Investor Call

Preliminary Phase 1 Dose-Escalation Data for VIP236 and Pipeline Update

Monday, April 8, 2024

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Welcome and Introductions

Ahmed Hamdy, MD
Chief Executive Officer, Vincerx Pharma, Inc.

On Today's Call

Ahmed Hamdy, MD
Chief Executive Officer
Vincerx Pharma, Inc.

Uma Borate, MD, MBBS
Clinical Associate Professor
Division of Hematology
Ohio State University
Comprehensive Cancer Center
Arthur G. James Cancer Hospital and
Richard J. Solove Research Institute

Vivek Subbiah, MD
Chief of Early-Phase Drug Development
Sarah Cannon Research Institute

Today's Presentation

Topic	*Presenter*
Company Overview	Dr. Ahmed Hamdy
Evolution of Camptothecins	Dr. Vivek Subbiah
Preliminary Phase 1 Dose-Escalation Data for VIP236	Dr. Ahmed Hamdy
Discussion	Dr. Vivek Subbiah Dr. Ahmed Hamdy
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Q&A	

OUR VISION

WE ASPIRE TO CONQUER CANCER

by addressing the unmet medical needs of patients
with paradigm-shifting therapeutics

A STRONG MANAGEMENT TEAM WITH A PROVEN TRACK RECORD OF CLINICAL AND REGULATORY SUCCESS

VersAptx™ NEXT-GENERATION PLATFORM TO BIOCONJUGATE UNIQUE ADCs, SMDCs AND DELIVER ON THE PROMISE OF DRUG CONJUGATES

R&D STRATEGY STREAMLINED RESEARCH AND DEVELOPMENT FROM PRECLINICAL TO CLINICAL PROOF-OF-CONCEPT

DIVERSE PIPELINE WITH MULTIPLE CLINICAL FIRST-IN- AND BEST-IN-CLASS OPPORTUNITIES

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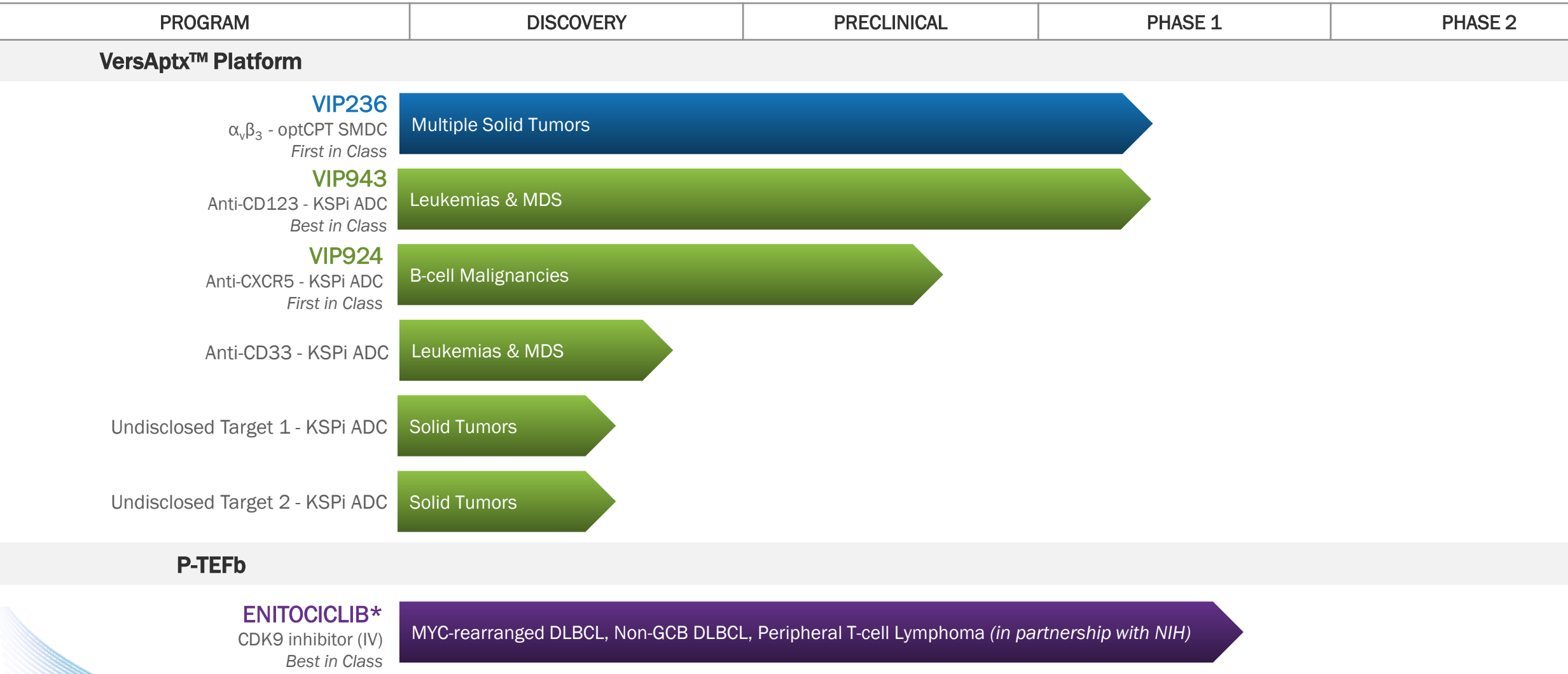
Our Pipeline



*Also known as VIP152.

ADC, antibody-drug conjugate; CDK, cyclin-dependent kinase; DLBCL, diffuse large B-cell Lymphoma; GCB, germinal center B-cell; IV, intravenous; KSPi, kinesin spindle protein inhibitor; MDS, myelodysplastic syndrome; optCPT, optimized camptothecin; P-TEFb, positive transcription elongation factor B; SMDC, small molecule drug conjugate.

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Validated Efficacy: Unveiling Camptothecins' Potency

EFFICACY ACROSS A BROAD RANGE OF SOLID TUMORS IN MONOTHERAPY AND IN COMBINATION

First Generation | **Second Generation** | **Third Generation**

Marketed Camptothecins (CPTs)

Chemotherapies

CAMPTOSAR® irinotecan HCl injection

HYCAMTIN® (topotecan HCl) for injection

onivyde® (irinotecan liposome injection)

Antibody Drug Conjugates

TRODELVY™ sacituzumab govitecan-hziy 180 mg for injection

ENHERTU® trastuzumab deruxtecan

VIP236

First Generation Challenges

- Rapid release and free circulating payload leads to serious toxicities
  - Bone marrow suppression (e.g., neutropenia, thrombocytopenia, anemia).
  - Life-threatening diarrhea
  - Pulmonary inflammation
- Resistance formation for camptothecins limits therapeutic success

Second Generation Challenges

- Antibody-targeted CPTs require the presence of the antibody target on the tumor to work—narrows cancer indications
- Still have toxicities associated with 1st generation CPTs and have added antibody-specific toxicity (eg, infusion-related reactions and cardiac toxicity)

Third Generation Solution

- VIP236 is a small molecule drug conjugate consisting of an $\alpha_V\beta_3$ integrin binder linked to an optimized CPT payload
- $\alpha_V\beta_3$ is highly expressed across a broad range of metastatic tumors with low expression in healthy tissue
- VIP236's optimized CPT payload was designed to "tune out" the life-threatening diarrhea and drug transporter liabilities present in 1st and 2nd generation camptothecins
- Preclinical studies show targeting of optimized CPT with VIP236 increased exposure in the tumor >10-fold over plasma increasing the therapeutic window

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Phase 1 Dose-Escalation Study in Patients With Solid Tumors

VNC-236-101

PRIMARY ENDPOINTS

- Safety
- Tolerability

SECONDARY ENDPOINTS

- Disease control rate
- PFS
- PK

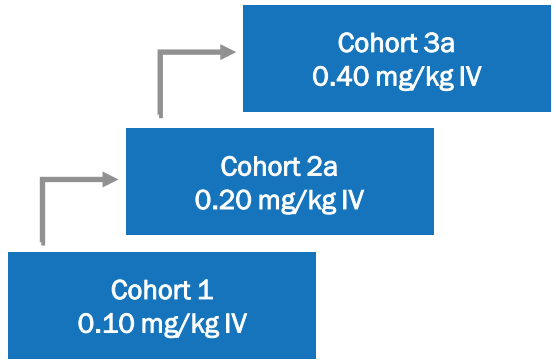
Original / Amendment 1

Amendment 2

Amendment 3 / Expansion cohorts

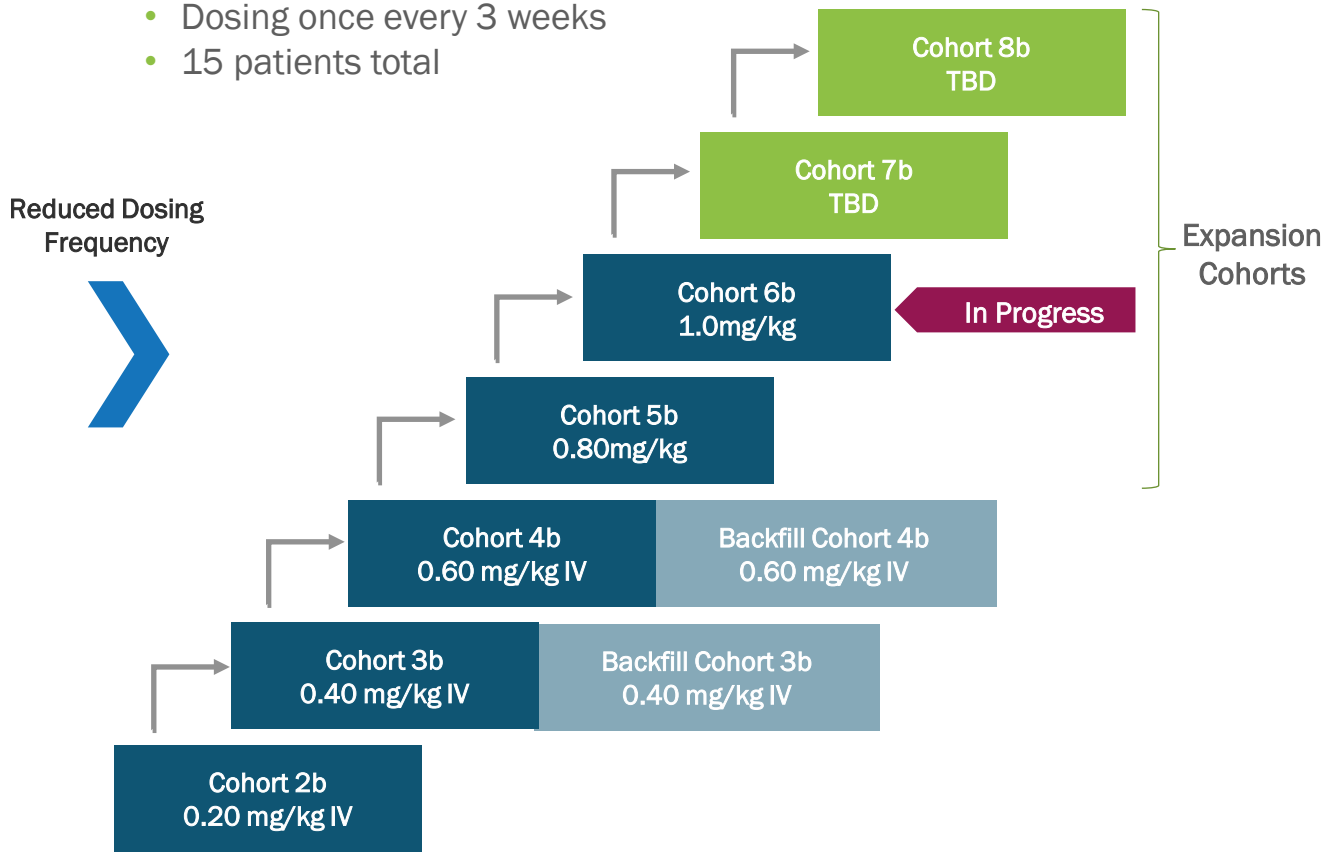
ORIGINAL DOSING SCHEDULE

- Dosing 2 days on/5 days off
- 5 Patients total



CURRENT DOSING SCHEDULE

- Dosing once every 3 weeks
- 15 patients total



All Comers Solid Tumor Study With Heavily Pretreated Patients

	Q3W (N=15)	
M F	8 7	
Age in years median [range]	58 [35-80]	
Prior Therapy ≤ 2 ≥ 3	N=14 4 (29%) 10 (66.7%)	
Histology	• Adenoid carcinoma, n=1 • Colorectal adenocarcinoma, n=5 • Hemangioendothelioma, n=1 • Malignant uveal melanoma, n=1 • NSCLC, n=1 • Ovarian, n=1	• Pleiomorphic Liposarcoma, n=1 • Retroperitoneal leiomyosarcoma, n=1 • SCLC, n=1 • Spindle cell breast cancer, n=1 • Uterine carcinoma, n=1

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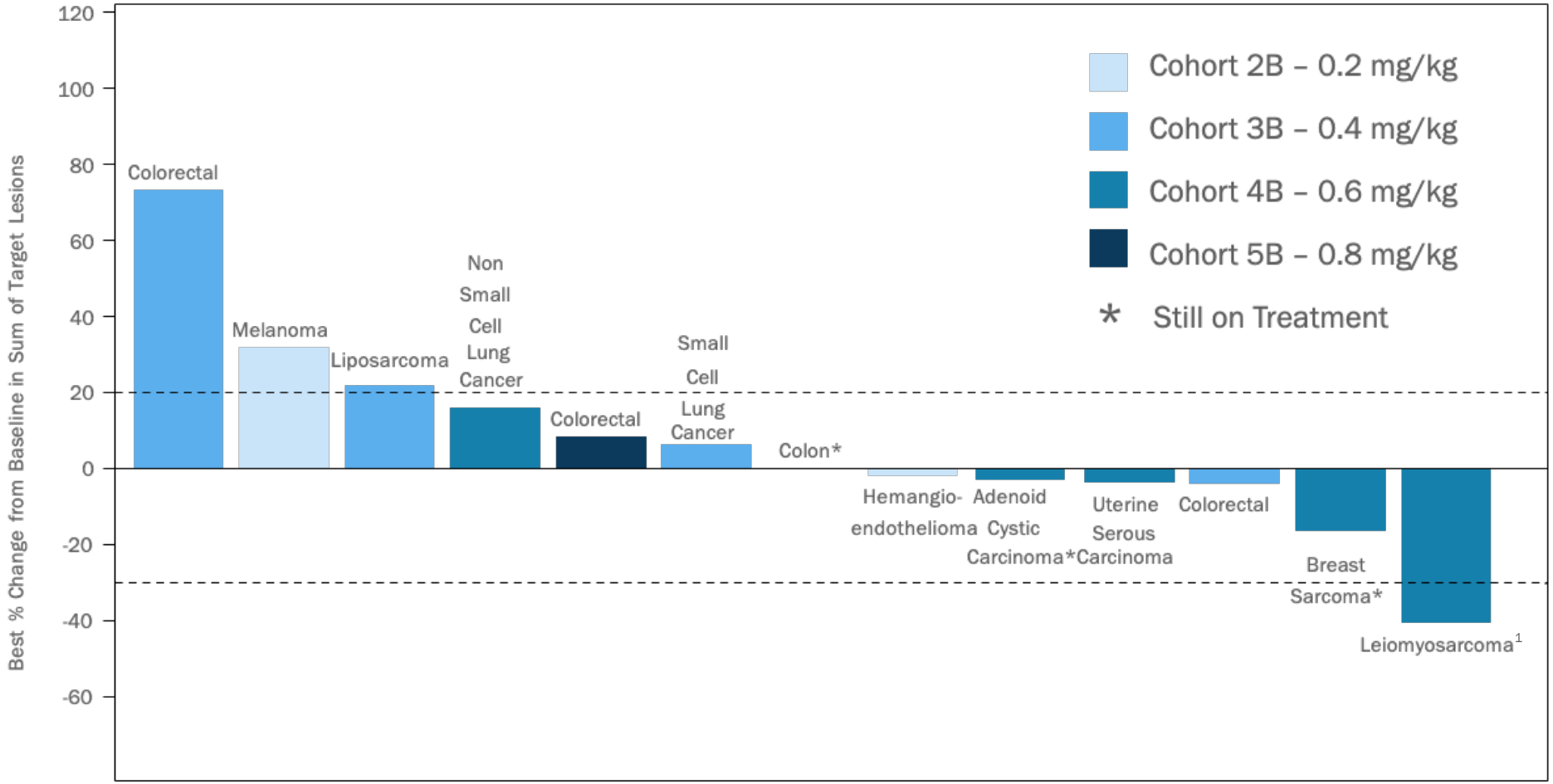
Positive Signs of Clinical Activity with Tumor Reduction Starting at the Third Dosing Level With Q3W Schedule

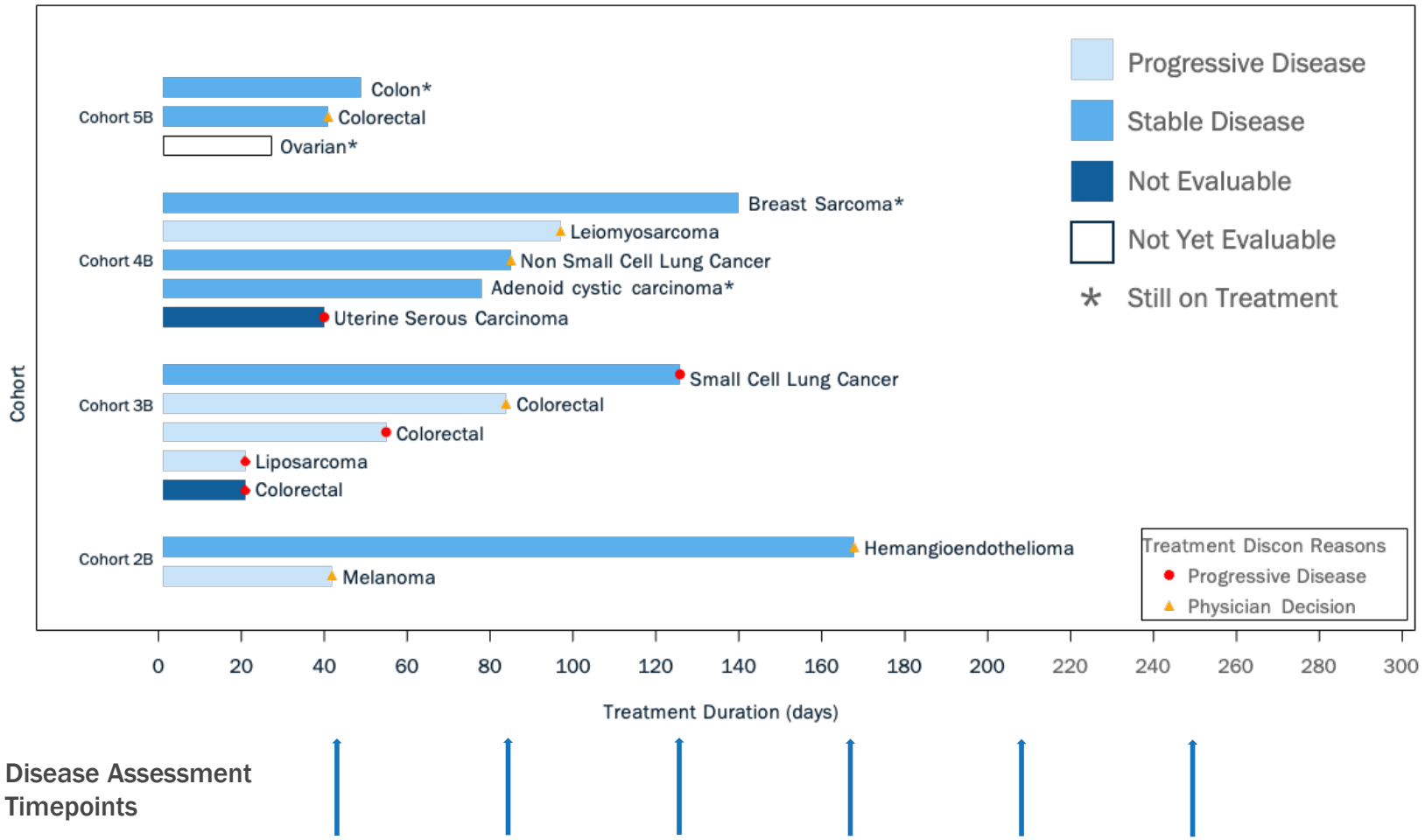
N=13



[1]The leiomyosarcoma patient had a 41% decrease in two target lesions, but a new 2cm lesion was detected at first scan
*=Still on treatment
Data taken from data cut – 25MAR 24
Unaudited data subject to change

Durable Disease Control Across Multiple Tumor Types With Q3W Schedule

21-DAY CYCLES WITH FIRST DISEASE ASSESSMENT AT THE END OF CYCLE 2



Data taken from data cut – 25MAR 24
Unaudited data subject to change

Differentiated and Favorable Safety With Q3W Schedule

DRUG-RELATED ADVERSE EVENTS

Drug-related AEs	Q3W (n=15)			
Preferred Term	G1	G2	G3	G4
Alopecia	5 (33.3%)	2 (13.3%)	0	0
White blood cell count decrease	0	1 (6.7%)	2 (13.3%)	1 (6.7%)
Fatigue	3 (20%)	1 (6.7%)	0	0
Nausea	5 (33.3%)	0	0	0
Diarrhea	3 (20%)	1 (6.7%)	0	0
Neutropenia	0	0	1 (6.7%)	2 (13.3%)
Vomiting	1 (6.7%)	3 (20%)	0	0
Anemia	0	1 (6.7%)	1 (6.7%)	0
Thrombocytopenia	0	1 (6.7%)	1 (6.7%)	0
Lymphocyte count decrease	0	1 (6.7%)	0	0

NO PATIENTS DISCONTINUED DUE TO AN ADVERSE EVENT

Data taken from data cut – 25MAR 24
Unaudited data subject to change

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Discussion

Ahmed Hamdy, MD
Chief Executive Officer, Vincerx Pharma, Inc.

Vivek Subbiah, MD
Chief of Early-Phase Drug Development at Sarah Cannon Research Institute

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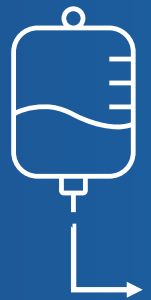
Current AML Landscape

GROWING INCIDENCE WITH
75,000 PATIENTS DIAGNOSED GLOBALLY IN 2022



STANDARD OF CARE IS CHEMOTHERAPY

WITH ONLY A SUBSET OF PATIENTS RECEIVING TARGETED AGENTS

MAJORITY OF PATIENTS LACK EFFECTIVE TREATMENTS

- Poor prognosis with CD123 expression
- Difficult to treat mutations, including TP53
- Older patients
- Secondary and therapy-related AML
- Relapsed refractory patients

GlobalData (2023): Acute Myeloid Leukemia (AML): Opportunity Assessment and Forecast (GDHCOA023)

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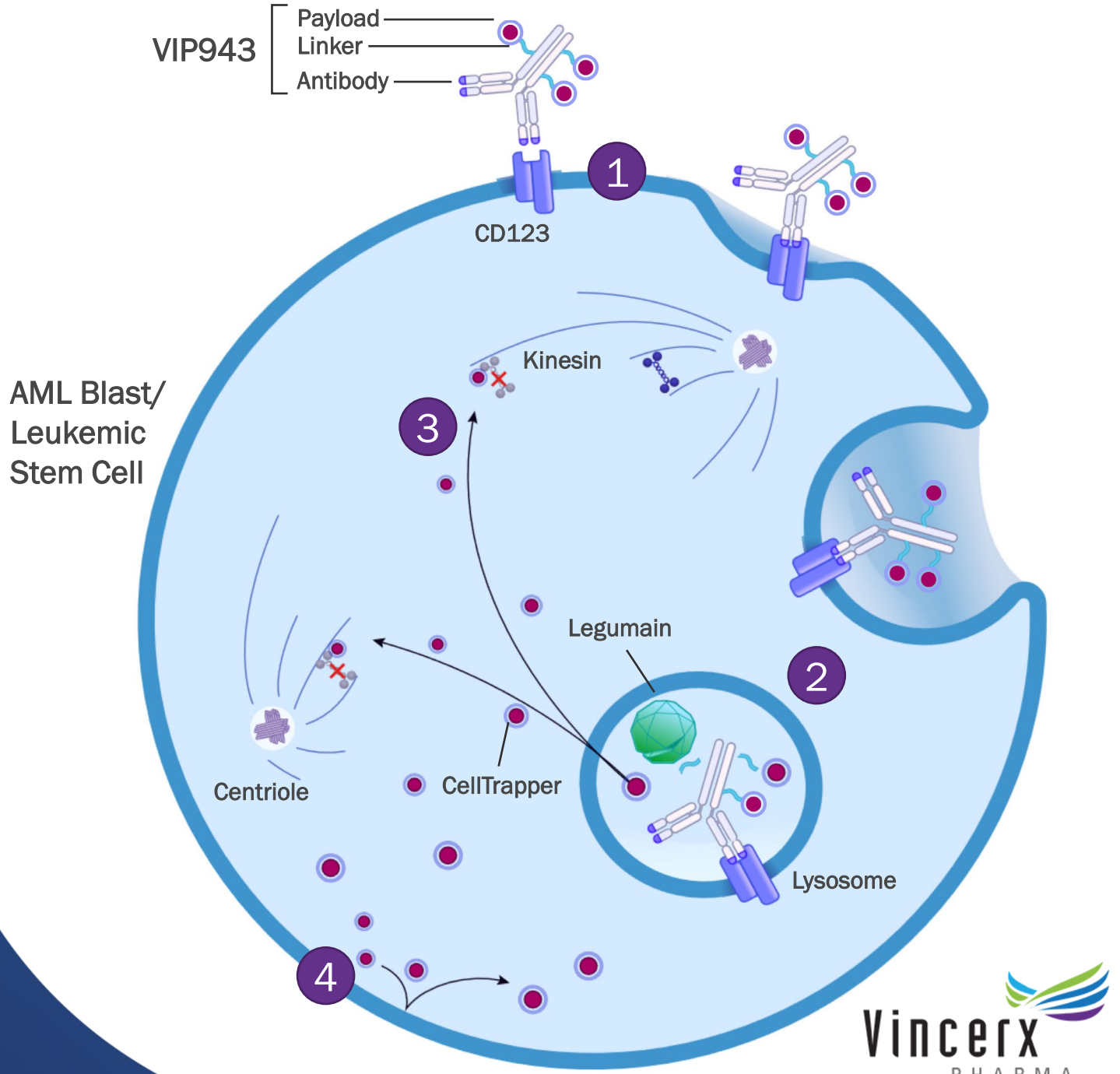
VIP943 CD123-KSPi

ANTIBODY-DRUG CONJUGATE FOR TREATMENT OF AML & MDS

1. CD123 is a validated target in myeloid malignancies and a potential leukemic stem cell target
2. VIP943-targeting Ab is internalized upon binding to CD123 linked to a legumain released KSPi
3. Payload targets KSP stopping cell division and causing catastrophic cell death
4. CellTrapper® modified payload is hydrophilic and accumulates in the tumor cell for improved safety and tolerability for long-term therapy and targeting leukemic stem cells



Ab, antibody; AML, acute myeloid leukemia; KSPi, kinesin spindle protein inhibitor; MDS, myelodysplastic syndrome.

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Phase 1 Dose-Escalation Study in Patients with CD123+ Relapsed/Refractory in Hematologic Malignancies

VNC-943-101

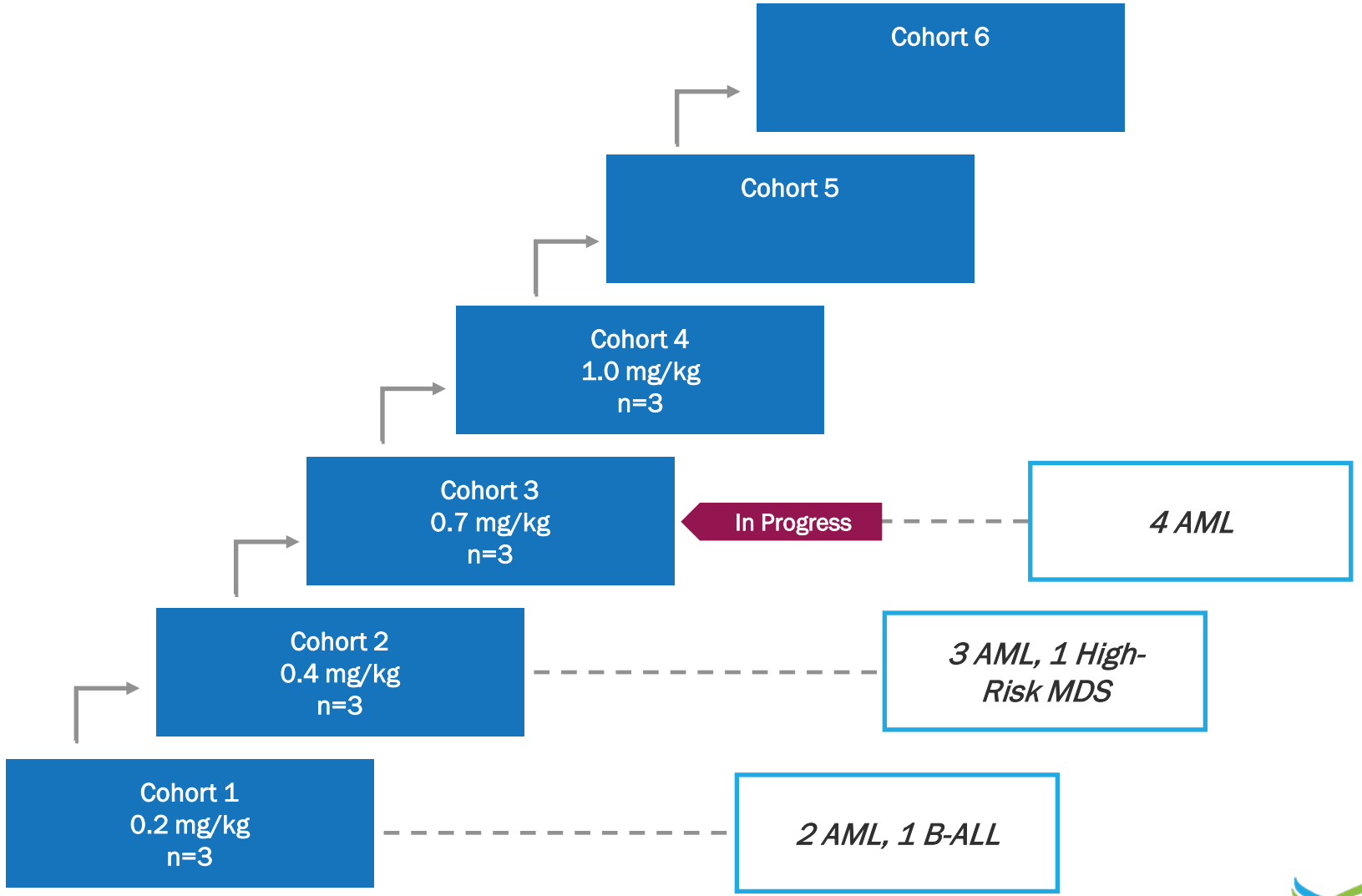
Enrolling adults with AML, Higher-Risk MDS, or B-ALL

PRIMARY ENDPOINTS

- Safety
- Tolerability

SECONDARY ENDPOINTS

- Response rate
- PK



As of 31st Jan 2024

Preliminary Results Show VIP943 has Favorable Safety and Tolerability Profile to Date

	# of Patients Cohort 1 (0.2 mg/kg)	# of Patients Cohort 2 (0.4 mg/kg)
N	3	4
Disease	• 1 de novo AML • 1 secondary AML • 1 B-ALL	• 1 de novo AML • 2 secondary AML • 1 MDS
Completed 28-day DLT evaluation	3	4
Received Cycle 2 dose	2	3
Received Cycle 3 dose	1	1
Still on study in Cycle 3	0	1 MDS
DLTs	0	0
Drug-related AEs		2 • 1 pt Grade 2 dry eye • 1 pt Grade 1 hot flush, Grade 1 confusion and Grade 3 diarrhea*

7 OF 7 SEQUENTIALLY DOSED PATIENTS COMPLETED 28-DAY DLT REVIEW

- No discontinuations due to AEs
- No dose reductions
- 4 patients enrolled in Cohort 3 are undergoing DLT assessment

*Grade 3 diarrhea was serious adverse event.
Data taken from data cut – 25MAR 24
Unaudited data subject to change

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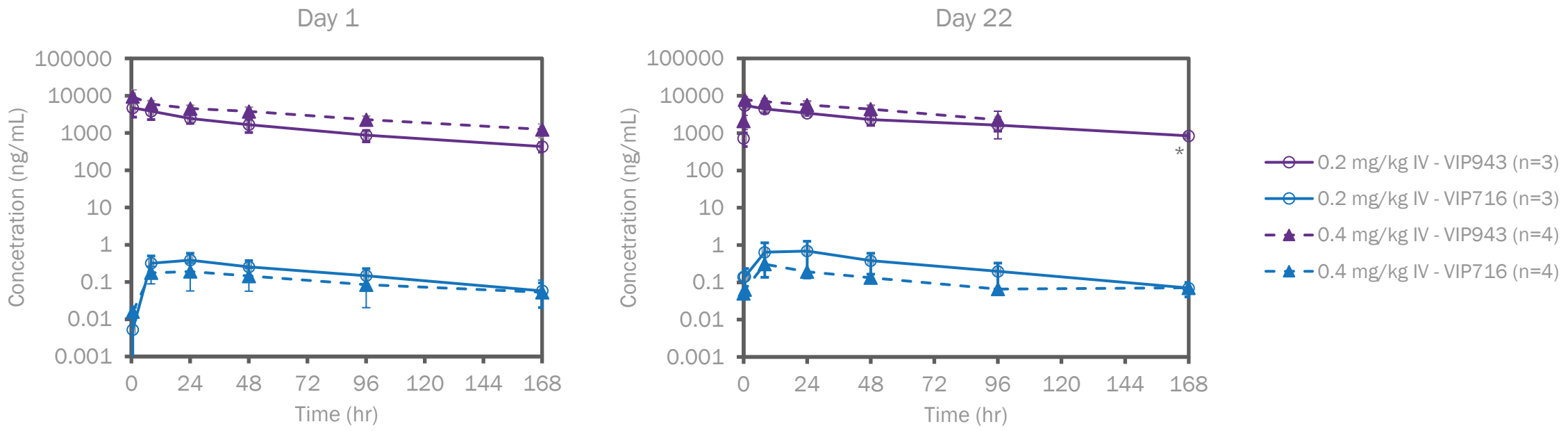
VIP943 PK Data Shows Very Little Free Payload in Circulation, Consistent With the Favorable Safety Profile Observed To Date

COHORT 1 (0.2 mg/kg) AND COHORT 2 (0.4 mg/kg)



- 0.7% - 3.0% free payload in circulation after four weekly doses indicative of our stable and selective legumain cleavable linker
- Low free payload after multiple doses is consistent with the favorable clinical safety profile observed to date and consistent with preclinical studies

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Unaudited data subject to change

Discussion

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Chief Executive Officer, Vincerx Pharma, Inc.

Uma Borate, MD, MBSS
Clinical Associate Professor of Medicine at The Ohio State University Comprehensive Cancer Center Arthur G. James Cancer Hospital and Richard J. Solove Research Institute

Upcoming Milestones

Program	Milestone	Estimated Time of Achievement
VIP236 $\alpha_v\beta_3$ - optCPT SMDC	Additional preliminary data for phase 1 dose-escalation study	**Summer 2024**
VIP943 Anti-CD123 - KSPi ADC	Additional preliminary data for phase 1 dose-escalation study	**On or around EHA**
ENITOCICLIB CDK9 inhibitor	Continue NIH phase 1 dose-escalation study of enitociclib in combination with venetoclax and prednisone in patients with PTCL and DH-DLBCL	**June 2024**

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Q&A

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