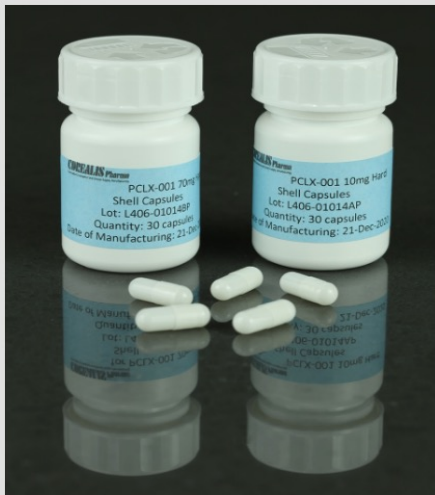




# Zelenirstat; first-in-class daily oral treatment for blood and solid tumor cancers in Phase 2

---



DECEMBER 2023

# Caution regarding certain information

This presentation has been prepared by Pacylex Inc. (“Pacylex” or the “Corporation”) solely for information purposes. This presentation is strictly proprietary, and recipients of this presentation may not reproduce or otherwise redistribute, in whole or in part, the presentation to any other person.

This presentation does not constitute an offer to sell or a solicitation of an offer to buy any securities in any jurisdiction to any person to whom it is unlawful to make such an offer or solicitation in such jurisdiction. Persons into whose possession this presentation may come are required by the Corporation to comply with all applicable laws and regulations in effect in any jurisdiction in or from which it invests or receives or possesses this presentation and must obtain any consent, approval or permission required under the laws and regulations in effect in such jurisdiction, and the Corporation, its directors and officers shall not have any responsibility or liability for such obligations. This presentation is not, and under no circumstances is it to be construed as, a prospectus, offering memorandum, advertisement or public offering of securities.

This presentation includes forward-looking statements, which may involve, but are not limited to: statements with respect to Pacylex’s objectives, guidance, targets, goals, priorities, beliefs, prospects, plans, expectations, anticipations, estimates and intentions; general economic and business outlook, prospects and trends of an industry; product development, including clinical estimates and timelines; and the receipt of regulatory and other approvals required with respect to this transaction and the anticipated timing thereof. Forward-looking statements can generally be identified by the use of forward-looking terminology such as “may”, “will”, “shall”, “can”, “expect”, “estimate”, “intend”, “anticipate”, “plan”, “foresee”, “believe”, “continue”, “maintain” or “align”, the negative of these terms, variations of them or similar terminology, as they relate to Pacylex. Forward-looking statements are presented for the purpose of assisting readers in understanding certain key elements of Pacylex’s current objectives, as well as expectations and plans. Readers are cautioned that such information may not be appropriate for other purposes.

By their nature, forward-looking statements require Pacylex’s management to make assumptions and are subject to important known and unknown risks and uncertainties, which may cause Pacylex’s actual results in future periods to differ materially from forecast results set forth in forward-looking statements. While Pacylex considers these assumptions to be reasonable and appropriate based on information currently available, they may not be accurate.

Certain factors that could cause actual results to differ materially from those anticipated in the forward-looking statements with respect to Pacylex include, but are not limited to, risks associated with the failure to receive or delay in receiving regulatory or other approvals; setbacks or increased costs in the drug development process, including setbacks or increased costs at each clinical stage and with subsequent commercialization; reliance on and protection of intellectual property rights; and adequacy of insurance coverage), financing risks (such as risks related to liquidity, access to capital and the need for further financing), and market risks (such as risks related to competitors, global and local economic trends and similar risks).

The assumptions underlying the forward-looking statements made in this presentation include the following material assumptions: Pacylex has access to capital sufficient to ensure that it can develop its product candidates on its expected timelines, the success of Pacylex’s drug development, the successful initiation, enrolment and completion of clinical trials, including whether clinical trials meet their endpoints.

Pacylex expressly disclaims any intention, and assumes no obligation, to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. The forward-looking statements contained in this presentation are expressly qualified by these cautionary statements.

# Zelenirstat: first-in-class compound that inhibits myristoylation



**Myristoylation** is a fatty acid modification of certain proteins in critical cell functions.

**Inhibition of myristoylation kills cancer cells** at concentrations that don't affect normal cells (**selective lethality**).

**Zelenirstat inhibits myristoylation:**

- blocks both enzymes responsible for myristoylation,
- Part of Library of 503 compounds with PCLX-002, backup with extensive preclinical data



In animal cancer models, **zelenirstat**

- **regresses lymphoma and leukemia tumors,**
- **eliminates leukemic stem cells** from bone marrow,
- **Inhibits growth of solid tumors** (lung, breast)

**In cancer patients** refractory and/or relapsed to a median of 4 prior lines of therapy, **zelenirstat:**

- **Is safe and well tolerated at daily oral doses up to 210mg,**
- **Improved Progression free and overall survival** observed in Phase 1 **solid tumor patients** comparing 210mg to lower doses,
- **210mg dose advanced to Phase 2**



**Seeks \$55M USD Series B to fund Phase 1/2a and 2b in pts with AML, and Phase 2a in pts with solid tumor cancers**

**Billion dollar exit potential** with history after successful **Phase 2**

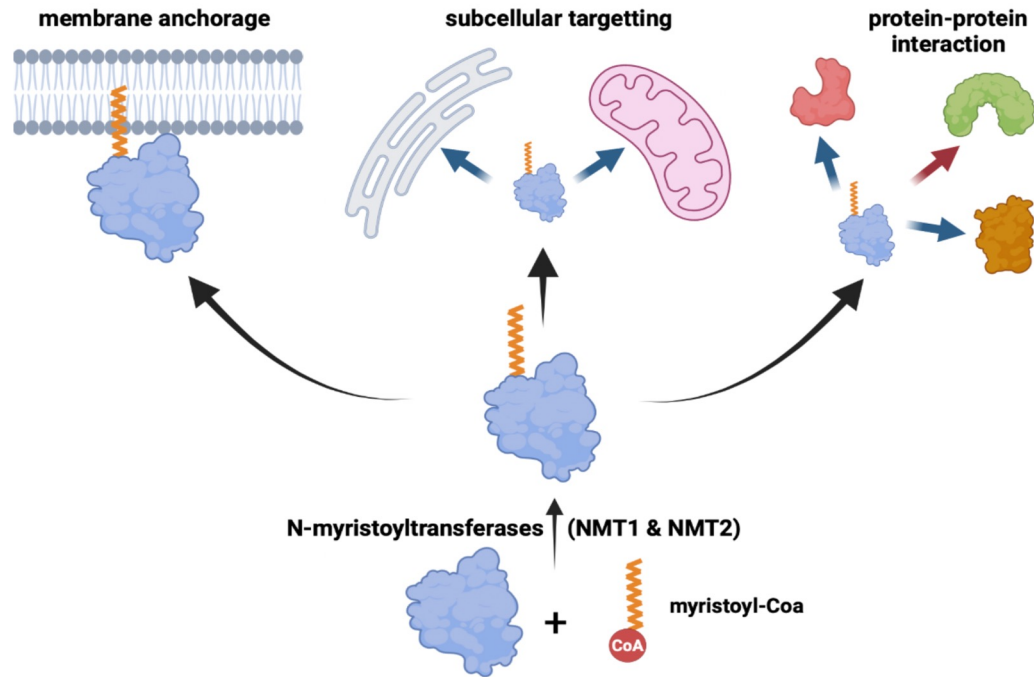
**Orphan and Fast Track** received for **AML**

**Synergy likely with other cancer therapies**  
- observed *in vitro* with venetoclax

Experienced **team >20 yr average in Pharma industry experience** in drug development and commercial strategy

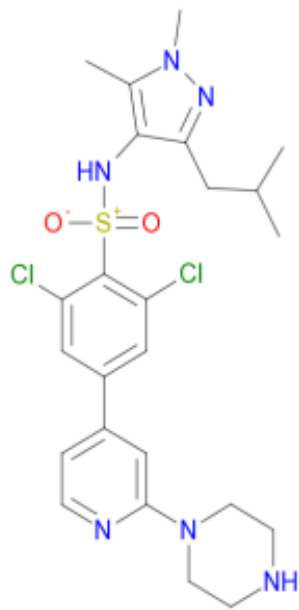
# TARGET: Myristoylation is key to membrane binding of proteins involved in cancer signaling and other key functions

- **Myristoylation** is the addition of 14 carbon saturated fatty acid myristate to N-terminal glycine proteins, mediated by two **N-myristoyltransferases (NMT), NMT1 and NMT2**.
- **Myristoylated proteins bind membranes** where they interact with other proteins in critical cell functions.
- Myristoylation is **essential for cancer cell pro-survival and proliferation signaling, energy production in mitochondria, and angiogenesis**, critical to cancer cell proliferation and survival.
- **Zelenistat** is an **N-myristoyltransferase (NMT) inhibitor** which blocks both enzymes responsible for myristoylation.
- Inhibition of myristoylation kills cancer cells at concentrations that don't affect normal cells (**selective lethality**).

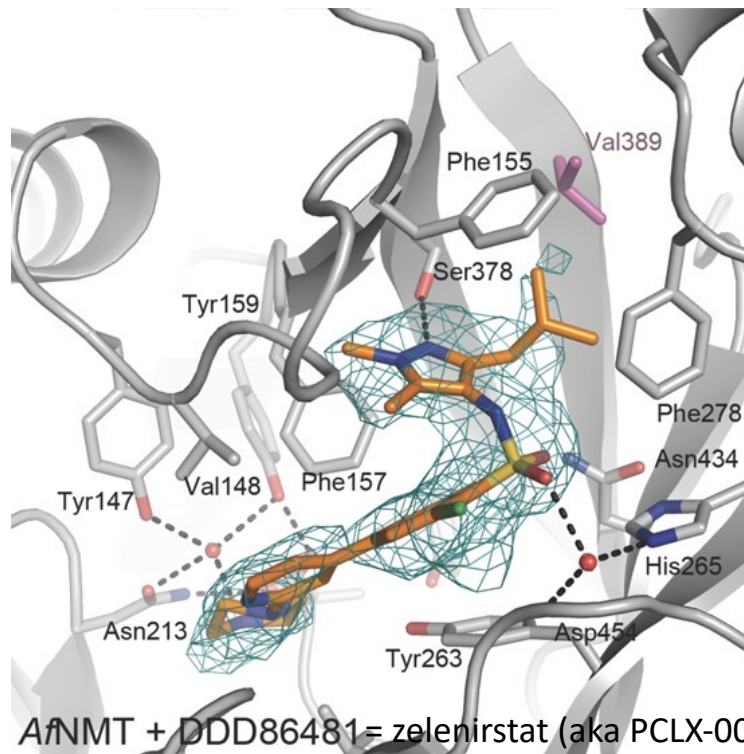


# Zelenirstat is a small molecule N-myristoyltransferase inhibitor (NMTi) which binds in the active site, inhibiting myristoylation

Zelenirstat Structure  
(C<sub>24</sub>H<sub>30</sub>Cl<sub>2</sub>N<sub>6</sub>O<sub>2</sub>S)

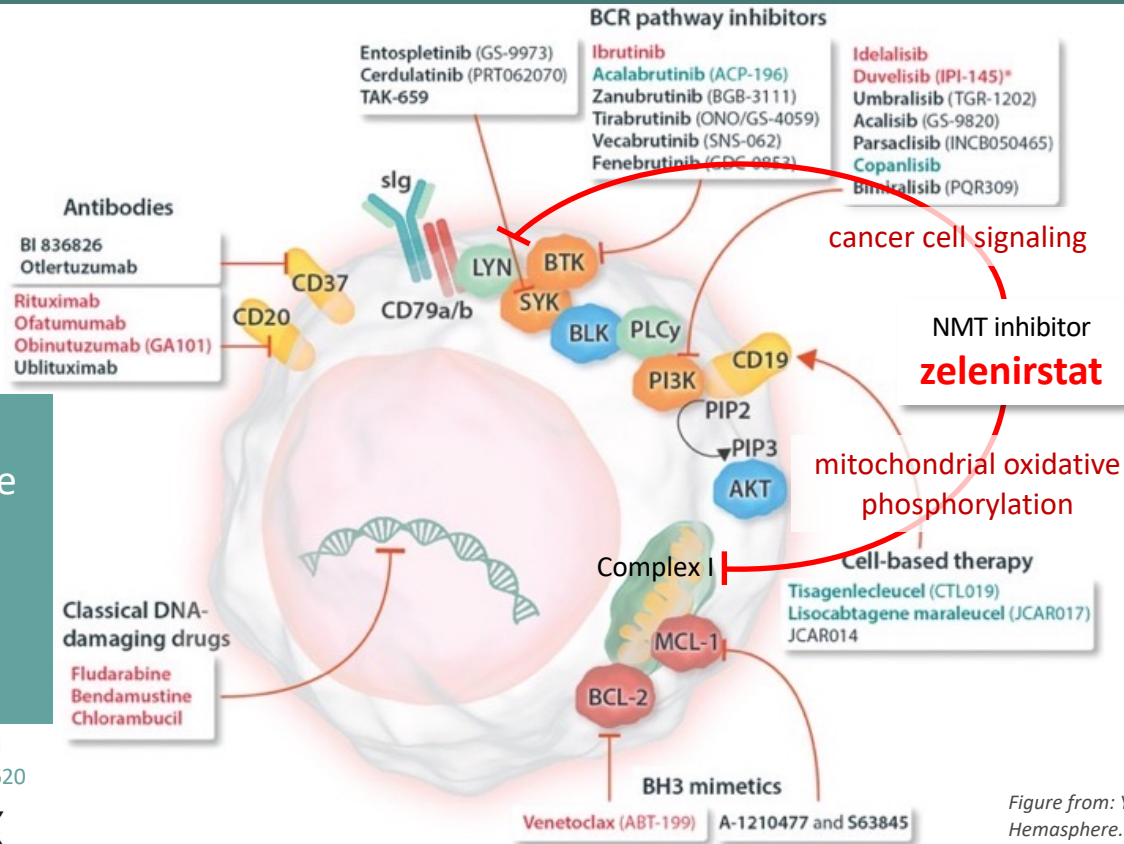


Active site of NMT in complex with zelenirstat



AfNMT + DDD86481 = zelenirstat (aka PCLX-001)

# MOA: NMT inhibition disrupts prosurvival signal initiation and oxidative phosphorylation in cancer cells



Beauchamp, et al., *Nature Communications* 2020, 11:5348

Gamma, et al. *EHA Library*. 06/08/2023; 386294; P465

It also disrupts Src-family kinase signaling in angiogenesis inhibiting solid tumors

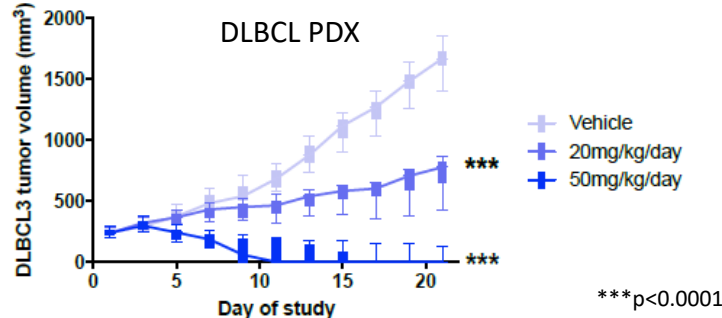
Pain, et al. *Cancer Res* 1 April 2023; 83 (7\_Supplement): 3620



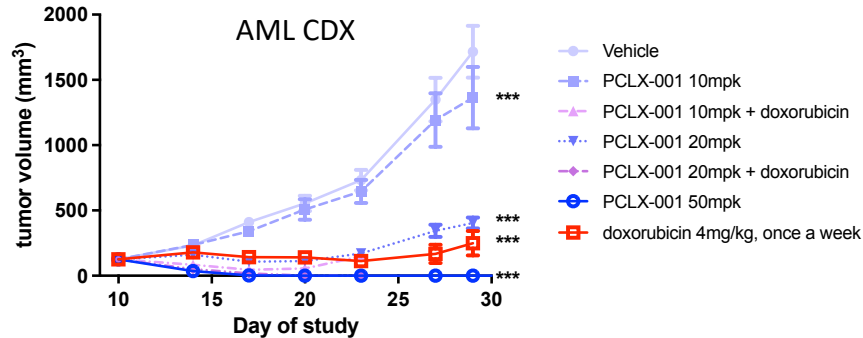
Figure from: Yosifov et al. *Hemasphere*. 2019 Apr;3(2):e175.

# Zelenistat (PCLX-001) regresses blood cancer xenografts and inhibits solid tumor xenografts in mouse models of cancers

## Zelenistat regresses tumors in lymphoma and leukemia



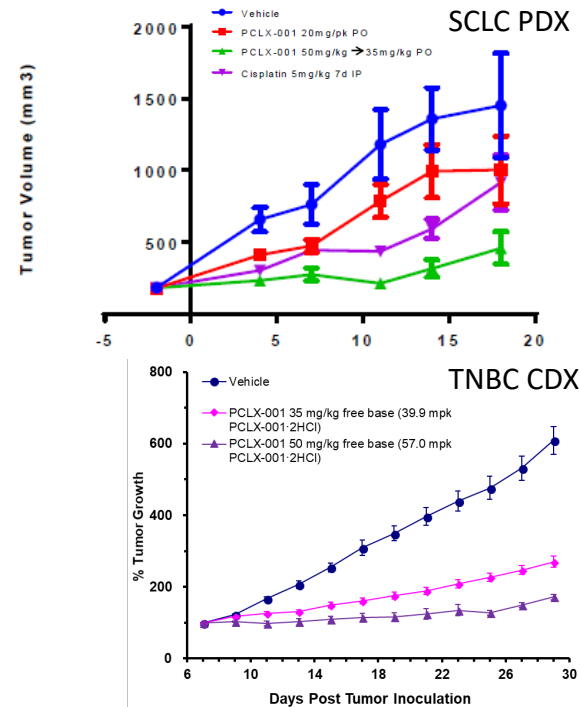
Beauchamp, et al., Nature Communications 2020, 11:5348



Mackey, et al. *Cancer Res* 1 July 2019; 79 (13\_Supplement): 3043.

DLBCL – Diffuse Large B-cell Lymphoma, AML – Acute Myeloid Leukemia, SCLC – Small Cell Lung Cancer, TNBC – Triple Negative Breast Cancer, PDX – patient derived xenograft, CDX – cell line derived xenograft

## Zelenistat inhibits solid tumors (lung and breast)

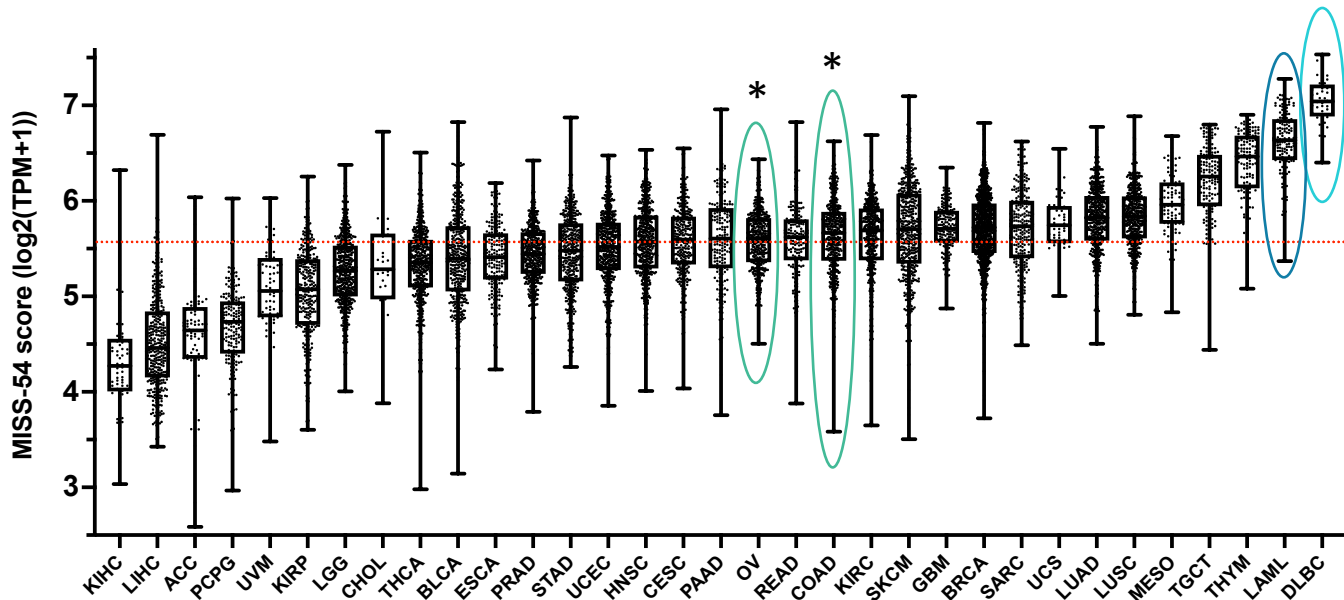


Mackey, et al. *Breast Cancer Research and Treatment*, 2021



# Gene expression signature predicts cancers most sensitive to zelenirstat

Myristoylation inhibition sensitivity signature predicts cancers and patients susceptible to respond to myristoylation inhibition treatment

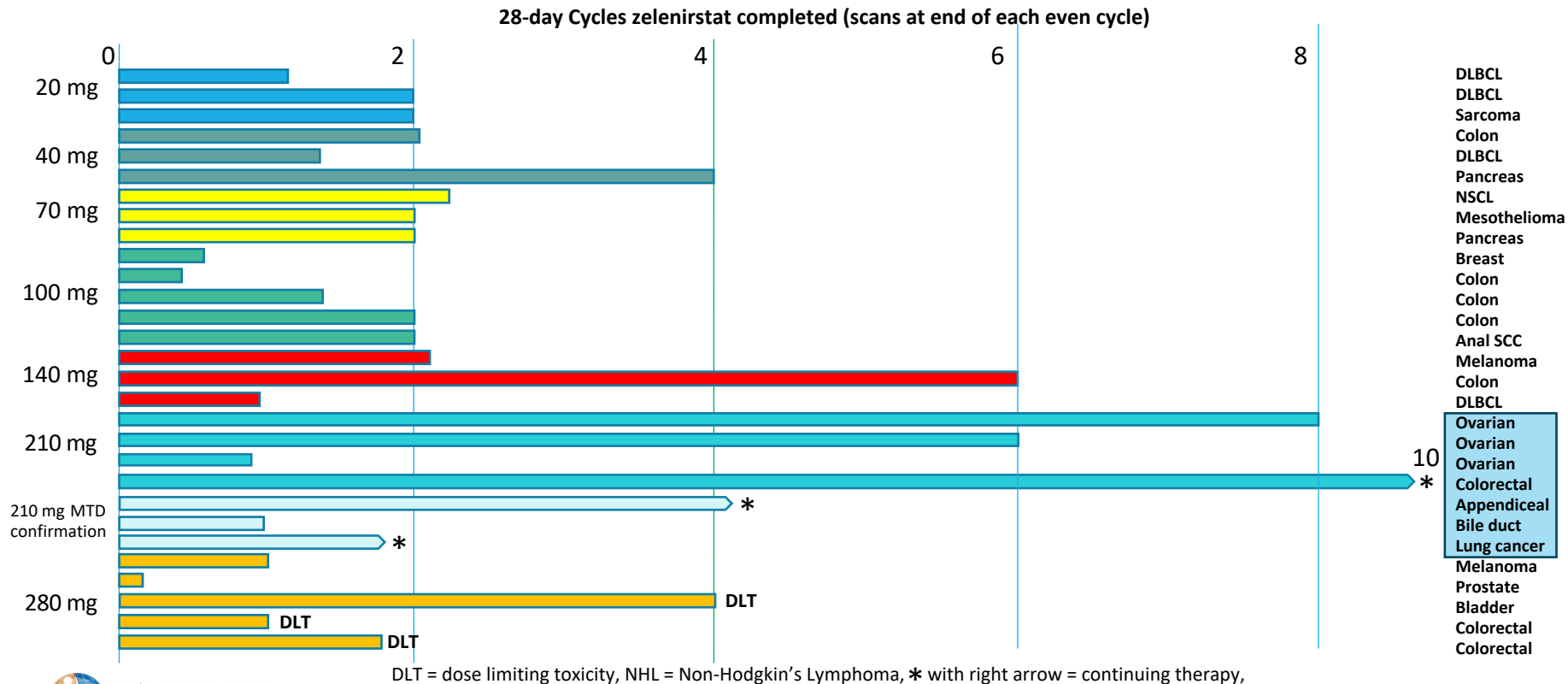


Gene expression signature identifies DLBCL and AML among the most zelenirstat-sensitive blood cancers, and colorectal and ovarian cancers (represented in long-term Phase 1 patients) among the most zelenirstat-sensitive solid tumor cancers. Cervix, Lung, testis, thymus, uterus, and Head and Neck are also predicted to be sensitive to zelenirstat treatment. Would also be expected to be used to ID sensitive patients within each cancer type.





# Patients receiving 210mg zelenirstat in Phase I dose escalation study responded and remained on study treatment much longer

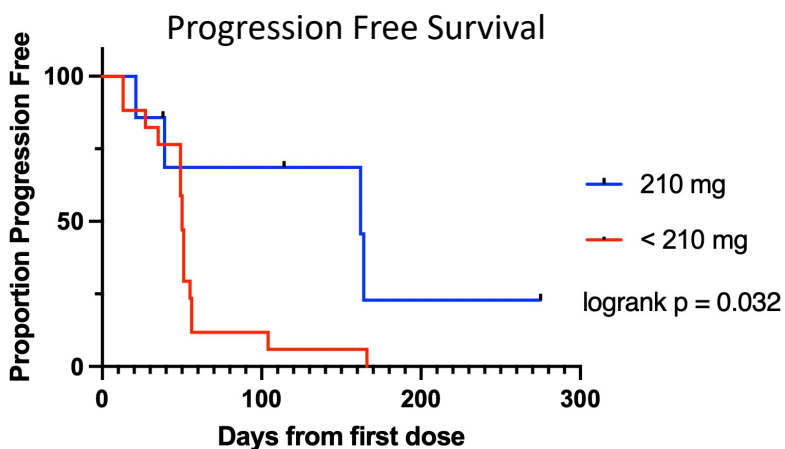


# Safety results: No dose limiting toxicities in patients receiving 210mg or less in Phase 1 study; a minority of patients experience GI adverse events

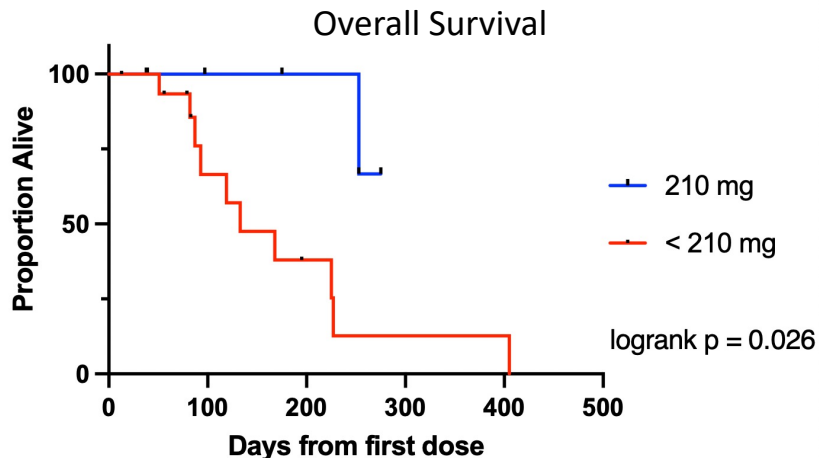
- No dose limiting toxicities identified from 20mg to 210 mg: compliance >90%
  - 280 mg cohort had three patients with first cycle GI Dose Limiting Toxicities
    - grade 3 dehydration (1); grade 3 biliary tract stenosis requiring hospitalization and antibiotics (1); grade 3 diverticulitis (1)
- For patients 20mg-210 mg
  - Grade 1-2 GI adverse events (AEs) most frequently reported at 20mg-210 mg
    - decreased appetite (11/24 patients = 46%)
    - nausea – responsive to standard antiemetics grade 1 and 2 (10/24 patients = 42%)
    - diarrhea – grade 1-2 self limited or responsive to therapy (10/24 patients = 42%)
    - vomiting – grade 1-2 responsive to standard antiemetics (9/24 patients = 37%)
  - Grade 1-2 fatigue in 11 patients (46%)
  - Grade 2 thrombocytopenia ( $75$  to  $100 \times 10^9/L$ ), transient, in 3 patients (12%) with baseline grade 1
  - No neutropenia, no febrile neutropenia, no neutropenic fever
  - No QT prolongation or arrhythmia
  - No zelenistat related renal, neurologic or skin AEs; no worsening of baseline neuropathy

# Zelenirstat 210 mg monotherapy resulted in a benefit in both Progression Free Survival and Overall Survival in Phase 1

Compared 210mg zelenirstat (n=7), the recommended Phase 2 dose versus < 210mg (n=17)  
PCLX-001-01 Phase 1 dose escalation study:



Post-hoc Progression-Free Survival analysis indicates patients at the Phase 2a dose of 210 mg have experienced significantly less progression (p = 0.032)  
Progressive disease: first occurrence of radiologic RECIST 2.0 or investigator-assessed disease progression.  
All censored patients continuing on PCLX-001 as of Dec 1<sup>st</sup> 2023

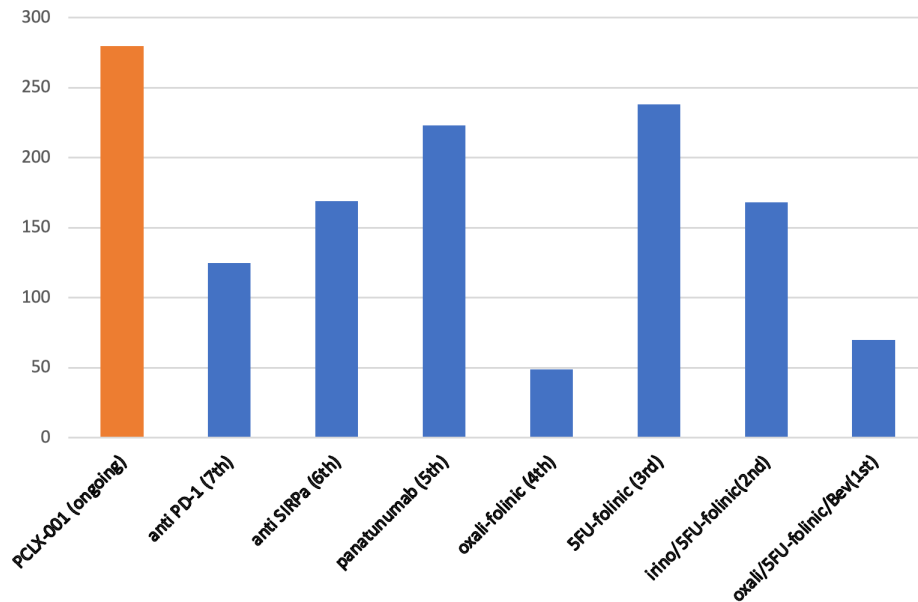


A post-hoc analysis of Overall Survival (all-cause death) indicates patients receiving the Phase 2a dose of 210 mg survived significantly longer (p=0.026)  
Overall survival: death from any cause  
Database review Dec 1<sup>st</sup> 2023

# Patient with colorectal cancer in Cohort 6

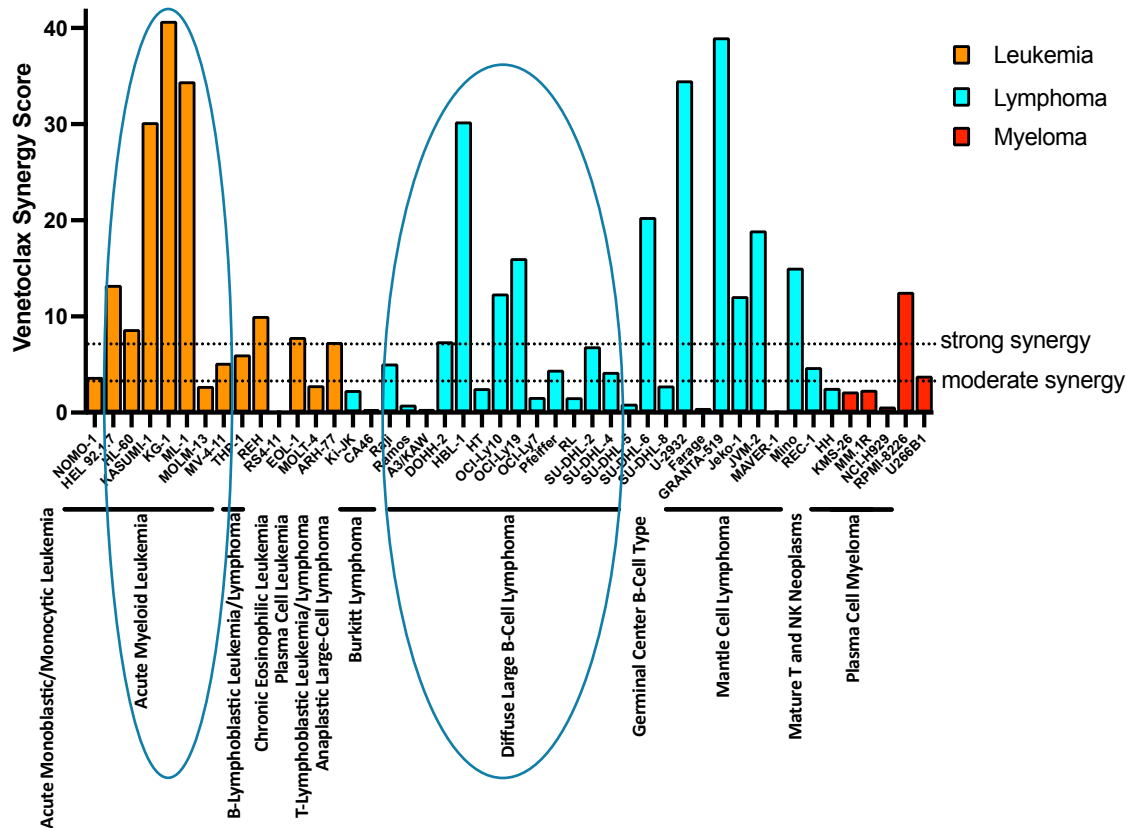
- 63 year-old male with refractory metastatic colon cancer
- Seven prior lines of therapy
- Has now received 275 daily doses of zelenistat 210 mg with only mild GI upset at the start, retains his hair, feeling well
- This treatment has controlled his cancer longer than any prior therapy
- 11% reduction in tumor sizes, 48% reduction in blood markers of cancer

Days on each line of therapy



# In vitro data show zelenirstat is strongly synergistic with venetoclax

- In most hematologic cancer cell lines, zelenirstat (PLCX-001) is synergistic with venetoclax
- Many cell lines show strong synergy
- Additional synergy studies planned



# Pacylex pipeline extends beyond oncology indications

Product	Indication	Discovery		Preclinical		IND	Clinical			NDA	
		<i>In vitro</i>	<i>In vivo</i>	Lead Op	GLP	(CTA-CAN)	Phase 1	Phase 2	Phase 3		
Zelenirstat	Non-Hodgkin Lymphoma (DLBCL)	[Progress bar]								n/a	2026
Zelenirstat	Solid tumors	[Progress bar]							2024	2025	2027
Zelenirstat	Acute Myeloid Leukemia (AML)	[Progress bar]						2023	2024	n/a	2026
Zelenirstat + venetoclax etc.	Acute Myeloid Leukemia (AML)	[Progress bar]							2024	n/a	2026
PCLX-002	Autoimmune	[Progress bar]				2024		2025	2026	2028	

- B cell NHL Phase 2a expansion study started in 2023 at 4 clinical sites in Canada
- Solid tumor Phase 2a expansion study will start early Q1 2024
  - Phase 2a to ID solid tumors which respond best to zelenirstat will initiate study with 4 cancer types: breast, non-small cell lung (NSCLC), small-cell lung (SCLC), colorectal (CRC), and bladder cancers
- IND and IRB cleared Phase 1/2 AML dose escalation study at MD Anderson expected to start in late 2023; supported by DOD grant
  - Orphan and Fast Track designations granted for AML
- Additional cancer indications are planned

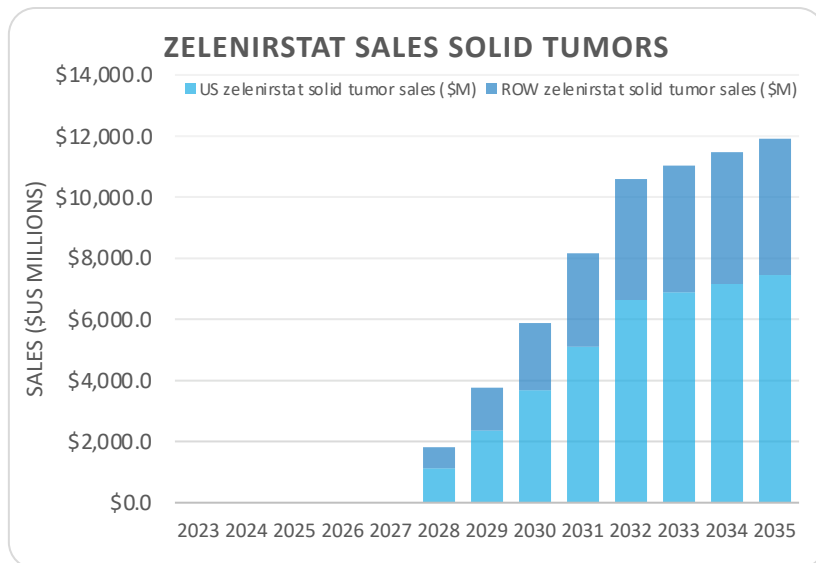
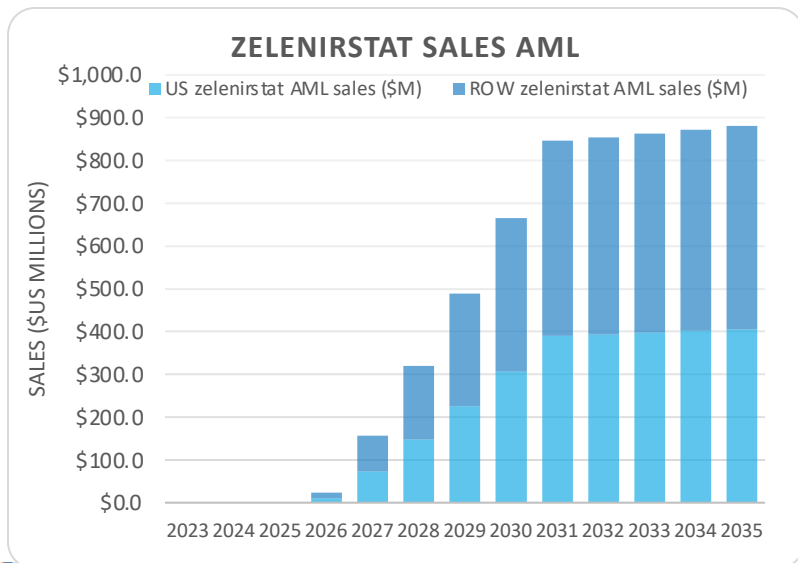
# Zelenirstat is 10x more potent *in vitro* than B-cell receptor pathway inhibitor ibrutinib (\$10B 2021) with similar market potential

## Market Assumptions Acute Myeloid Leukemia (AML)

- Initial indication (late 2026 launch; accelerated approval)
- 25% peak market share
- 6 months on treatment
- \$10,000 per month price in the US
- ROW worth 117% of the US

## Market Assumptions Solid Tumor (market potential for breast, lung cancers, and colorectal)

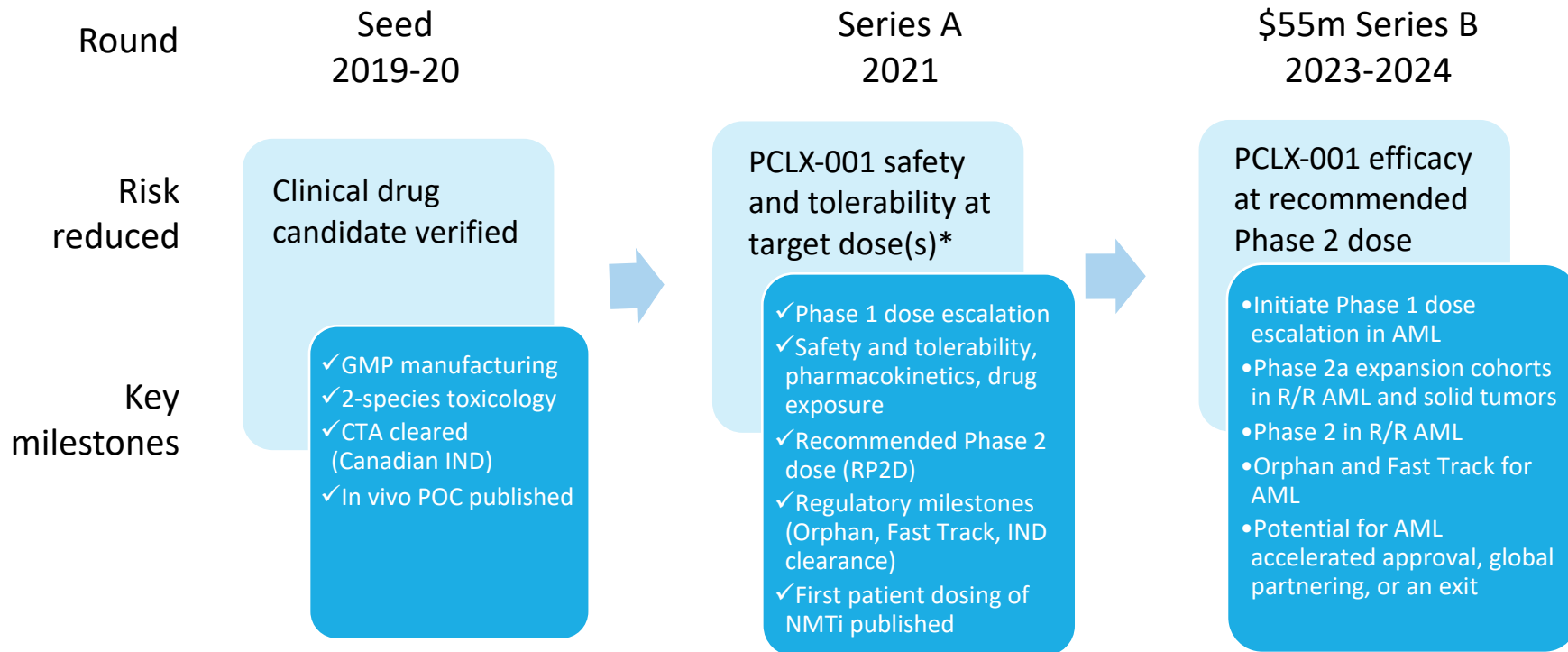
- 2028 launch
- 10% peak market share
- 6 months on treatment
- \$10,000 per month price in the US
- ROW worth 60% of the US



Sales continue beyond 2035; epidemiology and some market assumptions from GlobalData

PACYLEX PHARMACEUTICALS PROPRIETARY

# Pacylex has made steady progress on zelenirstat development



\*based on *in vitro* and *in vivo* efficacy studies



# Zelenistat has blockbuster exit potential in an area of pharma interest

- Zelenistat is 10x as potent *in vitro* as B-cell receptor pathway inhibitor ibrutinib (\$10B 2021)
- Pharma companies acquire B-cell receptor pathway inhibitors around Phase 2:

Acquirer	Acquired	BTKi Phase	Price	Date
Sanofi	Principia Biopharma	Phase 2b	\$3.7B	Aug 2020
Merck	ArQule	Phase 2	\$2.7B	Dec 2019
Eli Lilly	Loxo Oncology	Phase 1/2	\$8B	Jan 2019
AZ	Acerta	Phase 2/3*	\$6.8B	Feb 2016

# An experienced Pacylex team is in place to drive R&D



## **Michael Weickert, PhD – CEO, Director**

30+ yrs Pharma; 5x startup CEO, 15 yrs public pharma; Former VP Auspex, Senior Program Executive, Nektar, Ligand, NCI/NIH



## **Luc Berthiaume, PhD – CSO, co-Founder, Director**

World leader in protein fatty acylation; Founder of Eusera and Pacylex; 3 patents



## **Ryan Heit, MSc, MBA – VP Ops, co-Founder**

20+ companies in early-stage commercialization; founder/ co-founder of 4 companies; led deal screening for VA Angels



## **Erwan Beauchamp, PhD – Dir. Discovery Biol.**

Protein fatty acylation expert for 15+ years; made seminal discovery of sensitivity of hematologic cancers to PCLX-001



## **Michele Libonati, MSc – COO**

30+ yrs Pharma; Former SVP Program Strategy Leadership, Gilead Sciences, CEO Proneurotech, Lifecycle Leader OCREVUS, LUCENTIS, Rituxan, Raptiva (Genentech/Roche), Development Leader Intermezzo (Trancept), Tysabri (Elan Pharmaceuticals)



## **John Mackey, MD, FRCP – CMO, co-Founder, Director**

Former Director of clinical trials at CCI and Director of TRIO (CRO); practicing oncologist, ~100 clinical trials, founder of 3 cos.



## **Annette Marcantonio – VP Clinical Operations**

30+ yrs Pharma; Former VP Clinical Affairs at Neurogastrx, Aimmune, Sr. Dir. Clinical Ops at Alvine, Nektar, consultant at Genentech, Xenoport, Aviron.



## **Vanessa Grant - Counsel**

Counsel with Norton Rose Fulbright - expertise in M&A, corporate governance, private equity and venture capital.

## Outside Board Directors



## **Cindy Jacobs, MD, PhD – Board Director and Chair**

CMO Achieve Life Sciences, CMO OncoGenex, Corixa, executive with Cytran, CellPro, Immunex (inventor and devel. Enbrel). On Board of Renown Pharma.



## **Mark Huson, PhD – Board Director**

Professor of Finance and the Dianne and Irving Kipnes Chair in Finance and Development University of Alberta. is an expert in Corporate finance, Income trusts, Management science and Private enterprise.



## **Ajit Gill, – Board Director**

CEO, Founder, and Director, Greenfire Bio, former CEO & President, Nektar Therapeutics, Auspex; VP and Gen Mgr Kodak's Interactive Systems; VP, Finance at TRW-Fujitsu



## **Nola Masterson, MSc, – Board Director**

co-founder and former CEO Sequenom, Inc. (SQNM). Chair Emeritus California Life Science Institute, Boards: EpiCept Corporation, Nanostream, Inc., Omicia, Inc., Repros Therapeutics Inc. (RPRX, Chairman), EmbraceHer Innovations, Inc., Resonance-Med, and Lynx Bio.



# Pacylex is an extraordinary investment opportunity NOW



First-in-class, potent, oral therapy with safety and tolerability largely derisked



Potential exit after Series B since Phase 2 data has been historic partner point



Orphan Drug and Fast Track Designations granted for AML



\$55m Series B supports two indications in Phase 2, 1 for registration (AML)



Progression free and overall survival advantage in Phase 1; Major value inflection; Phase 2 efficacy data, just ahead



Combination therapy in liquid and solid tumors, and expansion to autoimmune disorders create huge upside





# PACYLEX

ACCELERATING THE PACE OF CANCER CARE

## Contact Info:

Michael Weickert, PhD, CEO

[michael.weickert@pacylex.com](mailto:michael.weickert@pacylex.com)

650-218-1840