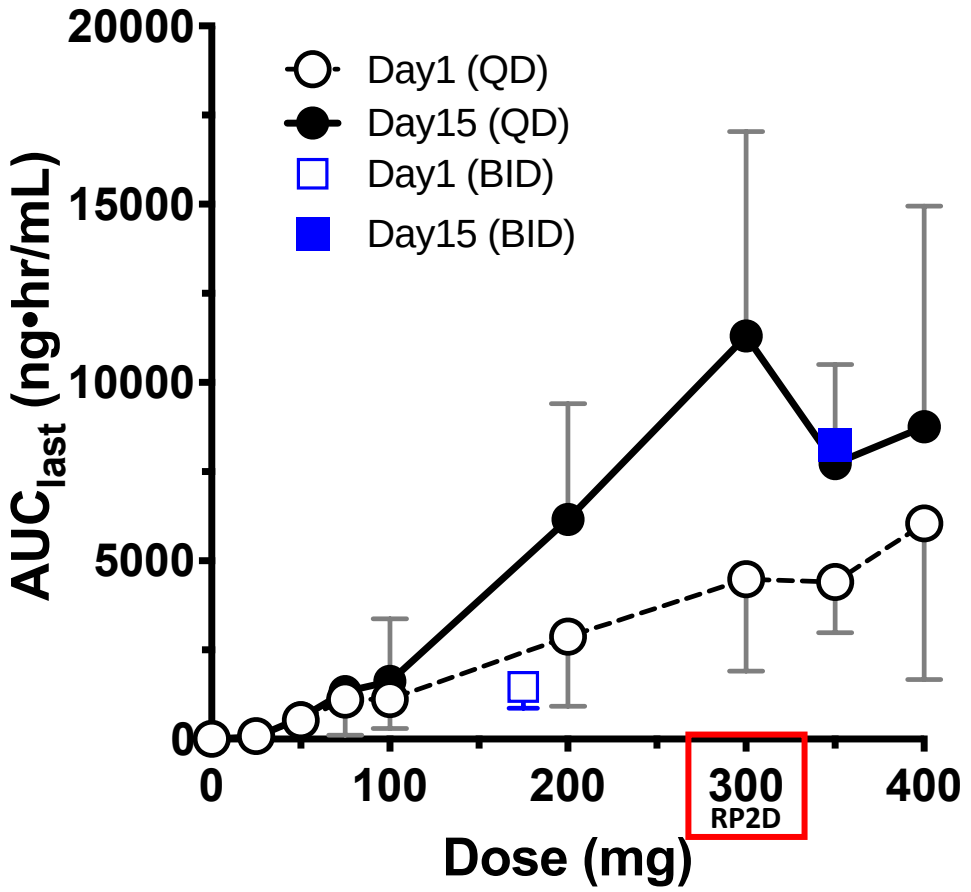
- Observed multiple Exceptional Responses with single agent ZN-c3 (3/3 patients or 100% ORR) (1)
- Activity in tumor types (e.g. CRC) not previously seen by other WEE1i
- Approach to confirm unique, novel and predictive profile
- Clear path for the development of companion diagnostic

Planning to initiate a predictive biomarker-enabled Phase 2 trial by year-end (2)

(1) Based on data from the ZN-c3 Phase 1 monotherapy trial as of March 1, 2021
(2) Pending FDA review

ZN-c3: RP2D Shows Highest AUC Across Doses

Interim Plasma Pharmacokinetics



25 & 50 mg: n=2
75 mg: n=10/8
100 mg: n=4

200 mg: n=3
300 mg: n=16/9
350 mg: n=10/9

400 mg: n=3
175 mg BID: n=7/5

ZN-c3 shows ~30% more exposure than AZD1775 at 300 mg dose (RP2D) (1)

- Greater than dose proportional exposure up to 450 mg (not plotted)
- 1.87 to 2.50-fold accumulation at 200-350 mg dose
- No additional increase of exposure occurs beyond Day 15 (up to Cycle 6)
- 300 mg QD exhibited the highest mean AUC between 25-400 mg
- 300 mg QD was well-tolerated without dose reductions in majority of patients

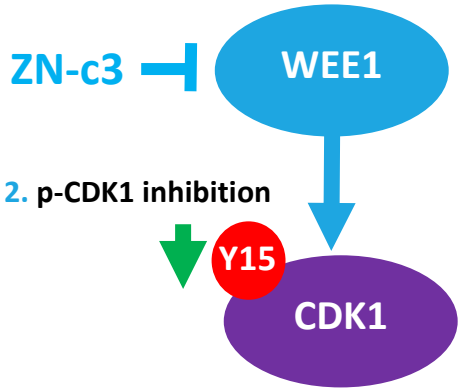
(1) Cancer Chemotherapy and Pharmacology (2020) 86:97–108

Decreases in p-CDK1 Show Target Engagement for WEE1 Inhibition

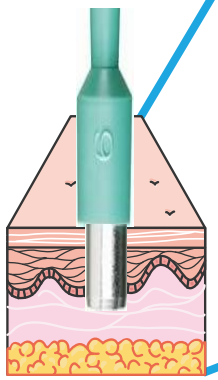
Confirmation of WEE1 Target Engagement in Surrogate Tissue

1. CDK1 phosphorylation (p-CDK1) is mediated by WEE1
2. Inhibition of WEE1 will lead to inhibition of p-CDK1
3. Skin biopsies were performed at baseline and on treatment to verify p-CDK1 levels and level of target engagement of WEE1

1. CDK1 phosphorylation by WEE1

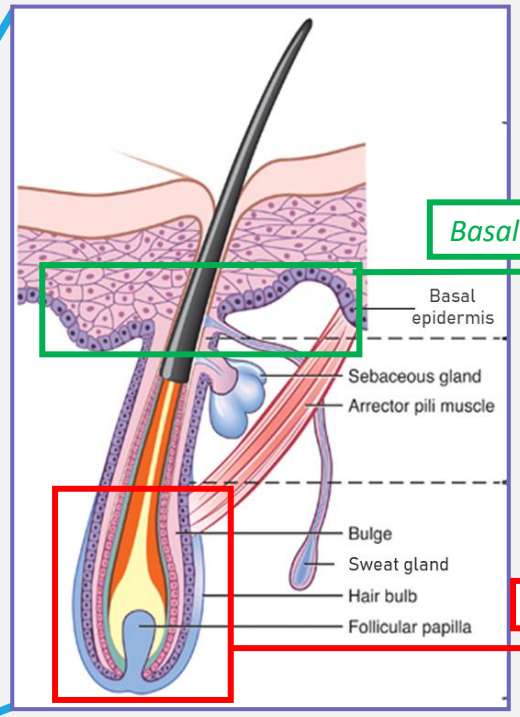


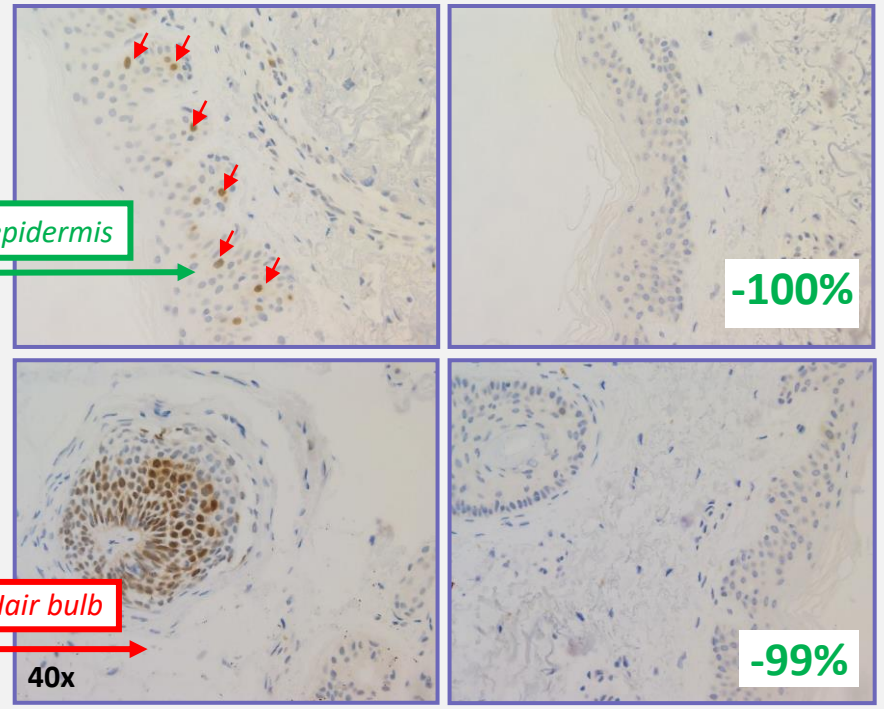
3. Skin Biopsy



Decreases in p-CDK1 at Baseline vs on Treatment

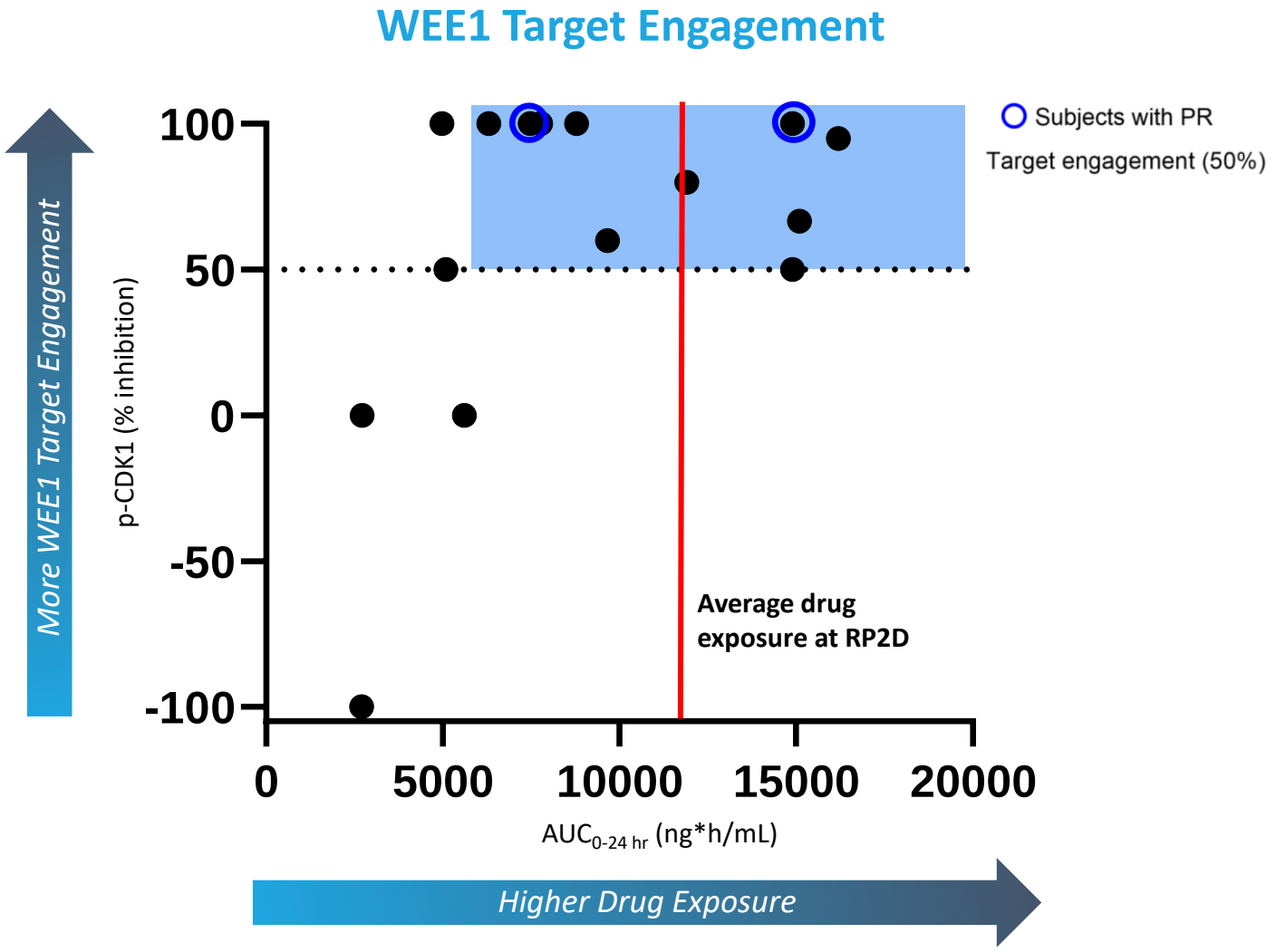
p-CDK1 = Brown Staining (subject with cPR)





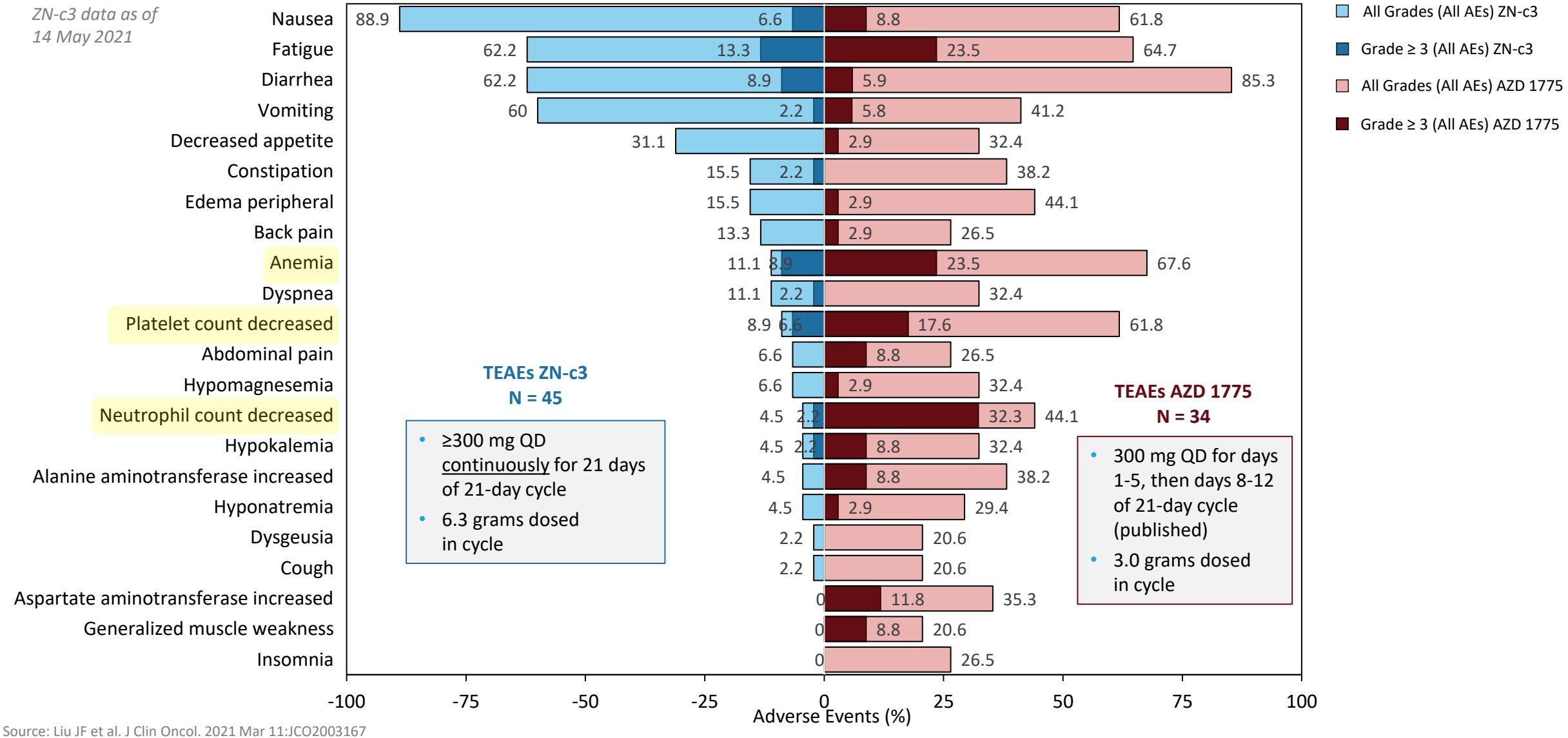
Source: Drawing adapted from Servier Medical Art

ZN-c3: PK/PD Correlation Shows Active Target Engagement at RP2D



- Inhibition of p-CDK1 demonstrated WEE1 target engagement
- Increase in dose / drug exposure directly related to WEE1 target engagement
- RP2D showed highest AUC, with excellent target engagement and p-CDK1 levels decreased at least by 50%

ZN-c3: Well Tolerated in Comparison to AZD1775 (1)

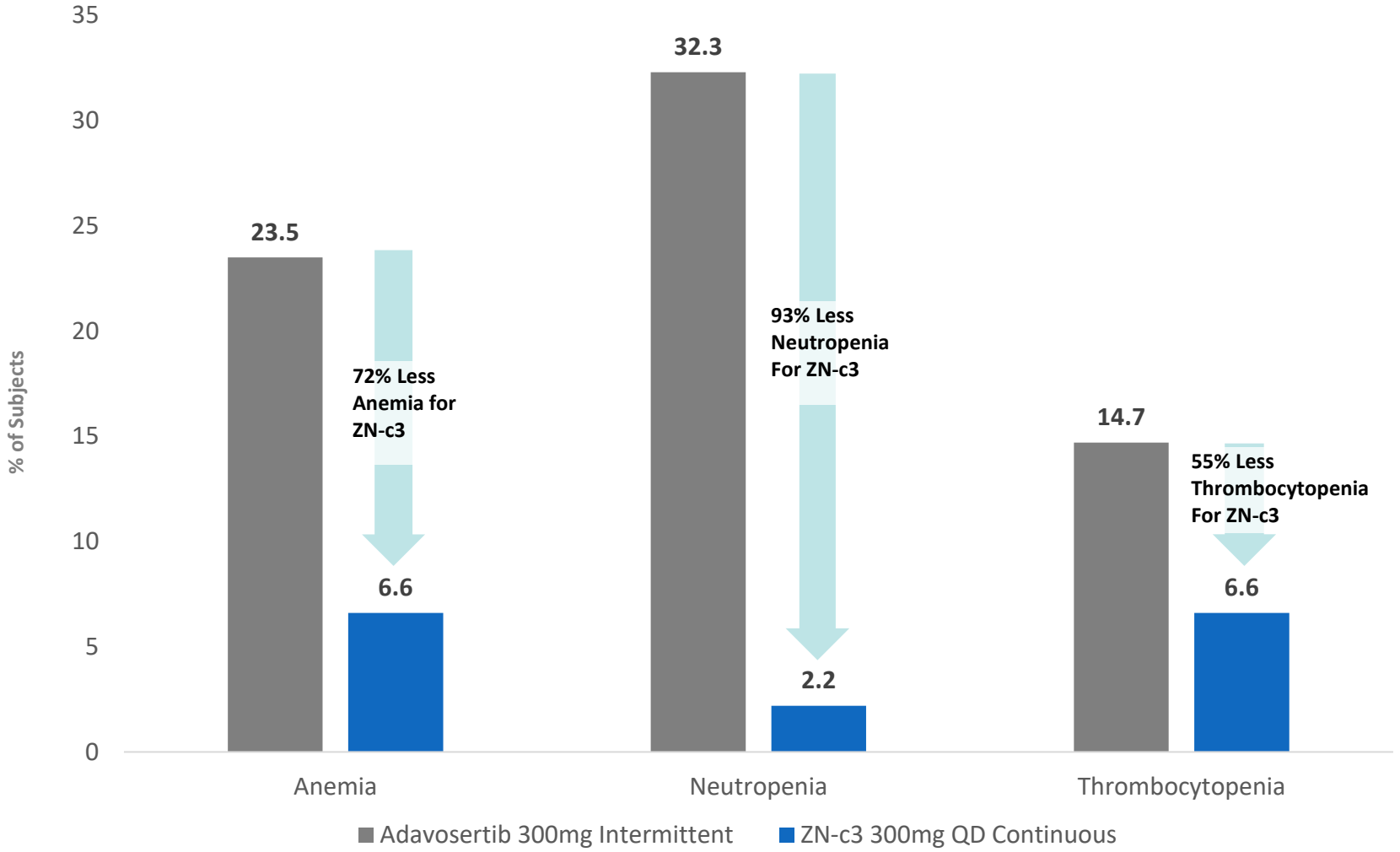


Source: Liu JF et al. J Clin Oncol. 2021 Mar 11:JCO2003167

(1) Non-head-to-head comparison. Results of a head-to-head comparison may differ significantly from those set forth herein. In addition, because our Phase 1 clinical trial for ZN-c3 and the Adavosertib clinical trials were separate trials, differences between the results of the trials may not be statistically or clinically meaningful

ZN-c3: Meaningfully Reduced Hematological Toxicities (1)

Interim Grade ≥3 Hematological TRAEs at ≥RP2D



- Significantly lower overall severe hematological AE rate vs AZD1775
- Despite continuous dosing and delivering 2x the drug load, ZN-c3 induces markedly less hematological toxicity
- Better tolerability unlocks the promise for wide ranging drug combinations with increased efficacy and commercial potential

Source: Liu JF et al. J Clin Oncol. 2021 Mar 11:JCO2003167

(1) Non-head-to-head comparison. Results of a head-to-head comparison may differ significantly from those set forth herein. In addition, because our Phase 1 clinical trial for ZN-c3 and the Adavosertib clinical trials were separate trials, differences between the results of the trials may not be statistically or clinically meaningful

Versatility of WEE1 Inhibition May Address Large Populations Across Solid Tumors

	Near-Term Monotherapy Registrational Paths		Near-Term Combo Registrational Path	Future Combo Registrational Path
	Orphan Setting	Predictive Biomarker Driven Settings	Ovarian Plat Resist	Combination Therapy Settings
Drug Setting	Single Agent ZN-c3	Single Agent ZN-c3	Combinations with ZN-c3	Combinations with ZN-c3
Representative Indication(s)	Uterine Serous Carcinoma	Biomarker Identified "Exceptional Responders" Across Tumor Types	Ovarian Platinum Resistant	PARP Combo (e.g., Ovarian) Chemo Combo (e.g., CRC, NSCLC or GBM) Immunotherapy Combos (e.g., TNBC or CRC)
Clinical Plan(s)	Phase 2 registrational trial initiated	Phase 2 registrational trial planned to initiate by year-end (4)	Expecting initial data 2022	Multiple ongoing/planned combination trials
Addressable Patient Populations (1)	~11,500 (2)	~55,000 (3)	~13,000	Very Large

(1) North America, Western Europe and Japan
(2) Gynecologic Oncology 115 (2009) 142-153, David Boruta et al.; National Cancer Institute, SEER 2020 Data
(3) Observed predictive biomarker frequency data across solid tumor types; predictive biomarker not disclosed
(4) Pending FDA review

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ZN-c5

Oral SERD

ZN-c5: Oral SERD Candidate for ER+/HER2- Breast Cancer

1 IDENTIFY: SERD

- Clinically validated approach
- Potential use as backbone therapy
- **Fulvestrant: only FDA-approved SERD**
  - First and second-line treatment as monotherapy and in combination with CDK4/6 or PI3Kα inhibitors

2 ANALYZE: Fulvestrant

- Fulvestrant limitations:
  - 2 painful monthly intramuscular injections (insoluble)
  - Capped efficacy at approved dose
  - Low convenience and high resource utilization

3 CREATE: ZN-c5

- Designed to have improved:
  - High potency and selectivity
  - Improved solubility
  - Compelling PK (long half life)
  - Favorable safety and tolerability
  - No agonist activity
- **Goal: safely establish increased drug exposure to enhance efficacy**

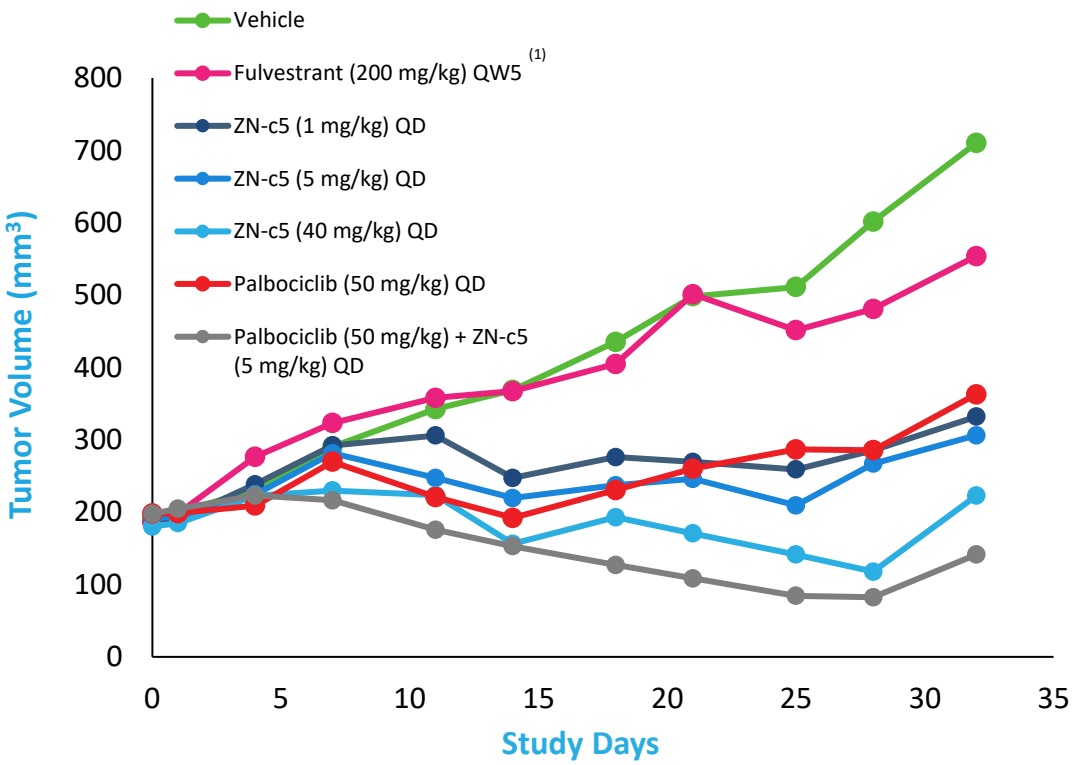
4 GENERATE: Preclinical Evidence

- Dose proportional responses and meaningful tumor shrinkage in combination with CDK4/6 inhibitor
- Anti-tumor activity in ESR1 models as monotherapy and in combination with CDK4/6 inhibitors
- Anti-tumor activity in combination with PI3Kα inhibitor
- No agonist activity, blocks Activation Function domains (AF-1 and AF-2) involved in ER transcriptional activity

ZN-c5: Demonstrated Strong Preclinical Anti-Tumor Activity

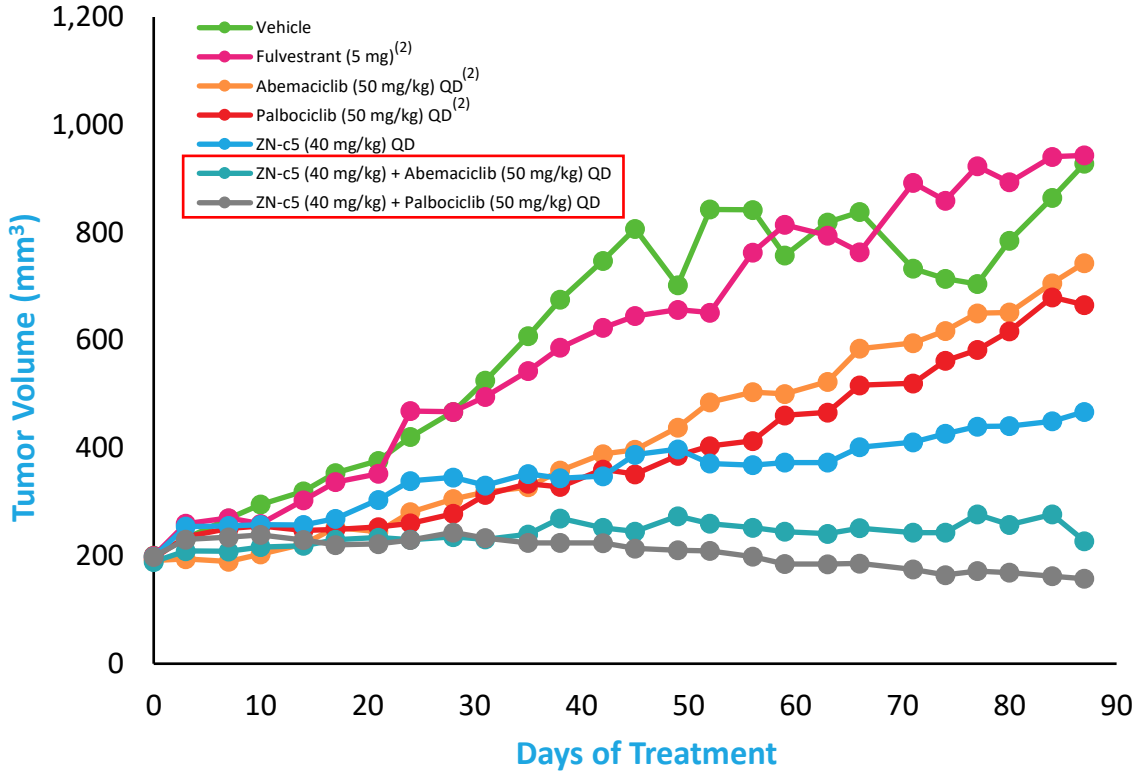
Exhibited Dose Proportional Response and Meaningful Tumor Shrinkage

Breast Cancer Model (MCF7)



Robust Anti-Tumor Activity in ESR1 Models as Monotherapy and in Combination

ESR1 Mutant Breast Cancer Model (WHIM20)



ESR1 mutations commonly drive resistance – prevalence ranges from *11% to 39%*

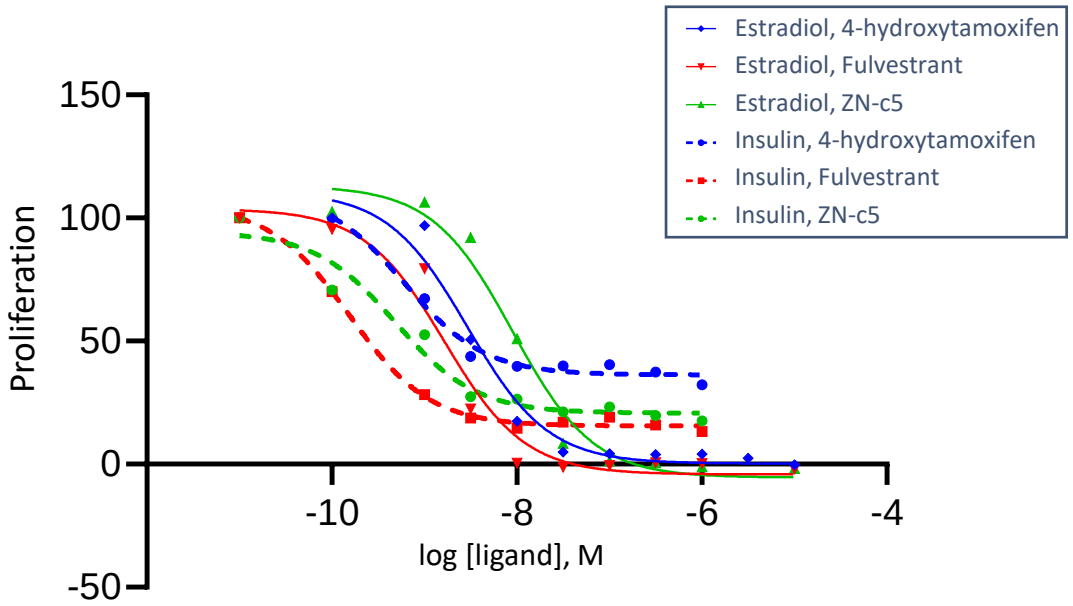
(1) Fulvestrant based on evaluation of comparable proxy chemical compounds purchased from commercial sources rather than the pharmaceutical companies commercializing the compound.
(2) Data based on evaluation of comparable proxy chemical compounds purchased from commercial sources rather than the pharmaceutical companies commercializing the compound.

ZN-c5: An ER Antagonist with No Agonist Activity

- Two Activation Function domains (AF-1 and AF-2) are involved in ER transcriptional activity
- ZN-c5 is an **estrogen receptor antagonist**, blocking both AF-1 and AF-2 activity

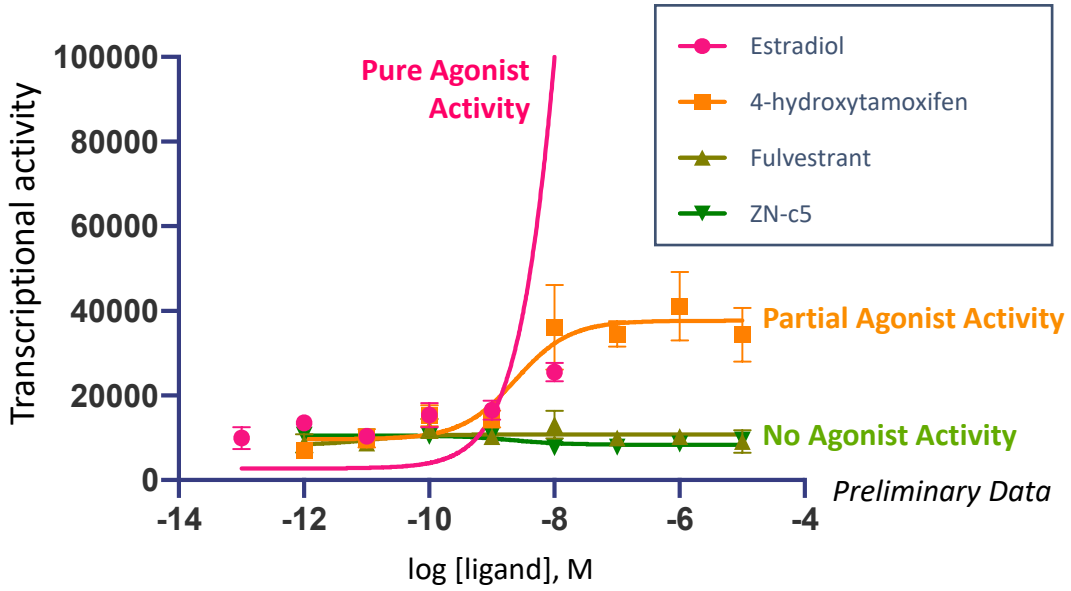
ZN-c5 Inhibits AF-1- and AF-2-Mediated Proliferation

MCF-7 cells treated with Insulin (AF-1 activation) or Estradiol (AF-2 activation) (1)



ZN-c5 has No ER Agonist Activity

Transcriptional activity of ERa AF1 construct (Nonfunctional AF-2) (1)



(1) Suzanne Wardell, John Norris, Duke School of Medicine

ZN-c5: Clinical Development Plan

Ongoing and Planned Clinical Programs

Phase 1/2

Monotherapy
Dose Escalation/Expansion
Ph 1/2 Study
Initiated Ph 2

Combination Pfizer
Ph 1/2 Study (2) (+ palbociclib)
Enrolling; Ph 2 Initiation Expected in 2021

Phase 1b

Combination Lilly
Dose Escalation
Ph 1b Study (+ abemaciclib)
Initiated

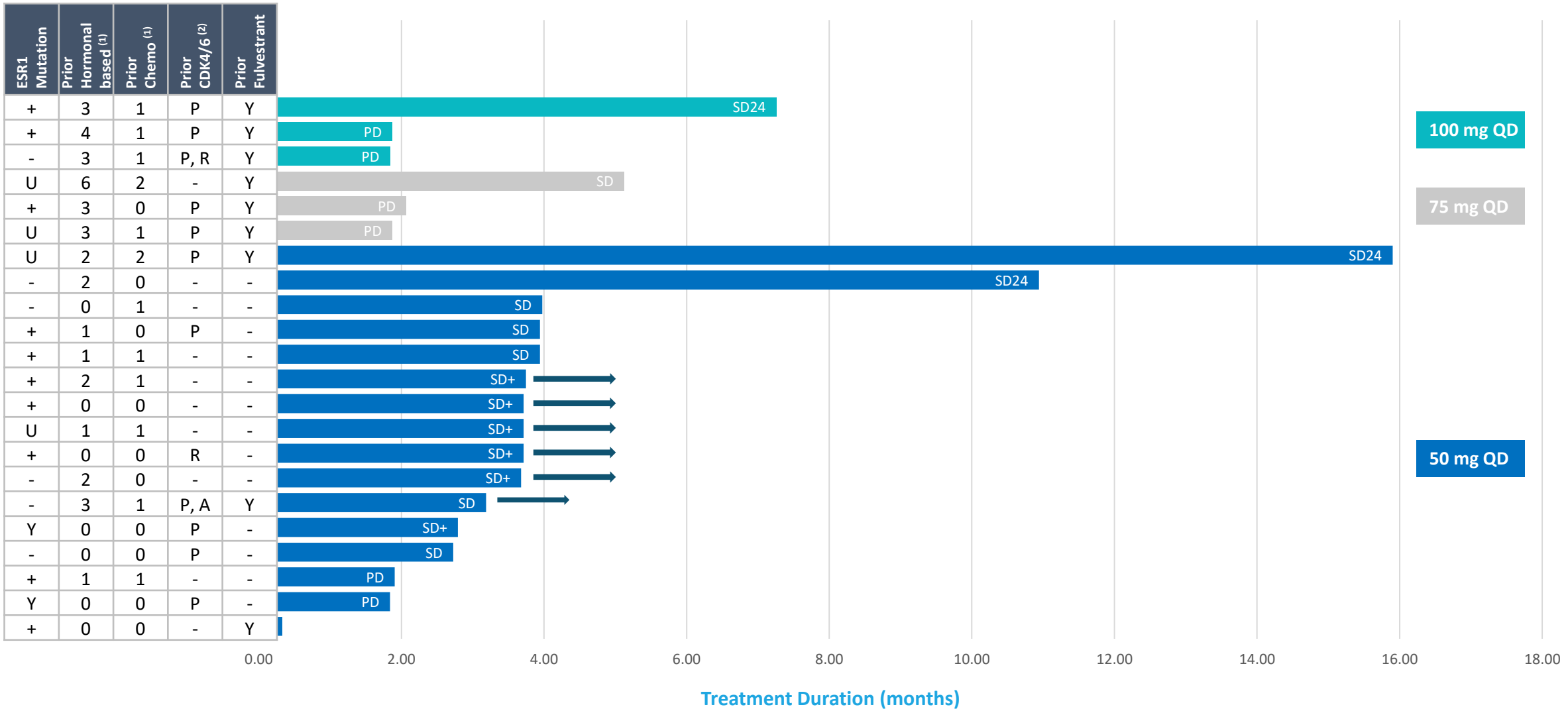
Overview

- **Updated interim Phase 1/2 monotherapy data (1,2)**
  - Potentially best-in-class safety/ tolerability data in mono and combo settings
  - Multiple dose cohorts may be chosen for Phase 2 study
- **Window of Opportunity study analyzing tumor ER degradation has completed enrollment (n=35)**
- **Food effect study (n=18) showed ZN-c5 could be administered with or without food**

(1) As of May 11, 2021, n=24 were enrolled patients in the Phase 1, monotherapy dose escalation portion of this trial. Of these 24 patients, 3 were still on treatment and 21 discontinued due to disease progression (n = 20), and physician decision (n = 1).
(2) As of May 11, 2021, 32 patients were enrolled in the Phase 1, monotherapy expansion portion of this trial. Of these 32 patients, 12 were still on treatment and 20 discontinued due to disease progression (n = 18), adverse event (n = 1, hypersensitivity) and physician decision (n = 1). As of May 11, 2021, we have enrolled 41 patients in the Phase 1, combination dose escalation portion of this trial. Of these 41 patients, 23 were still on treatment and 18 discontinued due to disease progression (n = 14), patient decision (n = 2), intercurrent illness (n = 1, endometrial cancer) and physician decision (n = 1).

Updated Interim Clinical Data: ZN-c5-001 Monotherapy 50-100 mg

Treatment Duration (months) and Response by Dose as of 11 May 2021

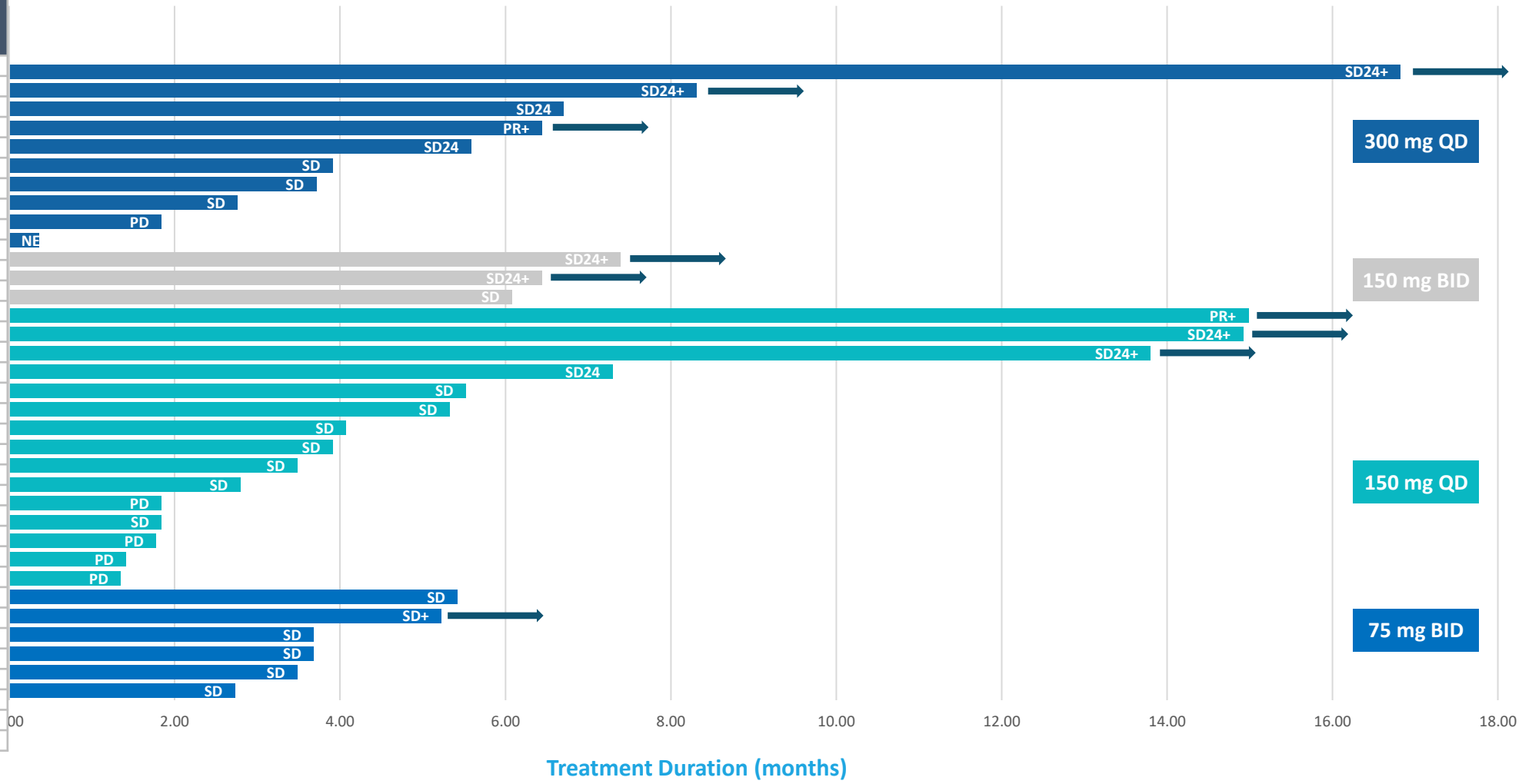


(1) Number of treatments reflect advanced or metastatic setting, not neo/adjuvant; also reflects combinations with targeted therapies CDK4/6, mTOR, PI3Ki
(2) P-palbociclib, A- abemaciclib, R-ribociclib, E-experimental treatment, could be placebo

Updated Interim Clinical Data: ZN-c5-001 Monotherapy 150-300 mg

Treatment Duration (months) and Response by Dose as of 11 May 2021

ESR1 m	Prior Hormonal(1)	Prior Chemo(1)	Prior CDK4/6 (2)	Prior Fulvestrant
U	5	1	P	Y
-	2	1	-	-
+	2	1	P	-
+	1	1	P	-
-	2	0	-	-
-	1	0	P	-
U	2	0	P	Y
-	1	0	P	-
+	2	0	P	Y
-	0	1	-	-
-	0	0	-	-
+	3	1	P	Y
-	1	0	-	-
-	1	0	P	-
U	1	0	-	Y
-	1	0	R	-
-	2	1	P	-
+	2	0	P	Y
-	0	0	-	-
+	2	1	P	Y
-	1	0	P	Y
-	2	0	P, R(E)	Y
-	2	0	P	Y
-	1	0	P	-
-	1	1	P	Y
-	1	0	P	-
-	2	0	P, R*	Y
-	1	0	P	-
-	1	0	P	Y
+	2	1	P	Y
-	1	1	P	Y
-	1	0	P	-
+	3	2	R, R*	Y
-	3	0	P	Y



(1) Number of treatments reflect advanced or metastatic setting, not neo/adjuvant; also reflects combinations with targeted therapies CDK4/6, mTOR, PI3Ki
(2) P-palbociclib, A- abemaciclib, R-ribociclib, E-experimental treatment, could be placebo

ZN-c5-001 Monotherapy Efficacy Summary by Dose

Interim Monotherapy Efficacy Results

Data cut-off 11 May 2021

Dose (mg)	50 (Likely RP2D)	75	100	150	300	Overall
N (enrolled)	16	3	3	21	13	56
CBR	2/5 (40%)	0/3 (0%)	1/3 (33%)	4/21 (19%)	7/13 (54%)	14/45 (31%)
ORR	0/14	0/2	0/3	1/13	1/8	2/40

- Interim clinical data is consistent with data from third party studies of other oral SERD competitors
- Last cohort in ZN-c5's monotherapy study is the 50 mg dose, with a large number of patients remaining on study
- RP2D selection to finalize after completion of study, with the 50 mg QD dose as likely RP2D

Safety Profile of Oral SERDs in Development

	AZD9833 (AstraZeneca)	GDC-9545 (Roche)	SAR439859 (Sanofi)	LSZ102 (Novartis)	G1T48 (G1 Therap.)	ARV-471 (Arvinas)	ZN-c5 [1] (Zentalis)
Dose	75 mg QD *(Initial Reported Data)*	30 mg QD	400 mg QD	600 mg QD	1,000 mg QD *(600 and 1,000 mg Taken Forward)*	360 mg QD *(Initial Reported Data)*	50 mg QD *(Likely RP2D)*
AUC (ng*hr/mL)	683	5070	~36,600 [2]	25,600	2,690	~34,000	61,300
Treatment-Related AEs: % Patients Treated with Drug (All Doses Tested)							
Diarrhea	0-10% [3]	14%	8%	62%	27%	0-10% [3]	3.6%
Nausea	18%	18%	8%	56%	15%	24%	14%
Bradycardia	45%	7% [4]	N/A	N/A	N/A	0-10% [3]	0%
Visual Disturbances	53%	N/A	N/A	N/A	N/A	0-10% [3]	0%
Other Notable Adverse Events: All Doses Tested							
Other Notable Adverse Events	QTcF DLT; Dizziness	Fatigue, Arthralgia, Back Pain	Hot Flush	N/A	Hot Flush; Fatigue	Vomiting, Arthralgia, Fatigue, Decreased Appetite	N/A

Sources: AZD9833 ASCO 2020 Poster; GDC-9545 SABCS 2019 Poster; LSZ102 Poster SABCS 2017; SAR439859 ASCO 2020 Poster; G1T48 ESMO 2019 Poster; ARV-471 2020 Presentation

(1) The data presents a non-head to head summary comparison. While we believe the comparison is useful in evaluating the observed results of ZN-c5 in the Phase 1/2 clinical trial, our Phase 1/2 clinical trial and the AZD9833, GDC-9545, SAR439859, LSZ102, G1T48 and ARV-471 clinical trials were separate trials conducted at different sites with other differences, including, for example, that the subjects in the GDC-9545 clinical trials had 1 median line of prior treatment while the subjects in our Phase 1/2 clinical trial had 4 median lines of prior treatment. In this regard, we have not conducted a head-to-head comparison of ZN-c5 and any of the presented oral SERDs in a clinical trial. Results of a head-to-head comparison may differ significantly from those set forth in the table. In addition, because our Phase 1/2 clinical trial and the AZD9833, GDC-9545, SAR439859, LSZ102, G1T48 and ARV-471 clinical trials were separate trials and because we have interim data for 29 patients in our Phase 1/2 clinical trial from the Phase 1, monotherapy dose escalation portion as of June 30, 2020, differences between the results of our clinical trial and the AZD9833, GDC-9545, SAR439859, LSZ102, G1T48 and ARV-471 clinical trials may not be statistically or clinically meaningful. For these reasons, you should not place undue weight on the table.

(2) Visual estimation based on graph

(3) Ranges represent adverse events where posters or presentations do not disclose events <10%

(4) Sinus bradycardia

ZN-c5: Well-Tolerated as a Monotherapy – Related AEs in ≥ 10%

TEAE's Related to ZN-c5

Data cut-off 11 May 2021

AEs in N	50 mg QD N = 16			75 mg QD N = 3			100 mg QD N = 3			75 mg BID N = 6			150 mg QD N = 15			150 mg BID N = 3			300 mg QD N = 10			Total N = 56			
Grade	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	All N (%)
Any AE	6	2	0	1	0	0	0	0	0	2	2	0	5	4	0	1	1	1	5	2	1	20	11	2	33 (59%)
Hot Flushes										2			3						1	2		6	2	0	8 (14%)
Nausea	1									1			1	1			1		1	2		4	4	0	8 (14%)
Fatigue	1									1			2			1			1	1		6	1	0	7 (13%)

Diarrhea events: 2 out of 56 subjects (3.6%), only grade 1 or 2 events observed
Grade 3 events: n=1 hypersensitivity (300 mg qd); n=1 γGT increase (150 mg bid)

No observed bradycardia, no visual disturbances, no QTC, no dizziness

ZN-c5: Well-Tolerated in Combination with Palbociclib – Related TEAEs ≥ 10%

TEAE's Related to ZN-c5

Data cut-off 11 MAY 2021

	25 mg QD N = 6				25 mg BID N = 5				50 mg QD N = 13				50 mg BID N = 2				100 mg QD N = 12				150 mg QD N = 3				Total N = 41			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Any AE	1	1			2				4	3			1	1			3	1			2	1			13	7		
Hot Flush		1			1				1	1			1								1				4	2		
Arthralgia					1				2	1															3	1		

TEAE's Related to Palbociclib

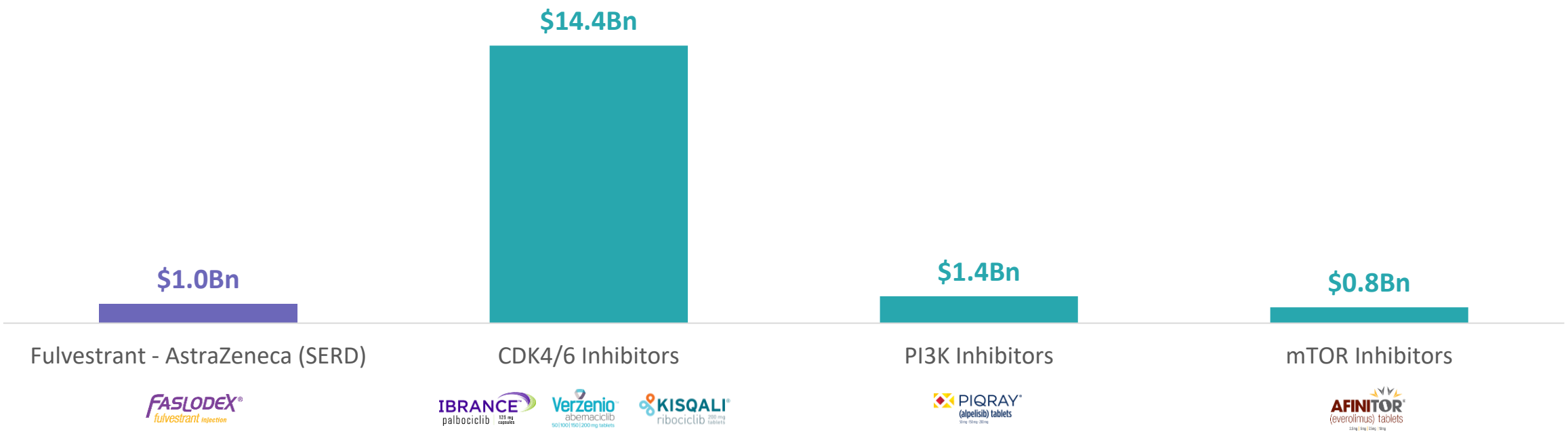
	25 mg QD N = 6				25 mg BID N = 5				50 mg QD N = 13				50 mg BID N = 2				100 mg QD N = 12				150 mg QD N = 3				Total N = 41			
Grade	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Any AE		4	1	1	2	2			1	7	5		1	1			5	2	5				3		9	16	14	1
Neutrophil count decreased		4	1		1	1				7	3		1					2	5				3		2	14	12	
WBC count decreased	1	2	1		2	1			2	4	2		1				5	2	2			1	1		11	10	6	
Anemia	1	1			1				4	1							4				1	1			11	3		
Lymphocyte count decreased		1	1	1		1				2	2			1			2				1				3	5	3	1
Fatigue	1								3	2							3				1				8	2		
Platelet count decreased		2			1				2								3				1				7	2		
Nausea									2								2				1				5			
Hot Flush		1			1				1												1				3	1		
Arthralgia					1				2	1															3	1		

Grade 3 events: n=1 hypersensitivity (300 mg qd); n=1 γGT increase (150 mg bid)

ZN-c5 tolerability data suggest best-in-class of oral SERDs and ideal for combos

Vast Market Opportunity for Oral SERDs

~$1Bn+ Markets in Various Classes Treating ER+ Breast Cancer(1)



Faslodex Sales of ~$1.0Bn Reflect Only Part of Significant Market Potential for an Oral SERD and does not include the much larger adjuvant opportunity

(1) Highest projected or historical sales for currently marketed products in breast cancer; includes historical years for drug classes with generic competition; based on data from EvaluatePharma as of July 2020

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ZN-d5

BCL-2 Inhibitor

ZN-d5: Oral BCL-2 Inhibitor for Hematologic Malignancies

1 IDENTIFY: BCL-2

- Broad applicability as anti-apoptotic target
- Difficult target given intracellular location
- Potential for use in combination
- **Venetoclax: only approved BCL-2 inhibitor**
- Small number of agents in development

2 ANALYZE: Venetoclax

- Demonstrated clinical efficacy in hematologic malignancies
- Approvals in CLL/SLL and AML
- Addresses side effects of previous BCL-2 inhibitors
- **Thrombocytopenia still observed in 29% of patients, attributed to BCL-xL inhibition**

3 CREATE: ZN-d5

- Designed to optimize:
  - Potency
  - Selectivity
  - PK properties

4 GENERATE: Preclinical Evidence

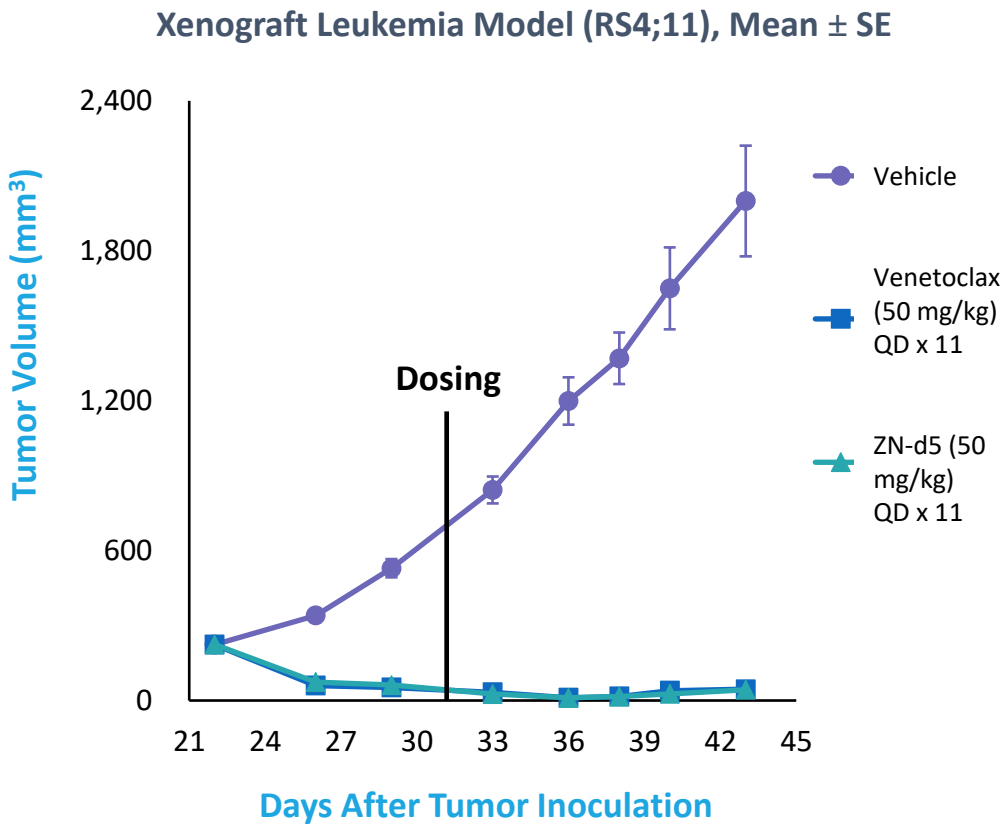
- Improved *in vitro* potency and has 10x improved selectivity for BCL-2 vs BCL-xL compared to Venetoclax
- Observed to bind with higher affinity to BCL-2 mutants than Venetoclax in *in vitro* assay
  - Mutations in BCL-2 may be driving sub-clonal pockets of resistance to Venetoclax
- Strong anti-tumor activity consistent with Venetoclax in leukemia model

ZN-d5: Strong Preclinical Activity with Better BCL-xL Selectivity

ZN-d5 has 10x Improved Selectivity for BCL-2 vs BCL-xL Compared to Venetoclax

Compound	Affinity (nM)		CTG IC_{50} (nM)						
			ALL	MCL	DLBCL		AML		
	BCL-2 Kd	**BCL-xL Kd**	RS4;11	Granta-519	DOHH-2	Toledo	HL-60	Molm-13	MV4-11
Venetoclax	0.41	**28**	2.9	161	43	191	26	18	3.8
ZN-d5	0.29	**190**	5.1	89	50	92	21	39	5.1

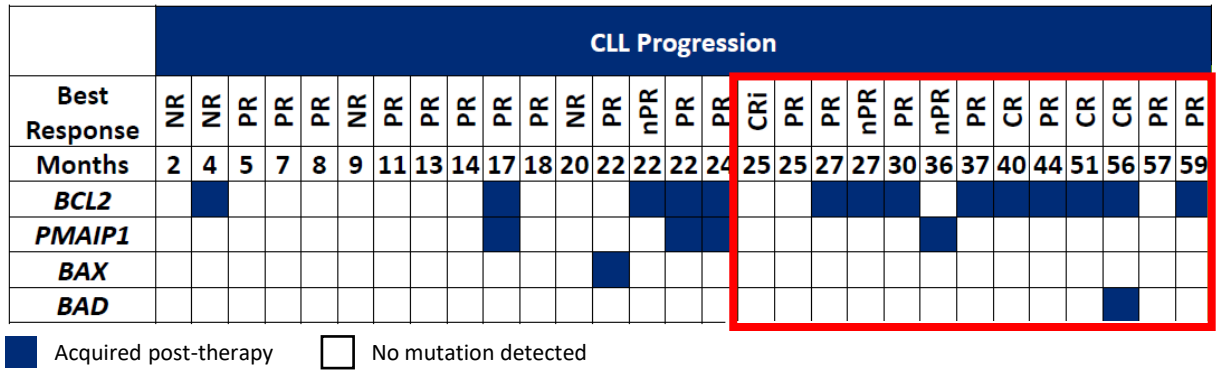
Strong Anti-Tumor Activity Consistent with Venetoclax



ZN-d5: May Bind with Higher Affinity to BCL-2 Mutants than Venetoclax

Mutations in BCL-2 May be Driving Sub-Clonal Pockets of Resistance to Venetoclax in CLL

CLL Progression on Venetoclax



55% (16/29) patients acquired mutations in BCL2 family members

- 48% (14/29) with mutations in BCL2
- 21% (6/29) with mutations in PMAIP1 (NOXA), BAX or BAD

Majority (9/14) were detected with BCL2 mutations after 24 months on Venetoclax

- % (16/29) of patients with CLL progression

Compound	IC_{50} (nM) BCL-2 Type			
	WT	G101V	F104L	D103Y
Venetoclax	1.3	7.3	8.4	18.3
ZN-d5	1.4	3.7	1.4	5.0

Note: Competition assay for displacing BAK peptide bound to BCL-2

Source: Chyla, B. ASH Presentation (2019)

ZN-d5: Clinical Development Plan

Ongoing and Planned Clinical Programs

Phase 1

Monotherapy
AML and Non-Hodgkin's Lymphoma
Dose Escalation (1)
Initiated

Combination
Undisclosed Indication
Phase 1b Study
Expected Initiation 1H 2022

Phase 2 (2)

Monotherapy
Phase 2 Study

Overview

- **Interim monotherapy dose-escalation study update**
  - 14 subjects with NHL enrolled; 4 cohorts complete
  - No unexpected safety findings

(1) As of May 15, 2021
(2) Trial designs will be based off data generated from Phase 1 trials

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ZN-e4

EGFR Inhibitor

ZN-e4: Third-Generation EGFR Inhibitor for NSCLC

1 IDENTIFY: EGFR

- Regulator of proliferation and survival in lung cancer
- Third generation inhibitors targeting T790M mutation have produced clinically meaningful benefits
- **Osimertinib: only approved third-generation EGFR inhibitor**
- Broad combination potential

2 ANALYZE: Osimertinib

- Addresses the T790M-mediated acquired resistance and improving efficacy
- ~60% of patients reported rashes
- **AZ5104, a major metabolite of osimertinib, may be responsible for these toxicities**

3 CREATE: ZN-e4

- Designed to achieve similar potency with:
  - Improved selectivity for mutant EGFR
  - No production of potent metabolite for wild-type EGFR
  - Better solubility
- **Actively evaluating potential combinations**

4 GENERATE: Preclinical Evidence

- Improved selectivity in comparison to osimertinib across single mutant, double mutant and wild-type cells
- Confirmed no potent metabolite for wild-type EGFR formed
- Favorable tolerability observed, similar weight loss to osimertinib at 5x efficacious dose

Source: Osimertinib data based on evaluation of comparable proxy chemical compound purchased from commercial sources rather than obtained from the pharmaceutical company developing the compound

ZN-e4: Improved Selectivity and Tolerability in Preclinical Models

ZN-e4 is More Selective than Osimertinib…

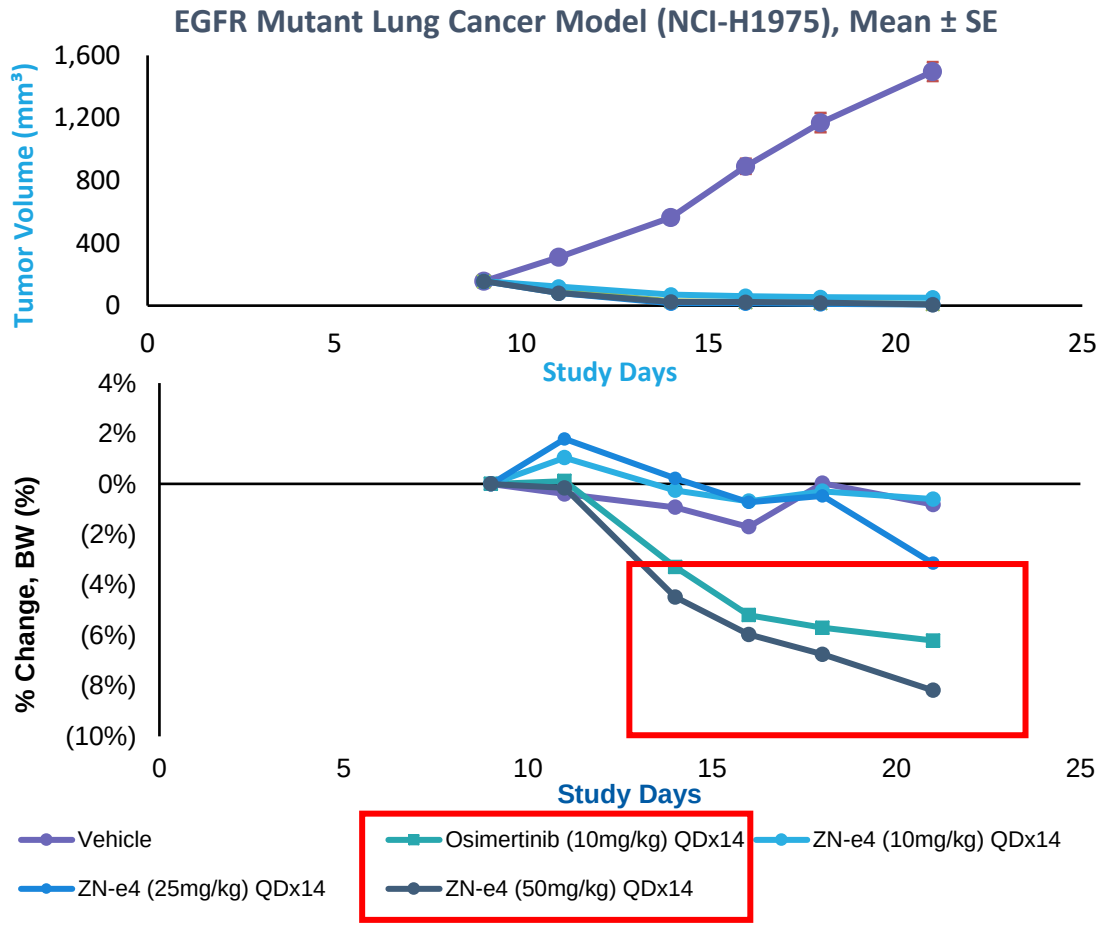
	Double Mutant Cell IC_{50} (nM)	Single Mutant Cell IC_{50} (nM)	Wild-Type Cell IC_{50} (nM)
Osimertinib: Core Drug	15	29	294
ZN-e4: Core Drug	**20**	**38**	**839**

…And Does Not Form a Potent Metabolite for Wild-Type EGFR

	Double Mutant Cell IC_{50} (nM)	Single Mutant Cell IC_{50} (nM)	Wild-Type Cell IC_{50} (nM)
Osimertinib: AZ5104	2 (2)	2 (2)	33 (2)
ZN-e4	***No Potent Metabolite for Wild-Type EGFR Formed***		

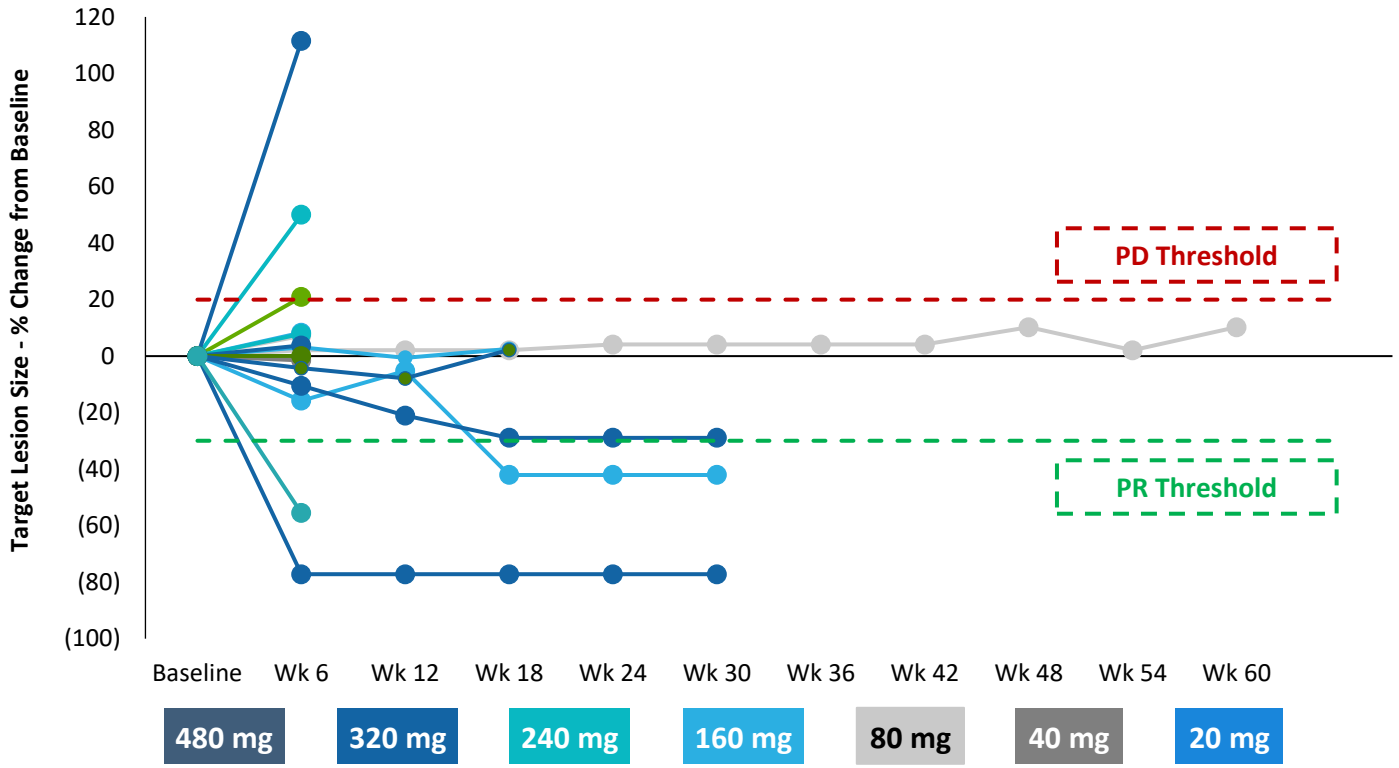
(1) Osimertinib data based on evaluation of comparable proxy chemical compound purchased from commercial sources rather than obtained from the pharmaceutical company developing the compound.
(2) Finlay, M.J. of Med. Chem. (2014)

Favorable Tolerability Observed: ZN-e4 Similar Weight Loss to Osimertinib at 5x Efficacious Dose (1)



ZN-e4: Clinical Development Overview

Interim & Preliminary Efficacy: Change In Target Lesion Size



Clinical Evidence (1)

- Enrolled 26 subjects, both osimertinib-naïve and -experienced
- Escalated from 20 mg through 480 mg, with clinical activity at doses >80 mg QD
- Well-tolerated at all doses
  - Rash AE observed in one patient and only grade 1 (1/26 subjects, 4%)
- Currently back-filling several dose cohorts to have robust PK and exposure-toxicity data to support RP2D selection

(1) As of March 25, 2021

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Conclusions

Key Milestones

ZN-c3: WEE1 Inhibitor

Completed	Initiate Phase 2 monotherapy in uterine serous carcinoma (USC)
Completed	Initiate Phase 1/2 chemotherapy combo in osteosarcoma
4Q 2021	Initiate Phase 1/2 GSK's niraparib combo in ovarian cancer
4Q 2021	Initiate Phase 2 tumor agnostic, predictive biomarker study
1H 2022	Initial readouts on Phase 1 USC expansion cohort and Phase 1b ovarian chemo combo
2H 2022	Initial readouts on Phase 2 USC trial and Phase 1/2 chemotherapy combo in osteosarcoma

ZN-c5: Oral SERD

Completed	Phase 1 interim results from monotherapy dose expansion and escalation studies, Window of Opportunity study, and safety from Pfizer's palbociclib combo
Completed	Initiate Phase 2 monotherapy study
1H 2022	Phase 1b combination study topline results with Pfizer's palbociclib; Phase 1b combination study topline results with Lilly's abemaciclib

ZN-d5: BCL-2 Inhibitor

1Q 2022	Initiate monotherapy Phase 2 study
1H 2022	Phase 1 initial results from dose escalation study in AML and Non-Hodgkin's Lymphoma
1H 2022	Initiate Phase 1b combination study in undisclosed indication

ZN-e4: EGFR Inhibitor

Completed	Phase 1 initial results from dose escalation study
2021+	Evaluate potential for use in combinations for treatment of lung cancer

Integrated Discovery Engine

4Q 2021	R&D Day

Zentera

Completed	Submit ZN-c3, ZN-c3 in combination, ZN-c5 and ZN-d5 CTAs in China
2022	Potential HK listing

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