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Investment Highlights

	Plinabulin: Safety & Efficacy	Lead Asset Plinabulin: >700 cancer patients treated with good tolerability; Positive Phase 3 data in 2 indications
\bigotimes	Plinabulin Potential	Plinabulin: Dual Benefit in anti-cancer and prevention of CIN; Potential in re-sensitizing in PD-1/PD-L1 progressed patients in multiple cancers
	SEED: Novel TPD Platform & Pipeline	SEED: 7 Disclosed Pipeline Assets with 1 expected to enter IND in 2024
Joseph -	Premier Partnerships	SEED: Investment and R&D Collaboration from Eli Lilly
	Intellectual Property	Strong Intellectual Property and Technology Protection

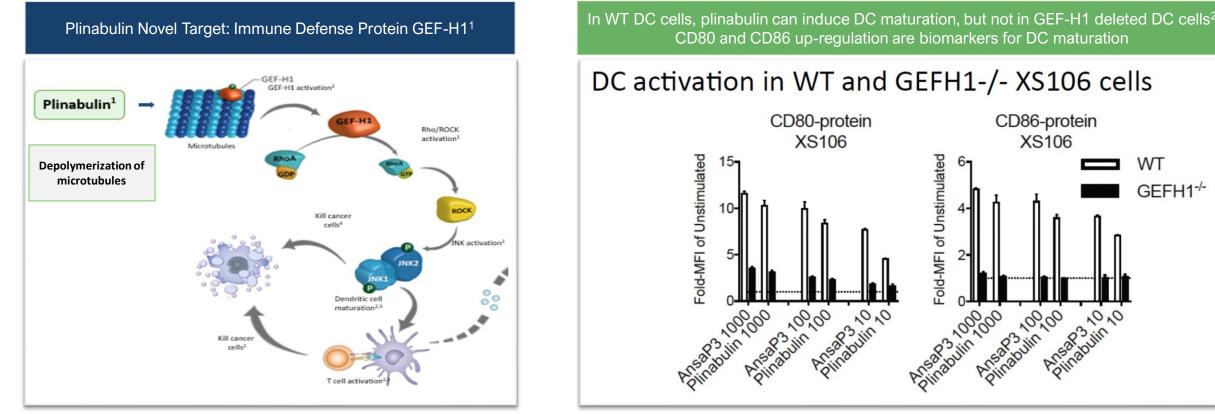


Pipeline

	Indication/Target	Program	Preclinical	Phase 1	Phase 2	Phase 3	Registration	Trial Name / Collaborator
Late stage	NSCLC (2 nd /3 rd line)	Plinabulin + Docetaxel						DUBLIN-3
Late	CIN Prevention	Plinabulin + Pegfilgrastim						PROTECTIVE-1 & PROTECTIVE-2
Investigator Initiated Trials	SCLC (2 nd /3 rd line)	Plinabulin + PD-1 + CTLA-4						ر ^{ال} Bristol Myers Squibb و Rutgers
	NSCLC (2 nd /3 rd line PD- 1 failed)	Plinabulin + PD-1 + Docetaxel						
vestigator Ir	7 cancers (PD-1/PD-L1 failed)	Plinabulin + PD-1/PD- L1 + Radiation						THE UNIVERSITY OF TEXAS MDAnderson Cancer Center
<u> </u>	AHCT (hematopoietic stem cell transplantation) in Multiple myeloma	Plinabulin + Pegfilgrastim						Memorial Sloan Kettering Cancer Center
Early Stage	Preclinical assets	BPI-002, BPI-003, BPI- 004						
SEED	7 Disclosed Targets (Internal & Collaboration)	Targeted Protein Degradation (TPD) Molecular Glue Platform						Lilly

Plinabulin: Induce Innate and Adaptive Immunity

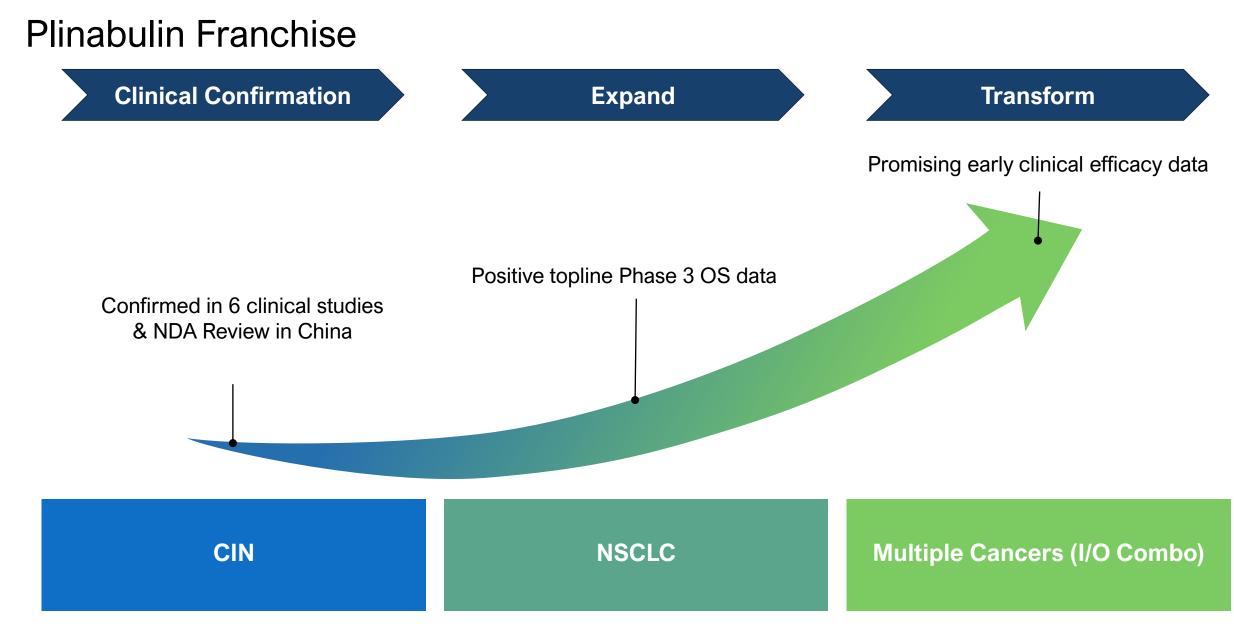
By depolymerizing microtubules, plinabulin releases, or activates, immune-defense protein GEF-H1. This leads to dendritic cell maturation (the most potent APC).



AnsaP3, Maytansinoid cytotoxic (positive control compound), too toxic for human study

² Kashyap et al., Cell Reports 28(13): 3367-3380 (2019) BevondSpring

¹ La Sala et al., Chem 5(11): 2969-2986 (2019)







SEED Therapeutics: Target Protein Degradation (TPD) Company

SEED Therapeutics

Founders:

- Avram Hershko, MD PhD (Nobel Prize Winner, Technion), a world expert in ubiquitin-mediated TPD research;
- Ning Zheng, PhD (HHMI, Pharmacology Dept, University of Washington), a pioneer in structural biology of ubiquitin E3 ligases;
- Michele Pagano, MD (HHMI, Chairman, Biochemistry and Molecular Pharmacology Dept, NYU School of Medicine), a pioneer in the biology of TPD research;
- Lan Huang, PhD (Scientist and entrepreneur, CEO of SEED), expert in TPD field by solving the first E3 ligase structure and biotech company operation.

Company Focus: Development of innovative precision medicine using proprietary and unique TPD platforms.

Drug Pipeline: The platform has been translated into a robust pipeline with 7 disclosed development programs including a drug candidate advancing to IND filing in 2024.

Investors and R&D Collaborator:

- Seed Financing: Led by Eli Lilly and Company (\$10M), joined by BeyondSpring Inc. (\$6M)
- Additional Eli Lilly R&D collaboration on multiple targets, with upfront \$10M and up to \$780M milestone payments, and tiered sales royalties.

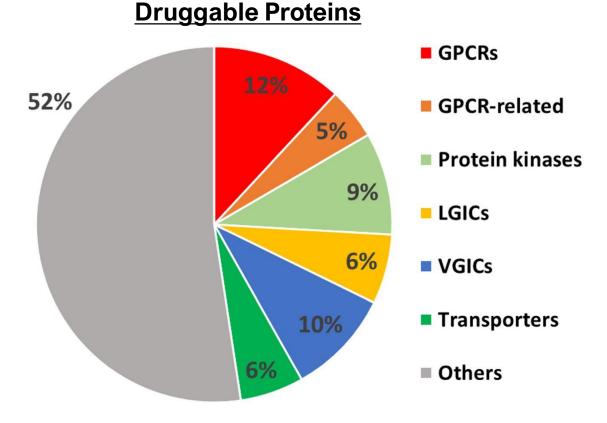


Built Infrastructure and Organization

- 10,000 lab and office space in King of Prussia, PA
- Scientific team with precious experience of >40 IND filings and >12 drug approvals.



Targeted Protein Degradation (TPD) Targets 80% of Disease-Causing Proteins That are Currently Undruggable



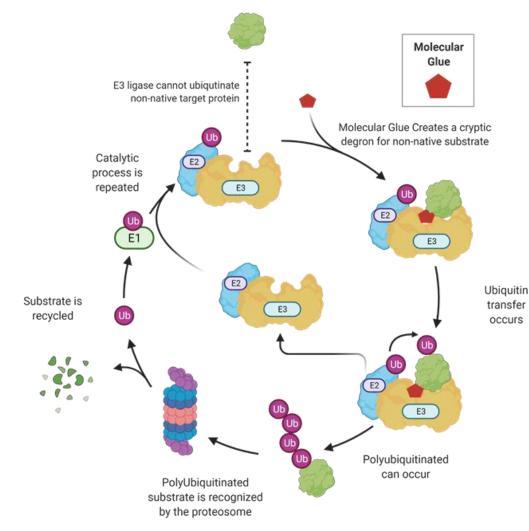
TPD for Undruggable Proteins



https://doi.org/10.1124/mol.117.111062



Nature Derived TPD Molecular Glue Approved To Degrade Cancercausing Proteins



Normal cell protein regulation via proteasomal degradation

- Natural method for selective protein degradation
- <u>Nature derived IMIDs are approved</u> molecular glues that hijack E3 ligases to degrade cancer causing proteins

SEED opportunity to capitalize on Nobel Prize winning biology to bring de novo designed molecular glues to patients



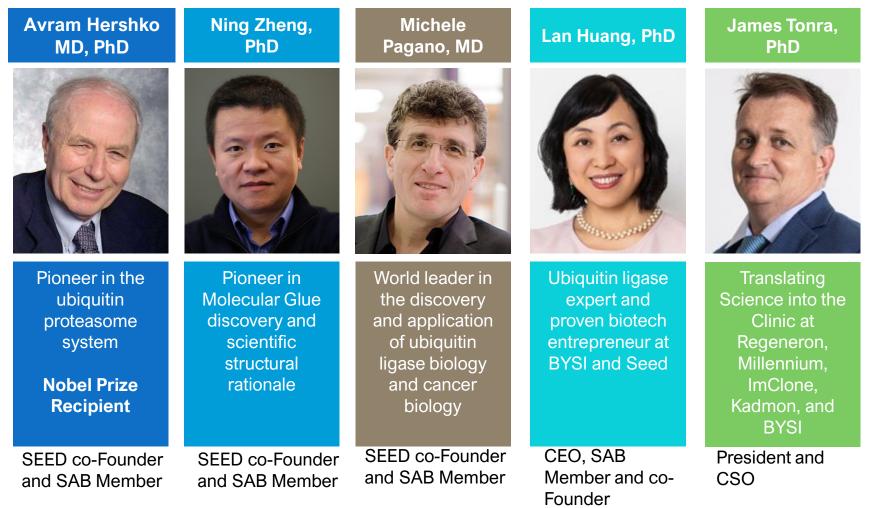
Avram Hershko, MD, PhD The Nobel Prize in Chemistry 2004 Prize motivation: "For the discovery of ubiquitinmediated protein degradation."

SEED Therapeutics Co-Founder and SAB member



Strong Scientific Foundation With Proven Execution Capability to Timely Deliver Drug Pipeline for Multiple Unmet Medical Needs

World-Leading Scientific Expertise → Translate to Drug Pipeline





Exceeding Seed Financing Expectations

SEED Internal Program Milestones

 pater M ta H⁻ in pr Pr 	 Development of SEED's unique TPD platforms and filed patents Multi-dimensional platforms to select the right E3 for any target; HTS screening and medicinal chemistry platforms which incorporate AI-predicted blood brain barrier penetration properties for CNS drug development, Proprietary statistical learning algorithms and neural networks (AI) 						Translation of SEED Platforms into Drug Pipeline of 7 disclosed programs in various disease areas Project X: POC in cell and animal models; lead candidate advancing to 2024 IND		
	2020		2021		2022	2	>	2023	
	Nov. 2020: SEED received investment and entered into a research collaboration and license agreement with Eli Lilly on targeted protein degradation.				2: Received investment	Feb. 2023: milestone p 1 st R&D tar	payment for	additional r	project to earn milestone payments ant advancement targets

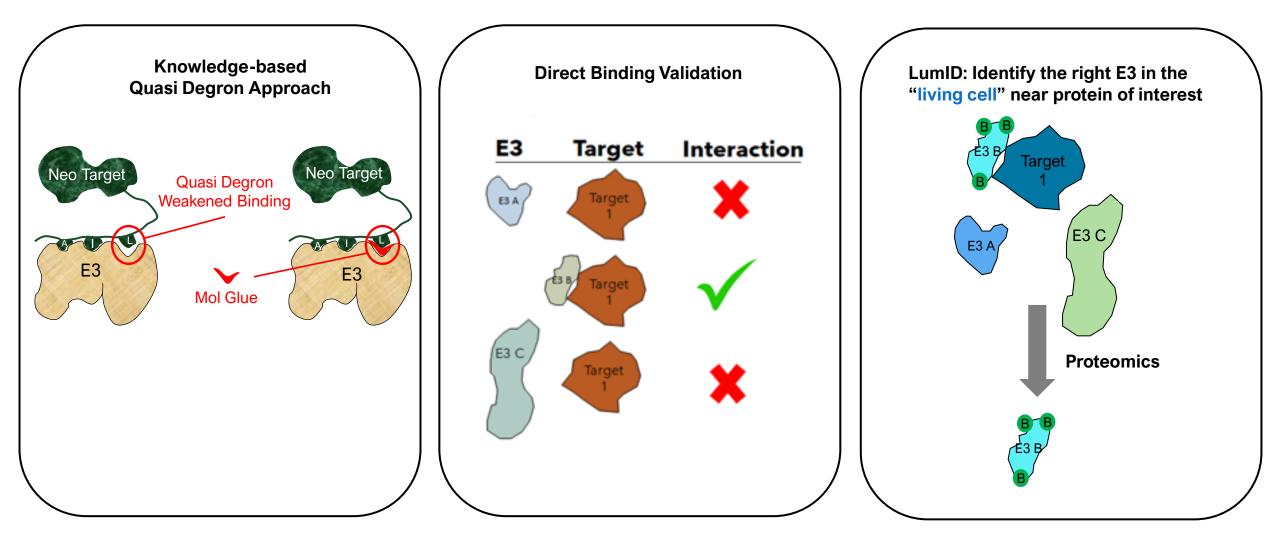
Eli Lilly Partner Program Milestones



How SEED Differentiates Itself in Surmounting Challenges

?	Unique Challenges	How to identify the right E3 for protein of interest (POI)?
Ĩ	Target-Centric Differentiation	Identify the right E3 for POI to increase the success rate in drug discovery: Platforms using Quasi-degron, LumID, and Basal Affinity
~~~	Pioneering Effort	World-leading scientific founding team, Talent acquisition, infrastructure development, intellectual property expansion and platform discovery
	Two Prong Approach	De-risked revenue model: R&D partnership and internal program development

### SEED's Multi-dimensional, Proprietary Platform for E3 Selection





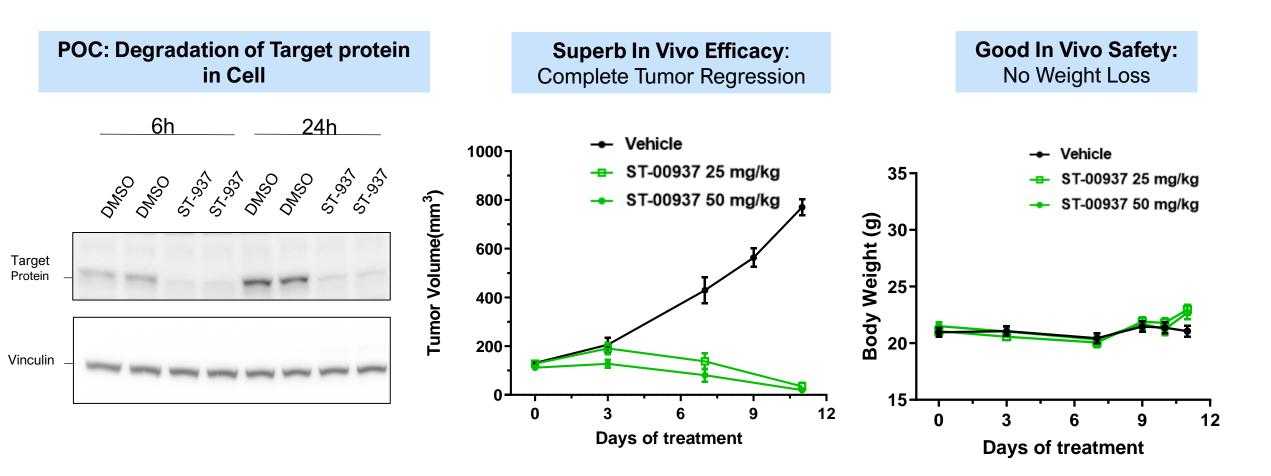
### 7 Drug R&D Pipeline in Multiple Disease Areas

Indication / Target	Target Protein Initiative*	Target Selection	E3 Ligase ID	Molecular Glue HTS	Lead ID	IND Candidate	IND Filing
	Target Alpha						
NeuroD	Tau						
	Project X						1 st IND 2024
-	KRAS-G12D						
Cancer	Target Beta						
	FEN1						
Antiviral	HBx						

* 6 of 7 Targets Unpartnered

**BeyondSpring** 

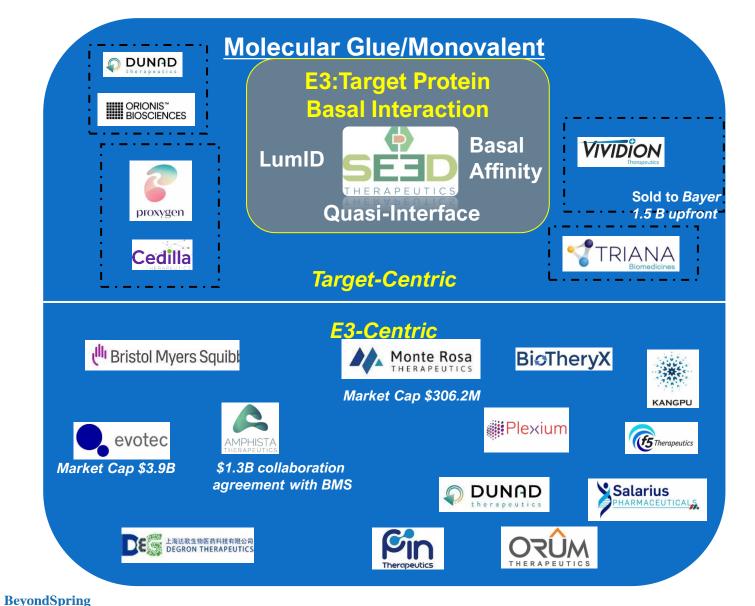
Project X: Lead ST-00973 Expected to Enter IND in 2024



Human colorectal cancer cell line, colorectal xenograft in immunodeficient mice (Oral dose, twice daily)



### SEED (TPD 2.0) - Differentiated among High-value TPD Companies



# Pharma Companies Licensing Deals in TPD Assets

#### **Discovery:**

- Deal Size
  - Upfront: \$40 \$415 M
  - Milestone: \$500 M to \$5 B
  - Collaborators:
    - BMS & Evotec
    - Genentech & Jemicare
    - Roche & Vividion
    - Sanofi & Nurix

#### **Pre IND Stage:**

- Deal Size:
  - Upfront: \$100 \$300 M
  - Milestone: \$1.3 B
- Collaborators:
  - Eli Lilly & Foghorn
  - GSK & IDEAYA

### Summary: First to Market and Best in Class

- 1. Target-centric SEED Breakthrough TPD Platforms Employ Multi-dimensional Proprietary Platforms for E3 Selection
  - 80% of disease-causing proteins are undruggable, presenting a tremendous medical opportunity for SEED's new drug development platform;
  - With over 600 E3 ligases to choose from, SEED's platforms will identify and validate molecular glues with high probability of success to accelerate towards clinical testing, and to realize commercial potential in multiple disease areas, including cancer and neurodegeneration.
- 2. SEED Breakthrough TPD Platforms Assure Successful Translation to Robust Pipeline with Near-term Value Creation
  - Development candidate selected for expected 2024 IND;
  - Currently disclosed 7 programs in multiple disease areas.
- 3. SEED is among the Leaders in the Industry in MG R&D for Undruggable Targets for Unmet Medical Needs
  - Have exceeded seed financing expectations in talent attraction, infrastructure development, intellectual property, platform discovery, partner milestone achievement, and drug pipeline growth and advancement towards clinic;
  - Unmatched team of seasoned, highly motivated experts: Founders, Drug Developers, BOD.





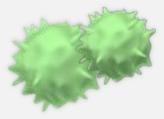
## Plinabulin: Chemotherapy-Induced Neutropenia (CIN) Prevention Indication

# CIN: Unmet Medical Need in Low White Blood Cell Count (depth of Neutropenia) in Week 1 After Chemotherapy

Despite widespread G-CSF use, CIN is #1 reason for FN, ER visits, hospitalization, sepsis, mortality, and chemotherapy dose reduction and disruption¹

### **Short-term**

G-CSF can reduce the duration of severe neutropenia, **but not depth of neutropenia**, which still happens in week 1 after chemo use.



Patients less Protected in week 1 after Chemotherapy with G-CSF

### Long-term

Chemotherapy's anti-cancer effectiveness is linear to its dose exposure. The objective to prevent CIN is to sustain optimum dose of chemo.

Reduction in Relative Dose Intensity (RDI) of Chemotherapy

Reduction in Overall Survival²

#### The Unmet Medical Need: Neutropenia Depth or Low ANC Nadir in Week 1, "Neutropenia Vulnerability Gap" (NVP)

- >75% clinical complications occur in week 1 after chemo, which G-CSF cannot protect;
- The depth of severe neutropenia has not been improved by G-CSF, which Plinabulin can Improve.

Source: 1 Lalami Y, Klastersky J.. Crit. Rev Oncol Hematol. 2017; 120:163-179. 2 Bonadonna G, Valagussa P, Moliterni A et al. Adjuvant cyclophosphamide, methotrexate, and fluorouracil in node-positive breast cancer. N Engl J Med 1995;332:901-906.

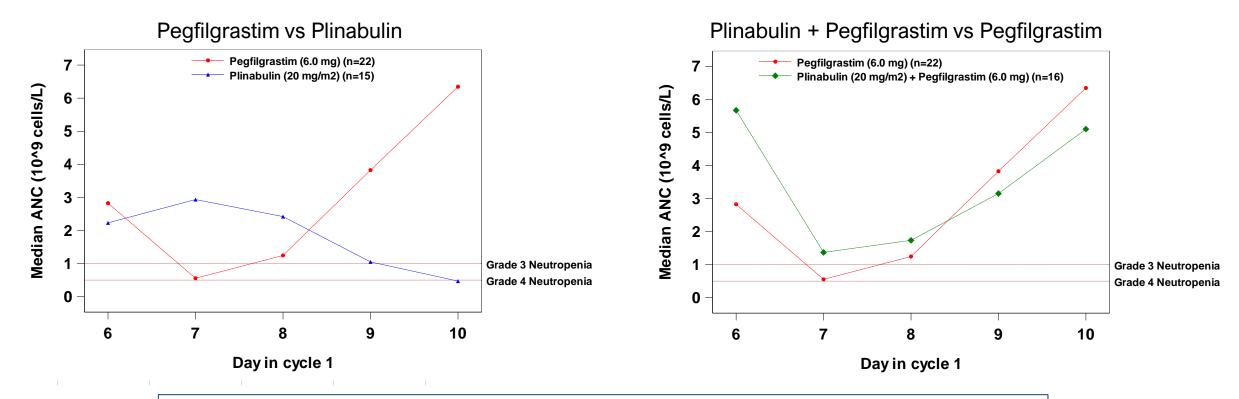
### Six Clinical Studies Confirm Plinabulin's Neutropenia Prevention Benefit Plinabulin enables more use of chemotherapy

	ANC-based Benefit	Clinical Benefit
Study 101 (Phase 2) - Docetaxel, NSCLC	<b>Grade 3/4 Neutropenia (C1D8):</b> Plinabulin (n=90, 10% G-CSF): <b>7%</b> vs. Placebo (n=73, 30% G-CSF): <b>26%,</b> p=0.002	Sepsis: 0% Plinabulin vs. 3.6% Placebo Severe Infection: 0% Plinabulin vs. 3.6% Placebo Docetaxel dose reduction: 6.7% Plinabulin vs. 19.2% Placebo
Study 103 (Phase 3) - Docetaxel, NSCLC	<b>Grade 4 Neutropenia (SN, C1D8):</b> Plinabulin (n=278, 40% G-CSF): <b>5.3%</b> vs. Placebo (n=281, 50% G-CSF): <b>27.8%</b> (p<0.0001) <b>Grade 4 neutropenia in patients used G-CSF (C1D8):</b> Plinabulin + G-CSF (n=111): 7.21% vs. G-CSF (n=141): 38.3% (p<0.0001)	<ul> <li>FN: 1.8% Plinabulin + G-CSF vs. 3.55% G-CSF</li> <li>Infection with SN: 0% Plinabulin + G-CSF vs. 6.38% G-CSF</li> <li>More docetaxel exposure in plinabulin vs. placebo</li> <li>Overall survival (OS) extension, double 2-year, 3-year OS rate in plinabulin vs. placebo</li> </ul>
Study 105 (Phase 2) - Docetaxel, NSCLC	<b>DSN (Cycle 1):</b> Plinabulin (n=14): 0.36 day (non-inferior) vs. Pegfilgrastim (G-CSF): 0.15 day	Bone pain: minimum or no bone pain in plinabulin Global QoL: improvement in Plinabulin vs. G-CSF (p<0.001) Platelet count decrease: 0% Plinabulin vs. 35% grade 1 G-CSF
Study 105 (Phase 3) - Docetaxel, NSCLC, Breast, Prostate Cancer	<b>DSN (Cycle 1):</b> Plinabulin (n=52): 0.77 day (non-inferior) vs. Pegfilgrastim (n=53): 0.25 day	<b>FN:</b> 0% plinabulin vs. 1.9% G-CSF <b>Infection:</b> 7.7% plinabulin vs. 15.1% G-CSF <b>Bone pain:</b> less bone pain plinabulin vs. G-CSF (p=0.01)
Study 106 (Phase 2) - TAC, Breast Cancer	Grade 4 Neutropenia (SN, Cycle 1): Plinabulin + Pegfilgrastim (n=16): 38% vs. Pegfilgrastim (n=22): 59% Median ANC Nadir (Cycle 1, x10^9 cells/L): Plinabulin + Pegfilgrastim (Combo): 1.0 vs. Pegfilgrastim: 0.46	Patients received >85% TAC treatment: 100% combo vs. 82% G-CSF
Study 106 (Phase 3) - TAC, Breast Cancer	<b>Grade 4 Neutropenia (SN, Cycle 1):</b> Combo (n=111): 68.5% vs. Pegfilgrastim (n=110): 86.4%, p=0.0015 <b>Profound Neutropenia (PN, Cycle 1)</b> ^{1, 2} : Combo (n=111): 21.6% vs. Pegfilgrastim (n=110): 46.4%, p=0.0001	FN: 3.6% combo vs. 6.4% G-CSF Duration of FN: 1.3 day combo vs. 2.3 day G-CSF Hospitalization for FN: 3.8 day combo vs. 7.4 day G-CSF Grade 4 Infection: 0.9% combo vs. 3.6% G-CSF



PROTECTIVE-2 (106 Study, Phase 2): Rationale for the Combination

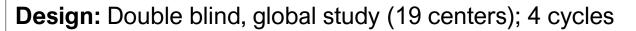


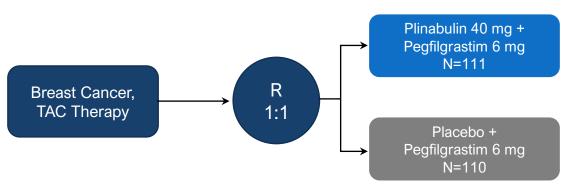


The depth of severe neutropenia has not been improved by G-CSF, which Plinabulin can Improve.

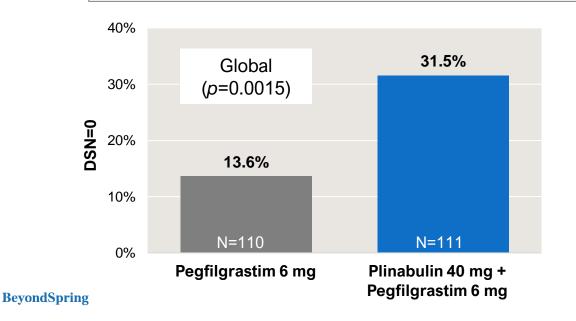


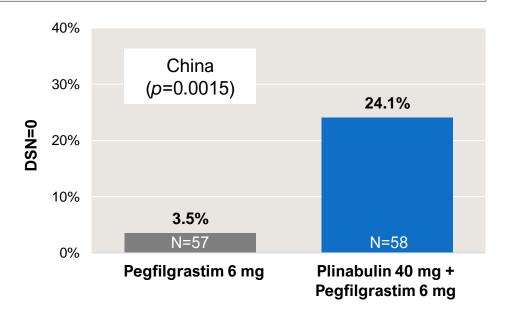
### Met Primary Endpoint in PROTECTIVE-2 (106 Study) Phase 3





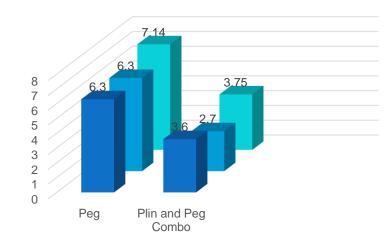
**Results:** Proportion of Patients with NO Grade 4 Neutropenia (or DSN= 0 Days) in Cycle 1





106 Phase 3: Superior Improvement Seen with the Combination in Clinically Meaningful Endpoints Compared to Pegfilgrastim Alone

#### Reduction of Incidence and Severity of FN and Hospitalization

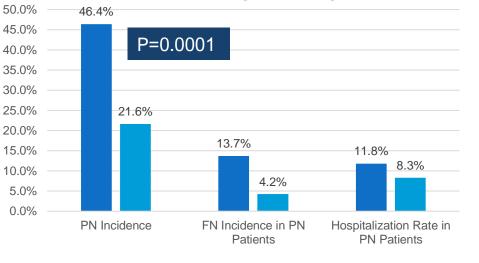


#### **Clinical Endpoints**



#### Plinabulin improves depth of neutropenia

#### **Profound Neutropenia Endpoints**



#### Profound neutropenia (ANC < 0.1) is the key contributor to death from FN, which causes 15% death*.

FN Incidence (%)

Disruption in Chemo Regimen (%)

Duration of Hospitalization (days)

Peg Plin and Peg Combo

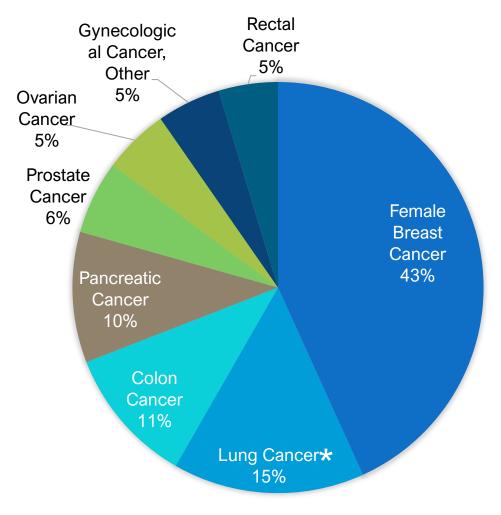


*Moreira-Pinto et al. FN in Patients Undergoing Chemotherapy. Oncol Res Treat , 2020; 43:605-601

June 2021 ASCO Presentations

### Potential for Use Across the Spectrum of Solid Tumors

**G-CSF Administrations: Across Solid Tumor** 



### Plinabulin Differentiated Benefit for CIN Prevention compared with G-CSF

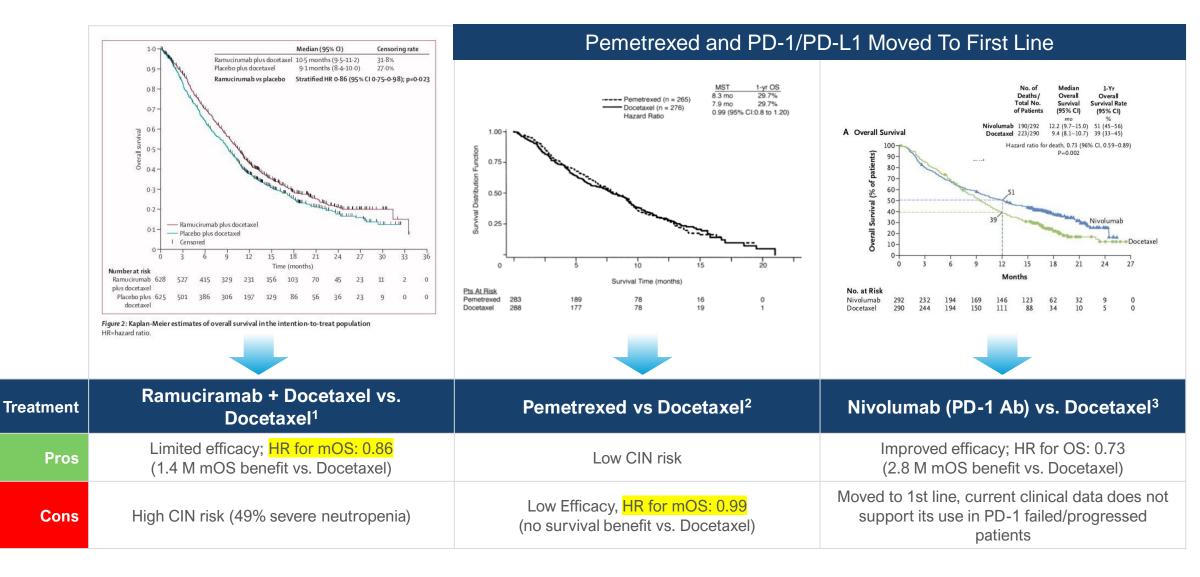
- Improve depth of neutropenia;
- First day dosing;
- Limited bone pain and limited thrombocytopenia;
- Potential in combination with PD-1/PD-L1 inhibitors and chemotherapy regimen to prevent CIN and increase anti-cancer benefit



# 2nd/3rd Line NSCLC Indication



### 2L/3L NSCLC, no Driver Mutation: Docetaxel as Standard of Care (SOC) With PD-1/PD-L1 moving to 1L, Docetaxel remains SOC for 2L/3L NSCLC





¹Lancet 384 (9944): 665-673 (2014). ² JCO 22(9): 1589-1597 (2004)。 ³ NEJM 373: 1627-1639 (2015)。

### DUBLIN-3 (Study 103) Trial Design

#### Docetaxel + Plinabulin vs. Docetaxel + Placebo in Patients with EGFR Wild-Type NSCLC

#### **Study Plan:**

- Global, randomized, single-blinded (patients only)
- Stratified by region (Asia/non-Asia), prior line(2L or 3L), ECOG (0-1/2), Prior PD-1/PD-L1 (yes/no)
- 58 sites across U.S., China and Australia
- CRO: ICON; LabCorp central lab for PK & ANC

#### **End Points:**

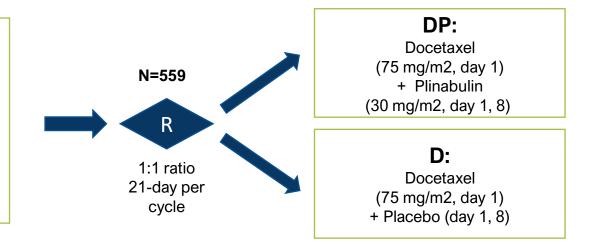
Primary Endpoint: OS

#### Secondary Endpoints:

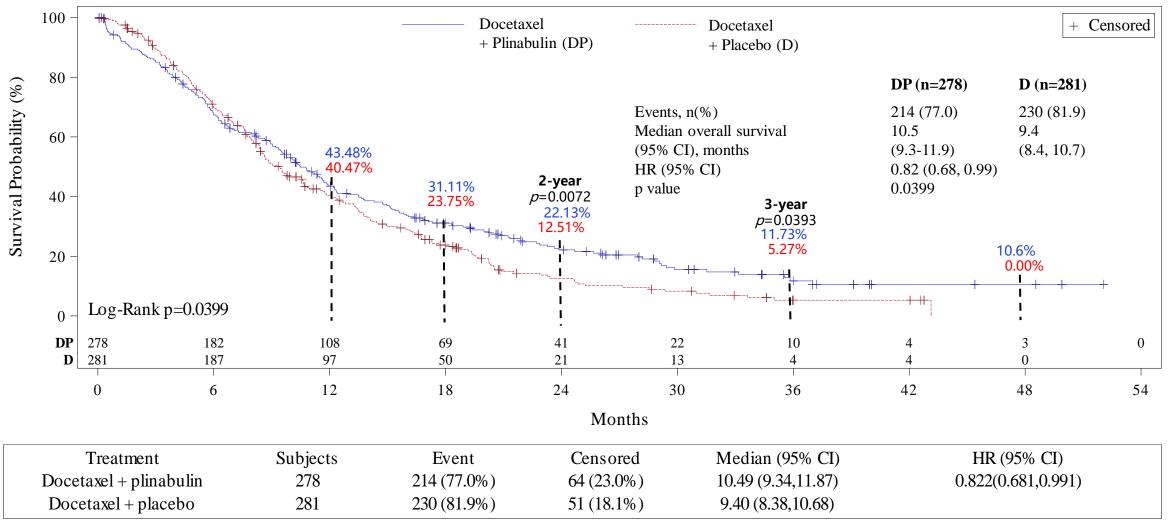
- ORR, PFS
- Percent of patients without severe neutropenia on Day 8 of cycle 1
- Month 24 and 36 OS rate
- DoR
- Q-TWiST (QoL)
- Proportion of patients who received docetaxel >8 cycles, >10 cycles and >12 cycles

#### Inclusion Criteria:

- Non-squamous or squamous NSCLC
- Stage IIIb/IV
- ECOG ≤ 2
- Progression during or after treatment with one or two treatment regimens containing a platinum
- Must have at least one measurable lung lesion
- Prior checkpoint inhibitor therapy allowed

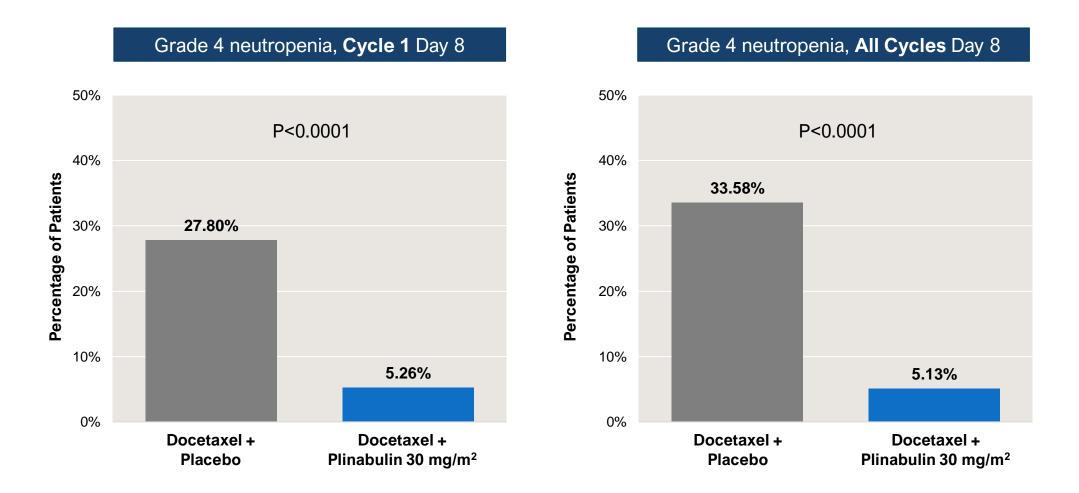


### Met Primary Endpoint of OS; Significantly Improve 2-, 3-year OS Rate



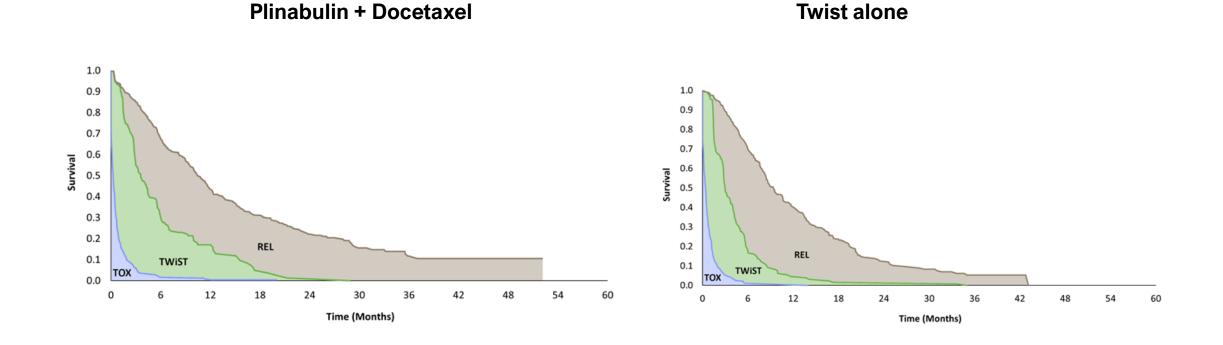
### Significant Reduction in Grade 4 Neutropenia

Cycle 1 Day 8 and All Cycles Day 8



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#### Significant Improvement in Quality of Life Benefit - Q-TWiST (Quality-Adjusted Time Without Symptoms of Disease and Toxicity)



_	Q-TWiST Gain	Relative Gain to OS Restricted Mean	Relative Gain to Q-TWiST	_	
	1.93	15.11%	18.43%		Clinically Meaningful
-		(1.72% to 30.63%)	(2.07% to 37.20%)		Improvement of >18%
		p-value=0.0396	p-value=0.0393		in Q-TWiST.



Potential Benefit of Plinabulin + Docetaxel in 2L/3L NSCLC, No Driver Mutation

With PD-1/PD-L1 moving to 1st line NSCLC, plinabulin + docetaxel could be the potential choice.

### Benefits compared to SOC Docetaxel:

### **Efficacy:**

- Significant survival benefit in ITT (OS HR=0.82), with more pronounced survival benefit in non-squamous NSCLC (OS HR=0.76);
- Significant neutropenia reduction;
- Significant QoL benefit.

### Safety:

 The regimen is well tolerated. Side effects include transient hypertension which resolves in 4-6 hours, nausea, vomiting and GI side effects.

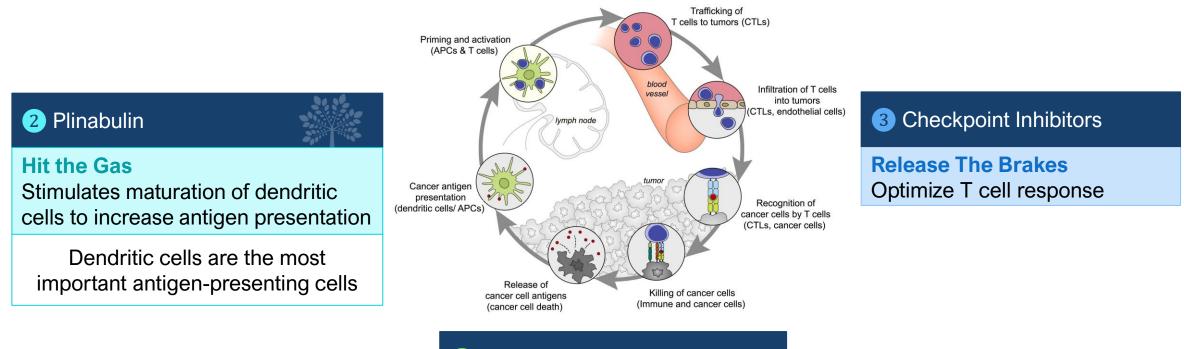


# Immuno-Oncology Combinations



### Mechanism with Broad Applications

Plinabulin Induces Dendritic Cell Maturation (the most potent APC), a Key Step in Initiating Anti-Cancer Durable Response



Radiation/Chemotherapy

**Release Tumor antigens** For more potent anti-cancer effect

1 + 2 + 3 = Optimal Immuno-Oncology Response



### Clinical POC in Triple Plinabulin IO Combination Regimen

Indication / Target	Program	Preclinical	Phase 1	Phase 2	Phase 3	Collaborator
7 cancers (PD-1/PD-L1 progressed)	Plinabulin + PD-1/PD-L1 + Radiation					THE UNIVERSITY OF TEXAS MDAnderson Cancer Center
NSCLC (2L/3L, PD-1/PD-L1 progressed)	Plinabulin + PD-1 + Docetaxel					MERCK

MD Anderson Phase 1 study clinical data and biomarker studies had been submitted for presentation at SITC conference in November 2023.



# Plinabulin as Potential Add-on Therapy to Current I/O Regimens to Address Severe Unmet Medical Needs

PD-1/PD-L1 Inhibitors - \$30B global annual sales

Current Severe Unmet Medical Needs

2/3rd Line: PD-1/PD-L1 resistant patients

**1**st **Line**: PD-1/PD-L1 + chemo double efficacy of PD-1, but with CIN risk

"Cold" Tumor: PD-1/PD-L1 non-responsive tumor

Plinabulin: APC Inducer with easy administration Potential to greatly expand the addressable market

#### Plinabulin Clinical Development

**Re-sensitize:** Plinabulin + PD-1/PD-L1 + chemo/radiation

Increase chemo dose and IO combo efficacy: Plinabulin + PD-1/PD-L1 + chemo

**Turn "cold" into "hot" responding tumor:** Plinabulin + PD-1/PD-L1 + chemo/radiation

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## **Regulatory** Pathway



### **Regulatory Pathway**

#### **Near-Term**

CIN: Ongoing discussion with NMPA in China and FDA in the US;

NSCLC: Ongoing preparation to file for NDA approval in China and the US.

#### Long-Term

Seek regulatory clarity and additional approvals in countries around the world.



### Investment Highlights

	Plinabulin: Safety & Efficacy	Lead Asset Plinabulin: >700 cancer patients treated with good tolerability; Positive Phase 3 data in 2 indications
$\bigotimes$	Plinabulin Potential	Plinabulin: Dual Benefit in anti-cancer and prevention of CIN; Potential in re-sensitizing in PD-1/PD-L1 progressed patients in multiple cancers
	SEED: Novel TPD Platform & Pipeline	SEED: 7 Disclosed Pipeline Assets with 1 expected to enter IND in 2024
a contra	Premier Partnerships	SEED: Investment and R&D Collaboration from Eli Lilly
	Intellectual Property	Strong IP and technology protection





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