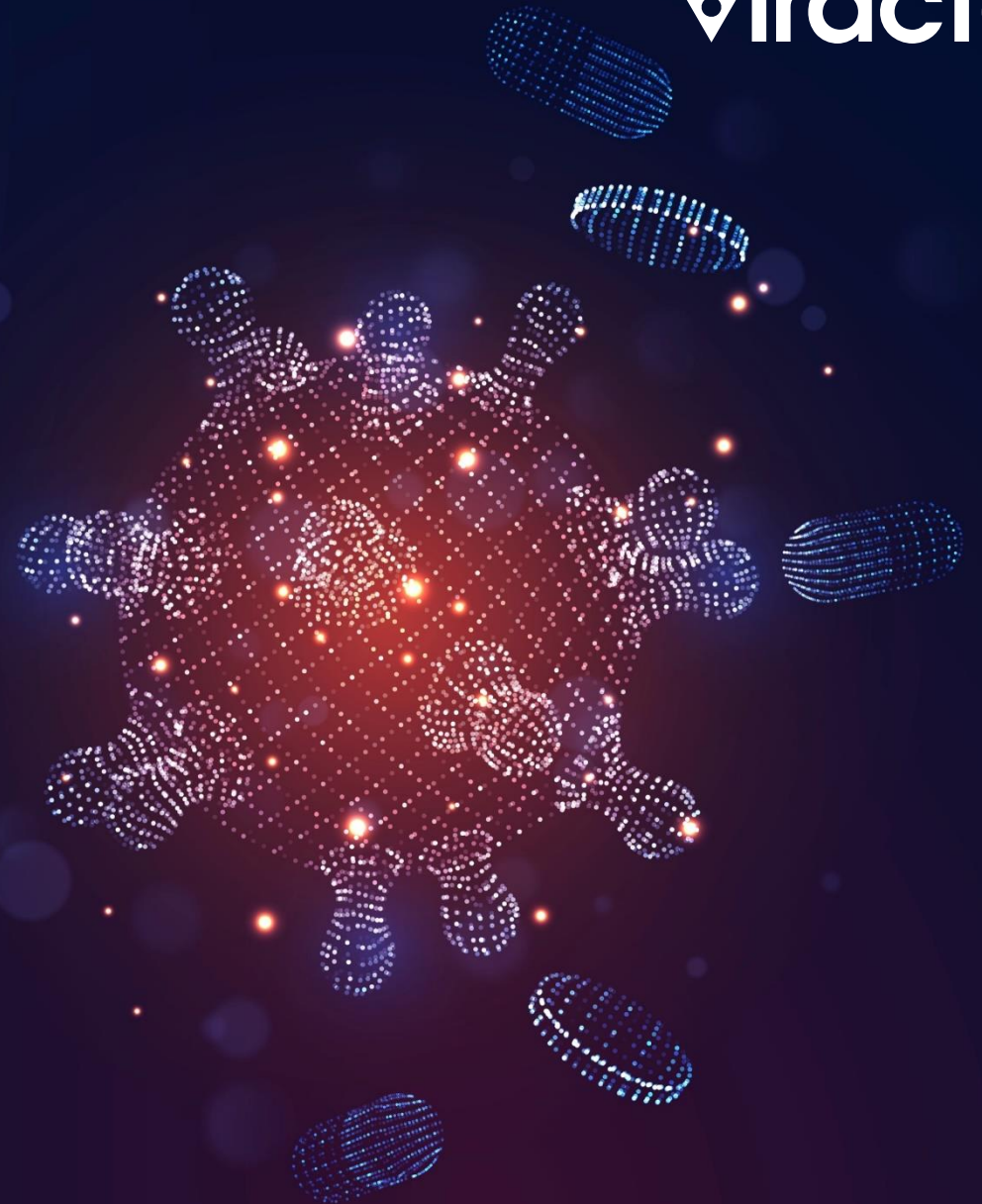


Viracta Therapeutics, Inc.

May 2024



Forward Looking Statements

This communication contains "forward-looking" statements within the meaning of the Private Securities Litigation Reform Act of 1995, which are based on current expectations, estimates and projections based on information currently available to management of Viracta Therapeutics, Inc. ("Viracta" or the "Company"), including, without limitation, statements regarding: Viracta's development pipeline; the details, timeline and expected progress for Viracta's ongoing trials; the expected ability of Viracta to undertake certain activities and accomplish certain goals with respect to its clinical program in EBV+ lymphoma, EBV+ solid tumors, other virus-associated malignancies or its programs; expectations regarding future therapeutic and commercial potential with respect to Viracta's clinical program in EBV+ lymphoma, EBV+ solid tumors or other virus-associated malignancies; the ability of Viracta to support multiple new drug application filings and approvals from the NAVAL-1 trial; Viracta's plans to meet with the FDA to discuss preliminary results from the NAVAL-1 trial, amending the NAVAL-1 protocol to add patients as necessary to enable registration and provide other program updates; the expected future milestones and key upcoming events and their significance; and other statements that are not historical facts. Risks and uncertainties related to Viracta that may cause actual results to differ materially from those expressed or implied in any forward-looking statement include, but are not limited to: Viracta's ability to successfully enroll patients in and complete its ongoing and planned clinical trials; Viracta's plans to develop and commercialize its product candidates, including all oral combinations of nanatinostat and valganciclovir; the timing of initiation of Viracta's planned clinical trials; the timing of the availability of data from Viracta's clinical trials; the possibility that previous preclinical and clinical results may not be predictive of future clinical results; the timing of any planned investigational new drug application or new drug application; Viracta's plans to research, develop and commercialize its current and future product candidates; the clinical utility, potential benefits and market acceptance of Viracta's product candidates; Viracta's ability to identify additional products or product candidates with significant commercial potential; developments and projections relating to Viracta's competitors and its industry; the impact of government laws and regulations; Viracta's ability to protect its intellectual property position; and Viracta's estimates regarding future expenses, capital requirements and need for additional financing.

These risks and uncertainties may be amplified by the COVID-19 pandemic, which has caused significant economic uncertainty. If any of these risks materialize or underlying assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements. Additional risks and uncertainties that could cause actual outcomes and results to differ materially from those contemplated by the forward-looking statements are included under the caption "Risk Factors" and elsewhere in Viracta's most recent filings with the SEC and any subsequent reports on Form 10-K, Form 10-Q or Form 8-K filed with the SEC from time to time and available at www.sec.gov. The forward-looking statements included in this communication are made only as of the date hereof. Viracta assumes no obligation and does not intend to update these forward-looking statements, except as required by law or applicable regulation.

A Precision Oncology Company Focused on the Treatment and Prevention of Virus-Associated Cancers that Impact Patients Worldwide



First-in-class treatment targeting Epstein-Barr virus (EBV)-associated cancers

Lead program, Nana-val, an all-oral combination therapy of proprietary nanatinostat and valganciclovir

Speed to market strategy for lead lymphoma indication - R/R EBV+ PTCL

Anticipated near-term data disclosures and alignment with FDA on potential accelerated approval pathway in mid-2024

Phase 1b/2 study in advanced EBV+ solid tumors

Plan to determine RP2D and initiate Phase 2 dose optimization cohort in the second half of 2024

Epstein-Barr Virus (EBV): A High Global Cancer Priority

EBV+ malignancies account for ~2% or >300,000 of all new lymphoma and solid tumor cases globally

EBV positivity, by lymphoma subtype^{1, 2,3}

Peripheral T-cell lymphoma* (PTCL)	40-65%
Diffuse large B-cell lymphoma (DLBCL)	5-15%
Post-transplant lymphoproliferative disorders (PTLD)	60-80%

EBV positivity, by solid tumor subtype⁴

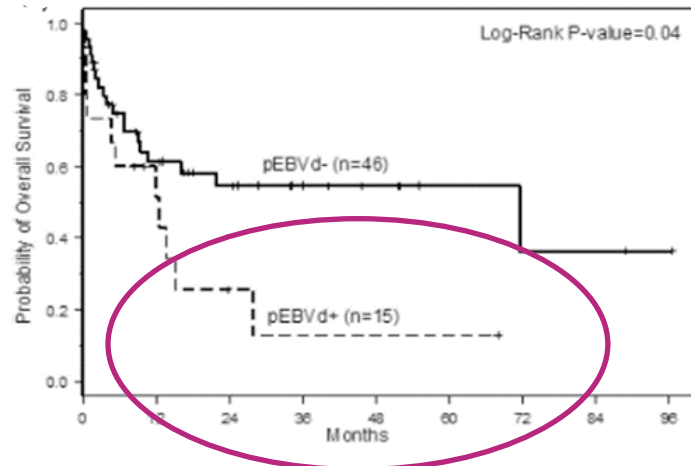
Nasopharyngeal carcinoma (NPC)	75-95%
Gastric cancer (GC)	8-10%

The incidence of EBV-associated cancers is likely greater, impacting more cancer types

Viracta is Developing a Precision Medicine to Treat Unique Subsets of EBV+ Lymphoma with Adverse Survival Outcomes

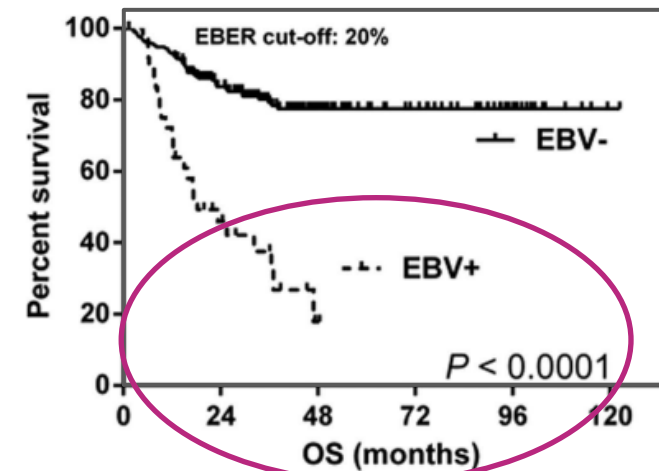
Currently limited or no targeted therapy options for EBV-associated cancers

Peripheral T-cell Lymphoma¹ (Overall Survival)



PTCL EBV+ Rate: 40-65%

Diffuse Large B-cell Lymphoma² (Overall Survival)



DLBCL EBV+ Rate: 5-15%

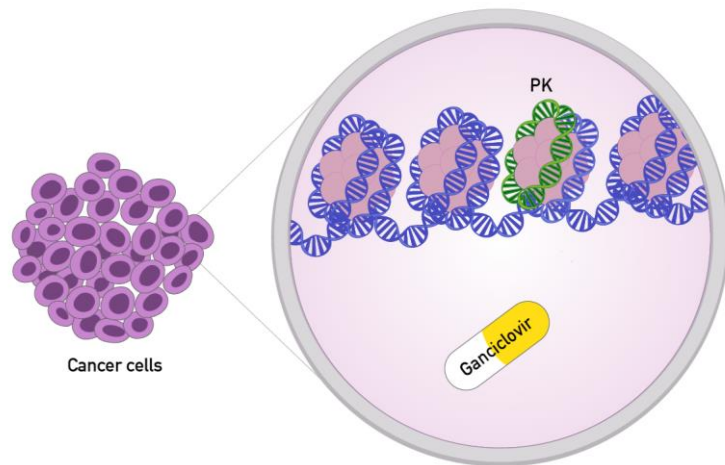
Addressing patient populations with high unmet medical need

Nana-val: a Unique Approach to Targeting and Killing EBV+ Cancer Cells

Nanatinostat sensitizes EBV+ tumors to the cytotoxic effects of ganciclovir

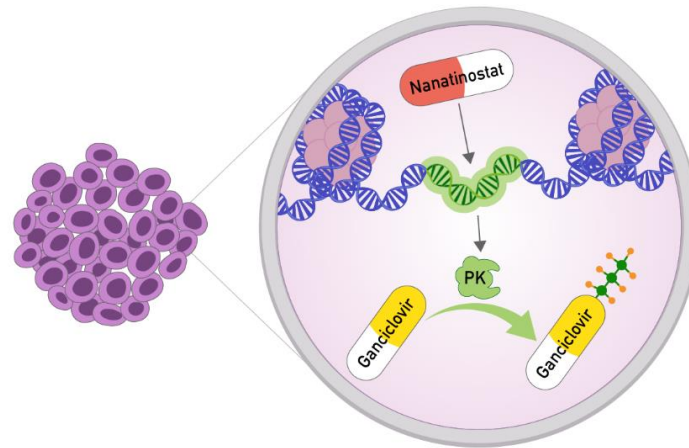
LATENCY

EBV is latent in cancer cells. Valganciclovir, antiviral & cytotoxic pro-drug of ganciclovir (GCV), is inactive in the absence of EBV protein kinase (PK)



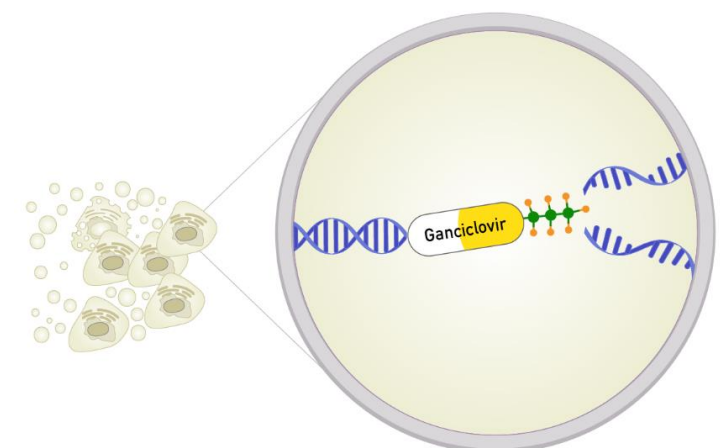
THE KICK

Nanatinostat potently induces expression of EBV protein kinase (PK), which activates GCV into its cytotoxic form



THE KILL

Activated GCV inhibits DNA replication leading to apoptosis of EBV+ cancer cells





Nana-val: R/R EBV⁺ Lymphoma Program

NAVAL-1: Pivotal Phase 2 Trial in R/R EBV+ Lymphomas

Global study, with an adaptive Simon 2-stage design, focused on the largest EBV-positive lymphoma patient populations

Patient population:

- R/R EBV+ lymphoma with ≥1 prior therapies and no curative options
 - Including pediatric EBV+ PTLT patients ≥12yrs

PTCL cohort randomization:

- Patients randomized to either Nana-val or Nstat monotherapy in Stage 1

Primary endpoint:

- Objective response rate (ORR) by independent central review
- Potential to further expand indications with promising antitumor activity after Stage 2

Stage 1 (n=10)	Stage 2 (n=11) (Stage 1 + Stage 2 = 21)	Potential Post-Stage 2 Expansion
EBV+ PTCL (2L+) Nana-val arm, completed enrollment of Stage 2 in Feb 2024		Further expansion of promising lymphoma subtype(s) with additional patients may support registration
EBV+ PTCL (2L+) Nstat monotherapy arm, enrollment closed Dec 2023		
EBV+ DLBCL (2L+)	Expand lymphoma subtype(s) into Stage 2 if 2 objective responses are achieved in Stage 1	
EBV+ PTLT (2L+)		
Other		

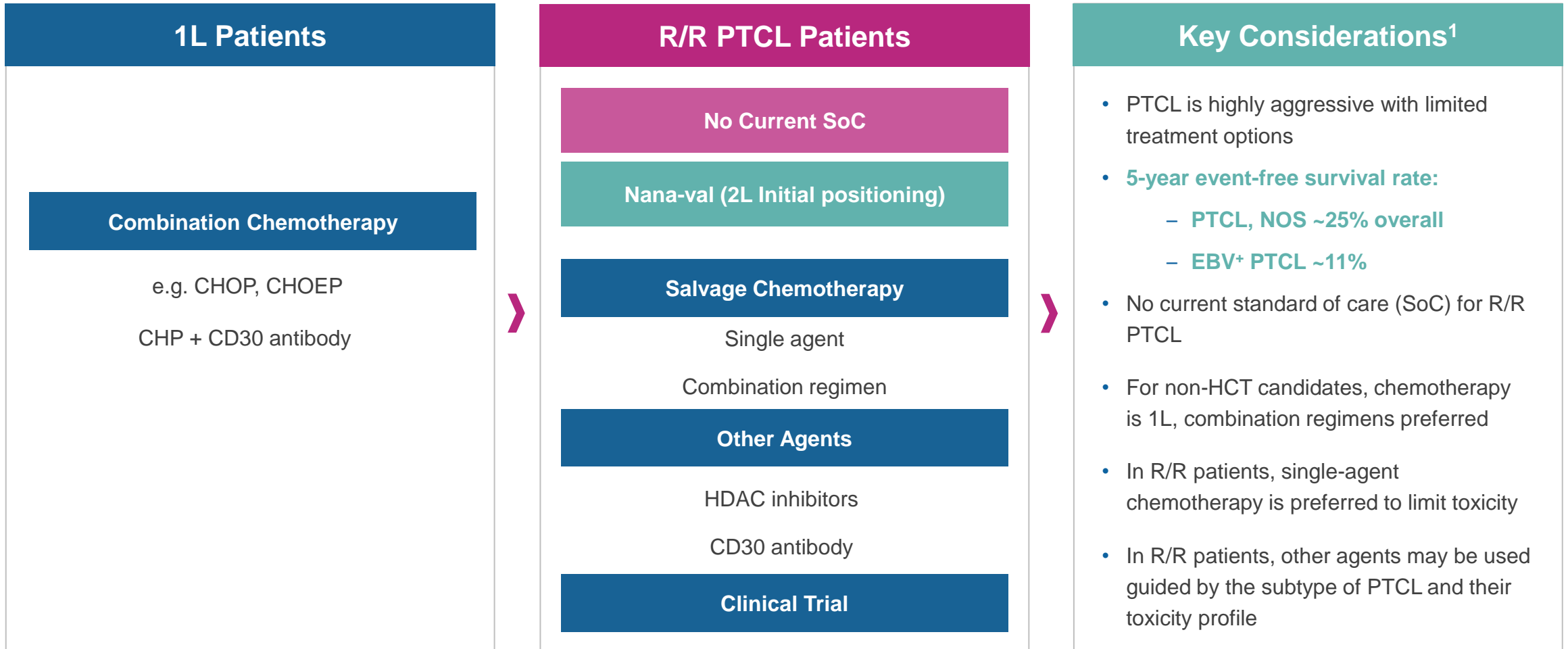


R/R EBV+ PTCL:
*T-cell lymphoma with high unmet
medical need*

PTCL: Patient Journey and Treatment Options are Suboptimal*

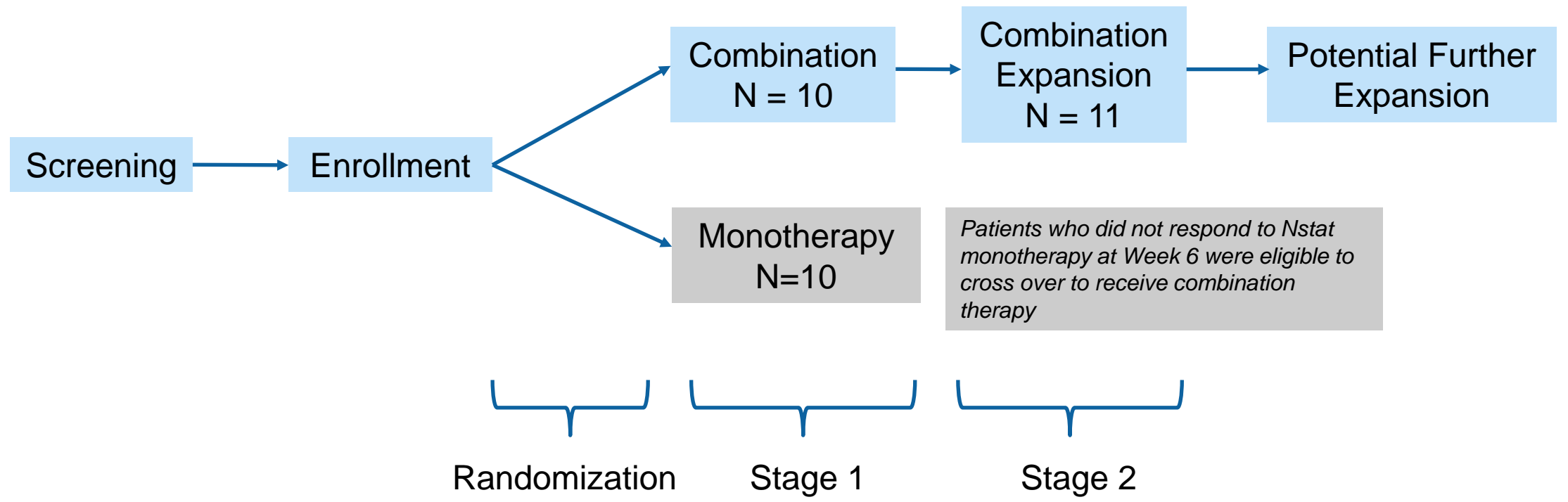
No established second-line treatment for PTCL

Diagnosis





NAVAL-1 R/R EBV+ PTCL Arm Study Design





NAVAL-1 Trial: Stage 1 Demographics for Patients with R/R EBV+ PTCL

65% of patients with ≥2 prior lines of therapy; 75% with advanced disease

Characteristic	Patients Enrolled in Stage 1 (N = 20*)
Median age (y), [range]	69 [47-78]
Male / Female	16 / 4
ECOG performance status, Unknown / 0 / 1 / 2	1 / 4 / 14 / 1
Ethnicity <ul style="list-style-type: none"> • WHITE • ASIAN • BLACK OR AFRICAN AMERICAN • NOT REPORTED 	10 (50%) 7 (35%) 2 (10%) 1 (5%)
Prior lines of therapy <ul style="list-style-type: none"> • 1 • 2 • ≥3 	7 (35%) 7 (35%) 6 (30%)
Median number of prior therapies [range]	2 [1-6]
Stage <ul style="list-style-type: none"> • Unknown • I-II • III-IV 	2 (10%) 3 (15%) 15 (75%)

Nana-val Provides Substantially Greater Anti-Tumor Response Than Nstat Monotherapy

NAVAL-1 Stage 1 Responses by Treatment Subgroup and Analysis Population

Intent-to-Treat Population¹


PTCL Treatment Subgroup	ORR	CRR
Nana-val, Stage 1 (n=10)	5/10 (50%)	2/10 (20%)
Nstat monotherapy, Stage 1 (n=10)	1/10 (10%)	0/10 (0%)


Efficacy-Evaluable Population^{1, 2}

PTCL Treatment Subgroup	ORR	CRR
Nana-val, Stage 1 (n=7)	5/7 (71%)	2/7 (29%)
Nstat monotherapy, Stage 1 (n=8)	1/8 (13%)	0/8 (0%)

Consistent and Robust Anti-tumor Activity Demonstrated Across Nana-val Clinical Trials

Study 201 (Phase 1b/2 study) vs NAVAL-1 trial: Comparison of evaluable patients

		Study 201 ¹ (n=13)
		Evaluable Patients (n=8)
Response		
ORR		4 (50%)
CR		3 (38%)
PR		1
SD		1
PD		3
Clinical Benefit Rate		5 (63%)
Data Cutoff		May 4, 2023

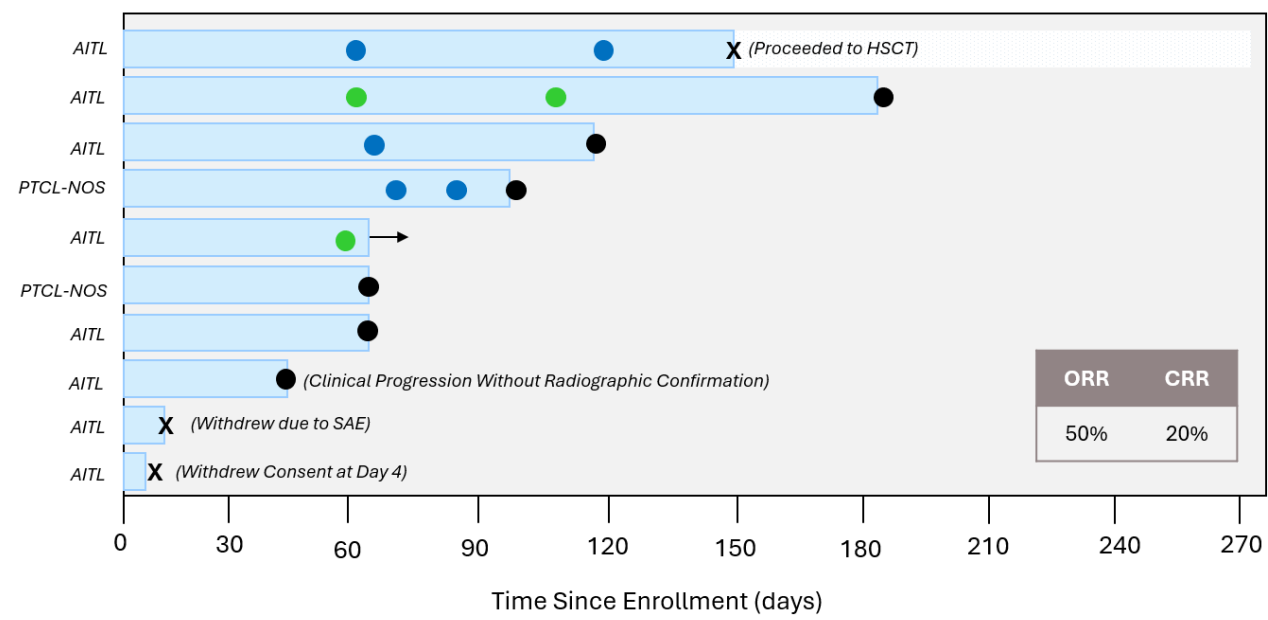
		NAVAL-1 (n=10)
		Evaluable Patients (n=7)
Response		
ORR		5 (71%)
CR		2 (29%)
PR		3
SD		0
PD		2
Clinical Benefit Rate		5 (71%)
Data Cutoff		Feb 7, 2024



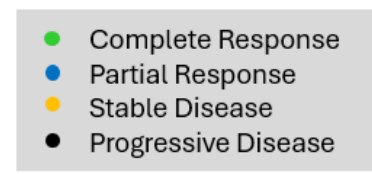
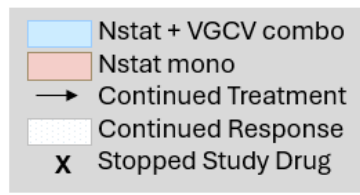
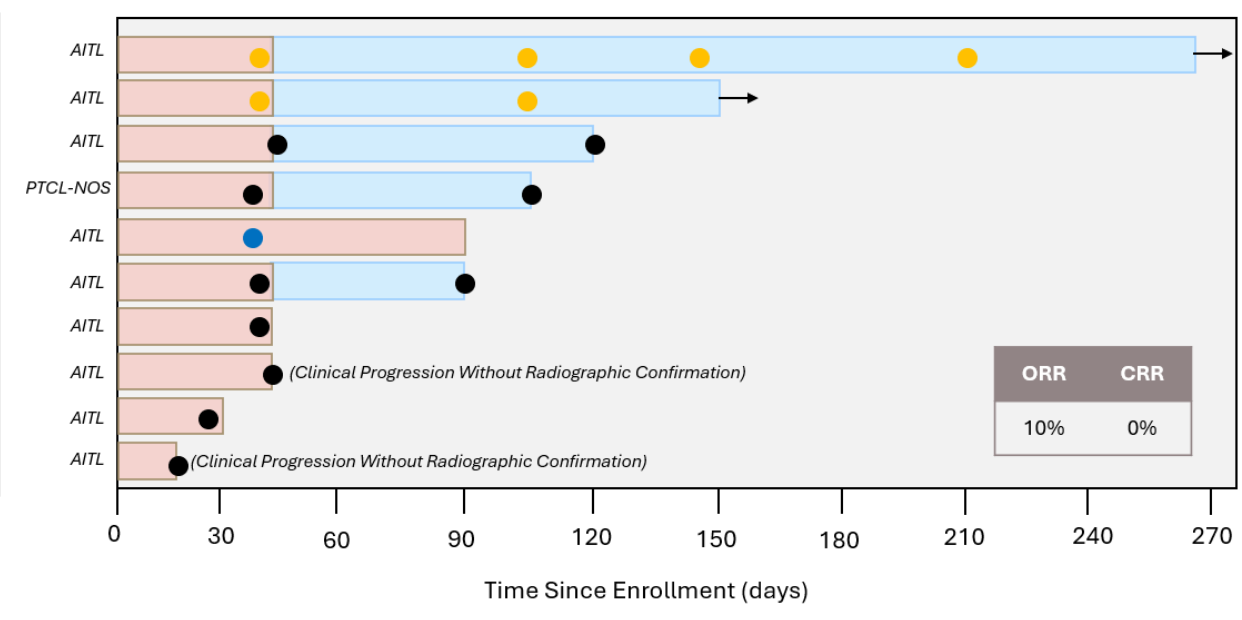
Nana-val Resulted in 5x Greater Response Rate

Randomized comparison of Nana-val to Nstat monotherapy (ITT population)

Nana-val 5/10 (50%) Responses



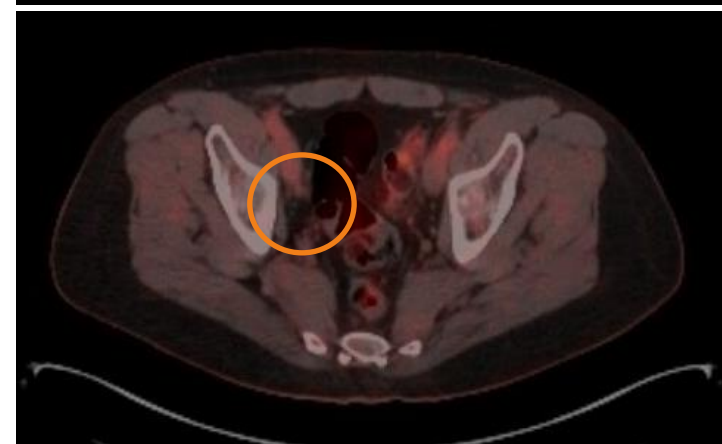
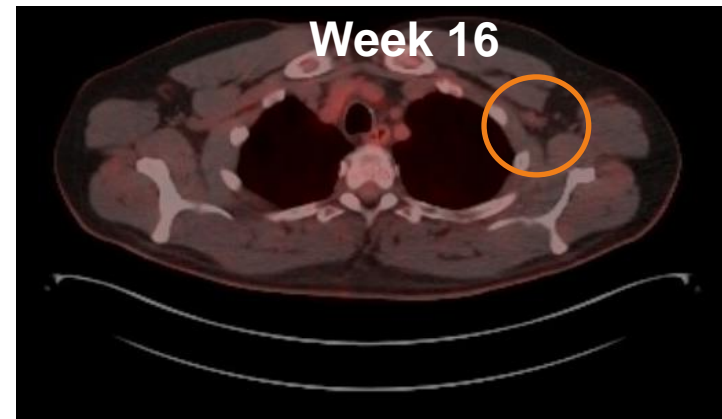
Nstat Monotherapy 1 PR/10 (10%)



Case Study: Responder at 16 Weeks Proceeded to HSCT and Continues in Response

CT scans of confirmed PR

- 52-year-old male with R/R EBV+ AITL (axillary, retroperitoneal, inguinal, and pelvic lymphadenopathy)
- Previously treated with CHEOP followed by autologous stem cell transplant
- Treated with Nstat 20 mg days 1-4/week + VGCV 900 mg QD x 5 months then proceeded to allogeneic stem cell transplant
- Continues in response as of the most recent radiographic follow-up 260 days after the initial response on Nana-val



Courtesy of Dr. Brian Greenwell, Medical University of South Carolina

All-Oral Nana-val was Generally Well-Tolerated

Most Frequently Occurring ($\geq 10\%$) Treatment-Related Treatment-Emergent Adverse Events by Severity Grade and Preferred Term

Preferred Term ^[1]	Combination Nstat + VGCV Therapy (N=10)		Nstat Monotherapy (N=10)	
	All ^[2]	G3+G4	All	G3+G4
Platelet count decreased	2 (20.0%)	1 (10.0%)	1 (10.0%)	0
Anaemia	1 (10.0%)	0	5 (50.0%)	4 (40.0%)
Fatigue	1 (10.0%)	0	3 (30.0%)	0
Decreased appetite	1 (10.0%)	0	3 (30.0%)	0
Nausea	1 (10.0%)	0	2 (20.0%)	0
Diarrhoea	1 (10.0%)	1 (10.0%)	2 (20.0%)	0
Weight decreased	1 (10.0%)	0	0	0

¹Adverse events were coded to preferred terms using MedDRA, version 26.0

²One combination Nstat + VGCV therapy patient had G5 pancytopenia and sepsis

R/R EBV+ PTCL: Speed to Market Strategy for Nana-val

Accelerated pace of enrollment supports speed to market strategy

Milestone	Anticipated Timing
Complete enrollment of Stage 1 <ul style="list-style-type: none">2 cohort arms: patients treated with nanatinostat monotherapy (n=10) or with Nana-val (n=10)	Q4 2023 ✓
Complete enrollment of Stage 2	Q1 2024 ✓
Present topline Stage 1 data from both arms with an aim to clearly delineate the differentiation of Nana-val's <i>'Kick and Kill'</i> MOA	Q2 2024 ✓
Engage with FDA to align on requirements for regulatory approval	Mid-2024
Enroll patients into the post-Phase 2 expansion cohort to support potential accelerated approval	Mid-2024
Present Stage 1 + Stage 2 data (n=21)	Q3 2024

Nana-val is Well Positioned for Potential Accelerated Approval in R/R EBV+ PTCL

Anticipate engagement with FDA in mid-2024 to align on accelerated registration pathway

Accelerated Approval Criteria	Nana-val: R/R EBV+ PTCL	
Unmet medical need population	No approved therapies for R/R EBV+ PTCL	✓
Rarity of the serious life-threatening disease without alternate available treatment options	EBV+ PTCL 5-year event-free survival rate of ~11%*	✓
Magnitude of the response rate observed	ORR of 30% - 45%+; CRR of ~25% - 40%	✓
Duration of response (DoR)	17.3 months median DoR observed in Phase 1b/2 study	✓
Favorability of the safety profile	Generally well-tolerated	✓

Base Case Assumption: ~60-90 total R/R EBV+ PTCL patients may be required in the NAVAL-1 trial for potential accelerated approval

Nana-val Compares Favorably to Other Therapies that Received Accelerated Approval for the Treatment of R/R PTCL

Criteria	Nana-val*	Beleodaq** (Belinostat)	Istodax** (Romidepsin)	Folotyn** (Pralatrexate)
Indication(s)	R/R EBV+ PTCL	R/R PTCL (EBV+ & EBV-)	R/R PTCL (EBV+ & EBV-)	R/R PTCL (EBV+ & EBV-)
Overall Response Rate (ORR)	30-50%	25.8%	26.2%	26.6%
Complete Response Rate (CRR)	~25-40%	10.8%	15.4%	8.3%
Duration of Response (DoR)	17.3 months	8.4 months	<8.5 months	9.4 months
Sample Size	~60-90 (pending FDA confirmation)	120	130	109
Route of Administration	Oral	IV	IV	IV



EBV+ DLBCL:
A distinct and unique subtype

EBV+ DLBCL Has a Significantly Worse Prognosis Compared to EBV- DLBCL

Recognized as a unique subtype of DLBCL with its own classification by the World Health Organization

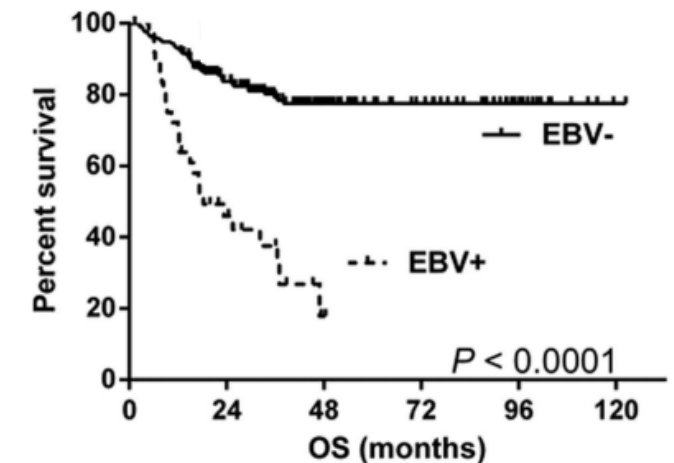
DLBCL is the most common lymphoma (~25% of all NHLs)

- ~5-15% of DLBCL cases are associated with EBV
- 5-year relative survival rate of ~64% overall

EBV+ DLBCL is a clinically more aggressive subtype of DLBCL

- Survival rate is significantly worse compared to EBV-negative disease
- Poor response/survival with standard immuno-chemotherapy
- Associated with distinct biologic features and mutational landscape
- Currently, no approved treatment options specifically targeting EBV+ DLBCL

Diffuse Large B-cell Lymphoma (Overall Survival)



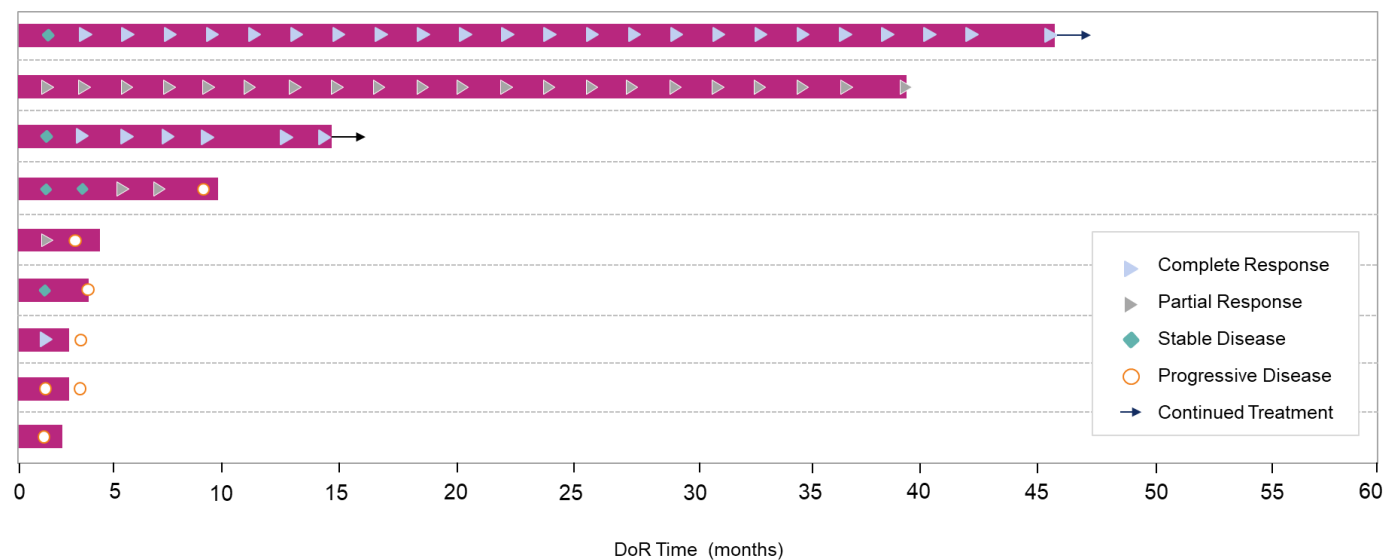
R/R EBV+ DLBCL: Expanded Clinical Response Data

Early data suggests Nana-val delivers a compelling combination of ORR and DoR

Study 201 Data¹
(n=10)

Evaluable Patients²
(n=9)

Response	
ORR	6 (67%)
CR	3 (33%)
PR	3
SD	1
PD	2
Clinical Benefit Rate	7 (78%)
Data Cutoff	May 4, 2023



- Median **Duration of Response (DoR)** not yet reached
- 2 responding patients remain on study treatment with DoR times of ~11 months (CR) and ~42 months (CR) (as of May 2023)

Anticipated 2024 Milestones for Lymphoma Program

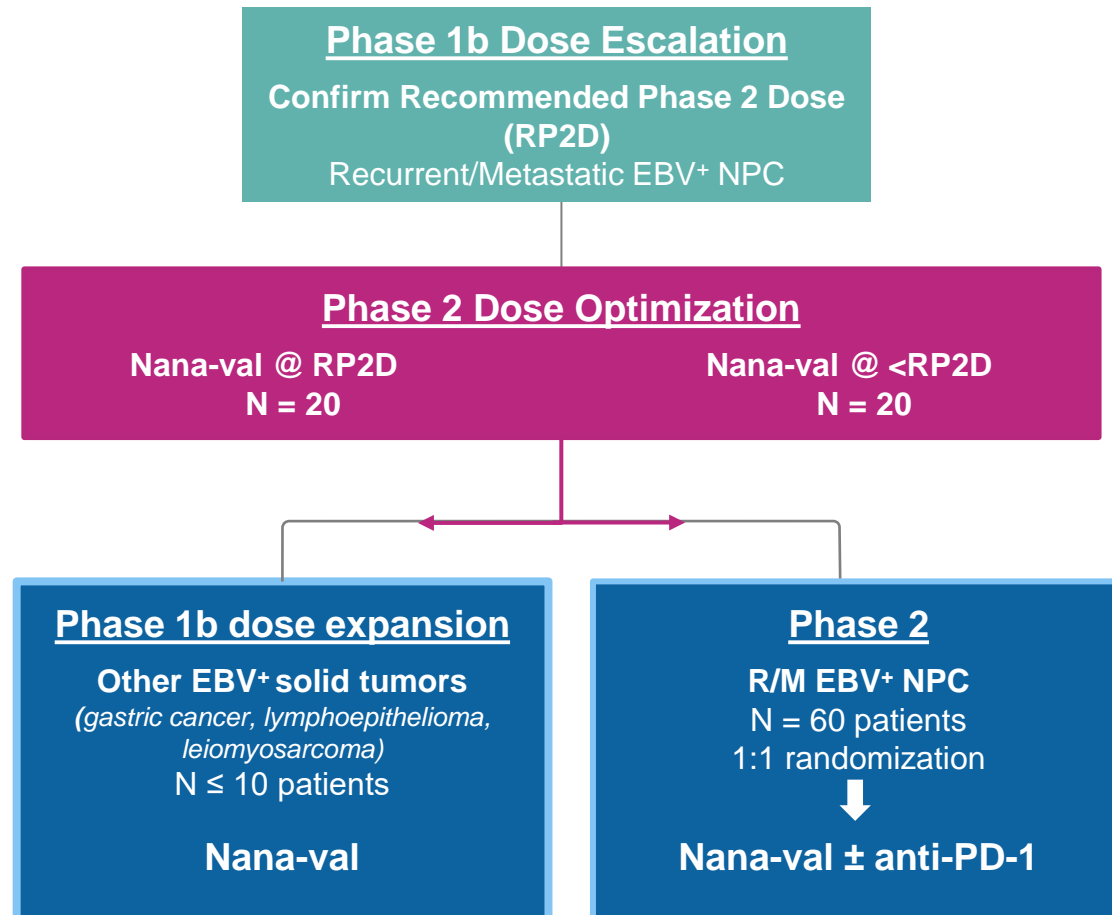
Trial	Indication	Q1:2024	Q2:2024	Q3:2024	Q4:2024
Nava-val Pivotal NAVAL-1 Trial (R/R EBV+ Lymphomas)	R/R EBV+ PTCL	Q1:24 - Complete enrollment of Stage 2 (n=11) ✓	Enroll patients into the post-Phase 2 expansion cohort to support potential accelerated approval		
	R/R EBV+ DLBCL		Q2:24 - Report Stage 1 data from both arms: nanatinostat with (n=10) or without (n=10) valganciclovir ✓	Q3:24 - Present Stage 2 data	YE:24 – Report Stage 1 data
	R/R EBV+ PTLT			Mid:24 - Meet with the FDA to discuss additional requirements for accelerated approval	YE:24 – Report Stage 1 data



Nana-val:
EBV⁺ Solid Tumor Program

Nana-val Study “301”: Phase 1b/2 Trial in Advanced EBV+ Solid Tumors

Open-label, multicenter study to evaluate the safety, tolerability, PK, and preliminary antitumor activity of Nana-val in patients with advanced EBV+ solid tumors



Endpoints:

- Primary:
 - Phase 1b: Incidence of dose-limiting toxicities
 - Phase 2: Objective response rate by RECIST v1.1
- Key Secondary:
 - Incidence and severity of AEs
 - Duration of response
 - Progression-free survival
 - Pharmacokinetic parameters

Anticipate initiating Phase 2 dose optimization cohort in 2024

Study 301: Responses to Date in Patients with R/M EBV+ NPC

Emerging evidence of dose response at higher doses and antitumor activity comparison of Dose Level 5 vs. Dose Level 2 suggest promise of split dosing approach

Dose Level	Nstat Oral Dose (Days 1-4/wk)	VGCV Oral Dose	N	Best Response
1	20 mg QD	900 mg QD	3	● ● ○
2	30 mg QD	900 mg QD	4	○ ○ ○ ○
3	40 mg QD	900 mg QD	3	● ○ NE
4	10 mg split dose	900 mg BID x 21 d, then QD	3	● ○ ○
5	20 mg / 10 mg split dose	900 mg BID x 21 d, then QD	4	● ● ● ○

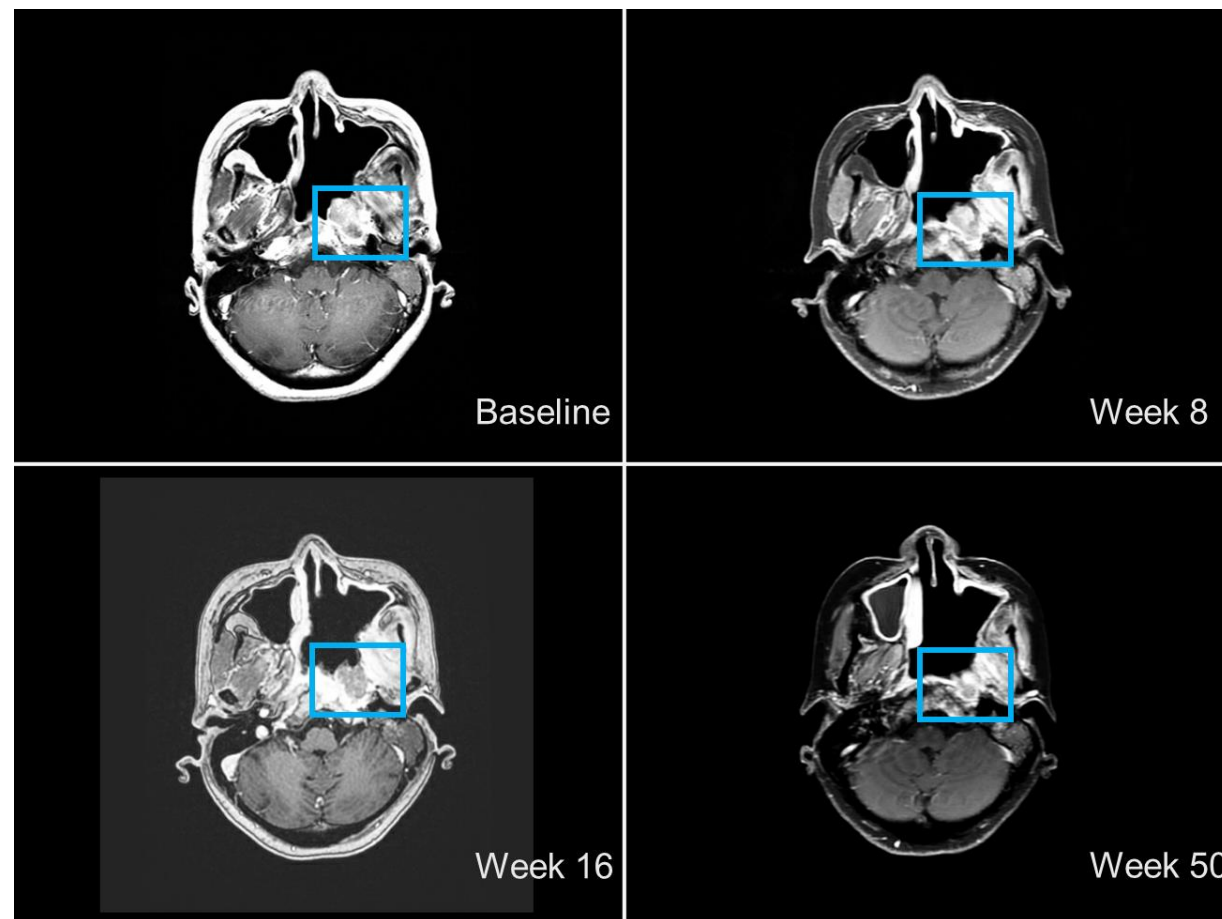
Partial responses confirmed at Dose Level 3 and Dose Level 5, both ongoing >10 months and >4 months on study treatment*

- Partial Response
- Stable Disease ≥14 wks
- Stable Disease <14 wks
- Progressive Disease

Study 301: MRI Scans of Confirmed Partial Response at Dose Level 3

>50% reduction in tumor size at 8-50 weeks

- 44-year-old female with locally recurrent EBV⁺ NPC (left nasopharynx)
- Disease previously progressed through chemoradiation therapy then combination chemotherapy
- Treated with nanatinostat 40 mg QD Days 1-4/week + VGCV 900 mg QD



Nana-val has been Generally Well-Tolerated at Initial 5 Dose Levels

Preliminary safety data support continued dose escalation to determine RP2D

Treatment-Related Adverse Events in ≥3 Patients

Dose Level 1 = RP2D for R/R Lymphoma

	Dose Level 1 (n=3)		Dose Level 2 (n=4)		Dose Level 3 (n=3)		Dose Level 4 (n=3)		Dose Level 5 (n=4)	
	G1-2	G3-4	G1-2	G3-4	G1-2	G3-4	G1-2	G3-4	G1-2	G3-4
Nausea	1		2		2		1		1	
Decreased appetite	1		1		1		2		2	
Creatinine increased	1		2						2	
Fatigue	1		2			1	1			
Anemia	1		1							1
Lymphopenia			1				1	1		
Vomiting					2		1			

Safety

- No dose-limiting toxicities reported
- Majority of treatment-related adverse events were mild to moderate in severity

Rationale for Split Daily Dosing (SDD) of Nanatinostat in Combination with Valganciclovir

Compelling preclinical data provides supporting evidence to evaluate a new dosing regimen



Split dose (2-4 hours apart) increases expression of EBV protein kinase, BGLF4



Split dose Significantly increased the anti-tumor activity of Nana-val in murine EBV⁺ gastric cancer xenograft model



Daily dosing Enables increased anti-tumor activity relative to 4 days on 3 days off



Higher doses Safety data suggest patients with NPC can withstand higher doses of nanatinostat compared to lymphoma patients

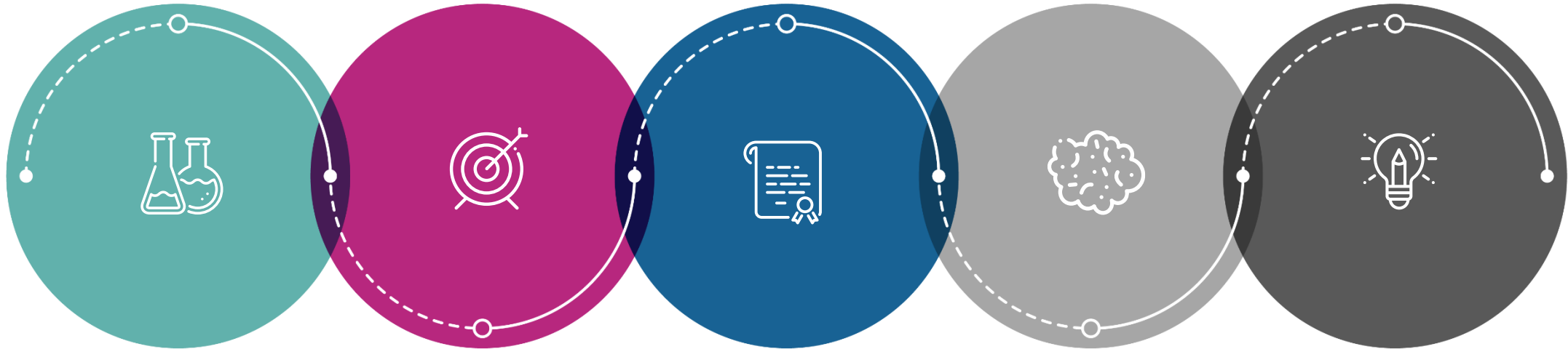
SDD of Nanatinostat offers a potential to extend Nana-val patent portfolio with differentiated strategy from lymphoma; US provisional application(s) have been filed

Completed enrollment of first cohort utilizing novel SDD regimen (dose cohort 6) to determine RP2D, currently enrolling dose cohort 7

Anticipated 2024 Milestones

Trial	Indication	Q1:2024	Q2:2024	Q3:2024	Q4:2024
Pivotal NAVAL-1 Trial (R/R EBV+ Lymphomas)	R/R EBV+ PTCL	Q1:24 - Complete enrollment of Stage 2 (n=11) ✓	Enroll patients into the post-Phase 2 expansion cohort to support potential accelerated approval		
			Q2:24 - Report Stage 1 data from both arms: nanatinostat with (n=10) or without (n=10) valganciclovir ✓	Q3:2024 - Present Stage 2 data	
			Mid:24 - Meet with the FDA to discuss additional requirements for accelerated approval		
	R/R EBV+ DLBCL				YE:24 – Report Stage 1 data
	R/R EBV+ PTL D				YE:24 – Report Stage 1 data
Phase 1b/2 Study 301 (Advanced EBV+ Solid Tumors)	NPC			H2:24 - Determine RP2D by investigating the novel split daily dosing regimen at higher dose levels of Nana-val	YE:24 - Initiate Phase 2 dose-optimization cohort to confirm RP2D

Focus is Maximizing the Nana-val Opportunity



Adverse survival outcomes are seen with many EBV-associated cancers

High unmet medical need for targeted therapies

Well-tolerated, all-oral combination approach to targeting EBV+ cancers

First-in-class targeted treatment; potential tumor agnostic MOA

Pivotal NAVAL-1 trial in multiple R/R EBV+ lymphoma subtypes

Near-term data from PTCL cohort and alignment with FDA anticipated in mid-2024

Phase 1b/2 study in advanced EBV+ solid tumors

Plan to determine RP2D and initiate Phase 2 dose-optimization in 2024

Lean operating model and a speed to market strategy

Regulatory validation with orphan drug designation granted for Nana-Val (across six indications)

Thank you



The image features a decorative graphic on the left side consisting of several overlapping circles in shades of blue and green. Some circles are solid, while others are dashed. Small white plus signs are scattered at various points where the circles intersect. A large, solid white circle is positioned in the lower-left quadrant of this graphic, containing the Viracta logo. The logo itself consists of a small green dot above a stylized white 'v' shape, followed by the word 'iracta' in a blue, lowercase, sans-serif font.

viracta

Nana-val:
Lymphoma Market Opportunity

US Incidence Estimates for EBV+ Hematological Malignancies



Incidence and % EBV Positivity by Lymphoma Subtype				
Subtype	Annual (newly diagnosed)	R/R	Total	EBV Positivity
Peripheral T-cell lymphoma (PTCL)*	~2,600	~1,100	~3,600	40%-65%
Diffuse large B-cell lymphoma (DLBCL)	~27,700	~13,800	~41,500	5%-15%
PTLD	~1,300	~700	~2,000	60%-80%

The diagnosed incidence of EBV-associated hematological malignancies is likely underestimated given inconsistent testing due to the absence of an actionable targeted and actionable therapy

Global Incidence Estimates for Priority EBV+ Hematological Malignancies

Nana-val has the potential to address other EBV+ hematological malignancies

Incidence and % EBV Positivity by Lymphoma Subtype				
Subtype	Annual (newly diagnosed)	R/R	Total	EBV Positivity
Peripheral T-cell lymphoma (PTCL)*	~15,200	~6,300	~21,500	40%-65%
Diffuse large B-cell lymphoma (DLBCL)	~113,000	~56,000	~169,000	5%-15%
PTLD	~9,100	~4,600	~13,700	60%-80%

The diagnosed incidence of EBV-associated hematological malignancies is likely underestimated given inconsistent testing due to the absence of an actionable targeted and actionable therapy