

#### **Forward-looking statements**

This presentation contains, and certain oral statements made by management from time to time may contain, "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended. Such statements include actions, events, results, strategies and expectations and are often identifiable by use of the words "believes," "expects," "intends," "anticipates," "plans," "seeks," "estimates," "projects," "may," "will," "could," "might," or "continues" or similar expressions. Forward-looking statements within this presentation include, but are not limited to, express or implied statements regarding the structure of Traws Pharma, Inc. ("Traws"); expectations regarding the ownership structure of Traws after its acquisition of Trawsfynydd Therapeutics, Inc. (the "Merger"); expectations regarding the issuance and value of CVRs (as defined herein); expectations regarding the conversion of the Series C preferred stock and related stockholder approval; expected impact of the private placement financing on ownership structure; Traws' expected cash runway following the Merger and private financing; the nature, strategy and focus of Traws following the Merger; the development and commercial potential benefits of any product candidates; anticipated clinical drug development activities, related timelines and expected milestones; and other statements other than statements of historical fact contained in this communication are forward-looking statements. These forward-looking statements are made as of the date they were first issued, and were based on the then-current expectations, estimates, forecasts, and projections, as well as the beliefs and assumptions of management. There can be no assurance that future developments affecting the combined company will be those that have been anticipated.

Forward-looking statements are subject to a number of risks and uncertainties, many of which involve factors or circumstances that are beyond Traws' actual results could differ materially from those stated or implied in forward-looking statements due to a number of factors, including but not limited to (i) failure to timely obtain stockholder approval for the transaction, if at all; (ii) risks related to Traws' ability to manage its operating expenses and its expenses associated with the Merger; (iii) unexpected costs, charges or expenses resulting from the transaction; (iv) potential adverse reactions or changes to business relationships resulting from the completion of the Merger; (v) the uncertainties associated with Traws' product candidates, as well as risks associated with the clinical development and regulatory approval of product candidates, including potential delays in the commencement and completion of clinical trials, studies and evaluations; (vi) risks related to the inability of Traws' sufficient additional capital to continue to advance these or other product candidates; (vii) uncertainties in obtaining successfully bringing product candidates; (viii) risks related to the failure to realize any value from product candidates; (viii) uncertainties in obtaining successfully bringing product candidates to market; and (ix) risks associated with the possible failure to realize certain anticipated benefits of the Merger, including with respect to future financial and operating results. Actual results and the triming of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties. These and other risks and uncertainties are more fully described in periodic filings with the U.S. Securities and Exchange Commission (the "SEC"), including the factors described in the section titled "Risk Factors" in Traws' Annual Report on Form 10-K for the year ended December 31, 2023, which was filed with the SEC on April 1, 2024, subsequent Quarterly

#### No offer or solicitation

This presentation is for informational purposes only and does not constitute a solicitation of a proxy, consent or authorization with respect to any securities or in respect of the Merger and shall not constitute an offer to sell or a solicitation of an offer to buy the securities of the Traws, nor shall there be any sale of any such securities in any state or jurisdiction in which such offer, solicitation, or sale would be unlawful prior to registration or qualification under the securities laws of such state or jurisdiction. No offer of securities shall be made, except by means of a prospectus meeting the requirements of Section 10 of the Securities Act or an exemption therefrom.

Traws expects to file a proxy statement with the SEC relating to proposals to be made in connection with the Merger. The definitive proxy statement will be sent to all Traws stockholders. Before making any voting decision, investors and security holders of Traws are urged to read the proxy statement and all other relevant documents filed or that will be filed with the SEC in connection with such proposals as they become available because they will contain important information. Investors and security holders will be able to obtain free copies of the proxy statement and all other relevant documents filed or that will be filed with the SEC by Traws through the website maintained by the SEC at www.sec.gov.

#### Participants in solicitation

Traws and their respective directors, executive officers and employees may be deemed to be participants in the solicitation of proxies in respect of the Merger. Information regarding Traws' directors and executive officers is available in Traws' Definitive Proxy Statement filed with the SEC on June 7, 2023 under "Proposal One – Election of Directors." To the extent holdings of such directors and executive officers are not reported, or have changed since the amounts described in the proxy statement for Traws' annual meeting of stockholders, such changes may be reflected on Initial Statements of Beneficial Ownership on Form 3 or Statements of Change in Ownership on Form 4 filed with the SEC. Other information regarding the persons who may, under the rules of the SEC, be deemed participants in the proxy solicitation and a description of their direct and indirect interests, by security holdings or otherwise, will be contained in the proxy statement and other relevant materials to be filed with the SEC when they become available.



## TRAWS PHARMA – A clinical stage biopharmaceutical company

Potential best in class oral small-molecules in development for cancer & respiratory viral diseases

**VIROLOGY** 

Developing oral potent inhibitors of SARS-CoV-2 Mpro (3CL protease); and against influenza, targeting the influenza cap-dependent endonuclease that is potent against drug-resistant viruses. Both compounds have properties to potentially address vulnerable populations

**ONCOLOGY** 

Developing a novel, proprietary multi-kinase CDK4/6 inhibitor, narazaciclib, for refractory endometrial and potentially other cancers. Narazaciclib targets pathways involved in the development of resistance to this class of drugs with positive safety data to date. Rigosertib targets RAS and PLK-1 driven diseases and is in investigator-initiated clinical trials.

CATALYTIC CLINICAL DATA IN 2024

TRX01 (travatrelvir) – Covid 19:

Phase 1 clinical data and initiation of phase 2 H2 2024

TRX100 (viroxavir) – Influenza:

Phase 1 clinical data and initiation of phase 2 H2 2024

Narazaciclib – endometrial cancer:

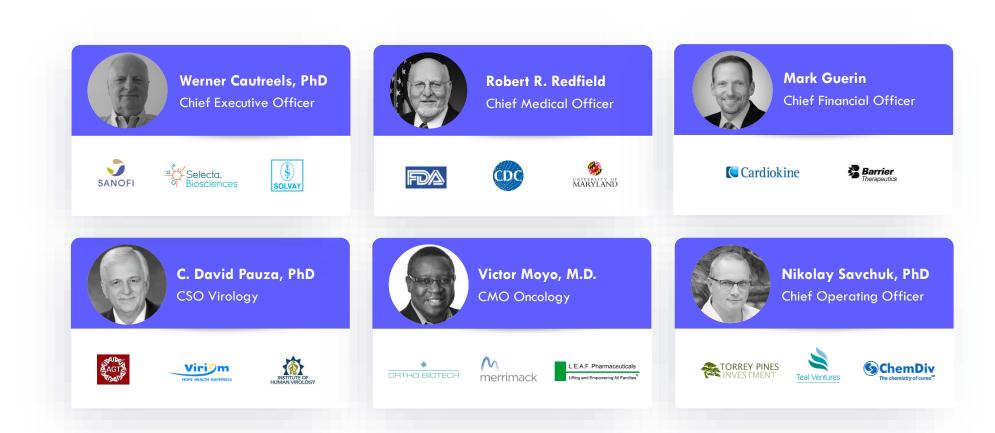
Definition of Recommended Phase 2 Dose H2 2024

CAPITAL AND INVESTORS

Closing cash balance of approximately \$30.3 million as of April 3, 2024 from Onconova funds and concurrent private placement led by OrbiMed and Torrey Pines.



## TRAWS PHARMA – Experienced Leadership Team



## TRAWS PHARMA – Accomplished Board of Directors





antares GYNÉTICS\*



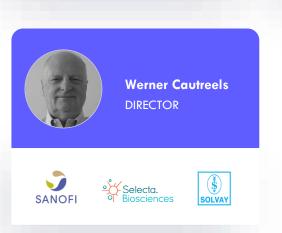
Celldex

ONCONOVA THERAPEUTICS









# **TRAWS PHARMA - Pipeline Overview**

#### **Virology Programs**

Target	Indication	Preclinical	Phase 1	Phase 2
TRX01 (travatrelvir)	COVID19			
TRX100 (viroxavir)	Seasonal or pandemic influenza			

#### **Oncology Programs**

Target	Indication	Preclinical	Phase 1/2	Phase 2/3
Narazaciclib (DAILY)	Solid tumors			
Narazaciclib + Letrozole (BOTH DAILY)	2L / 3L Low grade endometrioid endometrial cancer			
Rigosertib	Epidermolysis bullosa-associated squamous cell carcinoma (rare disease)	Rigosertib is in investig	ator-initiated clinical trials ar out-licensing	nd will become available for



Mpro Inhibitor (COVID)

TRX01- travatrelvir

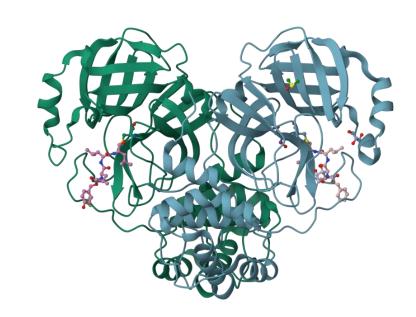
#### **Challenges and Opportunities for COVID19**

- COVID19 remains among the top 5 causes of death in the developing world. The [nirmaltrevir +ritonavir] course is 5 days BID; drug:drug interactions limit eligibility and use in many patients (Corritori, 2022, COVID).
- 20.8% of [nirmaltrevir + ritonavir] treated individuals had clinical rebound (Edelstein, 2023, Annals of Internal Medicine).
- Clinical rebound is associated with prolonged shedding of infectious virus and/or symptomatic rebound,
  which continue to be major obstacles in COVID19 care that were not solved by [nirmaltrevir + ritonavir],
  molnupiravir, or remdesivir.
- Global COVID19 therapeutics market was estimated at \$30.7B in 2021 and will contract by 8.3% annually but will reach \$16.2B by 2031 (https://www.transparencymarketresearch.com/covid-19-therapeutics-market.html).

### **TRX01** (travatrelvir) - Investigational Candidate



- Improved potency over nirmatrelvir (up to 9 times more potent in biochemical and cell-based assays);
   potency advantages greatest among Omicron strains and current VOC
- Does not require co-administered CYP inhibitor
- Exposures >EC90 for >48 h after single oral dose in animals
- GLP toxicology studies using 10 days of daily oral administration provides basis for human dosing
- Potential for once daily oral therapy for a duration of 10 days
- First-in-man Phase 1 dosing in April 2024





# TRX01 (travatrelvir) Superior to nirmatrelvir against Omicron Variants

					and b
Virus	m.o.i.	TRX01 EC50 nM	Nirmatrelvir EC50 nM	Remdesivir EC50 µM	Nirmatrelvir EC50 ÷ TRX01 EC50
USA_WA1/2020	0.005	2.6	11	1.7	4.2
Omicron B.1.1.529	0.02	16	26	0.69	1.6
Omicron B.A.2	0.01	7.3	21	0.74	2.9
Omicron B.A.4	0.02	<1	<1	1.2	-
Omicron B.A.5	0.02	<1	<1	2.5	-
Omicron BF.7	0.003	4.7	41	1.8	8.7
Omicron BQ.1	0.003	37	64	1.3	1.7
Omicron BQ.1.1	0.002	6.2	12	1.3	1.9

29

0.68

9.4

Compounds tested with 2 µM CP-100356 (efflux inhibitor)

0.002

EC50: 50% effective concentration

Omicron XBB

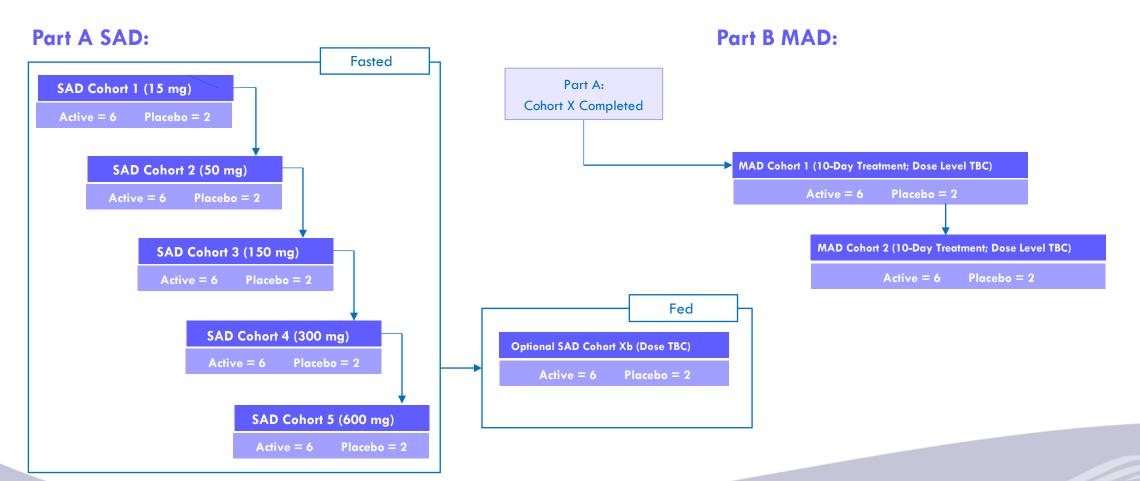


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#### TRX01 (travatrelvir) - Phase 1 Study Plan

Single (A) and Multiple (B) Ascending Doses travatrelvir

A Randomized, Double-Blind, Placebo-Controlled, First-in-Man Study of Orally Administered travatrelvir to Evaluate the Safety, Tolerability, Pharmacokinetics and Pharmcodynamics of Single and Multiple Ascending Doses in Healthy Volunteers





## TRX01 (travatrelvir) – Phase 2 development



- Phase 1 will provide data on safety and tolerability of a 10-day, daily regimen
- Phase 1 data will guide design of the phase 2 development plan
- Phase 2 is anticipated to be an international, multi-center randomized, double-blind, controlled clinical trial of the efficacy and safety of travatrelvir in patients with moderate to severe COVID19
- Phase 2 planned for H2 2024

# **TRX01** (travatrelvir) - Summary



- Potent inhibitor of SARS-CoV-2 Mpro (3CL protease)
- Active in vitro against original, delta and omicron variants of SARS-CoV-2
- More potent than nirmatrelvir; does not require ritonavir co-administration in preclinical studies and therefore expected to avoid drug:drug interactions potentially permitting wider patient use
- Under investigation for once-daily oral therapy for 10 days to prevent viral rebound
- Phase 1 study dosing April 2024 with Phase 2 planned for H2 2024

# Cap-dependent Endonuclease Inhibitor (Influenza) TRX100 - viroxavir



# **Challenges and Opportunities for Influenza Therapy**

- New drugs are needed to treat influenza strains resistant to oseltamivir or baloxavir
- Long-acting antiviral drugs will increase influenza resistance among elderly and immunocompromised populations
- The ongoing risk from virus emerging out of natural virus reservoirs requires high potency antivirals effective against pandemic-potential strains
- 80-90% of seasonal influenza deaths occur in persons >65 years old despite the fact that 70% of persons 65 years and older (in the US) receive seasonal vaccine
- 31% of persons 65 years and older, within 2 days of symptom onset, were prescribed influenza antiviral medication



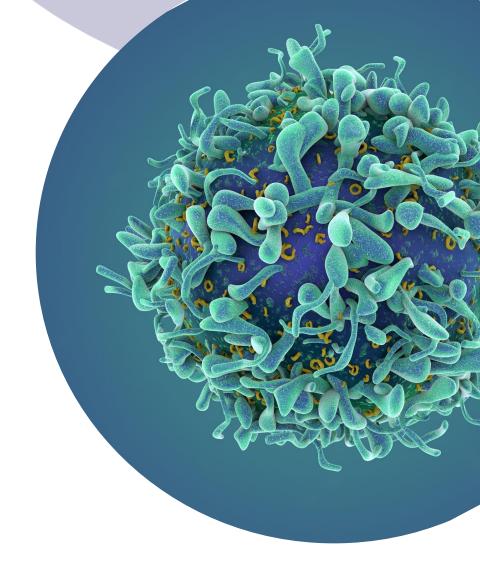
# TRX100 (viroxavir) - Investigational Candidate Cap-Dependent Endonuclease (CEN) Inhibitor for Influenza

The oral prodrug viroxavir targets the cap-dependent endonuclease of Influenza and is a potent inhibitor of influenza virus replication including A or B strains

Inhibits pandemic-potential influenza viruses circulating in nature during 2022 as well as oseltamivir or baloxavir-resistant viruses in cell-based assays

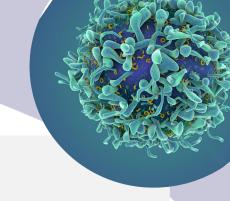
Completed a Phase 1 study that showed positive safety and tolerability data in healthy volunteers; will enter Phase 1 dose extension and Phase 2 studies in 2024

PK/PD data from the Phase 1 study support the potential use of a single oral dose administration for either treatment or prophylaxis.





# TRX101: The active metabolite of viroxavir, in cell-based assays





TRX101 (the active metabolite of the prodrug viroxavir) was potent at nM concentrations for inhibiting wild-type and baloxavir resistant viral replicase complexes



TRX101 is a potent inhibitor of influenza virus replication including wild-type and baloxavir-resistant strains

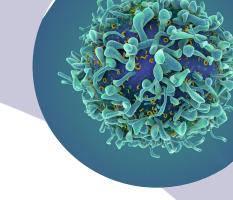


TRX101 is a potent inhibitor of Influenza A or B replication, including oseltamivir-resistant strains

Demonstrated potent inhibition of virus replication using a panel of pandemic-potential viruses circulating in nature during 2022







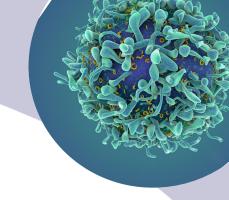
TRX-101 inhibits replication of influenza A/California/04/2009(H1N1)pdm09 and A/Texas/71/2017(H3N2) viruses containing PA I38-WT, I38T, or I38M substitutions

Influenza A virus subtype		P	laque-reduction as	say (EC <sub>50</sub> ± SEM, 1	nM)	
		TRX101			BXA	
	138-WT	138T	138M	I38-WT	138T	138M
A/California/04/2009 (H1N1)pdm09	0.2 ± 0	1.8 ± 1.7	2.2 ± 0.2	0.2 ± 0.1	14.3 ± 2.0	1.2 ±0.2
A/Texas/71/2017 (H3N2)	0.2 ± 0	8.1 ± 4.4	3.0 ± 0.3	0.2 ± 0.1	22.7 ± 4.7	2.5 ± 1.3

TRX-101 was more potent than BXA for inhibiting replication (plaque forming units) of the BXA-resistant influenza **A(H1N1)**pdm09 virus carrying PA I38T and the **A(H3N2)** virus carrying PA I38T

### TRX100 (viroxavir) - Summary of Available Phase 1 Clinical Data

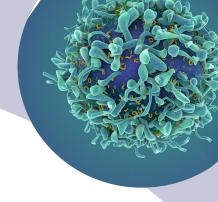
A randomized, double-blind, placebo-controlled study of the safety, tolerability, and pharmacokinetics of single doses of viroxavir administered orally in healthy volunteers on an empty stomach and after a meal



- Healthy Caucasian men 18-45 years, single ascending dose, 20, 40 80 or 120 mg on empty stomach followed by 8-15 days washout before receiving the same dose after a meal.
- Study confirmed high exposure and long-half life after single oral dose; exposure was roughly dose proportional, and exposures were greater when taken after a meal.
- Total of 2 adverse events (AE) recorded during the entire study, both in the same participant and one was a serious adverse event (SAE), deemed unrelated to study drug
- The relationship of non-serious AE (hyperglycemia) to the study drug was deemed probable
- In the range of 20 mg to 120 mg, a single administration of viroxavir was well tolerated in human volunteers

#### TRX100 (viroxavir) - Phase 1 Study - Acute Influenza

Dose Extension Study – to start H1 2024



A single ascending dose, placebo-controlled study on safety and tolerability of viroxavir in healthy volunteers. This study tests a 200 mg dose level to determine the impact(s) of a higher dose on safety and pharmacokinetics.

Viroxavir 120\* mg single dose

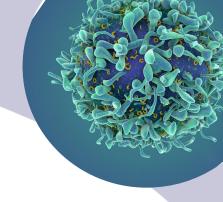
Viroxavir 200 mg single dose

Placebo

\* Repeats highest dose cohort from previous Phase 1 study



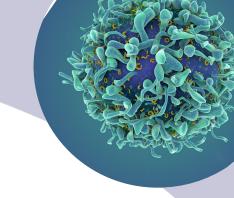
### TRX100 (viroxavir) – Phase 2 development



- Phase 1 data will define further design of the phase 2 development plan
- Phase 2 is planned to be an international multicenter randomized, double-blind, controlled clinical trial of the efficacy and safety of viroxavir in patients with Influenza
- Potentially as a single oral administration
- Phase 2 is planned for H2 2024

#### **TRX100 (viroxavir) - Summary**

- Potent at nM or sub-nanomolar concentrations against a panel of influenza A and influenza B viruses including highly pathogenic avian influenza strains circulating in 2022
- Demonstrated in animals preferential accumulation in lung, which may improve antiviral potency in the respiratory tract
- Inhibited baloxavir-resistant influenza viruses bearing 138T or 138M mutations in the PA gene
- Showed positive safety/tolerability results in a completed Phase 1 study with healthy volunteers
- PK/PD data from the Phase 1 study support the potential use of a single oral dose administration for either treatment or prophylaxis.
- Phase 1 study extension will evaluate two additional (higher) doses prior to Phase 2 in H2 2024
- Properties make viroxavir suitable for further evaluation as stockpiling



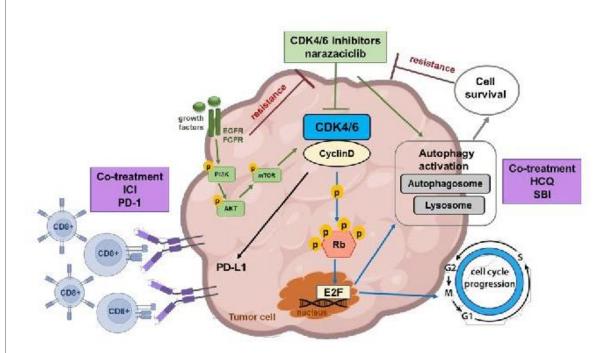
# Narazaciclib

# ONG LOGY

## CDK 4/6 Inhibitors Represent an Important Class of Cancer Therapeutics

Graphic: San Antonio Breast Cancer Symposium, 2023 Poster

- Overexpression of CDK 4/6 causes cell-cycle deregulation in certain cancers
- Role of Rb pathway in tumor initiation and progression is well-established
- Inhibition of Rb prevents CDK-mediated G1-S phase transition, suppressing DNA synthesis and inhibiting cancer cell growth
- Multiple therapeutic opportunities
- Utilization of CDK 4/6 inhibitors changed the face of care for HR+ / HER2-metastatic breast cancer
- Worldwide sales of \$6B in 2020



#### Narazaciclib has Demonstrated Differentiation in Preclinical Studies

Potential to be used where other CDK4/6 inhibitors have failed

Active in numerous tumor types in preclinical results with acceptable and differentiated safety profile

Narazaciclib causes less myelosuppression and, thus less neutropenia

#### A potent inhibitor of CSF1R

- CSF1 promotes the infiltration of immunosuppressive Tumor-Associated Macrophages (TAMs), which support tumor
  progression
- Blockade of CSF1R or inhibition of its kinase activity promote antitumor immunologic effects

#### Inhibits ARK 5/NUAK1

 ARK 5/NUAK1 overexpression is found in multiple tumors and is associated with poor prognosis in metastatic breast cancer, multiple myeloma, and hepatocellular carcinoma

Demonstrated BBB penetration in non-human primates



# Recurrent Metastatic Low-grade Endometrioid Endometrial Cancer (LGEEC) is an Area of High Unmet Need

Improved treatment options are needed for patients failing first-line therapy

#### **Endometrial Cancer**

arises in the uterine lining and is the most common cancer of the female reproductive organs

Estimated U.S. peak sales potential of \$240MM <sup>1</sup>

#### Positive Published Data with CDK 4/6 agents

suggest a clinical program evaluating narazaciclib + letrozole in LGEEC is worth pursuing

#### Narazaciclib Phase 1 Study (19-01)

Phase 1, Dose Escalation/Dose Finding (MTD/RP2D), Safety, Tolerability, PK, PD; Dose Expansion; 3+3 design

Completed Cohort 6 (240 mg/day); N=6 patients; 1 DLT (Gr 3 uveitis); SMC meeting → proceed to next cohort

Total of 2 patients with uveitis: Gr 3, Non-SAE, related, resolved with treatment

With 2 DLTs in last 2 cohorts leads to believe we are near MTD for Narazaciclib monotherapy

Preliminary evidence suggesting target engagement at 200 mg/day: decreased neutrophils, Thymidine Kinase 1 activity decrease

## Narazaciclib Phase 1: Study 19-01 Single Agent in Solid Tumors

Cohort 6 – 240mg; Pharmacodynamic DiviTum® (TKa) assay

Decreased TK1 levels suggest target engagement

VISIT	001-015	001-016	001-017	002-015	002-017	005-009
Tumor type	Ovarian	Oropharynx SCC	Pancreatic	NSCLC	SCC	LGSOC
Screening (Day -14 to -1)	82	79	82	155	126	79
Cycle 1 Day 1	70	54	73	129	152	85
Cycle 1 Day 8	<50	52	52	59	79	<50
Cycle 1 Day 15	<50	51	55	66	<50	<50
Cycle 1 Day 22	67	57	64		<50	<50
Cycle 2 Day 1	57	<50			55	<50
Cycle 3 Day 1					151	
Cycle 4 Day 1					209	
End of Treatment	336			163		
Status	PD	Ongoing	Ongoing	DLT	Ongoing	Ongoing

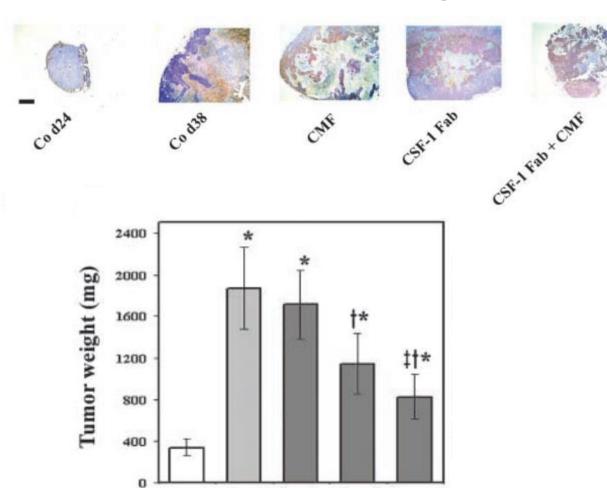


# In Vitro Multi-Kinase Activity with nM Potency for the CDK Family and Other High Potential Kinase Targets\*

Reaction Biology 2021; Data on file. \*Note that kinase activity is based on  $IC_{50}$  values, a quantitative measure indicating the concentration needed to inhibit the listed kinase by 50%

	Narazaciclib	Palbociclib	Ribociclib	Abemaciclib
Sponsor	Onconova	Pfizer	Novartis	Lilly
CDK Family				
CDK4/cyclin D1	2	2	3	0.8
CDK6/cyclin D1	0.6	0.8	6.0	0.6
CDK1/cyclin A	2190	>10,000	>10,000	270
CDK2/cyclin E	69	2300	>10,000	130
CDK9/T1	48	630	390	7
Other Kinases				
CSF1R	0.7	>10,000	>10,000	>10,000
ARK 5/NUAK 1	5	1,400	1,540	773
FLT3	6.0	496	753	72

# Colony-Stimulating Factor-1 Antibody Reverses Chemoresistance in Human MCF-7 Breast Cancer Xenografts



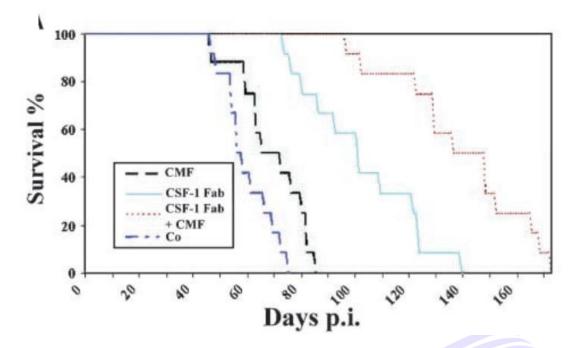






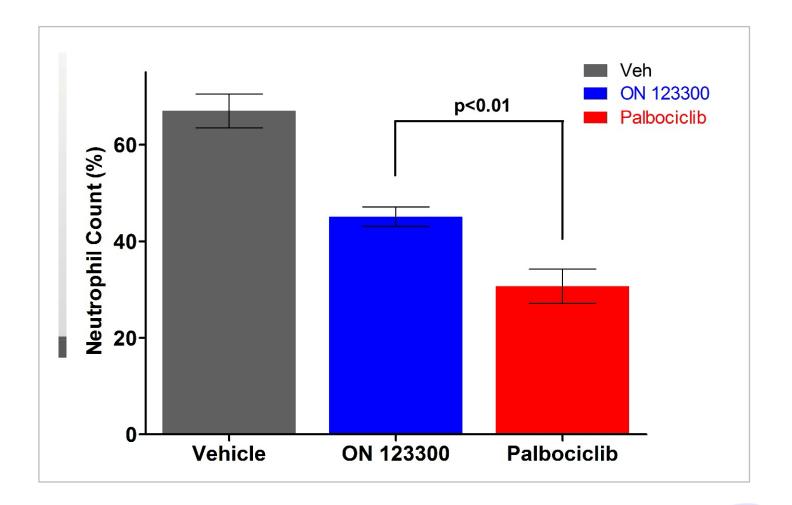




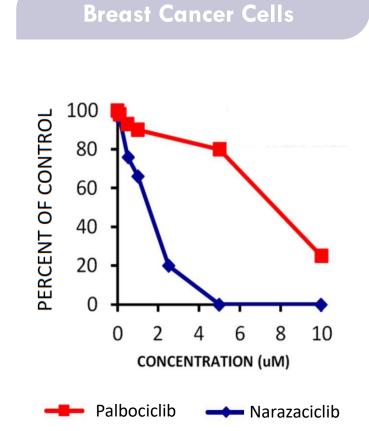


# Preclinical Results Show Reduced Neutropenia with Narazaciclib (ON123300) Compared to Palbociclib

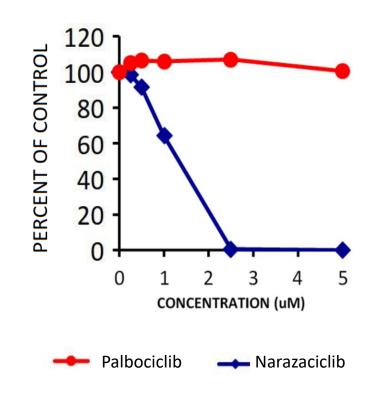
Xenograft Mice (n=5/group)



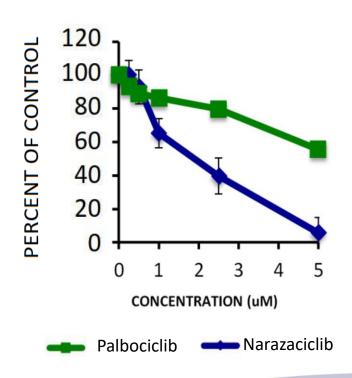
#### Narazaciclib Inhibits Growth of Palbociclib Resistant Cancer Cell Lines



#### **Ovarian Cancer Cells**



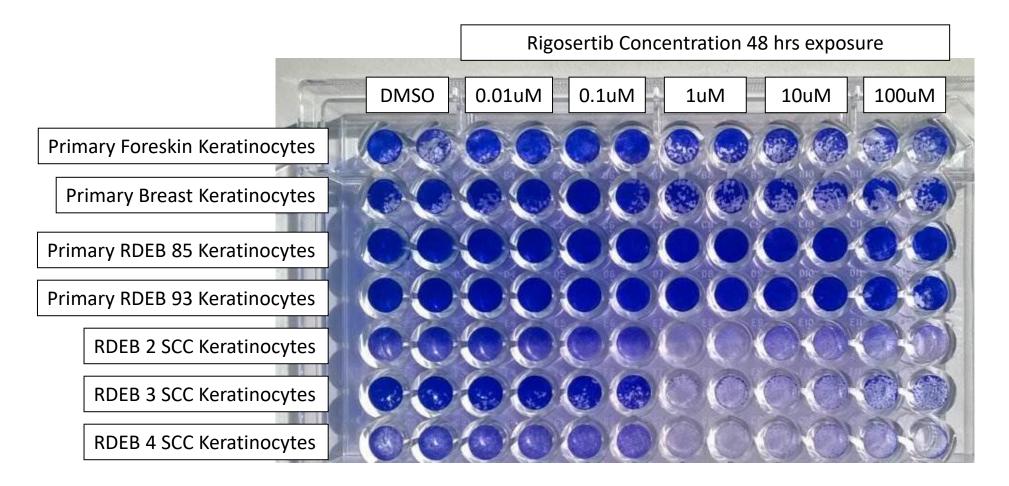
#### **Prostate Cancer Cells**



# Rigosertib

# ONG LOGY

# Rigosertib identified as lead PLK1 inhibitor in RDEB cSCC





### Rigosertib's Promising Single-agent Activity in RDEB-associated SCC

Complete remission of all cancerous skin lesions in 2 of 2 evaluable participants

RDEB-associated SCC: An ultra-rare condition

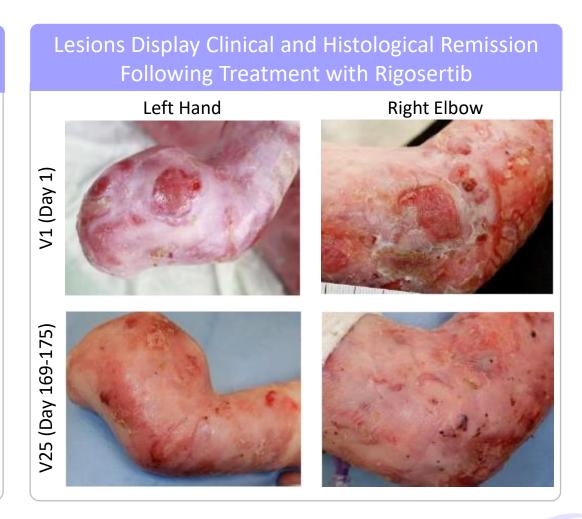
Absence of type VII collagen protein leads to extreme skin fragility and chronic wound formation

Patients develop SCCs that arise in areas of chronic skin inflammation

Cumulative risk of death: 78.7% by age 55

Current therapies: Limited response of short

duration





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Rigosertib	Epidermolysis bullosa-associated squamous cell carcinoma (rare disease)	Rigosertib is in investig	ator-initiated clinical trials ar out-licensing	d will become available for



