UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of report (Date of earliest event reported): August 9, 2022

ZENTALIS PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-39263**	**82-3607803**
(State or other jurisdiction of incorporation or organization)	**(Commission File Number)**	**(I.R.S. Employer Identification No.)**

1359 Broadway, Suite 1710
New York, New York 10018
(Address of principal executive offices) (Zip Code)

(212) 433-3791
(Registrant's telephone number, include area code)

N/A
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.001 par value per share	ZNTL	The Nasdaq Global Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 2.02. Results of Operations and Financial Condition.

On August 9, 2022, Zentalis Pharmaceuticals, Inc. (the "Company") announced its financial results for the quarter ended June 30, 2022 and commented on certain business updates. The full text of the press release issued in connection with the announcement is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 7.01. Regulation FD Disclosure.

Beginning on August 9, 2022, spokespersons of the Company plan to present the information in the Corporate Presentation attached hereto as Exhibit 99.2 at conferences and in meetings with investors and analysts.

The information contained in Items 2.02 and 7.01 of this Current Report on Form 8-K (including Exhibits 99.1 and 99.2 attached hereto) shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, except as expressly provided by specific reference in such a filing.

By providing the information in Item 7.01 of this Current Report on Form 8-K, including Exhibit 99.2 hereto, the Company is not making an admission as to the materiality of any information herein. The information contained in this Current Report on Form 8-K is intended to be considered in the context of more complete information included in the Company's filings with the U.S. Securities and Exchange Commission (the "SEC") and other public announcements that the Company has made and may make from time to time by press release or otherwise. The Company undertakes no duty or obligation to update or revise the information contained in this Current Report on Form 8-K, although it may do so from time to time as its management believes is appropriate. Any such updating may be made through the filing of other reports or documents with the SEC, through press releases or through other public disclosures.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

The following exhibits relating to Items 2.02 and 7.01 shall be deemed to be furnished, and not filed:

Exhibit No.	Description
99.1	Press Release issued on August 9, 2022
99.2	Corporate Presentation, dated August 2022
104	Cover Page Interactive Data File (embedded within the inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ZENTALIS PHARMACEUTICALS, INC.

Date: August 9, 2022

By: /s/ Kimberly Blackwell, M.D.
Kimberly Blackwell, M.D.
Chief Executive Officer

Zentalis Pharmaceuticals Reports Second Quarter 2022 Financial Results and Operational Update

Strengthened leadership team with the appointment of additional industry veterans, including CEO Dr. Kimberly Blackwell and Chairman Dave Johnson

Received a $25 million equity investment from Pfizer, with plans to jointly advance and expand clinical development of ZN-c3; added Pfizer's Dr. Adam Schayowitz to its Scientific Advisory Board

Raised approximately $200.2 million in gross proceeds from recent follow-on offering, extending cash runway into 2025

NEW YORK and SAN DIEGO—August 9, 2022— Zentalis® Pharmaceuticals, Inc. (Nasdaq: ZNTL), a clinical-stage biopharmaceutical company focused on discovering and developing clinically differentiated small molecule therapeutics targeting fundamental biological pathways of cancers, today announced financial results for the second quarter ended June 30, 2022 and highlighted recent corporate accomplishments.

"We remain steadfast in our commitment to accelerate the clinical development of our lead candidates, ZN-c3 and ZN-d5, and we took many important steps this quarter – including continuing to strengthen our leadership team and cash position – to help reach this goal," commented Dr. Kimberly Blackwell, Chief Executive Officer of Zentalis. "To that end, we are excited to receive financial and strategic support from Pfizer, whose commitment will help us to realize the full potential of ZN-c3, a selective Wee1 inhibitor designed to induce synthetic lethality in cancer cells. We look forward to sharing updates on our ongoing and planned trials later this year."

Program Highlights:

- The Company is focusing its resources on investigating the full potential of its lead clinical candidates ZN-c3, its Wee1 inhibitor, and ZN-d5, its BCL-2 inhibitor, as monotherapies and in combination across a wide range of cancers. Therefore, Zentalis will discontinue the clinical development of ZN-c5, its oral SERD, and ZN-e4, its EGFR inhibitor, following completion of its existing clinical trials, which are closed to accrual, in these two programs.

- In April 2022, Zentalis presented five abstracts at the American Association of Cancer Research (AACR) Annual Meeting and held a webcast event with Key Opinion Leader, Dr. Kathleen Moore, to further discuss the clinical and preclinical data presented at the conference, with additional details available here.

Corporate Highlights:

- In April 2022, Zentalis sold 953,834 of its common shares at a price of $26.21 per share to Pfizer for gross proceeds of approximately $25.0 million. Zentalis and Pfizer plan to jointly advance the clinical development of ZN-c3. In addition, Dr. Adam Schayowitz, Vice President & Medicine Team Group Lead for Breast Cancer, Colorectal Cancer and Melanoma, Pfizer, joined Zentalis' Scientific Advisory Board.
- In May 2022, the Company closed an underwritten public offering of 10,330,000 shares of its common stock at a public offering price of $19.38 per share. The total gross proceeds were approximately $200.2 million.
- In May 2022, the Company appointed Kimberly Blackwell, M.D., an oncology clinical development veteran, as Chief Executive Officer. Dr. Blackwell has been a member of Zentalis' Board since 2020 and previously served as Chief Medical Officer of Tempus Labs. Before that, she held clinical development leadership roles at Eli Lilly and Company. Additionally, Board member Dave Johnson was appointed Chairman and Cam Gallagher, MBA, a cofounder of Zentalis, was promoted to President and will remain a Board member.
- In July 2022, Zentalis announced the appointment of Andrea Paul, J.D., as General Counsel and Corporate Secretary.

Second Quarter 2022 Financial Results

- **Cash and Marketable Securities Position**: As of June 30, 2022, Zentalis had cash, cash equivalents and marketable securities of $455.2 million. The Company believes that its existing cash, cash equivalents and marketable securities as of June 30, 2022 will be sufficient to fund its operating expenses and capital expenditure requirements into the first quarter of 2025.

- **Research and Development Expenses**: Research and development expenses for the three months ended June 30, 2022 were $43.8 million, compared to $44.8 million for the three months ended June 30, 2021. The decrease was primarily due to licensing milestones and manufacturing expenditures incurred during the three months ended June 30, 2021, which did not recur during the comparable period in 2022.
- **General and Administrative Expenses**: General and administrative expenses for the three months ended June 30, 2022 were $19.6 million, compared to $10.4 million during the three months ended June 30, 2021. The increase in expenses was primarily attributable to an increase in non-recurring, non-cash stock-based compensation and other cash compensation.

About Zentalis Pharmaceuticals

Zentalis Pharmaceuticals, Inc. is a clinical-stage biopharmaceutical company focused on discovering and developing small molecule therapeutics targeting fundamental biological pathways of cancers. The Company is developing a broad pipeline of potentially best-in-class oncology candidates, all internally discovered, which include ZN-c3, a Wee1 inhibitor for advanced solid tumors, ZN-d5, a BCL-2 inhibitor for hematologic malignancies and related disorders and a heterobifunctional degrader of BCL-xL for solid and hematological malignancies. The Company has licensed ZN-c3, ZN-d5 and ZN-c5 to its joint venture, Zentera Therapeutics, Ltd. to develop and commercialize these candidates in China. Zentalis has operations in both New York and San Diego.

For more information, please visit www.zentalis.com. Follow Zentalis on Twitter at @ZentalisP and on LinkedIn at www.linkedin.com/company/zentalis-pharmaceuticals.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. All statements contained in this press release that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements regarding accelerating and advancing the clinical development of our product candidates; the impact of management and personnel changes on our business, operations and financial results; achieving the full potential of our product candidates; future updates on our trials and the timing thereof; discontinuing programs; and our cash runway. The terms “design,” “commitment,” “goal,"

“plan,” “potential,” “will” and similar references are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. 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: 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 candidates; the outcome of preclinical testing and early trials may not be predictive of the success of later clinical trials; failure to identify additional product candidates and develop or commercialize marketable products; 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; 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 risks relating to management transitions; significant costs as a result of operating as a public company; the COVID-19 pandemic has adversely impacted and may continue to adversely impact our business, including our preclinical studies and clinical trials; and the other important factors discussed under the caption “Risk Factors” in our most recently filed periodic report on Form 10-K or 10-Q and subsequent filings with the U.S. Securities and Exchange Commission (SEC) and our other filings with the SEC. Any such forward-looking statements represent management’s estimates as of the date of this press release. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change.

Investor Contact:

Alexandra Roy

Solebury Trout

aroy@soleburytrout.com

Media Contact:

Julia Deutsch

Solebury Trout

jdeutsch@soleburytrout.com

Zentalis Pharmaceuticals, Inc.
Condensed Consolidated Statements of Operations
(Unaudited)
(In thousands, except per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Operating Expenses				
Research and development	$ 43,825	$ 44,770	$ 89,937	$ 83,164
General and administrative	19,636	10,362	31,403	22,315
Total operating expenses	63,461	55,132	121,340	105,479
Operating loss	(63,461)	(55,132)	(121,340)	(105,479)
Other Income (Expense)				
Investment and other income, net	424	115	850	214
Net loss before income taxes	(63,037)	(55,017)	(120,490)	(105,265)
Income tax expense	17	45	50	241
Loss on equity method investment	5,338	—	7,089	—
Net loss	(68,392)	(55,062)	(127,629)	(105,506)
Net loss attributable to noncontrolling interests	(35)	(488)	(195)	(1,031)
Net loss attributable to Zentalis	$ (68,357)	$ (54,574)	$ (127,434)	$ (104,475)
Net loss per common share outstanding, basic and diluted	$ (1.34)	$ (1.34)	$ (2.64)	$ (2.58)
Common shares used in computing net loss per share, basic and diluted	51,117	40,738	48,197	40,549

Exhibit 99.1

Zentalis Pharmaceuticals, Inc.
Selected Condensed Consolidated Balance Sheet Data
(Unaudited)
(In thousands)

	As of June 30, 2022	As of December 31, 2021
Cash, cash equivalents and marketable securities	$ 455,221	$ 339,887
Working capital [1]	418,990	306,826
Total assets	567,856	454,507
Total liabilities	95,033	90,025
Total Zentalis equity	472,823	364,482

[1] The Company defines working capital as current assets less current liabilities.

zentalis

CORPORATE PRESENTATION

August 2022

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 U.S. 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 the target profiles and potential benefits of our product candidates, including as a monotherapy and/or in combination; clinical and regulatory progress of our product candidates, including the estimated timing of the initiation of clinical trials and data readouts; the market potential of our product candidates; our milestones; and the potential of our collaborations are forward-looking statements, as well as statements that include the words "potential," "design," "expect," "intend," "plan," "believe," "estimate," "may," 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. Other risk and uncertainties include those identified under the caption "Risk Factors" in our most recently filed periodic reports on Forms 10-K and 10-Q and subsequent filings with the U.S. Securities and Exchange Commission in the future 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, adavosertib, 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.

ZENTALIS® and its associated logos are trademarks of Zentalis and/or its affiliates. All other trademarks, trade names and service marks appearing in this presentation are the property of their respective owners. All website addresses given in this presentation are for information only and are not intended to be an active link or to incorporate any website information into this document.

Zentalis's product candidates are investigational drugs and have not yet been approved by the U.S. Food and Drug Administration or any other regulatory authority.

zentalis

Company Overview

Lead Program: Wee1i (ZN-c3) potentially first- and best-in-class

- Partial responses seen in four tumor types to date
- Potential accelerated approval paths for USC and biomarker-driven trials
- Fast Track designation granted in USC
- Orphan drug and rare pediatric disease designations granted in osteosarcoma

BCL-2 inhibitor (ZN-d5): broad applicability as anti-apoptotic target; potential as monotherapy and in combination, including with ZN-c3

Additional programs targeting fundamental cancer pathways including BCL-xL heterobifunctional degrader

Investigating internal & third-party combinations, including ZN-d5 + ZN-c3 for liquid tumors

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

Utilizing the Highly Efficient 'Integrated Discovery Engine' to Generate Potentially Best-In-Class Drugs

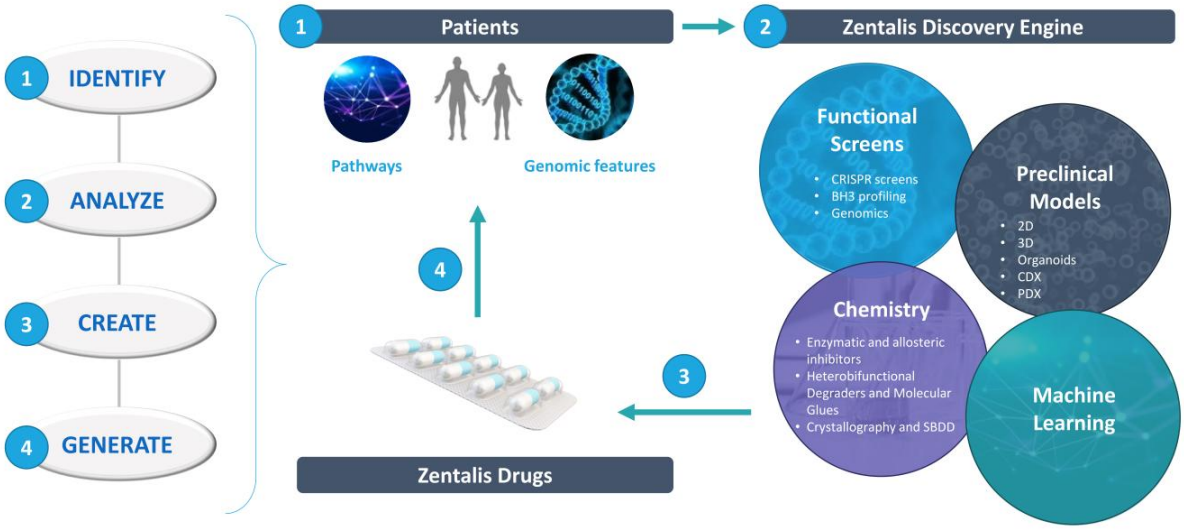
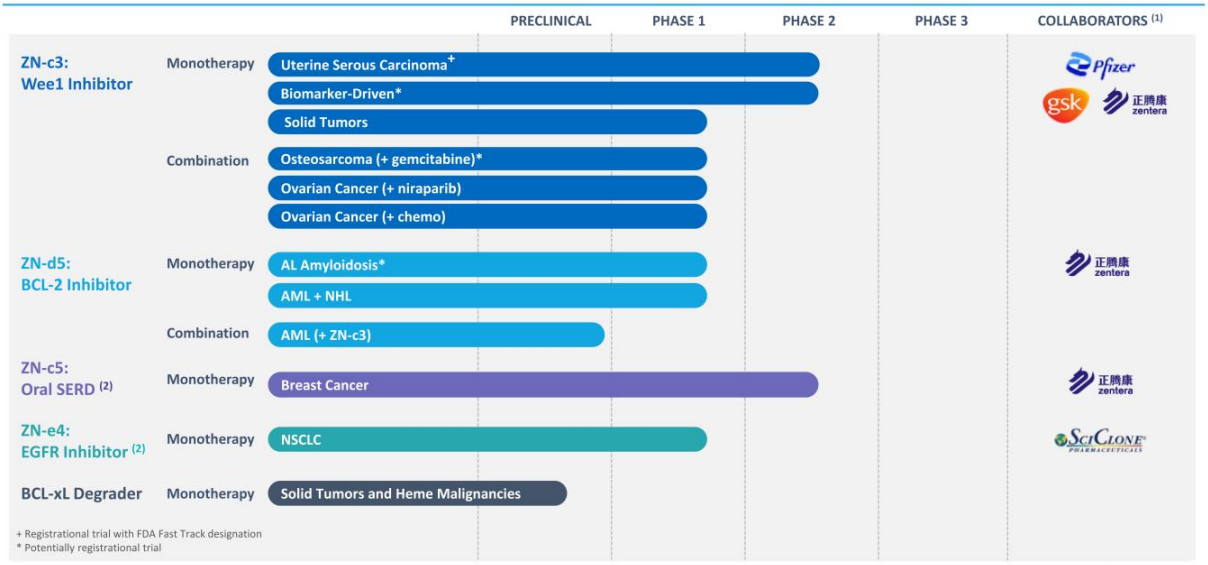


Image reproduced from: https://blog.f1000.com/2017/02/01/f1000prime-f1000prime-faculty-launch-bioinformatics-biomedical-informatics-computational-biology/

Broad Oncology Pipeline Designed to Improve Patient Outcomes



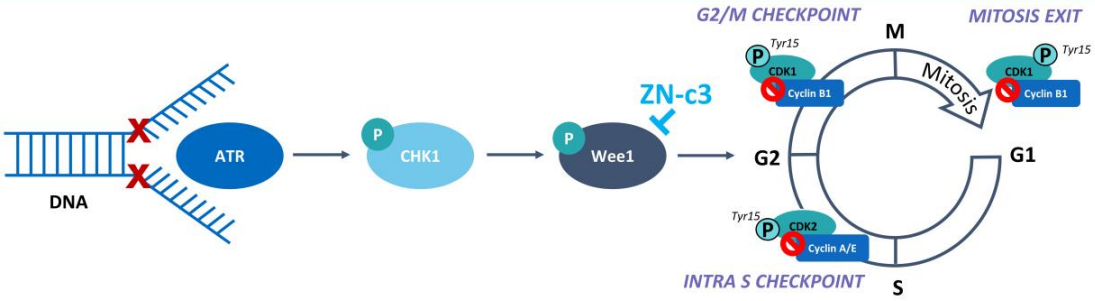
(1) Zentalis intends to evaluate ZN-c3 in combination with niraparib (ZEJULA®), as part of a clinical research collaboration with GlaxoSmithKline. Zentalis maintains full ownership of ZN-c5 and ZN-c3 in each such collaboration. SciClone has development and commercial rights to ZN-e4 in Greater China (including Macau and Hong Kong), South Korea, Taiwan and Vietnam. Zentera, our joint venture, has development and commercial rights to ZN-c5, ZN-c3 and ZN-d5 in select Asian countries (including China). Zentera received CTA acceptances in China for ZN-c3, ZN-c3 in combination, ZN-c5 and ZN-d5 and four clinical trials have begun enrollment.
(2) Zentalis will discontinue the clinical development of ZN-c5 and ZN-e4 following completion of its existing clinical trials, which are closed to accrual, in these two programs.

zentalis

ZN-c3

Wee1 Inhibitor

Wee1 Inhibition: Clinically Proven DDR Target for Cancer

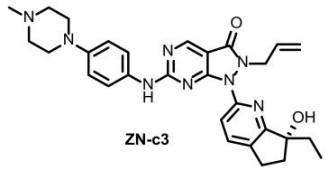


- Wee1 is a protein kinase expressed at high levels in many cancer types that prevents entry into mitosis in response to DNA damage by regulating the G2 checkpoint
- Wee1 inhibition causes cancer cells to proceed to mitosis without repairing DNA damage, resulting in premature mitotic entry and apoptosis
- Wee1 inhibition also causes aberrant origin firing [1], depletion of dNTP pools [2], and activation of cGAS/STING pathway [3-5]
- ZN-c3 has demonstrated significant growth inhibition and induced apoptosis *in vitro* and anti-tumor activity *in vivo*

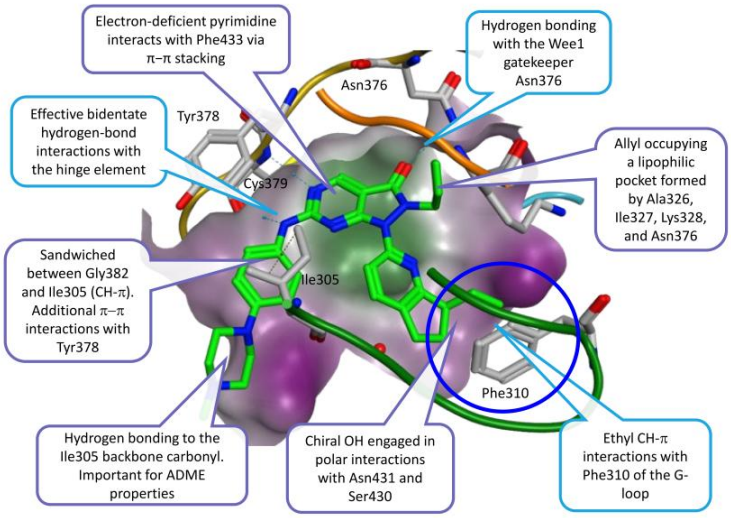
(1) Di Rora AGL et al. J Hematol Oncol. 2020 Sep 21;13(1):126; (2) Pfister SX et al. Cancer Cell. 2015 Nov 9; 28(5): 557–568; (3) Keenan et al. Clin Canc Res. (2021); (4) Hai J et al. Clin Cancer Res. 2020 Jul 1;26(13):3431-3442; (5) Guo e et al. J. Exp. Med. 2021 Vol. 219 No. 1

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

Structure-Based Drug Design (SBDD) Led to the Discovery of a Highly Potent and Selective Wee1 Inhibitor ZN-c3 with Improved ADME Properties(1)



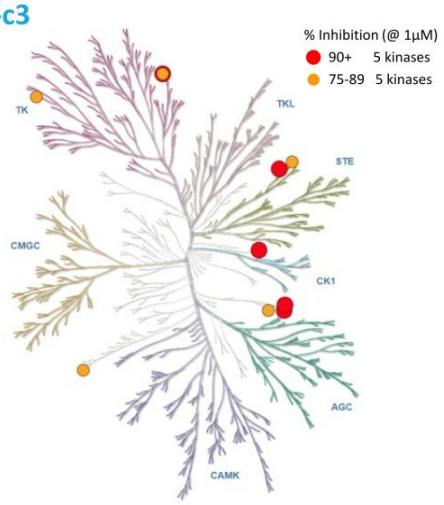
ZN-c3 potency and ADME	
Wee1 IC_{50}	3.8 nM
H23 IC_{50}	103 nM
A427 IC_{50}	75 nM
Log *D*	2.4
*h*PPB	66%
*h*Hep	<18 mL/min/kg
solubility	> 2000 µM
CYP3A4	7 µM
hERG	> 30 µM



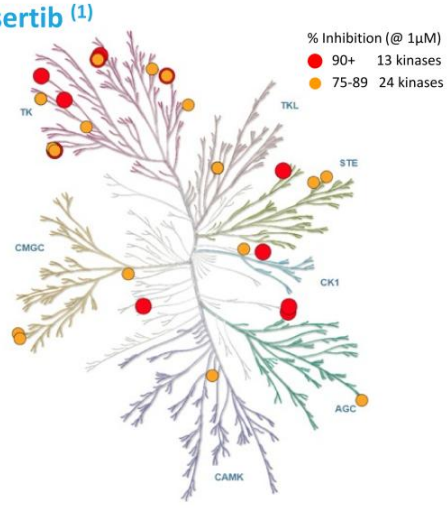
(1) Huang, PQ; *et al.* J. Med. Chem. **2021**, *64*, 13004-13024

ZN-c3: Differentiated Selectivity Profile

ZN-c3



Adavosertib (1)



(1) Adavosertib 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: Cornerstone of Multiple Treatments in Many Indications

- Potentially best-in-class/first-in-class profile; efficacy observed in hematologic and solid tumors
- Targeting superior selectivity and tolerability profile supports combination therapies across multiple indications
- Potentially registrational trials underway; planning for a Phase 3 trial in combination with chemo in ovarian cancer
- Significant market opportunity across a broad range of solid and liquid tumors

Ongoing and Planned Clinical Programs

Indication	Treatment	Status	Addressable Patient Population[1]	Trial Updates[#]
USC*	ZN-c3	Phase 2 enrolling	~12,000[2]	Initial enrollment/safety update – 2H 2022
Solid Tumors	ZN-c3	Phase 1 enrolling	N/A	Initial USC cohort data presented at AACR 2022
Ovarian	ZN-c3 & chemotherapy	Phase 1b enrolling	~14,000[3]	Initial readout presented at AACR 2022
Osteosarcoma+	ZN-c3 & gemcitabine	Phase 1/2 enrolling	~1,000[4] (U.S. incidence)	Initial readout – 2H 2022
Predictive Biomarker+	ZN-c3	Phase 2 initiated	~55,000[5]	-
Ovarian	ZN-c3 & niraparib (PARPi)	Phase 1/2 initiated	~18,000[6]	-
AML	ZN-c3 & ZN-d5 (BCL-2i)	Phase 1/2 planned	~68,000[7] (U.S. prevalence)	Trial to initiate in 2022
Colorectal	ZN-c3	-	>2,000,000[8] (total); ~500,000 (TP53/KRAS mutant)[9]	-

*Registrational Study with Potential Accelerated Approval; +Potentially Registrational Study

(1) North America, Western Europe, and Japan prevalence unless otherwise stated.
(2) Gynecologic Oncology 115 (2009) 142-153, David Boruta et al.; National Cancer Institute, SEER 2020 Data.
(3) Informa Pharma Intelligence. Ovarian Cancer November 2020; Platinum resistant/refractory.
(4) Cancer.org; SEER database.
(5) Observed predictive biomarker frequency data across solid tumor types; biomarker not disclosed.
(6) Informa Pharma Intelligence. Ovarian Cancer November 2020; estimated PARP treated patients.
(7) Cancer.org; SEER database (2018).
(8) Globocan 2020 https://gco.iarc.fr/today/data/factsheets/cancers/10_8_9 Colorectum fact sheet.pdf
(9) American Cancer Society Facts & Figures 2020; Based on flowchart of patients from Seligmann JF et al. J Clin Oncol. 2021. US population.
Expected

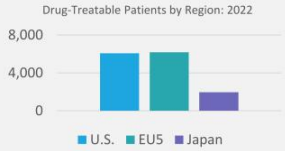
Platinum-Resistant/Refractory Ovarian Cancer Remains an Unmet Need

UNMET NEED

- Platinum-resistant and -refractory ovarian cancer represents a **high unmet need**
- It is associated with a poor prognosis and limited treatment options
  - **ORR of 11.8% with SOC[1] for platinum resistant patients**
- **Improvement in efficacy with acceptable safety profile** would make a meaningful difference for patients

PATIENT POPULATION

- In 2022, the total number of drug-treatable second line platinum-resistant ovarian cancer patients is estimated to be **>14,000 in the United States, EU5 and Japan[2]**



COMPETITIVE LANDSCAPE

- Current standard of care for second line platinum-resistant ovarian patients is single-agent chemotherapy ± bevacizumab[3]
- Ongoing pivotal trials focus on novel MOAs, including ADCs, and combinations with either PARPi or chemotherapy.[3] Of note, ADCs only work in a sub-population of patients
- ZN-c3 is potentially a first-in-class treatment option that works synergistically with other anticancer therapies

ZN-c3's efficacy and tolerability profile are well-positioned for the platinum-resistant/refractory ovarian population

(1) Pujade-Lauraine et al. J Clin Oncol 2014; 32:1302-1308; AURELIA study (2) Decision Resources Group; data on file. (3) CancerMPact Treatment Architecture Ovarian cancer July 2021; data on file.

Expectations for Efficacy in Recurrent Ovarian Cancer Patients

Study Name / Author	Drug	Platinum Refractory	Prior Bevacizumab Treatment	ORR	Overall Survival for Wee1 Inhibitor
AURELIA (Phase 3, Randomized Trial) [1]	Chemotherapy (PLD, paclitaxel, topotecan) in control arm	Not included	None	11.8%	N/A
Moore KM, CCR (Phase 2, Open Label) [2]	Adavosertib + chemotherapy	Not included	34% overall	11-33% range (High dose C2 arm not tolerated)	N/A
Lheureux S, Lancet (Phase 2, DB, PC, Randomized Trial) [3]	Adavosertib + gemcitabine	Included Plat Refractory (10%)	Unknown	23% (6% chemo alone)	**mOS = 11.4 mos; HR = 0.56 vs gemcitabine alone (p=0.017)**
ZN-c3-002	ZN-c3 + chemotherapy	Included Plat Refractory (7%)[4]	46% overall		

A response rate >20% may lead to significant PFS and OS advantages in larger trials

(1) Pujade-Lauraine E et al. [AURELIA study] *J Clin Oncol* 2014; 32:1302-1308.
(2) Moore KM et al. *Clin Cancer Res* 2022;28:36–44
(3) Lheureux S et al. *Lancet* 2021; 397: 281–92
(4) Platinum refractory population of 7% in evaluable population

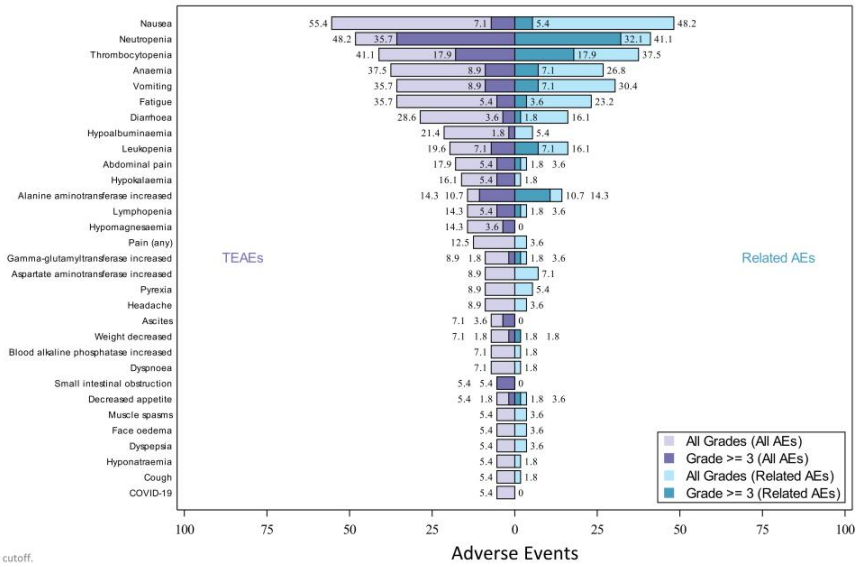
ZN-c3-002: Summary of Clinical Activity

Summary of Clinical Activity (All Cohorts)

Group	N	Evaluable* (n)	PR/uPR+ (n)	SD/SD+ (n)	PD (n)	DCR (%)	ORR (%)
Total	56	43	13	24	6	86.0	30.2
ZN-c3 + PLD	30	24	3	17	4	83.3	12.5
ZN-c3 + Carboplatin	17	11	5	4	2	81.8	45.5
ZN-c3 + Paclitaxel	9	8	5	3	–	100	62.5

Measurable disease per Response Evaluation Criteria in Solid Tumors (RECIST), version 1.1
* Patients with measurable disease and at least one post-baseline scan
Of evaluable subjects, ORR is percentage with PR/uPR; and DCR is percentage with ORR + SD/SD+
+ Indicates treatment is ongoing for this subject
PR = partial response; uPR = unconfirmed partial response; ORR = objective response rate; DCR = disease control rate; SD = stable disease; PD = progressive disease
Data cutoff January 28, 2022

ZN-c3-002: TEAEs ≥5% for All Patients (N=56)[1]

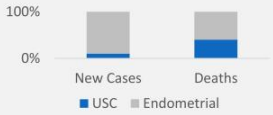


(1) January 28, 2022 data cutoff.

The Unmet Need in Uterine Serous Carcinoma is Significant

UNMET NEED

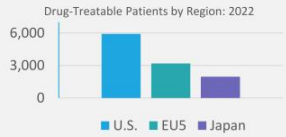
- USC results in **~40% of endometrial cancer deaths** despite comprising only 10% of cases



  - **Prior to pembro+len approval, ORR of 9.5% with PLD was chemo SOC for third-line USC**[1]
  - The 5-year survival rate for late-stage USC is 33% [2]
- >90% of USC patients have TP53 mutations[3]

PATIENT POPULATION

- In 2022, the total number of drug treatable **third line** advanced or recurrent endometrial cancer patients is approximately **10,000 in the United States, EU5 and Japan**[4]



- **Improvement in efficacy while limiting toxicities** would make a meaningful difference for patients

COMPETITIVE LANDSCAPE

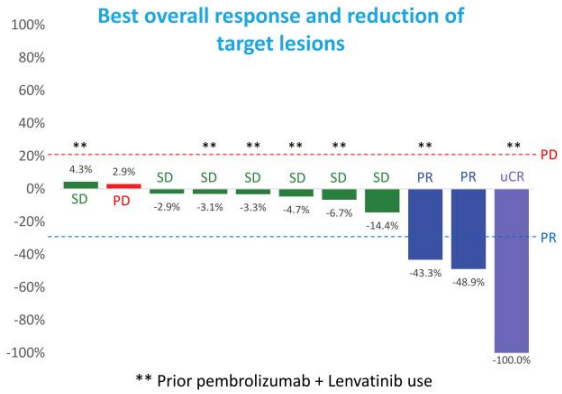
- Current standard of care for third line, USC is single-agent chemotherapy, with some limited use of bevacizumab and pembrolizumab monotherapies[5]
- There is a **high need** for a therapeutic option in later line patients **after prior platinum containing chemotherapy and pembrolizumab + lenvatinib treatment**[1]
  - Another Wee1 inhibitor (adavosertib) is also in late-stage clinical evaluation
- ZN-c3 is potentially a best in-class treatment option for USC

ZN-c3's efficacy and tolerability profile are well positioned for the USC population

(1) Muggia, J Clin Oncol, 2002 (2) Hamilton CA et al. Br J Cancer. 2006 Mar 13;94(5):642-6. (3) Liu JF et al. J Clin Oncol. 2021 Mar 11:JCO2003167. (4) Decision Resources Group; data on file. (5) CancerMPact, Future Trends and Insights Endometrial cancer June 2021; data on file.

ZN-c3-001: Summary of Clinical Activity – Complete Response Seen

Best Overall Response	N = 11; n (%)
Complete Response (unconfirmed)*	1 (9)
Partial Response (confirmed)	2 (18)
Stable Disease	7 (63.6)
≥ 12 weeks	4 (36.3)
< 12 weeks	3 (27.3)
Progressive Disease	1 (9)
Overall Response Rate (95% CI = 6.0%, 61.0%)	3 (27.3)
DCR‡ (CR + PR + SD) (95% CI = 58.7%, 99.8%)	10 (90.9)
Duration of Response	5.6 months
mPFS	4.2 months



*The BOR for this subject is cPR.
†N=11 subjects with measurable disease and at least 1 postbaseline tumor assessment.
‡Includes 3 subjects with cPR and 7 with SD.
Median duration of response for 3 responders = 5.55 months (95% CI, 4.11 – not available).
BOR, best overall response; cPR, confirmed partial response; DCR, disease control rate; PD, progressive disease; PR, partial response; SD, stable disease; uCR, unconfirmed complete response.
Data cutoff January 21, 2022.

ZN-c3 Compares Favorably in Efficacy and Tolerability to Adavosertib

Trial	Dosing Schedule	Prior Pem/Len Use (%)	ORR (%)	DCR (%)	Grade ≥3 Heme Tox (Neutropenia/Anemia/ Thrombocytopenia)
ZN-c3-001	300 mg QD continuously; 21-day cycle	57.1	27.3	90.9	0.0/9.4/3.1[1]
Liu et al[2]	300 mg QD D1-5, 8-12; 21-day cycle	Very low[3]	29.4	78.8	32.3/23.5/17.6

- ZN-c3 demonstrated a higher DCR and on par ORR to adavosertib in a sicker patient population
- ZN-c3-001 USC cohort had 57% prior pembrolizumab + lenvatinib use
- Oral continuous dosing regimen for ZN-c3 is enabled by its best-in-class tolerability profile

(1) AE profile for 32 ZN-c3 patients at 300mg QD continuous dosing from ZN-c3-001 study.
(2) Liu JF et al. J Clin Oncol. 2021 Mar 11:JCO2003167
(3) Exact number of patients receiving TKI/IO combi not available.

Not a head-a-head comparison

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

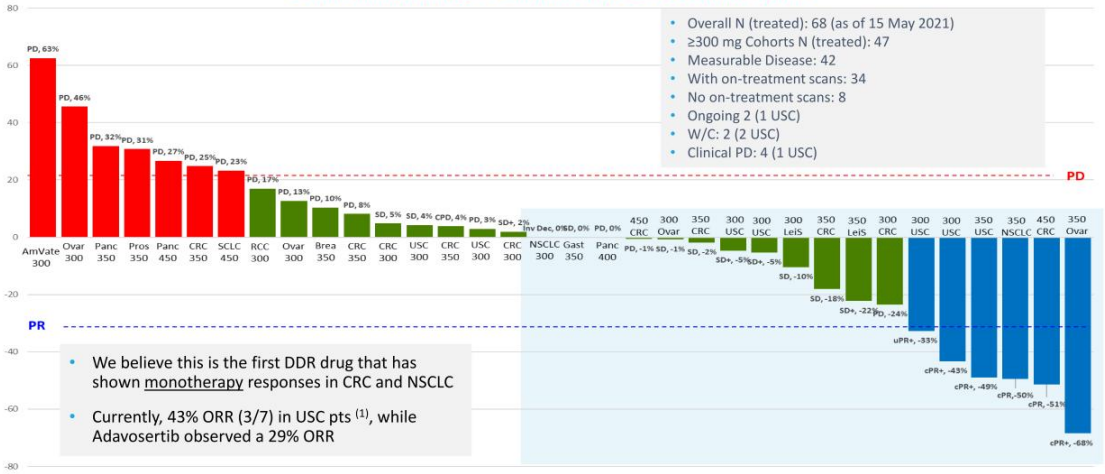
Overview of PRs in USC (2)

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; USC update on slide 16

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

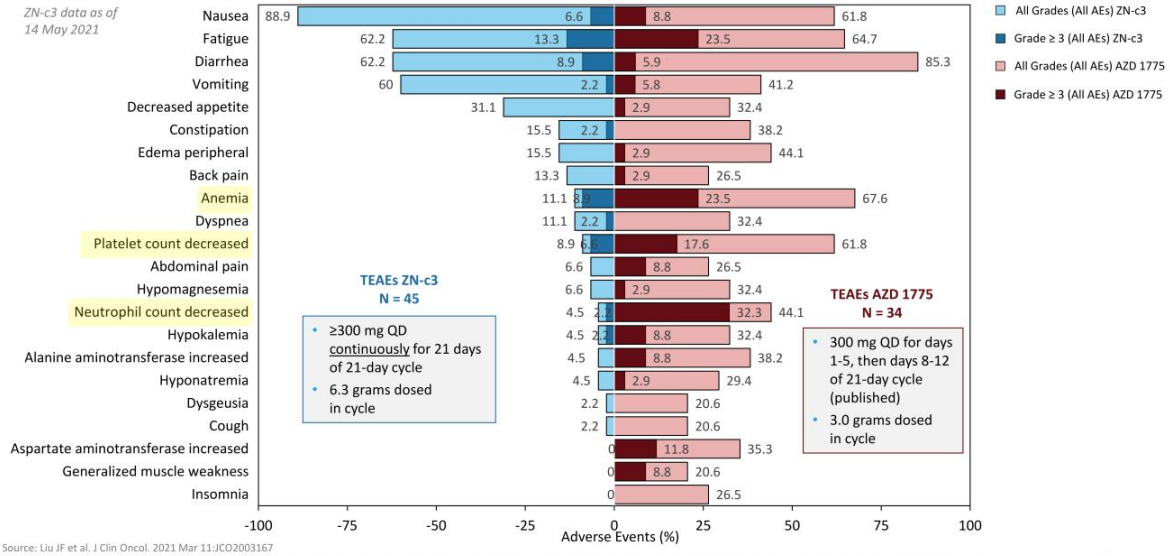


- Overall N (treated): 68 (as of 15 May 2021)
- ≥300 mg Cohorts N (treated): 47
- Measurable Disease: 42
- With on-treatment scans: 34
- No on-treatment scans: 8
- Ongoing 2 (1 USC)
- W/C: 2 (2 USC)
- Clinical PD: 4 (1 USC)

- We believe this is the first DDR drug that has shown monotherapy responses in CRC and NSCLC
- Currently, 43% ORR (3/7) in USC pts [1], while Adavosertib 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.

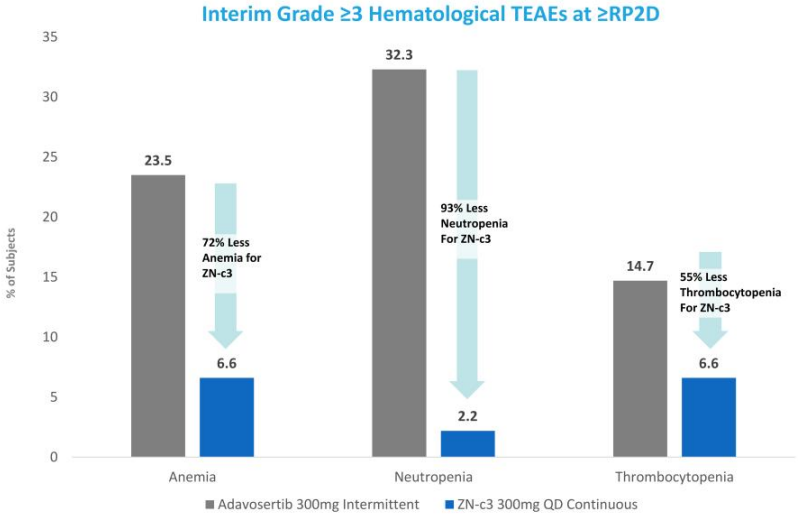
ZN-c3: Well Tolerated in Comparison to Adavosertib [1]



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]



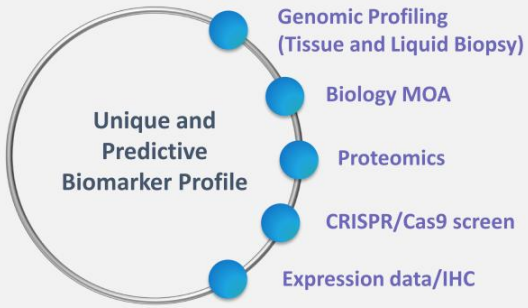
- Significantly lower overall severe hematological AE rate vs Adavosertib
- Despite continuous dosing and delivering 2x the drug load, ZN-c3 induces markedly less hematological toxicity
- Better tolerability unlocks the promise for wide ranging drug combinations with increased efficacy and commercial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

Exceptional Responders Exhibit Unique Biological Features

Zentalis Predictive Biomarker Approach



Confirming Biomarker Profile

- Observed multiple Exceptional Responses with single agent ZN-c3 (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

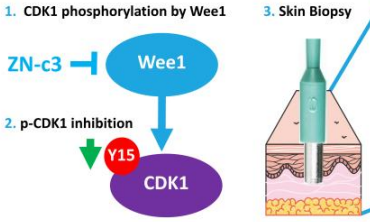
Phase 2 predictive biomarker-enabled trial ongoing

(1) Based on data from the ZN-c3 Phase 1 monotherapy trial

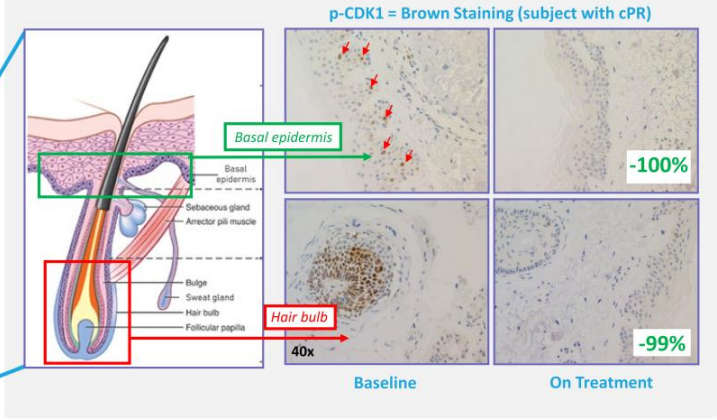
Decreases in p-CDK1 Show Target Engagement for Wee1 Inhibition

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

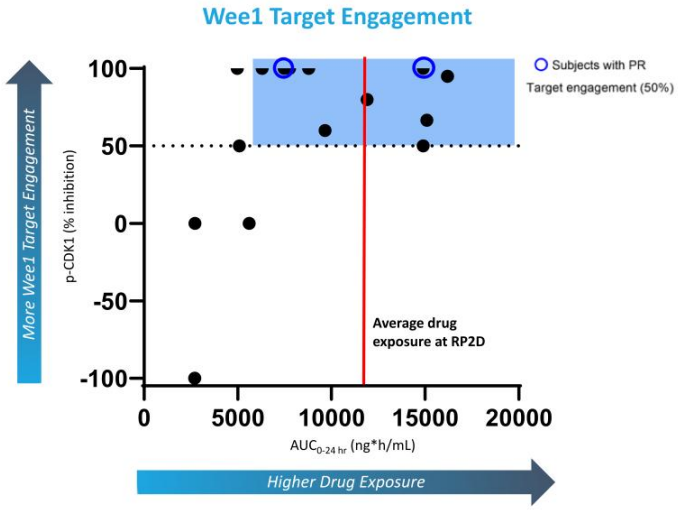


Decreases in p-CDK1 at Baseline vs on Treatment



Source: Drawing adapted from Servier Medical Art

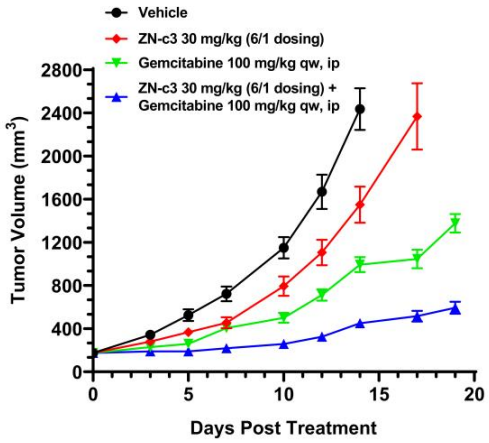
ZN-c3: PK/PD Correlation Shows Active Target Engagement at RP2D



- 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 in Combination with Gemcitabine Shows Strong Activity in an Osteosarcoma Cancer Model

Osteosarcoma Cancer Model SJSA-1



Clinical Unmet Need in Osteosarcoma

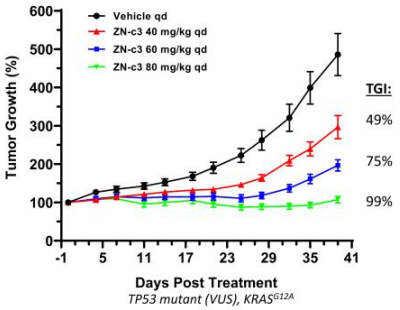
- Approximately 1,000 new cases in the U.S.[1]
- Up to 90% have sequence mutations or structural variants in TP53 and are often enriched in relapsed or refractory cases, portending resistance to chemotherapy[2]
- No significant advances over the last 10 plus years[3]
- Overall survival rate for patients with metastatic or recurrent disease is <20%[4]

Phase 1/2 initial readout expected 2H 2022

(1) American Cancer Society. Last accessed on April 7th, 2020
(2) Tang et al. J *Orthop Res.* 2019;37(3):789–98
(3) Misaghi A et al. *Sicot-j.* 2018;4:12
(4) Harrison DJ et al. *Expert Rev Anticanc.* 2018;18:1, 39-50

Wee1 Inhibition as a Monotherapy and in Combination Shows Strong Preclinical Activity in Colorectal Cancer

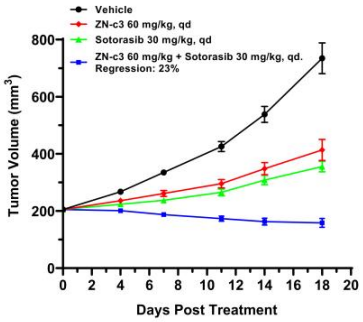
ZN-c3 is Active in a KRAS/TP53 Mutant Preclinical Colorectal Cancer Model



TP53 mutant (VUS), KRAS^{G12A}

- Multiple opportunities for combining ZN-c3 with different agents: 5-FU, irinotecan, anti-PD-1 and others

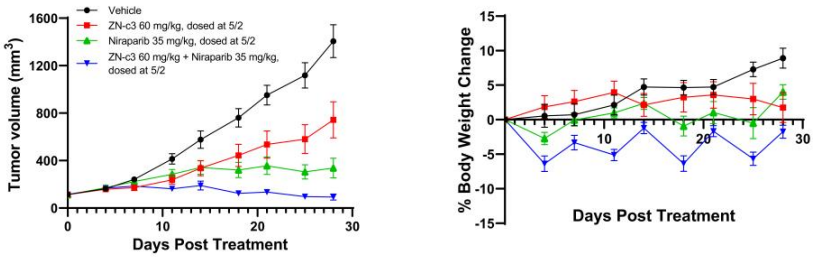
ZN-c3 in Combination with Sotorasib[1] Induces Regressions in a KRAS/TP53 Mutant Preclinical Colorectal Cancer Model



- Wee1 inhibition has been shown to improved PFS compared with active monitoring in patients with KRAS/TP53 mutated CRC (FOCUS4C trial)[2]
- These data support combining ZN-c3 with KRAS^{G12C} inhibitors in this population

(1) Sotorasib (AMG510, KRAS G12C inhibitor)
(2) Seligmann JF et al. J Clin Oncol. 2021 Sep 18

ZN-c3 + PARP Inhibitor Combination Induces Regressions and is Well Tolerated in a TNBC PDX Tumor Model



- Tumors with Cyclin E amplification have enhanced sensitivity to Wee1 inhibition [1]
- Combination of PARP and Wee1 inhibitors in TNBC:
  - Results in synergistic cell killing in preclinical models with either BRCA1 mutations or high levels of cyclin E [2]
  - Has shown to induce replication stress, DNA damage and abrogation of the G2 DNA damage check point leading to significant tumor growth inhibition in pre-clinical models [3]
- Wee1 inhibition may broaden the application range of PARP inhibitors in TNBC

(1) Chen X et al Clin Cancer Res. 2018 Dec 15;24(24):6594-6610
(2) Chen X Cancers (Basel). 2021 Apr 1;13(7):1656
(3) Fan, Y et al. Cancer Cell. 2019 Jun 10;35(6):851-867

zentalis

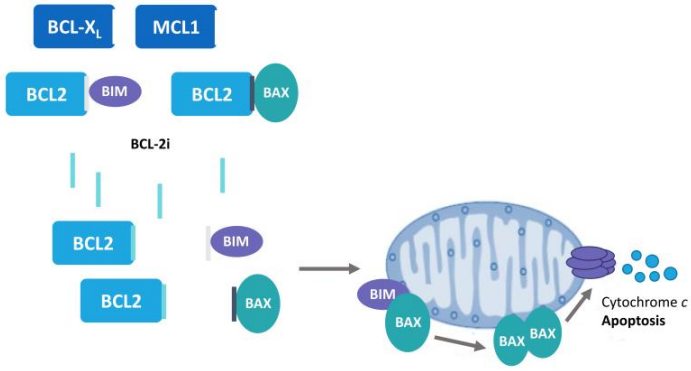
ZN-d5

BCL-2 Inhibitor

BCL-2: A Clinically Validated Oncology Target

- BCL-2 is an anti-apoptotic protein involved in tumor survival and chemo resistance [1]
- The intrinsic apoptotic pathway is controlled by the BCL-2 protein family on the mitochondrial outer membrane [2, 3]
- BCL-2 inhibitors may restore the normal apoptosis process, making it an important target for cancer treatments

Mechanism of action of BCL-2 inhibitors [1]



(1) Konopleva M et al. Cancer Discov. 2016 Oct;6(10):1106-1117
(2) Konopleva M and Letai A. Blood. 2018 Sep 6;132(10):1007-1012
(3) Bhola PD and Letai A. Mol Cell. 2016;61(5):695-704

ZN-d5: A Potent BCL-2 Inhibitor Designed with Improved Selectivity for BCL-2

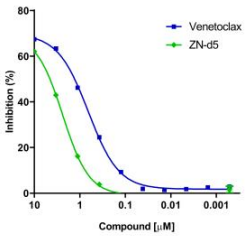
ZN-d5 has >14x Improved Selectivity for BCL-2 vs BCL-x_L and Binds With Higher Affinity to BCL-2 Mutants than Venetoclax

Compound ID	Affinity (Kd, nM)			IC_{50} (nM) BCL-2 Type			
	BCL-2	BCL-x_L	MCL-1	WT	G101V	F104L	D103Y
Venetoclax	0.41	28	>30000	1.3	7.3	8.4	18.3
ZN-d5	0.29	190	>30000	1.4	3.7	1.4	5.0

ZN-d5 Exhibits Potent *In Vitro* Activity Across Multiple Tumor Cell Lines

Compound ID	CTG IC_{50} (nM)							
	ALL	MCL		DLBCL		AML		
	RS4;11	Mino-1	Granta-519	DOHH-2	Toledo	HL-60	Molm-13	MV4-11
Venetoclax	2.9	1.1	161	43	191	26	18	3.8
ZN-d5	5.1	0.1	89	50	92	21	39	5.1

ZN-d5: Less Human Platelet Toxicity Compared to Venetoclax in an *In Vitro* Assay



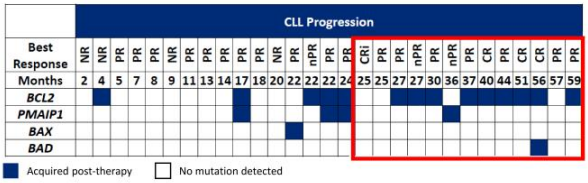
Compound ID	CTG (24 h) IC_{50} (µM)
Venetoclax	0.6
ZN-d5	2.4

ZN-d5 shows activity in preclinical models of ALL, NHL and AML

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

- 55% (16/29) of patients with CLL progression

Source: Chyla, B. ASH Presentation (2019)

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

ZN-d5 Clinical Development Plan

- 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
- Preclinical combination data of ZN-d5 + ZN-c3 utilizing novel biology showed synergistic and additive activity across multiple indications in both solid and liquid tumors, often at subtherapeutic doses

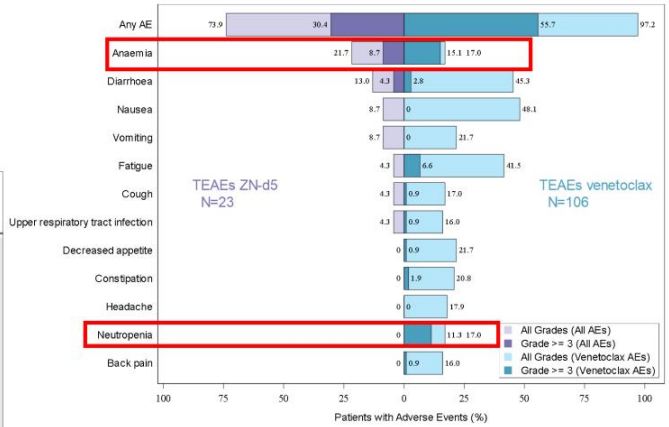
Ongoing and Planned Clinical Programs			
Indication	Treatment	Status	Trial Updates
AML and Non-Hodgkin's Lymphoma	ZN-d5	Phase 1 enrolling	Updated results in 2H 2022
AL Amyloidosis[+]	ZN-d5	Phase 1/2 enrolling	-
AML	ZN-d5 & ZN-c3 (Wee1i)	Phase 1/2 planned	Trial to initiate in 2H 2022

[+]Potentially Registrational Study

ZN-d5: Favorable Early Comparison to Venetoclax in NHL

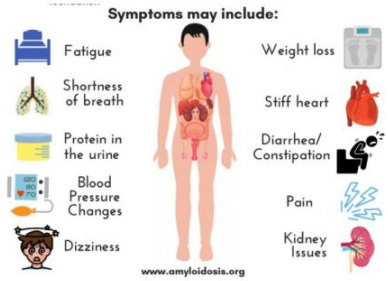
- ZN-d5 100-1200 mg, empty stomach
- Venetoclax 200-1200 mg with food
- Early toxicity profile in NHL favorable vs. published venetoclax data[1]
  - Fewer AEs of any Grade, Grade ≥3
  - No TLS observed
  - Venetoclax AEs not dose-dependent

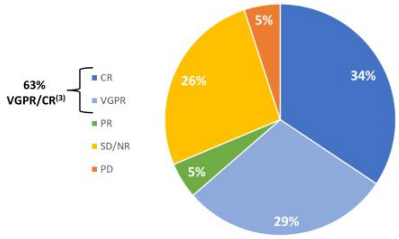
Adverse Event	Any Grade			
	All Doses (N = 106)	≤ 400 mg (n = 22)	600 to 900 mg (n = 33)	1,200 mg (n = 51)
Emergent*				
Any event	103 (97)	21 (96)	33 (100)	49 (96)
Nausea	51 (48)	9 (41)	15 (45)	27 (53)
Diarrhea	48 (45)	7 (32)	14 (42)	27 (53)
Fatigue	44 (42)	10 (45)	9 (27)	25 (49)
Decreased appetite	23 (22)	4 (18)	4 (12)	15 (29)
Vomiting	23 (22)	5 (23)	6 (18)	12 (24)
Constipation	22 (21)	6 (27)	7 (21)	9 (18)
Headache	19 (18)	2 (9)	7 (21)	10 (20)
Anemia	18 (17)	7 (32)	6 (18)	5 (10)
Cough	18 (17)	7 (32)	6 (18)	5 (10)
Neutropenia	18 (17)	4 (18)	8 (24)	6 (12)
Back pain	17 (16)	3 (14)	6 (18)	8 (16)
Upper RTI	17 (16)	5 (23)	8 (24)	4 (8)



(1) Davids et al, J Clin Oncol 2017;35:826-833; emergent AEs reported in ≥15% of subjects. ZN-d5 results as of 03 Nov 2021 data cutoff.

ZN-d5 in AL (Primary) Amyloidosis





- AL Amyloidosis: Deposition of immunoglobulin light chains
  - Clonal plasma cell population secretes misfolding light chain
  - Progressive systemic amyloid accumulation causes widespread organ damage
  - **High morbidity and mortality**
- Orphan disease
  - Estimated worldwide prevalence is 75,000(1)
  - About 4k new cases/year in the US(2)
- Not a cancer, but treated like one
  - Agents active in multiple myeloma used in first-line and relapsed/refractory settings
  - Daratumumab only approved therapy, for first-line use with CyBorD
- **Relapsed/refractory setting is a high unmet medical need**

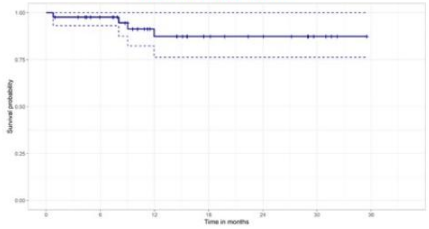
AL Amyloidosis study is currently enrolling patients

(1) Zhang et al. Clin Lymphoma Myeloma Leuk. 2019;19(suppl 10):e339
(2) Kyle et al, Mayo Clin Proc. 2019;94:465-471
(3) Premkumar et al, Blood Cancer J 2021;11:10; hematologic response rate in 38 evaluable patients.

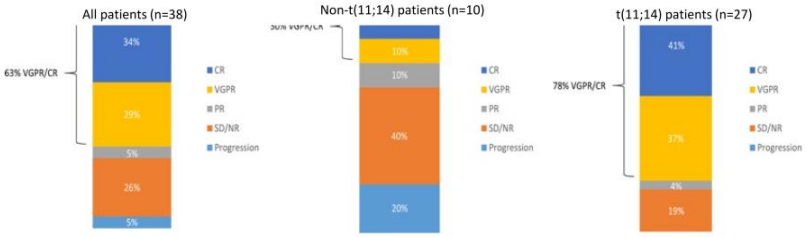
BCL-2 Inhibition has Shown Robust Clinical Activity in AL Amyloidosis

- Patients with the t(11;14) translocation have a worse prognosis than the general AL amyloidosis community [1]
- BCL-2 inhibition showed an improved response rate in the t(11;14) cohort with a trend towards better survival

OS for All Patients



Best Response in Evaluable Patients

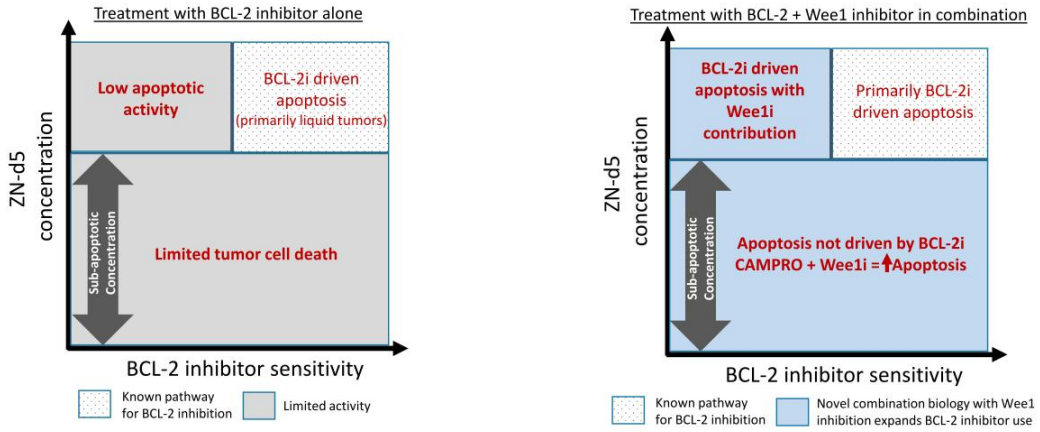


(1) Premkumar et al, Blood Cancer J 2021;11:10; hematologic response rate in 38 evaluable patients.

ZN-d5 + ZN-c3

Novel Biology Supports Synergy of BCL-2 and Wee1 Inhibition – *CAMPRO (CAspase Mediated PROteolysis)*

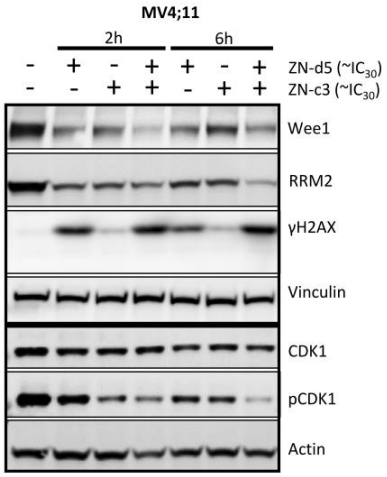
BCL-2 inhibition (BCL-2i) induces CAMPRO of multiple proteins, including DNA damage repair (DDR) proteins



This novel synergistic finding supports the use of ZN-d5 + ZN-c3 in both sensitive and less sensitive tumor cells, opening a large market opportunity across both solid and liquid tumors

ZN-d5 + ZN-c3 Combination Treatment Also Results in Decreased Levels of DDR Proteins

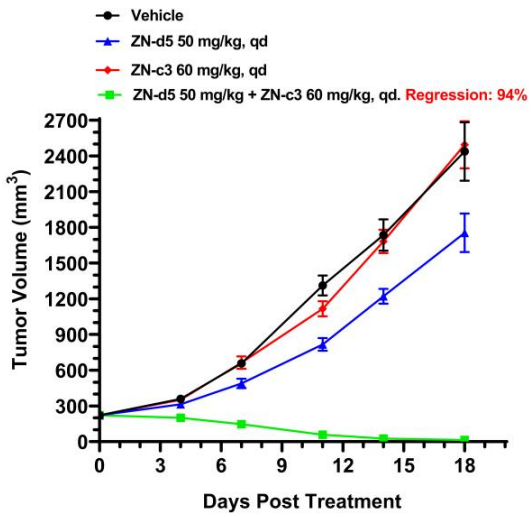
- **ZN-d5 at subtherapeutic doses activates caspases leading to:**
  - DNA damage (increased in γH2AX)
  - Degradation or decrease of DDR related proteins (Wee1 and RRM2)
  - **These effects are increased when combined with ZN-c3**
- **This, in turn, results in inhibition of multiple relevant pathways (e.g. pCDK1) and synergistic anti-tumor activity when combined with ZN-c3**



Based on preclinical data

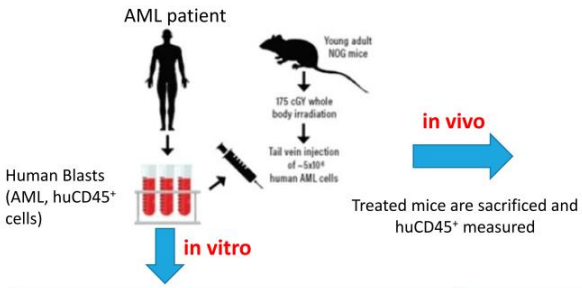
The Combination of BCL-2 and Wee1 Inhibitors Results in Synergism in Several Tumor Models Including AML

HL-60 AML model



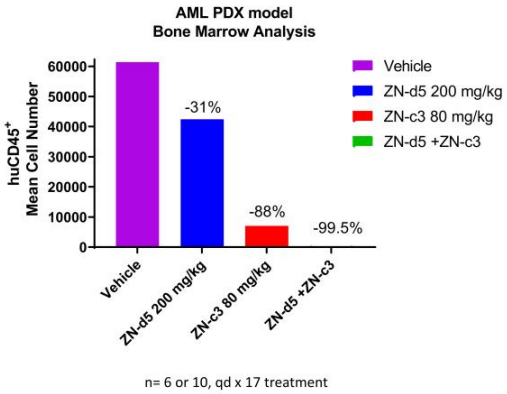
- ZN-d5 and ZN-c3 combination represents a novel therapeutic approach
- Significant enhancement of activity than single agent in several indications, including AML
- Combination regimen was well-tolerated in mice
- **Zentalis is the only company known to have both inhibitors in clinical development**

ZN-d5 Combined with ZN-c3 is Active in Patient-Derived AML Samples



Clinical				In vitro (ZN-d5+ZN-c3)	
Patient	Blasts % (before treatment)	Post- Collection Treatment	Blasts % (After Treatment)	ZN-d5/ZN-c3 Treatment (nM)	Blasts % (After Treatment)
3930	93.4	Vidaza/Venetoclax	Residual AML (33% blast) (~2 months post-treatment)	120/500	4.6
3977	62.1	Vidaza/Venetoclax	Residual AML (68% blast) (~2 months post-treatment)	65/100	0
3978	41.1	Gilteritinib/Venetoclax	Residual AML (32% blast) (~1 month post-treatment)	65/500	3.6

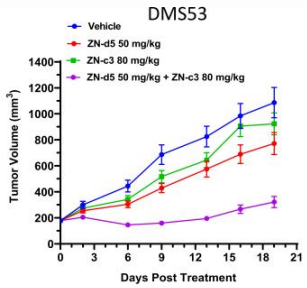
- The combination of ZN-d5+ ZN-c3 is active *in vitro* in **3/3 samples from patients who progressed on venetoclax**
- The combination of ZN-d5 + ZN-c3 is active *in vitro* in 29 patient's derived AML samples independently of TP53 mutation

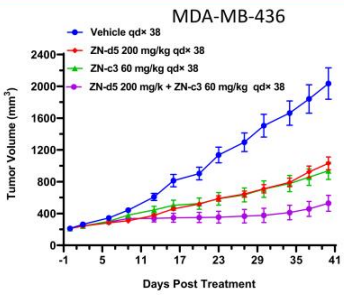


n= 6 or 10, qd x 17 treatment

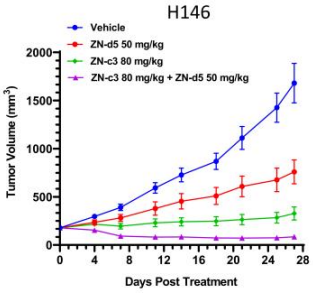
ZN-d5 + ZN-c3 shows promising activity in samples from AML patients progressing on venetoclax

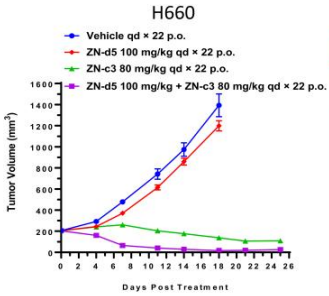
Antitumor Activity in Solid Tumor Models with the ZN-d5 + ZN-c3 Combination Represents Market Expansion Opportunities





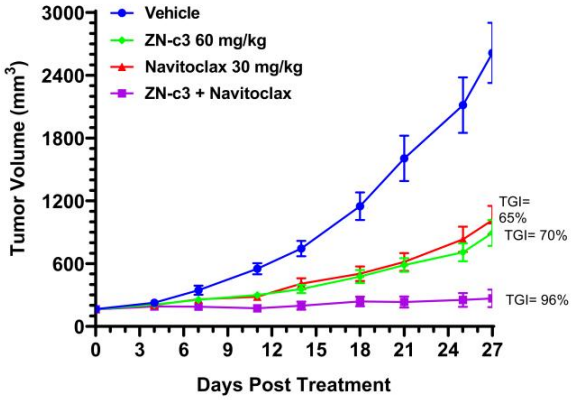
Cell Line	Indication
DMS53	SCLC
MDA-MB-436	TNBC





Cell Line	Indication
H146	NSCLC
H660	Neuroendocrine Prostate

ZN-c3 Combined with a Low Dose of Navitoclax (BCL-xL Inhibitor) Results in Enhanced Anti-tumor Activity in the ALL model MOLT-4



The MOA of the combination of ZN-d5 and ZN-c3 represents a novel therapeutic approach which also applies to combinations of ZN-c3 with other inhibitors of anti-apoptotic proteins

- Navitoclax enhances the anti-tumor activity of ZN-c3 at one-third of the active dose used as a single agent in xenografts (30 versus 100 mg/kg)
- Opportunity to overcome the toxicity observed with navitoclax

TGI: Tumor Growth Inhibition
ALL: Acute Lymphoblastic Leukemia
MOLT-4 model is BCL-xL dependent, but is not on BCL-2

zentalis

Conclusions

Key Milestones

ZN-c3: Wee1 Inhibitor

1H 2022	✓	Initial readout on Phase 1 USC expansion cohort
1H 2022	✓	Initial readout on Phase 1b ovarian chemotherapy combo
2H 2022		Initial enrollment/safety update on Phase 2 USC trial[1]
2H 2022		Initial readout on Phase 1/2 chemotherapy combo in osteosarcoma[2]

ZN-d5: BCL-2 Inhibitor

1Q 2022	✓	Initiate Phase 1/2 monotherapy study in amyloidosis[2]
2H 2022		Initiate Phase 1/2 combination study of ZN-d5 + ZN-c3 in AML
2H 2022		Updated results from Phase 1 dose escalation study in AML and NHL

Integrated Discovery Engine

2022	Initiate IND enabling studies for an internal program

Zentera

2022	Maximize value from investment in and partnership with Zentera

[1] Registrational trial with FDA Fast Track designation
[2] Potentially registrational trial

zentalis

Kimberly Blackwell, M.D.
Chief Executive Officer
kblackwell@zentalis.com
(212) 433-3787

Melissa Epperly,
Chief Financial Officer
mepperly@zentalis.com
(215) 290-7271

Corporate Office
1359 Broadway
Suite 1710
New York, NY 10018

Science Center
10275 Science Center Drive
Suite 200
San Diego, CA 92121