Next Generation Targeted Therapy for Cancer

Pipeline & Business Update | January 2022

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eFFECTOR

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Pipeline and Business Update Conference Call

Participants

- Steve Worland, Ph.D., President & CEO
- Premal Patel, M.D., Ph.D., Chief Medical Officer
- Mike Byrnes, Chief Financial Officer
- Alana McNulty, Chief Business Officer

Agenda

- Introductory Remarks and Overview
- Pipeline Update
- Business Update
- Closing Remarks
- Q&A

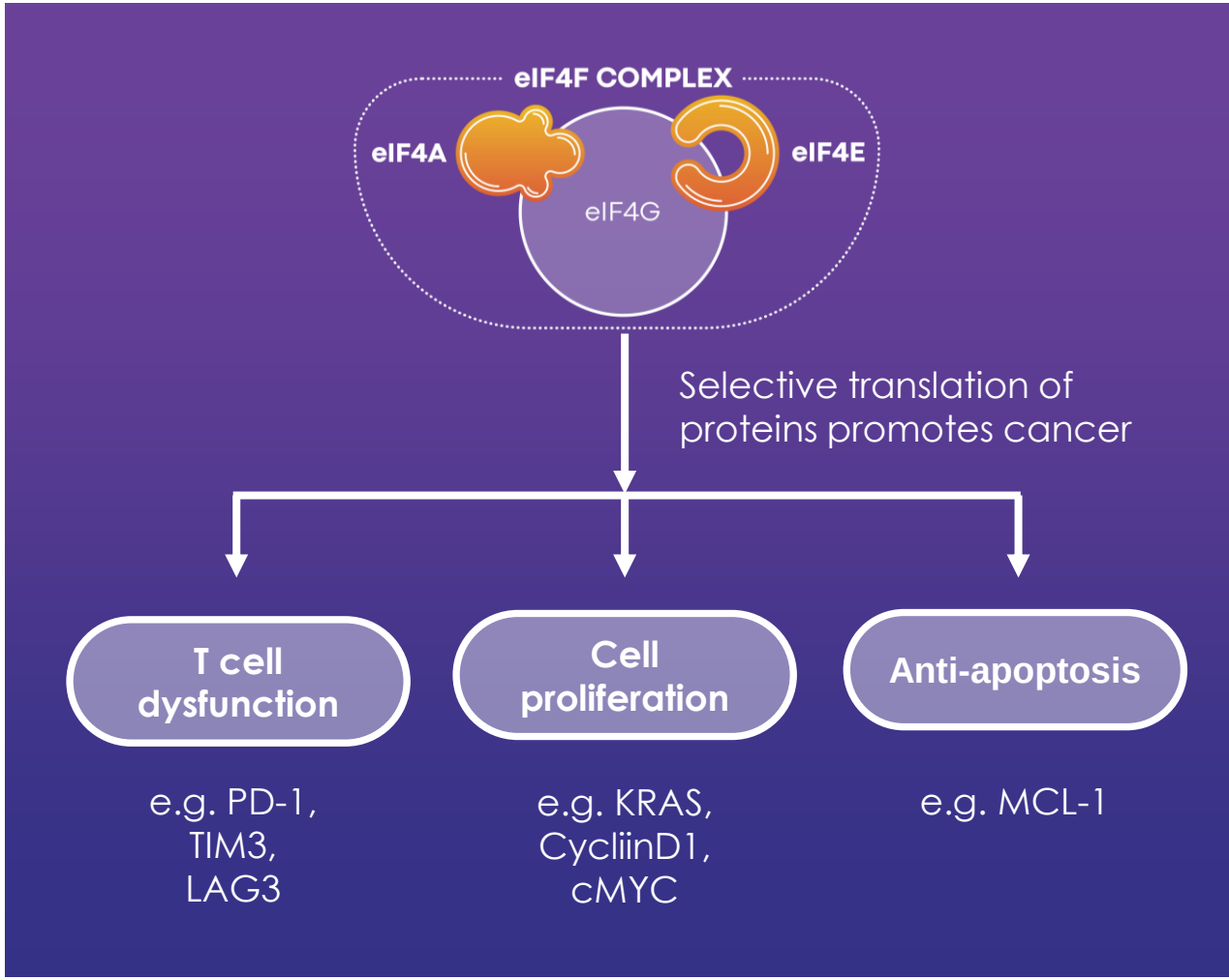
Major Unmet Need in Oncology: Therapeutic Strategies Designed to Outsmart Cancer

Cancer cells evolve rapidly, resulting in rapid proliferation, anti-apoptosis, and immune evasion

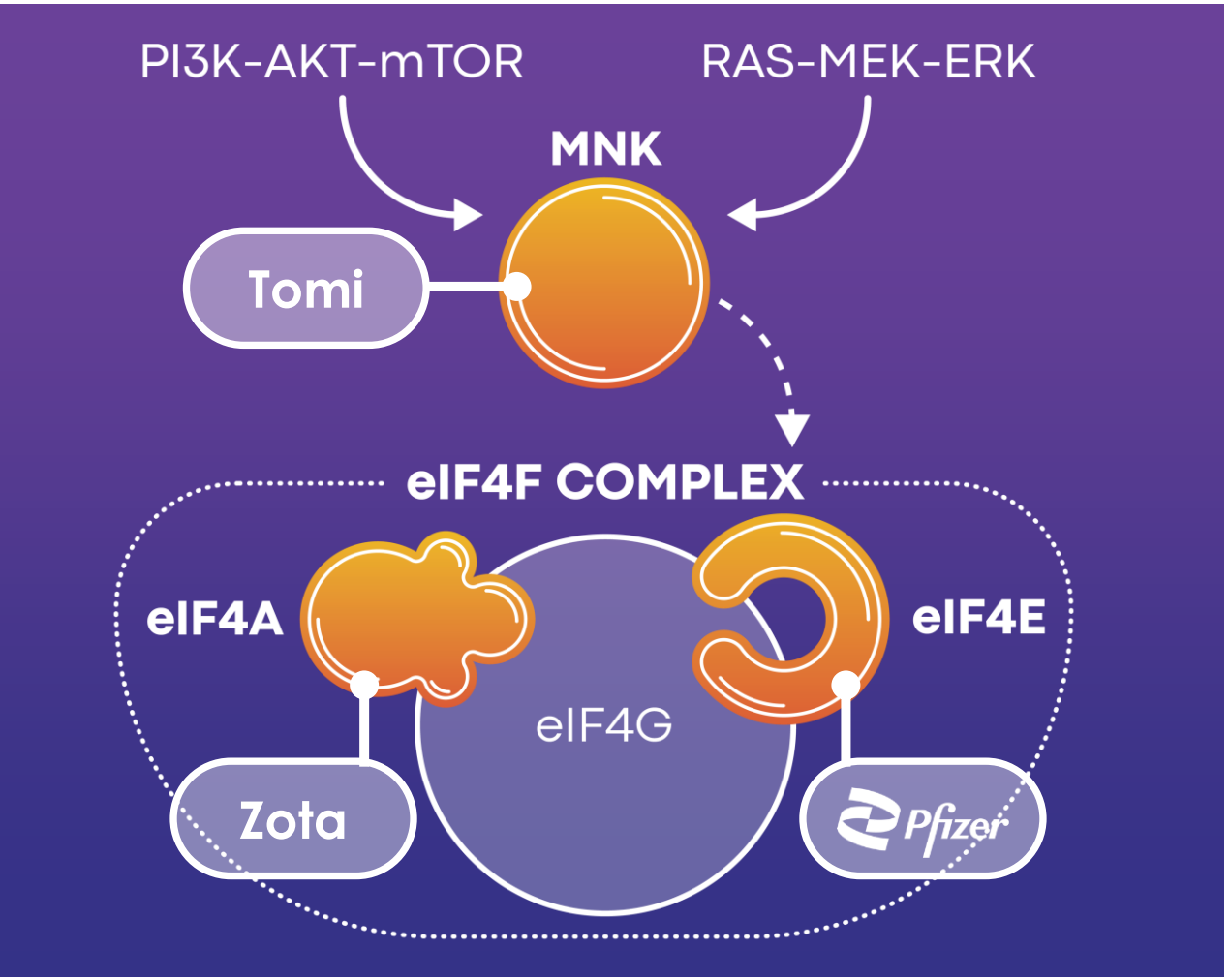
Improved cancer treatments require:

- Shutting down multiple drivers of cancer simultaneously
- Reactivating the immune system to eliminate tumors
- Preventing resistance to existing treatments
  - Delay need for toxic chemotherapy

Inhibiting eIF4F blocks many hallmarks of cancer



STRI Platform Overview: Targeting Key Node in Cancer



- Novel targets located at a key node where two important cancer pathways – RAS-MEK and PI3K-AKT – converge and drive production of multiple disease-driving proteins
- Multiple potential advantages of inhibiting targets related to the eIF4F complex
  - ✓ Simultaneously decrease production of multiple cancer-driving proteins before they are synthesized
  - ✓ Strong combination potential due to inhibition of key proteins expressed in resistance to other single oncoprotein-targeted drugs
- Invented 3 novel product candidates with strong intellectual property

Overview of Today's Updates

- **Enhanced pipeline strategy for tomivosertib**
  - Phase 2b KICKSTART trial of tomivosertib in NSCLC amended to include almost all patients with PD-L1 status ≥1%, representing **$9 billion market opportunity**
    - **Enrollment ongoing:** cohort of patients with PD-L1 ≥50% receiving tomi or placebo as frontline in combo with pembro
    - **Now open to enroll:** cohort of patients with PD-L1 ≥1% receiving tomi or placebo combined with pembro-based frontline maintenance* after completing platinum chemo
    - **Discontinuing:** cohort of patients with PD-L1 ≥50% receiving tomi or placebo combined with pembro as frontline extension after progression on pembro

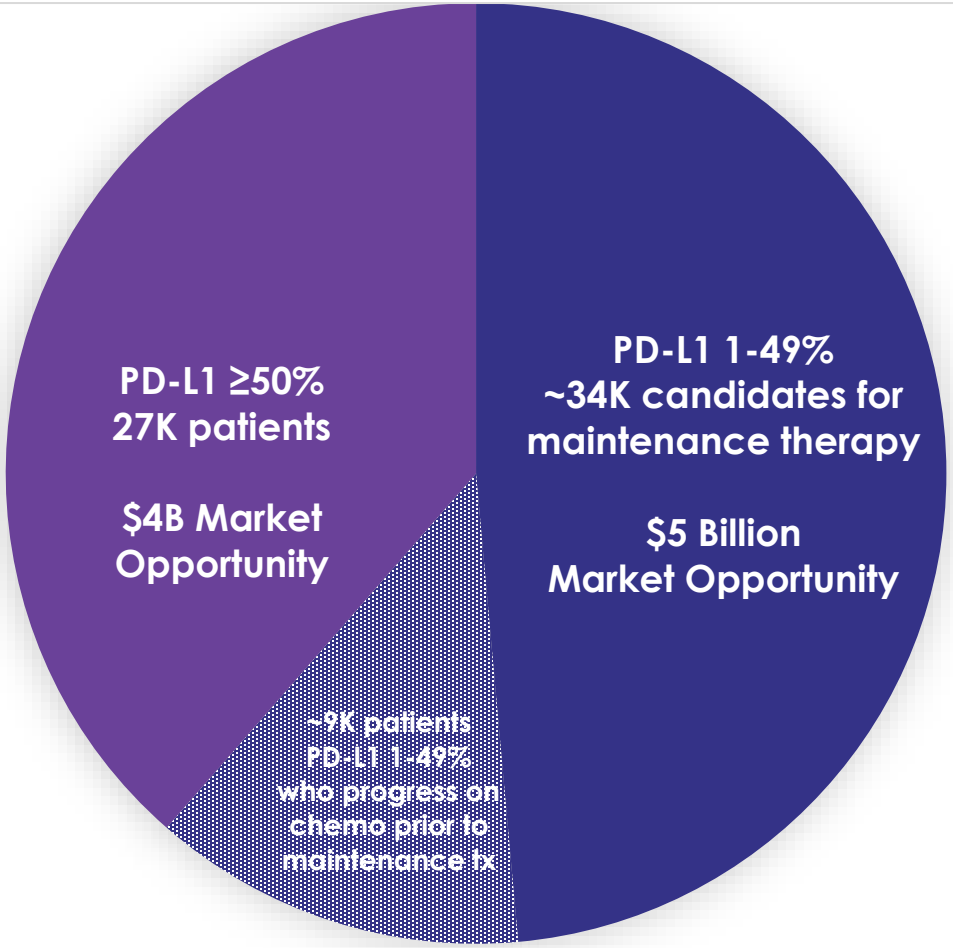
- **First patient dosed in zotatifin Phase 2 expansion cohorts in ER+ metastatic breast cancer and KRAS mutant NSCLC**

- **Company enters into investment agreement with Lincoln Park Capital for up to $50 million over 36 months**

*frontline maintenance defined as pembro for squamous and pembro+pemetrexed for non-squamous

$9 Billion Market Opportunity for Tomivosertib

SOC is anti-PD-(L)1 monotherapy



SOC is chemo + anti-PD-(L)1 followed by anti-PD-(L)1 maintenance

Addressing the Large Majority of 70,000 U.S. Patients with Metastatic NSCLC

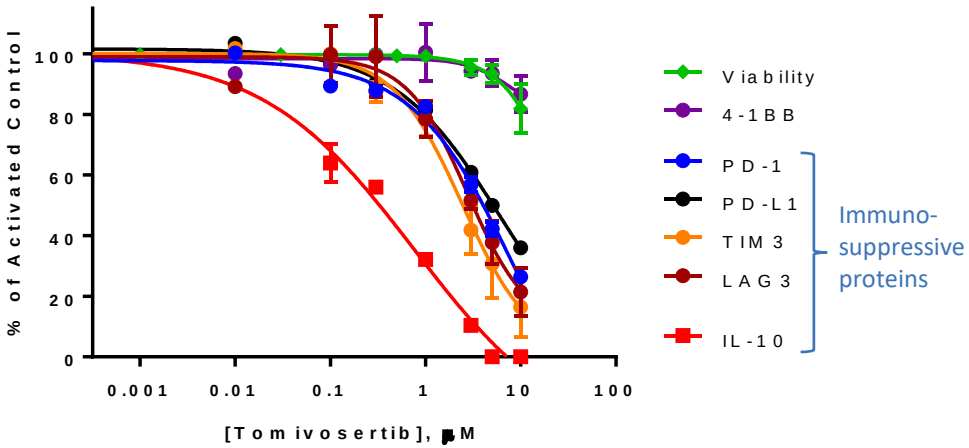
Pipeline Update

Program (Target)	Discovery	Preclinical	Phase 1	Phase 2a	Phase 2b	Phase 3	Global Rights	Anticipated Milestones
Tomivosertib (MNKi)	NEW COHORT: NSCLC – 1L in combo with pembro and platinum chemotherapy						eFFECTOR	H1 2023: Topline data readout
	NSCLC – 1L in combo with pembro							H1 2023: Topline data readout
	DISCONTINUED: NSCLC – 1L extension in combo with pembro							Discontinued
	mBC - SU2C combination trial*							PD biomarkers
Zotatifin (eIF4Ai)	Solid Tumors RTK BC (DOSED) and KRAS NSCLC (SCREENING)						eFFECTOR	H1 2022: Initial ORR data readout
	Anti-SARS-CoV-2 Dose Escalation							
eIF4Ei	Solid Tumors						Pfizer *eFFECTOR Option to Co-Promote/ Profit Share in US*	

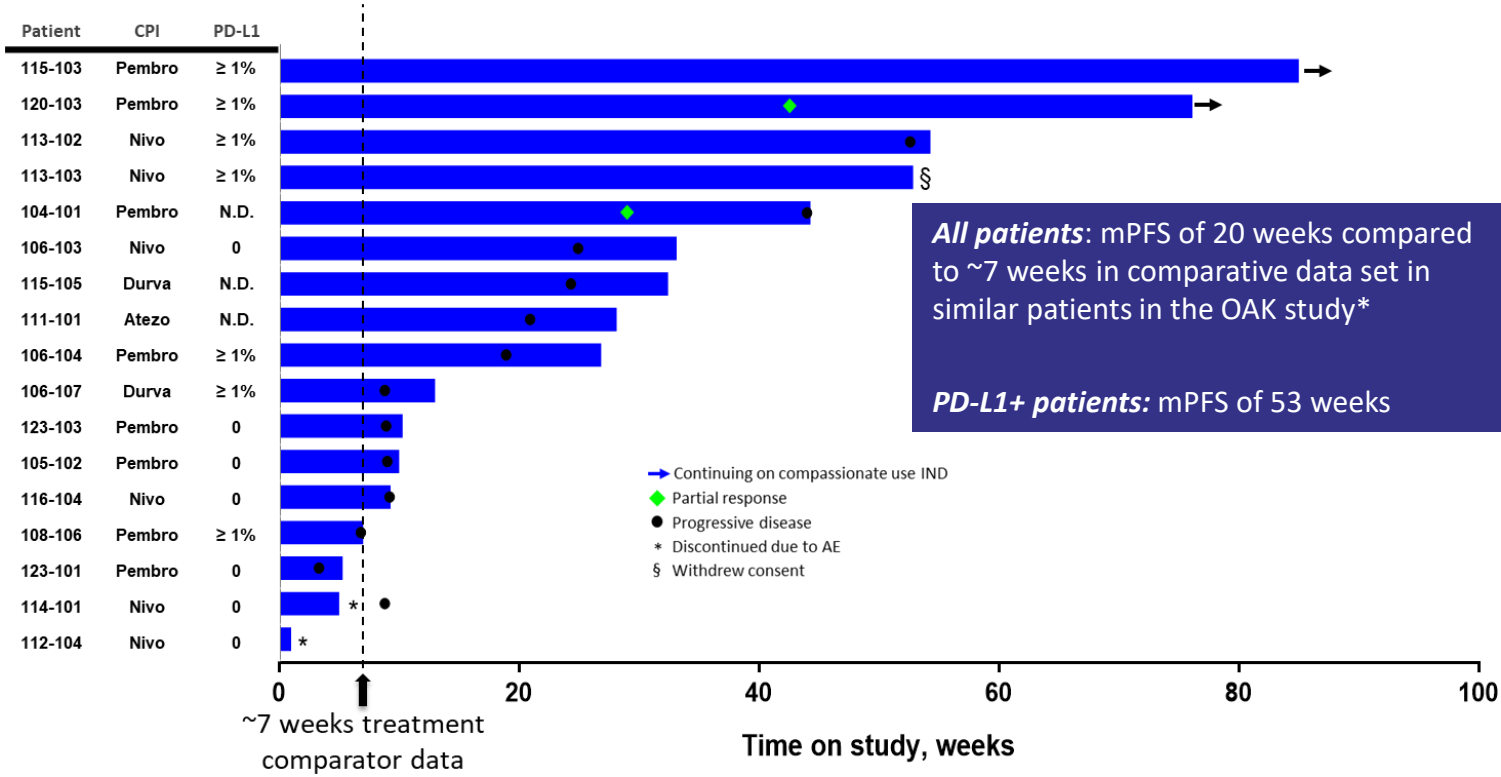
*Led by McGill University; funded by Stand Up to Cancer (SU2C) grant

Tomivosertib Improved T Cell Function Preclinically and Extended PFS in Phase 2A Trial

Preclinical data:



Clinical data:



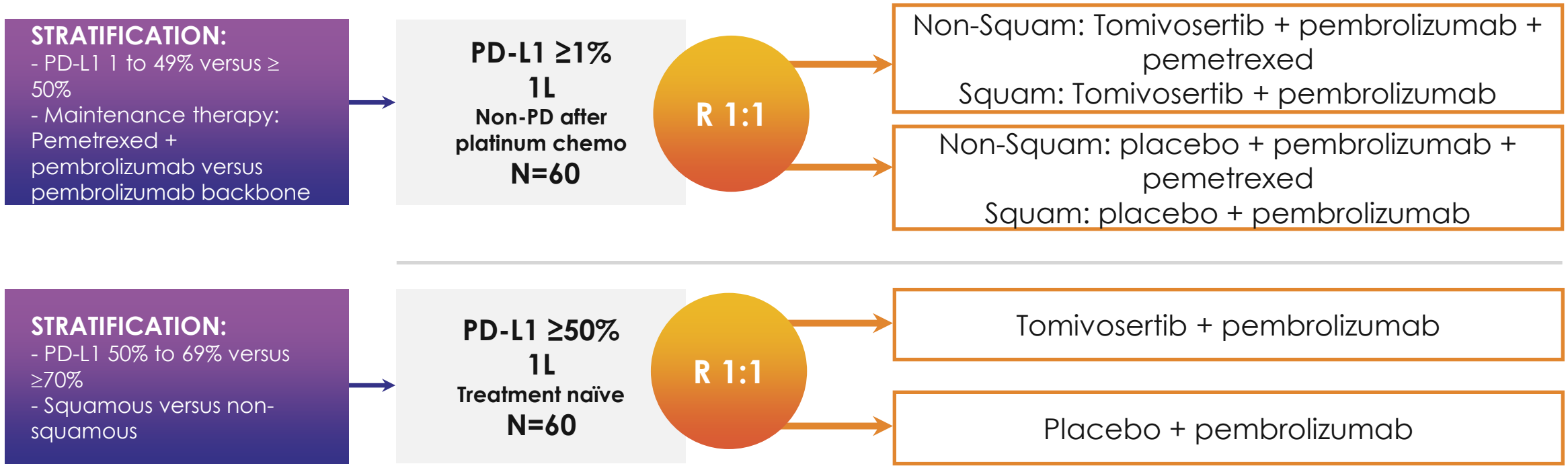
All patients: mPFS of 20 weeks compared to ~7 weeks in comparative data set in similar patients in the OAK study*

PD-L1+ patients: mPFS of 53 weeks

**FOR ILLUSTRATIVE PURPOSES ONLY: Treatment Beyond Progression (TBP) cohort; Differences exist between trial designs and subject characteristics, and caution should be exercised when comparing data across trials*

Data through study completion in September 2020 Patients 115-103 and 120-103 continued treatment past study completion on Single Patient Expanded Access INDs

KICKSTART: Randomized, Double-blind, Phase 2b Trial Updated to Include 1L NSCLC Patients PD-L1 ≥1%



- Progression Free Survival (PFS) is primary endpoint
- Trial design enriched for PD-L1+ patients who received the most benefit in the P2a trial

- **Topline data readout from each cohort anticipated 1H 2023**

Zotatifin Ph1/2 Update

Part 1: Ph 1 - dose escalation

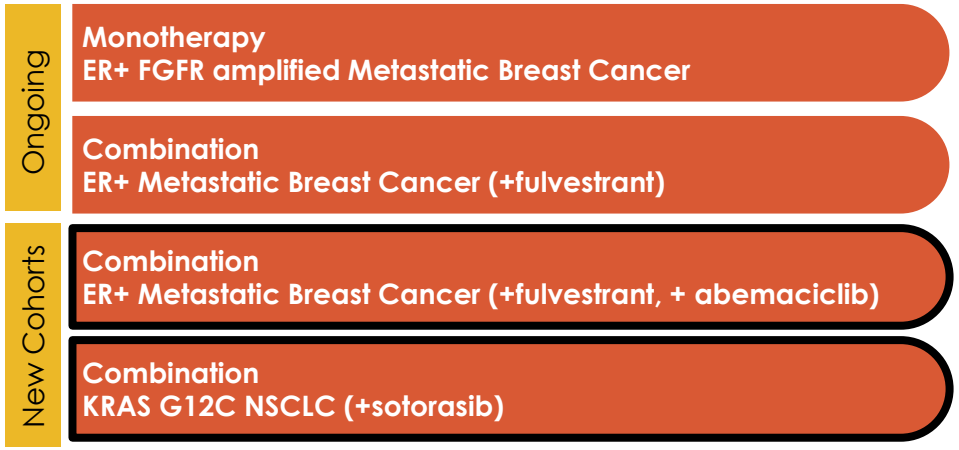
Key findings in Part 1: 1st in human study

-RP2D 0.07 mg/Kg IV weekly,
2 weeks on / 1 week off

-Generally well tolerated - DLT: anemia.
AEs were manageable, reversible

-Target exposure was achieved
half-life in blood was ~4 days

Part 2: Ph 2a - dose expansion cohorts



2022 Pipeline

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	1L NSCLC PD-L1 ≥50%– 1L in combo with pembro							H1 2023: Topline data readout
	mBC - SU2C combination trial*							PD biomarkers
Zotatifin (eIF4Ai)	Solid Tumors ER+ BC and KRAS NSCLC						eFFECTOR	H1 2022: Initial ORR data readout
	Anti-SARS-CoV-2 Dose Escalation							
eIF4Ei	Solid Tumors						Pfizer *eFFECTOR Option to Co-Promote/ Profit Share in US*	

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$50 Million Committed Investment with Lincoln Park Capital

Summary of Terms

- Up to $50,000,000 can be accessed at eFFECTOR's sole discretion
- Initial draw of $3,000,000 upon effectiveness of S-1
- Facility has term of 36 months

Financial Strength

- Current cash position of eFFECTOR anticipated to fund all programs, including through top-line data for both cohorts in KICKSTART trial
- Committed investment aligns with long-term strategy for value creation

Multiple Upcoming Clinical Milestones

Anticipated Milestones		2022		2023		2024
		1H	2H	1H	2H	
Tomivosertib	Top line data from P2b NSCLC frontline with pembro			●		
	Top line data from P2b NSCLC frontline maintenance post platinum chemotherapy with pembro			●		
	Initiate P3 in NSCLC					●
Zotatifin	Initial ORR data from P2a expansion cohorts	●				
	Top line data from P2a expansion cohorts		●			
	Initiate randomized P2b combination studies				●	
	Initiate potential single arm P3 registration study				●	

Q&A

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