



RBM39 Degradar

# REC-1245

May 2026

# REC-1245: RBM39 degrader

A highly selective RBM39 degrader for biomarker-enriched solid tumors and lymphoma

## Program Status

- Potential **first-in-class** RBM39 degrader in solid tumors
- First patient dosed in **4Q24**
- Additional Phase 1 dose escalation data expected **2H26**

## Mechanism of Action

- **Molecular glue** that degrades RBM39 via E3 ligase adaptor DCAF15
- **Disrupts RNA splicing** to downregulate cell cycle checkpoints and DDR networks

## Thesis & Differentiation

- **RBM39 phenotypically mimics CDK12** and is **distinct** from **CDK13** in Recursion OS
- **Novel approach** to target DDR biology via RBM39 **avoids on-target toxicities** associated with cell cycle checkpoint inhibitors (e.g., CDK12, WEE1, ATR, ATM, PLK1)
- **Selective** RBM39 degrader with **minimal ITGA2 liability** to limit thrombocytopenia

## Unmet Need<sup>1</sup>

- **>100,000 patients** with solid tumor or lymphoma experience disease progression while on frontline therapies
- Potential to be used as a **single agent or in combination** with chemo/IO

## Recursion Approach

- **Unbiased ML-aided genomics screen** to identify biological signature and relate cellular phenotypes
- Progressed REC-1245 from target biology to IND-Enabling studies in **under 18 months (vs. 42 months in industry<sup>2</sup>)**

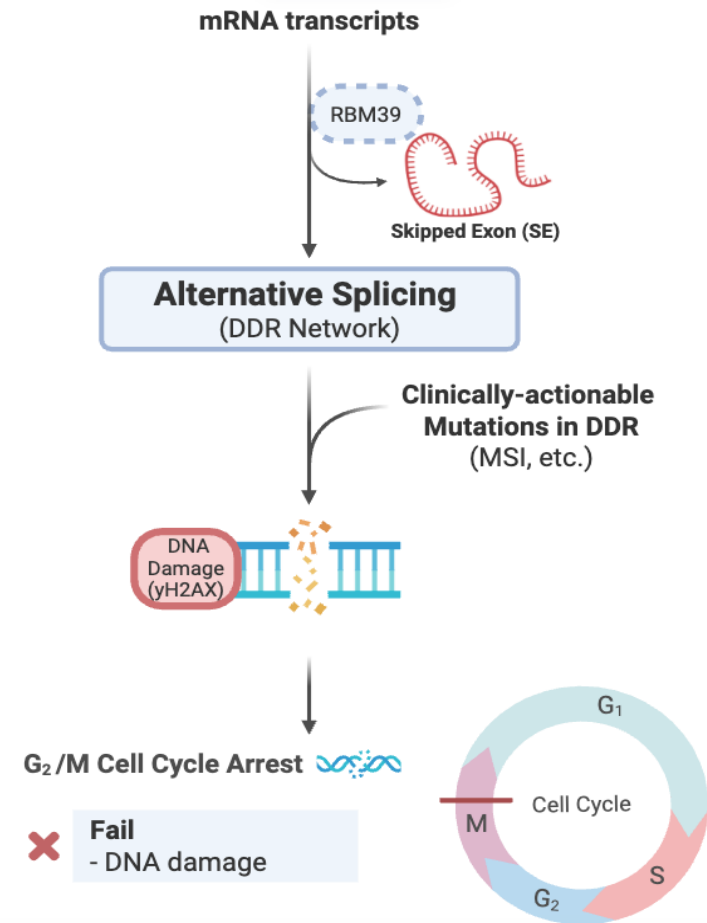
# RBM39 Degradator: Selective degradation of RBM39 impairs splicing, compromising DDR pathways and transcriptional regulation

## Biological Rationale

- **RBM39 is a splicing factor essential for DDR network** and a c-Jun/ER/PR transcriptional coactivator
- **Overexpression of RBM39** in many solid tumors is **linked to poor survival**, highlighting it as a **key cancer driver**<sup>1</sup>
- REC-1245-induced RBM39 degradation leads to **DNA damage and cell death** in several genetic backgrounds / tumor types such as those w/ DDR deficiency

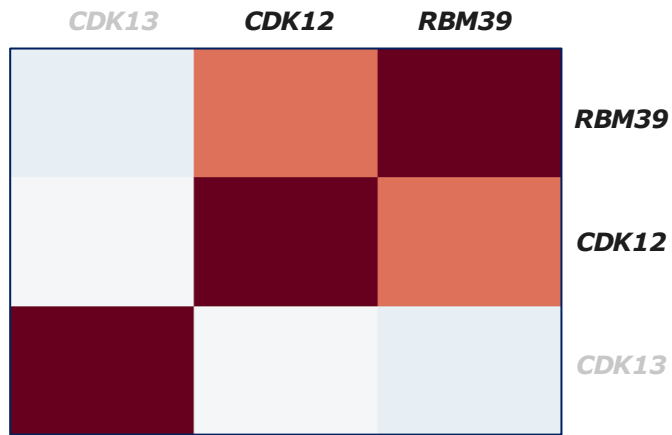
## REC-1245 Opportunity

- REC-1245 is a **highly potent, first-in-class RBM39 degrader**
- **>100,000** addressable patients across US & EU5 - **solid tumor indications and lymphoma**<sup>2</sup>
- **Currently no RBM39 degraders approved by the FDA**



# REC-1245: Novel platform derived insight to unlocking comprehensive genomic instability vulnerabilities

## Recursion OS Insight

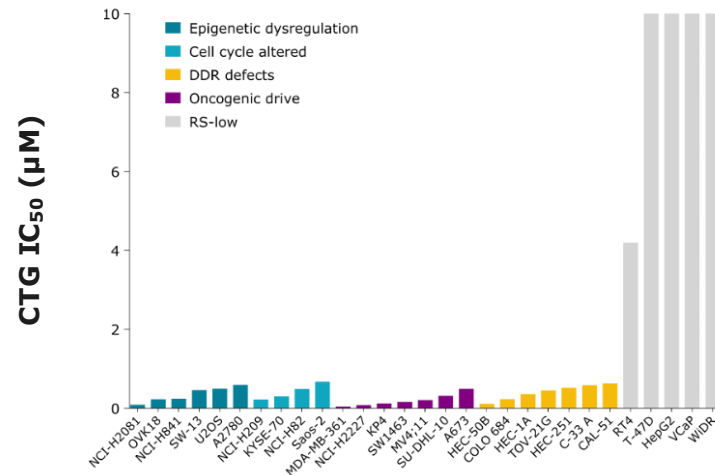


### Platform-derived novel target and degrader

- RBM39 loss phenocopies CDK12 deficiency
- RBM39 degrader: advanced from **204 compounds to candidate in 18 months**
- Translates phenomic insight into mechanism, with **rapid and potent RBM39 degradation in human PBMCs within 24 hours**<sup>1</sup>

## Preclinical Insight

### In vitro: Cell viability with REC-1245<sup>2</sup>

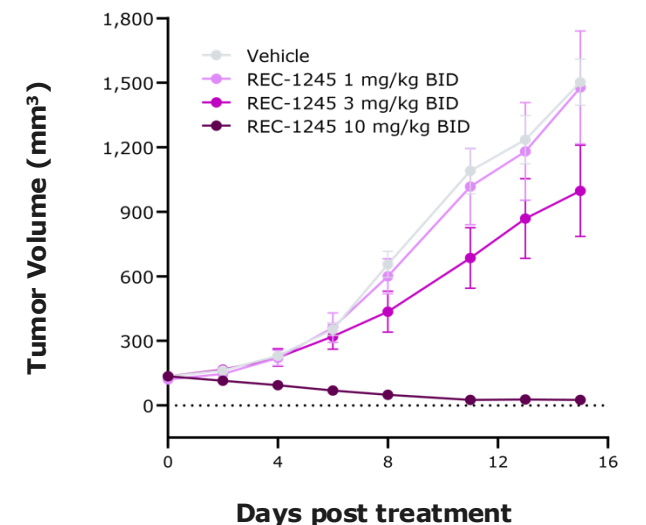


### Potential REC-1245 sensitivity based on genomic instability

- Emerging preclinical data uncover **replication stress and DNA repair vulnerability** as potential signatures for REC-1245 sensitivity

## Preclinical Data

### Ovarian CDX Model: OVK18 (MSI-H)

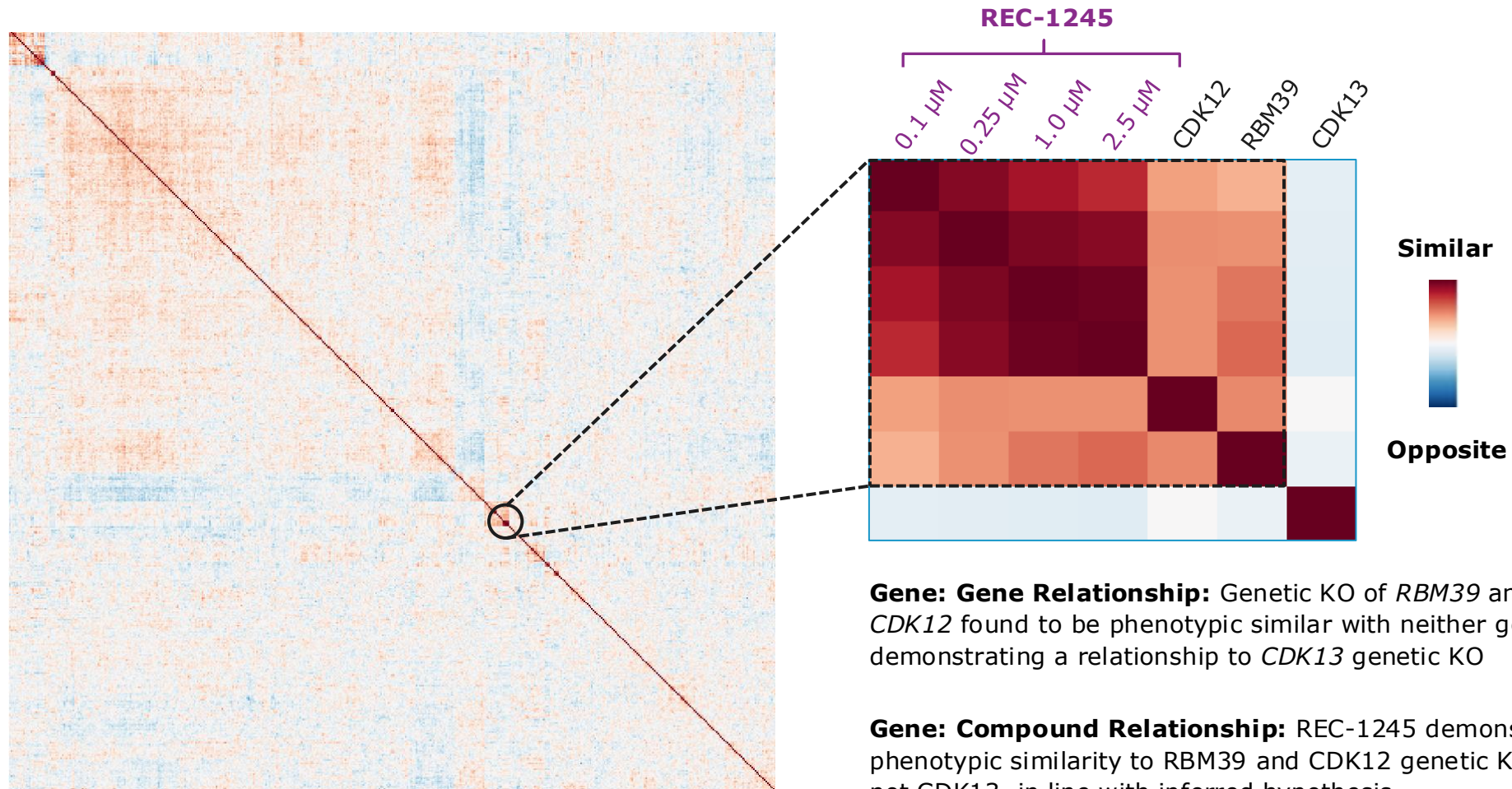


### REC-1245 induces significant tumor regressions in an ovarian CDX

- Model driven by elevated replication stress

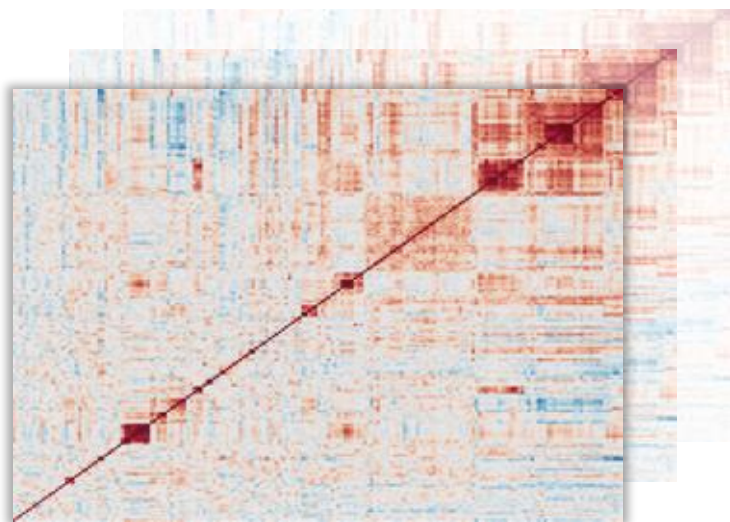
# REC-1245 (RBM39 degrader): Platform inferred a functional similarity between RBM39 and CDK12 biology suggesting a novel approach to potential DDR modulation

## Recursion OS Novel Insight



# Platform links RBM39 biology to CDK12, a key regulator of DNA damage response genes (DDR) and replication stress (RS)

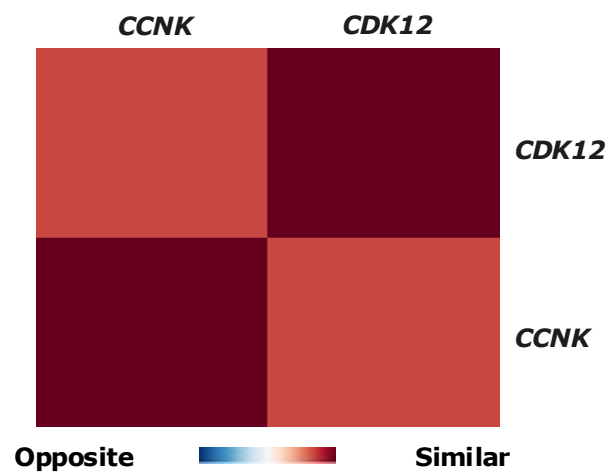
## AI-guided Multimodal Mapping



### Deep genome coverage across major DDR pathways in HUVEC PhenoMap<sup>1</sup>

- **Whole genome CRISPR** knockouts; close to **1 million** compounds profiled
- **Vast** DDR network resolution **unattainable** with single-readout screens

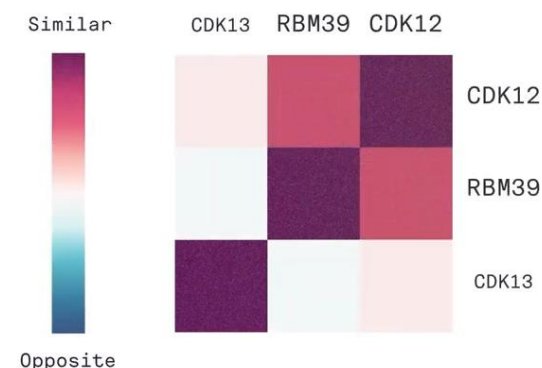
## CDK12 Axis Recapitulated



### CDK12 and cyclin K (CCNK) share a similar signature in phenomic readout

- CDK12 kinase activity **requires** CCNK binding, a **well-established** dependency
- **Validates** approach and potential for novel **AI-driven mechanistic** and **patient** insights

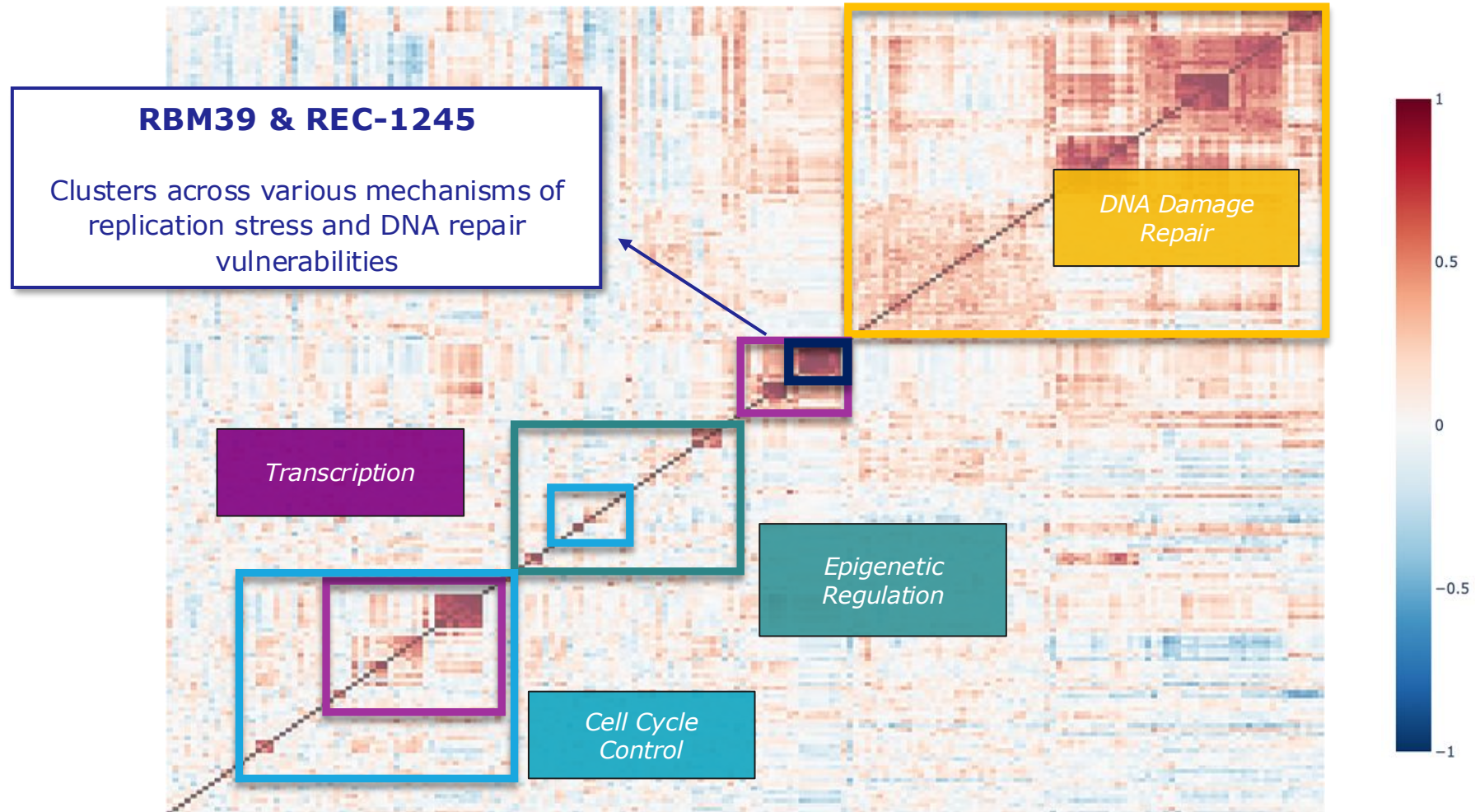
## Genetic-Chemical Convergence



### RBM39 loss mimics CDK12 inhibition, providing a druggable potential analog

- Suppresses DDR networks and cell-cycle pathways
- Potential for **tumor-selective** activity with a **wider** therapeutic index

# Multi-omics insights link RBM39 dependency to transcription-replication stress and DNA repair vulnerabilities



# Target tumors characterized by drivers of genomic instability arising from replication stress potentially linked to RBM39 dependency

## Broad patient subsets with replication stress and DNA repair vulnerabilities<sup>1</sup>

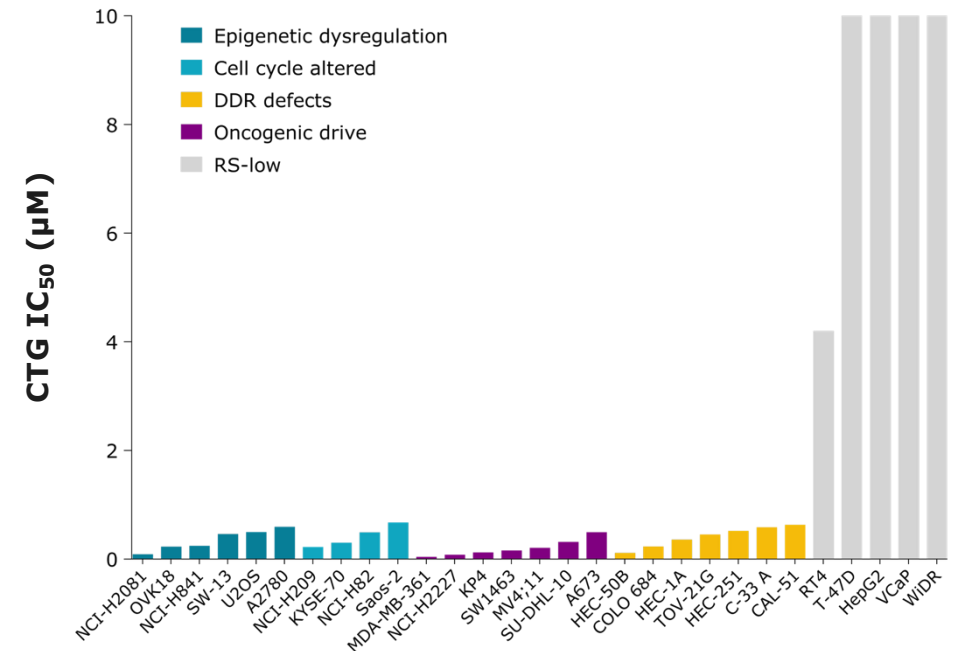


>100,000 patients in US & EU5 per year<sup>2</sup>

## Replication stress and DNA repair vulnerabilities span several solid tumors and blood cancers

- Including colorectal, endometrial, lung, breast, sarcoma, bladder, ovarian, pancreatic, DLBCL and AML
- Correlates with clinically actionable alterations
  - E.g., MYC/MYCN amplification, SWI/SNF loss, MSI-H, HRR defects
- Potential to meaningfully expand beyond initial patient population

## In vitro: cell viability with REC-1245<sup>3</sup>



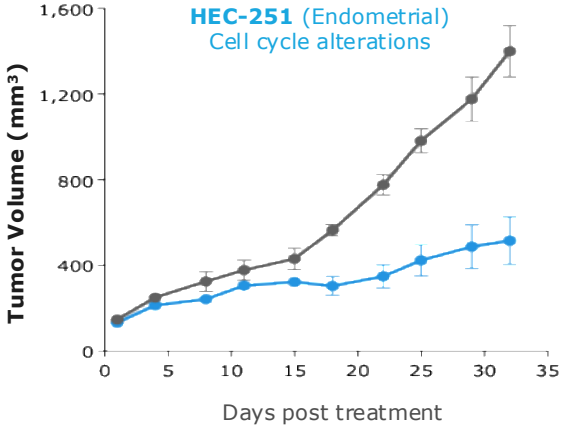
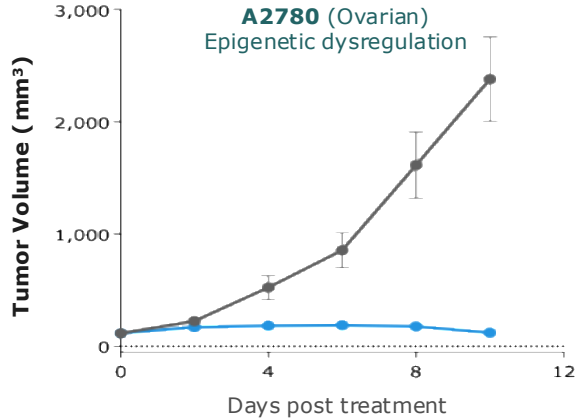
## Emerging preclinical data uncover replication stress as a potential signature for REC-1245 sensitivity

- REC-1245 also demonstrates concentration-dependent increases in  $\gamma$ H2AX in high replication stress driven human cancer cells in vitro (*data not shown*)

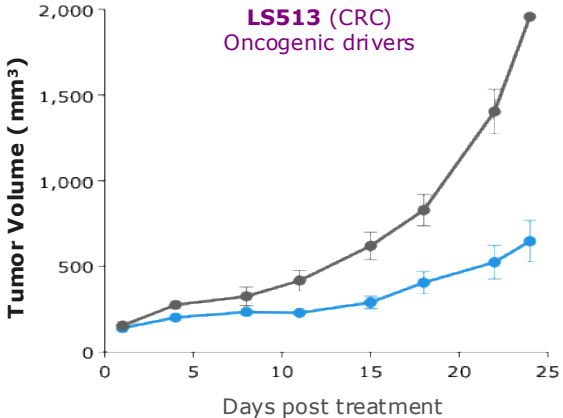
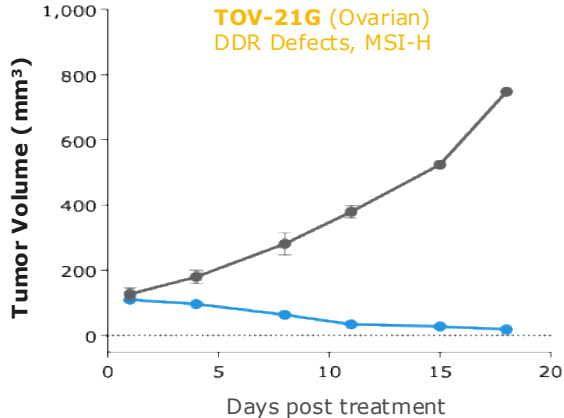
1. da Costa 2022, NRDD  
2. Internal company estimates. Assumes US+EU5 addressable incidence with biomarker-enriched solid tumors and other select histologies.  
3. Cell lines were assigned to broad pathway dysregulation contexts based on 1 or more documented alteration from CCLE/GSDC databases

# Emerging preclinical data suggests greater sensitivity with REC-1245 in high replication stress and DDR vulnerable tumors

**REC-1245 demonstrates reduction in tumor volume across different tumors with high-RS signatures and DNA repair vulnerability<sup>1</sup>**



● Vehicle BID  
● REC-1245 10 mg/kg BID



1. N=4 mice per group.

# Phase 1 Dose Escalation Update: Early data from monotherapy dose escalation with REC-1245

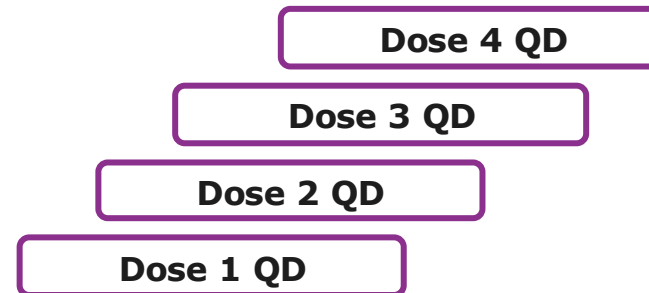
## Key inclusion criteria

- **Unresectable, locally recurrent, or metastatic select solid tumors or select relapsed/refractory lymphoma**
- Progressed following, or intolerant to, available SoC treatments

ALL PATIENTS	N=16
<b>Age (median)</b>	<b>65</b>
Range	57-77
<b>Advanced solid tumors</b>	<b>16</b>
<b>Tumor biomarker</b>	
MSI-H and/or dMMR	7
MSS	9
<b>Prior systemic therapy lines (median)</b>	<b>4.5</b>

## Ph 1A Monotherapy Dose-Escalation *Continuous once-daily dosing summary*

*Additional dose levels enrolling*



## Primary objective

- PK and safety

## Secondary objective

- Anti-tumor activity

→ **ClinTech:** Ongoing RWE efficacy contextualization leveraging high-fidelity longitudinal EHR and claims data

# Preliminary Safety Data: REC-1245 well-tolerated with no DLTs across all evaluated doses to date

Treatment-Related Adverse Event (TRAE)	
	Patients (n=16)
Patients with <b>Any TRAE</b>	<b>10 (62.5%)</b>
Grade 1-2	9 (56.3%)
Grade 3	1 (6.2%)
Grade 4-5	0 (0.0%)

## Preliminary safety and tolerability summary

- REC-1245 was **well-tolerated**
- **No DLTs reported** across evaluated doses to date
- **No serious TRAE** was reported
- **90%+ of TRAEs were Grade 1 or 2**
  - Most common GI-related: constipation (12.5%, n=2), nausea (12.5%, n=2), vomiting (12.5%, n=2)
  - Most common non-GI related: fatigue (18.8%, n=3)
- 6.2% (n=1) of patients experienced Grade 3 nausea and vomiting

# Preliminary PK/PD summary

Early data suggests  
REC-1245 has  
**predictable, dose  
dependent  
exposure**

- **Predictable, dose-dependent exposure** across evaluated patients to date
- **PK is supportive of QD dosing** and exposures continue to increase with dose
- Expect to **achieve exposures consistent with tumor regression** in mice **within the next two dose levels**
- Pharmacodynamic assessments demonstrate **target engagement**

# REC-1245 (RBM39): Insight → early proof → next steps

