

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**FORM 8-K**

**CURRENT REPORT**  
Pursuant to Section 13 OR 15(d)  
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **October 24, 2022**

**MONTE ROSA THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction  
of incorporation)

**001-40522**  
(Commission  
File Number)

**84-3766197**  
(I.R.S. Employer  
Identification No.)

**645 Summer Street, Suite 102**  
**Boston, MA 02210**  
(Address of principal executive offices, including zip code)

**(617) 949-2643**  
(Registrant's telephone number, including area code)

**Not Applicable**  
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.0001 par value per share	GLUE	The Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

**Item 7.01. Regulation FD Disclosure**

On October 24, 2022, Monte Rosa Therapeutics, Inc. presented at a Key Opinion Leader (KOL) webinar hosted by Cowen and Company, LLC on the topic of MRT-2359. The full KOL webinar presentation is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information in this Form 8-K (including Exhibit 99.1) shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such a filing.

**Item 9.01. Financial Statements and Exhibits**

(d) Exhibits

99.1 [KOL webinar presentation furnished by Monte Rosa Therapeutics, Inc. on October 24, 2022.](#)

104 Cover Page Interactive Data File (embedded within the Inline XBRL document).

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Monte Rosa Therapeutics, Inc.

Date: October 24, 2022

By: /s/ Markus Warmuth  
Markus Warmuth  
President and Chief Executive Officer

# MRT-2359 KOL Webinar hosted by Cowen

October 24, 2022

## Guest Speakers

**Jordi Rodon Ahnert, M.D., Ph.D.**, Department of Investigational Cancer Therapeutics, Division of Cancer Medicine at MD Anderson Cancer Center

**Davide Ruggero, Ph.D.**, Professor, Department of Urology and Cellular & Molecular Pharmacology at UCSF; Helen Diller Family Endowed Chair in Basic Cancer Research



## Forward-Looking Statements

These materials include express and implied "forward-looking statements," including forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward looking statements include all statements that are not historical facts, and in some cases, can be identified by terms such as "may," "might," "will," "could," "would," "should," "expect," "intend," "plan," "objective," "anticipate," "believe," "estimate," "predict," "potential," "continue," "ongoing," or the negative of these terms, or other comparable terminology intended to identify statements about the future. Forward-looking statements contained in herein include, but are not limited to, statements about our product development activities, including our expectations around MRT-2359 and the ongoing development of our QuEEN™ platform, and the advancement of our pipeline and the various products therein, our expectations of timing for initiation of our clinical trial for MRT-2359, our expectations of timing for dosing patients in our clinical trial for MRT-2359, our ability to initiate and the timing of initiation of additional lead optimization programs, and our expectations regarding our ability to nominate and the timing of our nominations of additional development candidates. By their nature, these statements are subject to numerous risks and uncertainties, including the impact that the current COVID-19 pandemic will have on our development activities and operations, as well as those risks and uncertainties set forth in our Annual Report on Form 10-K for the fourth quarter and full year ended December 31, 2021 filed, with the US Securities and Exchange Commission on March 29, 2022, and any subsequent filings, including our Quarterly Report on Form 10-Q for the second quarter of 2022 ending on June 30, filed on August 11, 2022, that could cause actual results, performance or achievement to differ materially and adversely from those anticipated or implied in the statements. You should not rely upon forward looking statements as predictions of future events. Although our management believes that the expectations reflected in our statements are reasonable, we cannot guarantee that the future results, performance or events and circumstances described in the forward-looking statements will be achieved or occur. Recipients are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date such statements are made and should not be construed as statements of fact. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, any future presentations or otherwise, except as required by applicable law. Certain information contained in these materials and any statements made orally during any presentation of these materials that relate to the materials or are based on studies, publications, surveys and other data obtained from third-party sources and our own internal estimates and research. While we believe these third-party studies, publications, surveys and other data to be reliable as of the date of these materials, we have not independently verified, and make no representations as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, no independent source has evaluated the reasonableness or accuracy of our internal estimates or research and no reliance should be made on any information or statements made in these materials relating to or based on such internal estimates and research.

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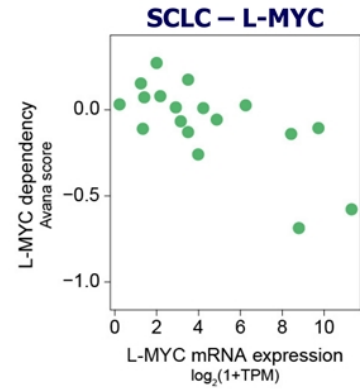
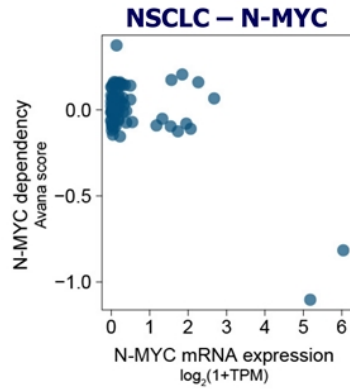


# MYC Transcription Factors are Undruggable Oncogenes

## MYC family members are amongst the most dysregulated oncogenes in human cancer

- MYC family: c-MYC, N-MYC, and L-MYC
- MYC dysregulation is frequently associated with poor prognosis and unfavorable patient survival
- MYC up-regulation dysregulates key cellular processes (e.g. ribosome biogenesis and protein synthesis)
- MYC dependency is observed in many cancer types

## Cells expressing high MYC are sensitive to MYC CRISPR KO

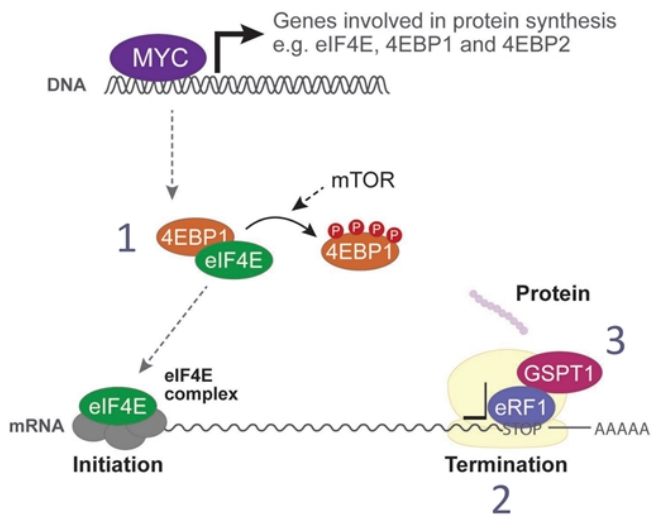


DepMap data, each dot represents a cell line

**Targeting enhanced translation induced by MYC represents an attractive alternative**



# Targeting Myc-driven Tumors and Their Addiction to Protein Translation



1

## Addiction

To sustain growth, MYC-driven tumors are **addicted to protein translation**

2

## Dependency

This addiction creates a dependency on the **translation termination factor GSPT1**

3

## Therapeutic vulnerability

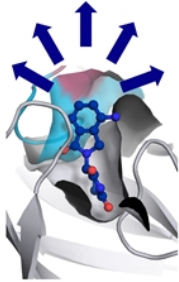
**GSPT1 is a therapeutic vulnerability of MYC-driven tumors** which can be targeted using MGD



# QuEEN™ Discovery Engine Facilitates the Discovery of MRT-2359

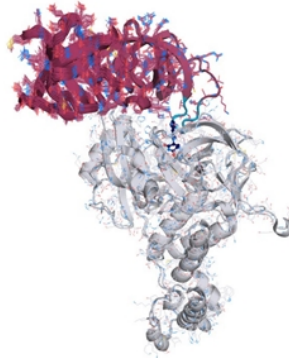
## Proprietary MGD library

Diverse library, rationally designed, using structural insights to engage a variety of degrons

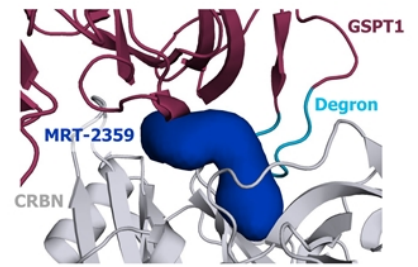


## Rhapsody™

*In silico* ternary complex modelling using proprietary AI-powered algorithms



## MRT-2359 is a potent GSPT1 degrader



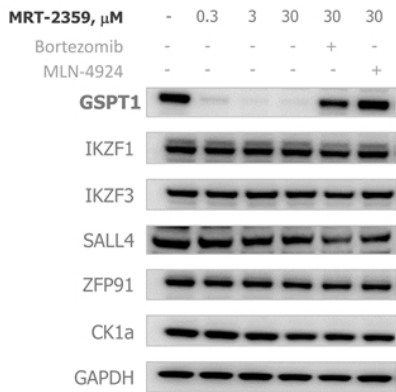
### *in vitro* data

CRBN binding, $K_i$	113 nM
Ternary complex, $EC_{50}$	< 7 nM
Degradation, $DC_{50}$	80 nM



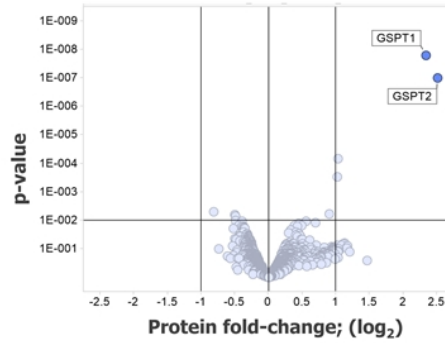
# MRT-2359 is a GSPT1-directed MGD with Favorable Drug-like Properties

## MRT-2359 is a selective GSPT1-directed MGD



6hr post treatment in MM1S and Kelly (SALL4)

## Proximity – Turbo ID



1hr post treatment

## MRT-2359 is orally bioavailable and has favorable ADMET profile

### ADMET profile

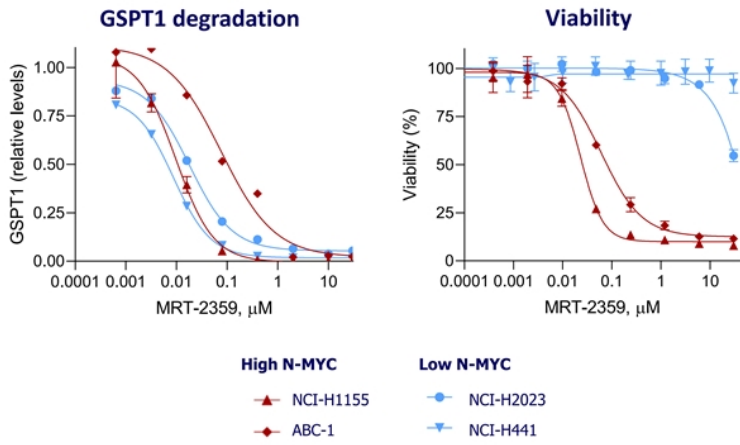
CYP DDIs	> 30 $\mu\text{M}$
hERG inhibition patch clamp	$\text{EC}_{50}$ > 30 $\mu\text{M}$
Oral bioavailability all species	~50%

- MRT-2359 is neither an inhibitor, nor an inducer of major CYPs
- MRT-2359 doesn't inhibit hERG
- MRT-2359 is orally bioavailable



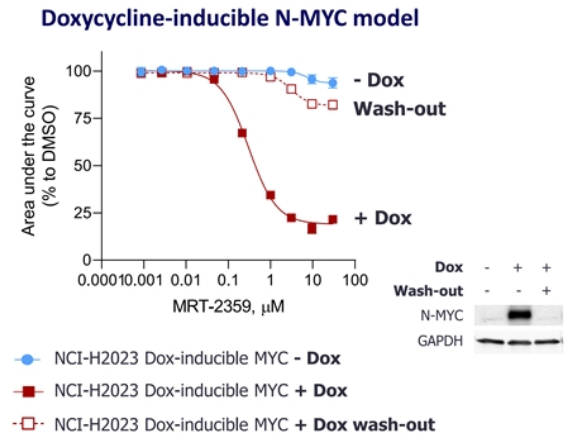
# Preferential activity of MRT-2359 in MYC-Driven NSCLC Lines

**MRT-2359 induces GSPT1 degradation in all cell models, but show preferential antiproliferative activity in N-MYC high cell lines**



GSPT1 western blot at 6 hr (N-Myc high) and 24 hr (low). 72 hr viability assay (CTG)

**N-MYC overexpression sensitizes NCI-H2023 resistant cells to MRT-2359**

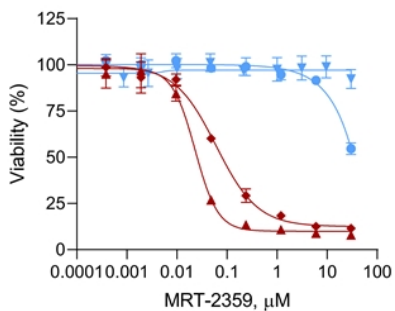


Incucyte, 96 hr post treatment



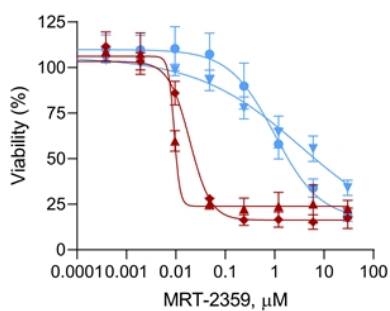
# MRT-2359 Shows Preferential Activity in MYC High or Neuroendocrine (NE) Positive Cancer Lines

**N-MYC - NSCLC lines**



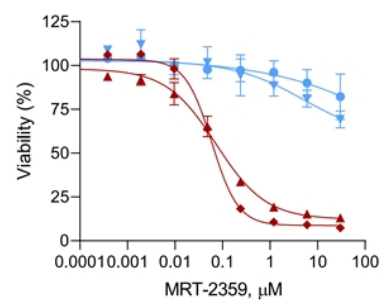
<b>High N-MYC</b>	<b>Low N-MYC</b>
▲ NCI-H1155	● NCI-H2023
◆ ABC-1	▼ NCI-H441

**L-MYC - SCLC lines**



<b>High L-MYC</b>	<b>Low L-MYC</b>
▲ NCI-H1836	● NCI-H2286
◆ NCI-H1876	▼ NCI-H196

**NE positive lung lines**



<b>High NE</b>	<b>Low NE</b>
▲ NCI-H810	● NCI-H2405
◆ NCI-H1770	▼ NCI-H1693

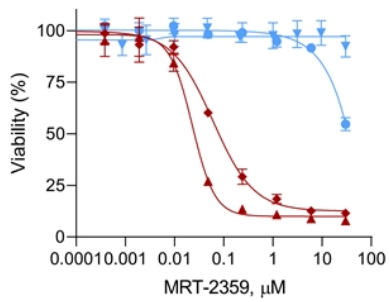
All cell lines are L-MYC and N-MYC low

72 hr viability assay (CTG)

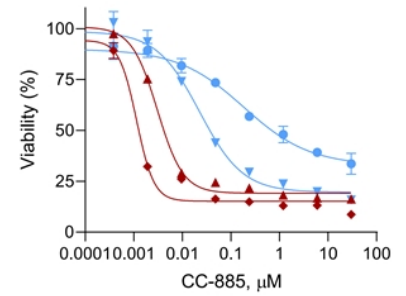
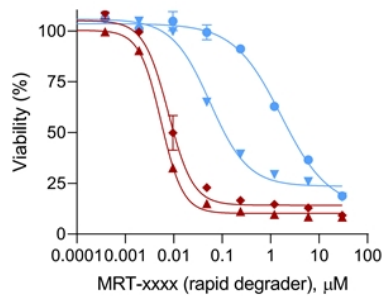


# MRT-2359 Shows Preferential Activity Compared to "Rapid" GSPT1 Degraders

## MRT-2359



## "Rapid" GSPT1 degraders lack preferential activity in N-MYC high cell lines



- Differential activity can be optimized and is a function of selectivity and degradation dynamics
- High selectivity and intermediate fast degradation (6h – vs 1-2h to maximum degradation) lead to greater differential activity

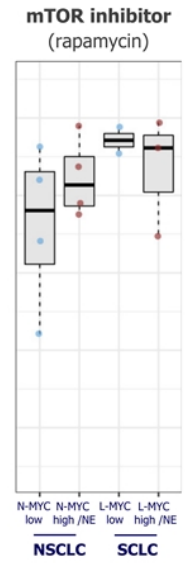
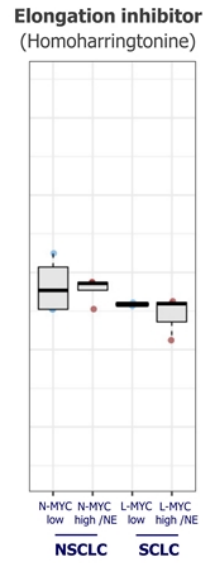
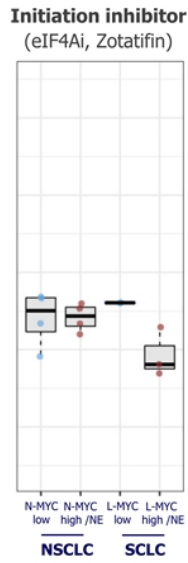
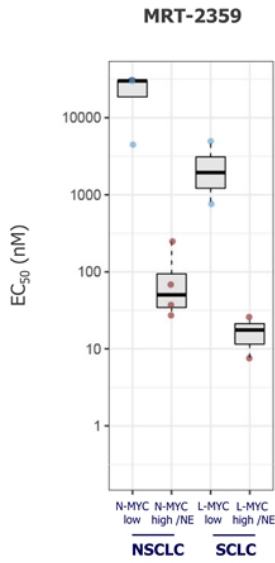
72 hr viability assay (CTG)



# Translation Initiation/Elongation Inhibitors Do Not Show Preferential Activity in MYC High NSCLC and SCLC Cell Lines

**MRT-2359 shows preferentially activity in MYC high lung lines**

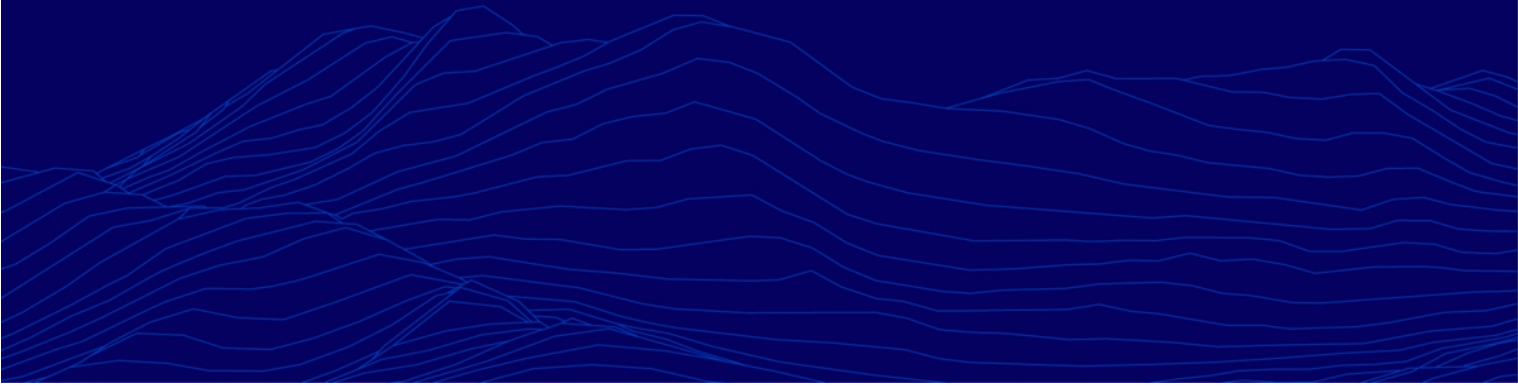
**Translation initiation and elongation inhibitors lack differential activity**



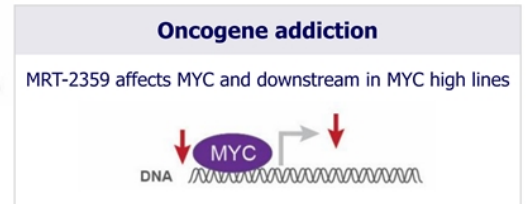
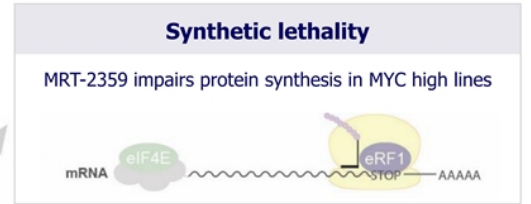
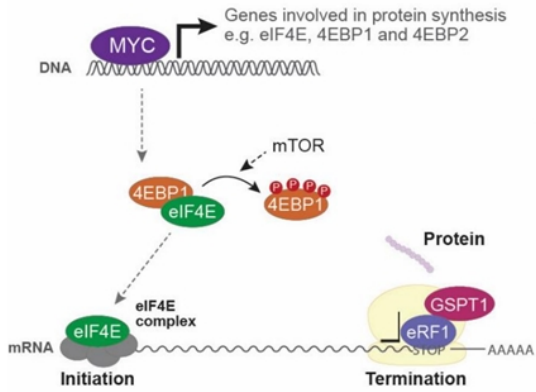
72 hr viability assay (CTG).



# MRT-2359 Mechanism of Action



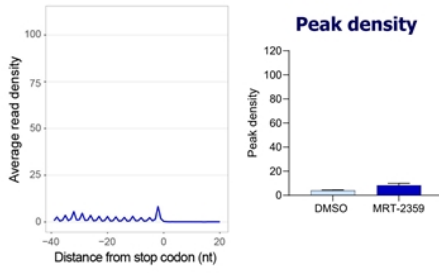
# MRT-2359 Mechanism of Action in MYC-driven Tumors



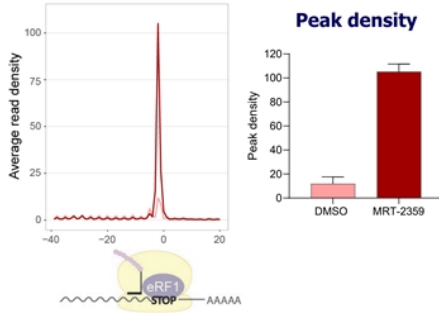
# MRT-2359 Impairs Protein Synthesis in N-MYC High NSCLC Cell Lines

## MRT-2359 induces ribosome stalling only in N-MYC high cell line

Low N-MYC  
NCI-H2023

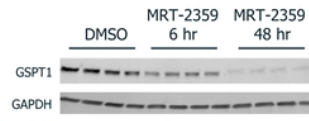


High N-MYC  
NCI-H1155

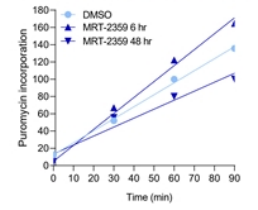


## MRT-2359 rapidly and completely abrogates protein synthesis only in N-MYC high cell line

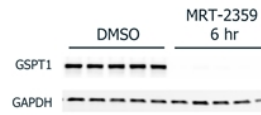
### GSPT1 protein levels



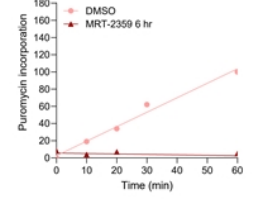
### Puromycin incorporation



### GSPT1 protein levels



### Puromycin incorporation



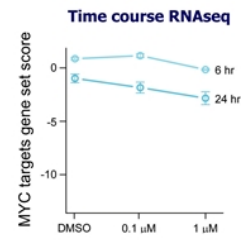
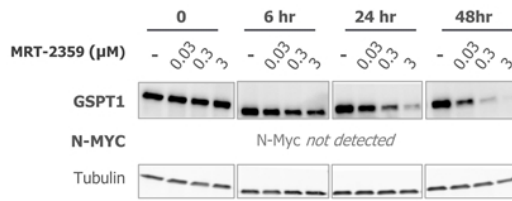


# MRT-2359 Affects MYC and MYC Pathway in N-MYC High NSCLC Cell Lines

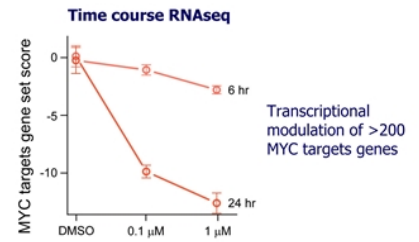
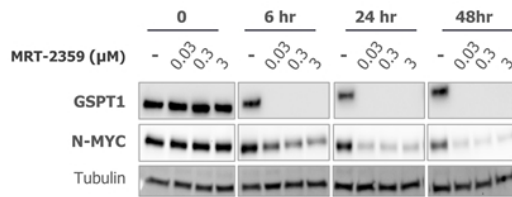
**MRT-2359 induce GSPT1 degradation leading to N-MYC protein downregulation in NCI-H1155**

**Degradation of GSPT1 leads to downregulation of N-MYC transcriptional output in NCI-H1155**

**Low N-MYC  
NCI-H2023**

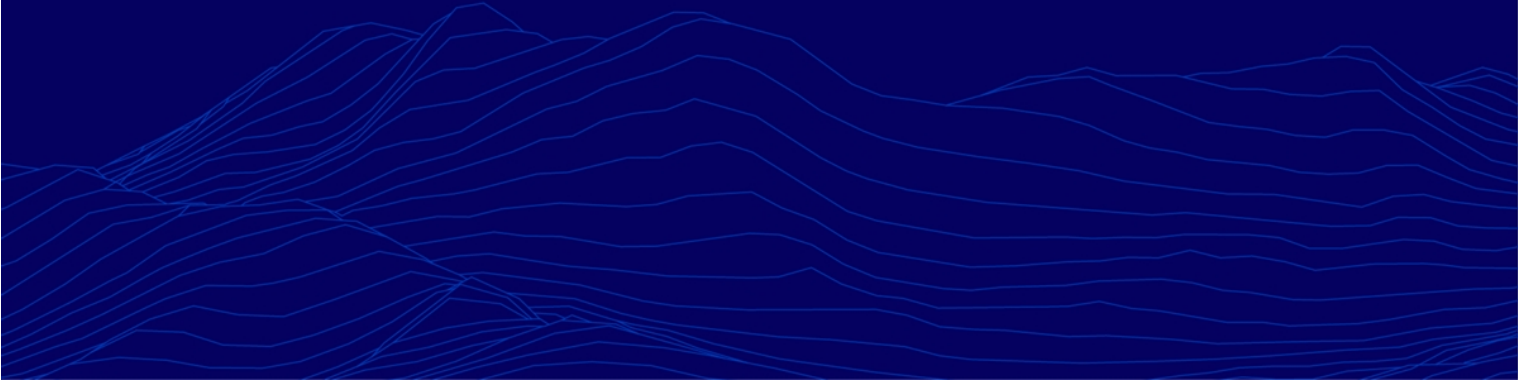


**High N-MYC  
NCI-H1155**





# MRT-2359 and Other Clinical Stage GSPT1 Degraders



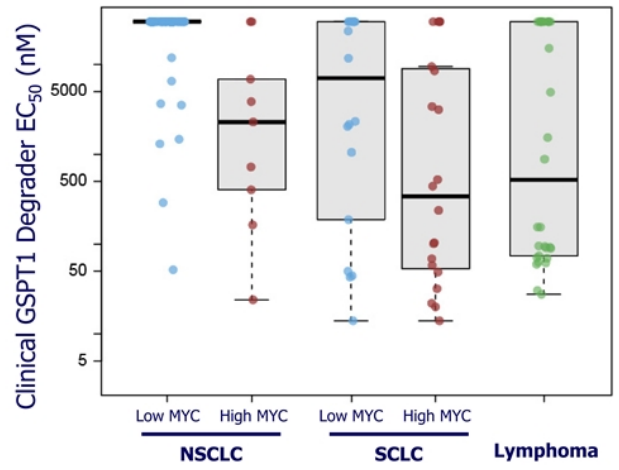
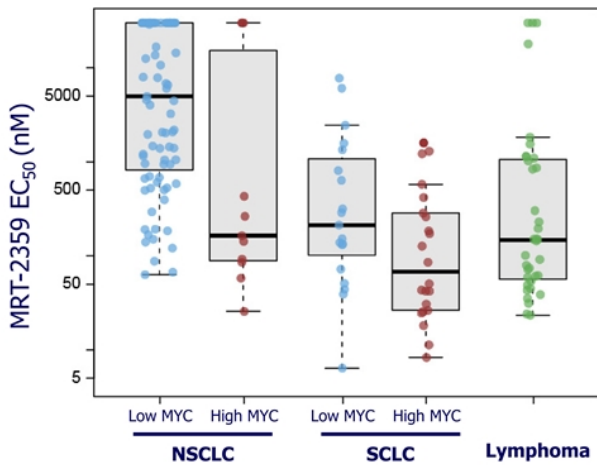
# MRT-2359 Shows Superior Characteristics Compared to Clinical GSPT1 Degradar

	Assay	MRT-2359	Clinical GSPT1 Degradar
in vitro	Selectivity (TMT Px, WB)	GSPT1, GSPT2	GSPT1, GSPT2, SALL4, FIZ1, RNF166, ODC1
	CYP DDI (2B6, 1A2, 2D6,3A4, 2C8,2C9, 2C19)	> 30 uM	CYP2C19 @ 1.5 uM
	hERG (patch clamp)	> 30 uM	5.3 uM
	CEREP	a1A > 50% @ 10 uM	M1/M2 > 50% @ 10 uM
	Caco2 (Efflux Ratio)	9	>100
	Route of Administration	PO	IV
Clinical	Development status	Ph I	Phase I/Ib
	Stratification	Myc high	None reported

\* Comparison based on internal profiling. Selectivity based on internal data as well as data from DFCI Proteomic data base  
<https://proteomics.fischerlab.org>



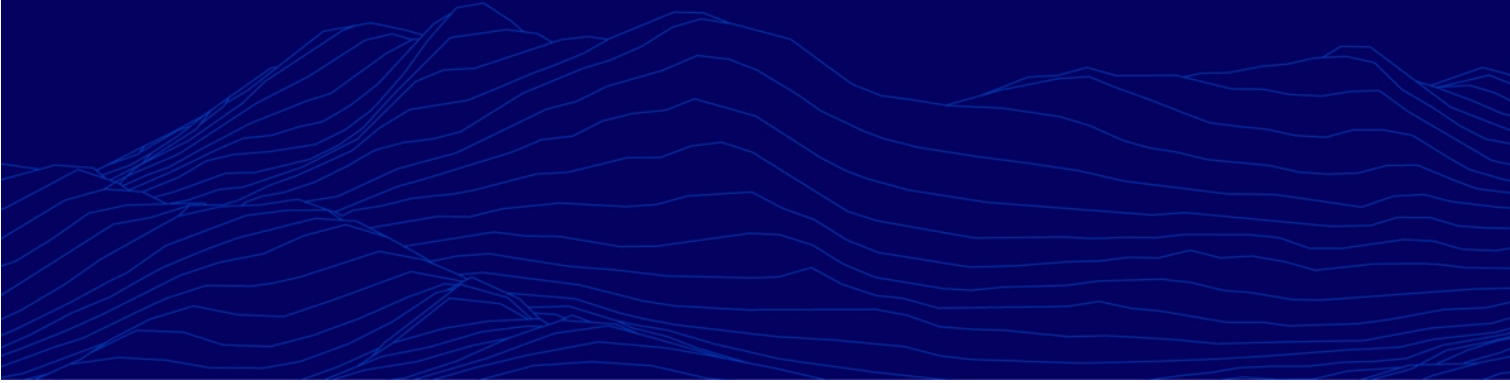
# Superior Activity of MRT-2359 in MYC-driven Cancer Cell Lines



\* Comparison based on internal profiling



# Preclinical Anti-tumor Activity of MRT-2359 in MYC-driven Animal Models



# MRT-2359 Mouse-trial in NSCLC, SCLC and Lung NE Patient-derived Xenograft

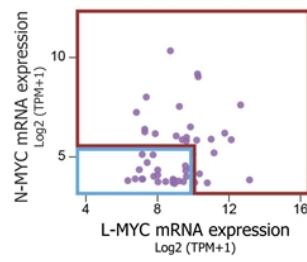
## Collection of PDX models



All models have been characterized by DNA and RNAseq

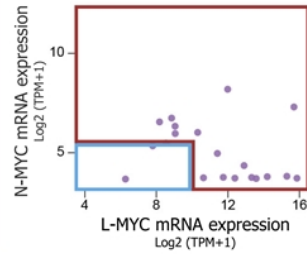
Large cell NE carcinoma or NE lung cancer

NSCLC

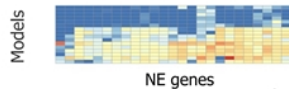


Selected 48 models

SCLC



Selected 20 models



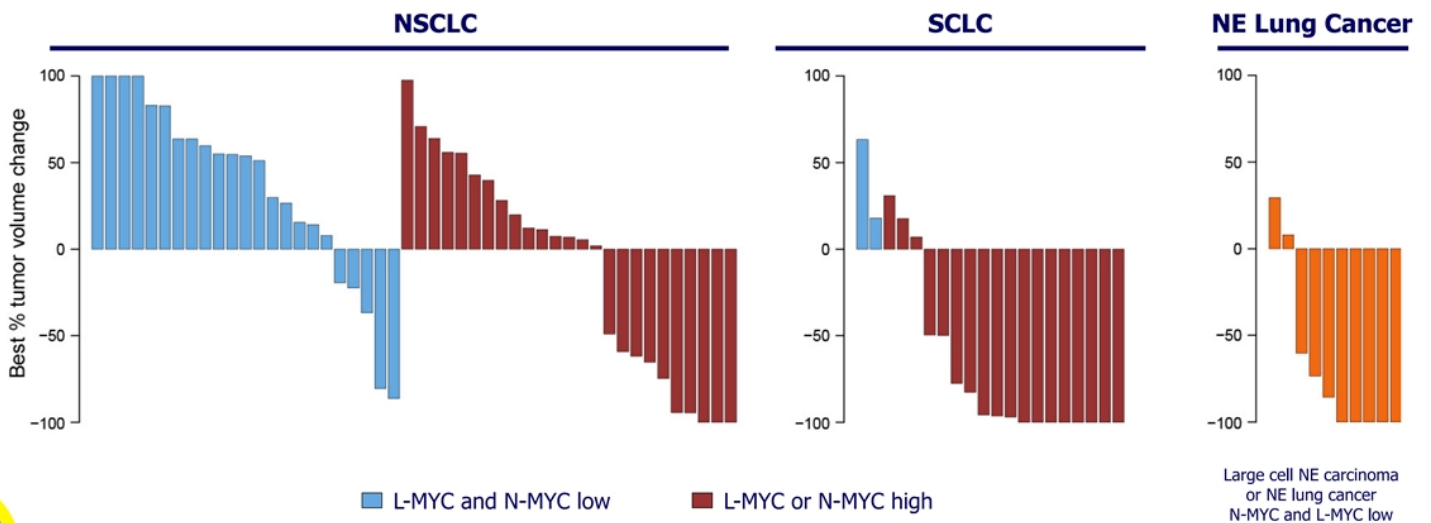
Selected 10 models

**Models selected across range of N-MYC and L-MYC mRNA expression levels or NE status were treated with:**

- Vehicle
- MRT-2359 10 mg/kg PO QD

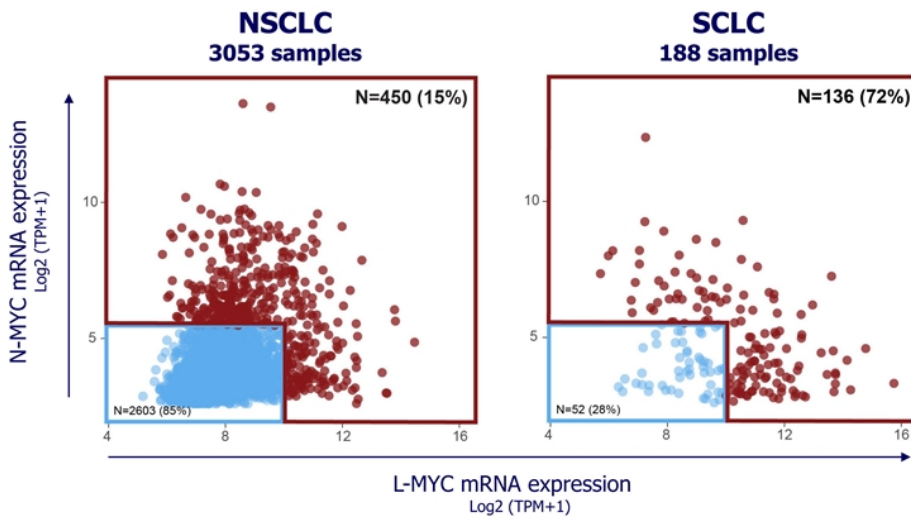
3 mice for each treatment group

# MRT-2359 Demonstrates Preferential Anti-tumor Activity in MYC High or Neuroendocrine (NE) Lung Cancer PDXs



MRT-2359 10 mg/kg, PO, QD

# High Frequency of L-MYC and N-MYC Expression in NSCLC and SCLC from Real-world Data



**mRNA expression**

- High N-MYC or L-MYC
- Low N-MYC and L-MYC

## Demographic and Diseases Characteristic

- There is no notable difference in the proportion of MYC high expressors across disease staging, gender or racial groups

## Treatment Outcomes

- No statistically significant associations between MYC high status and treatment outcomes

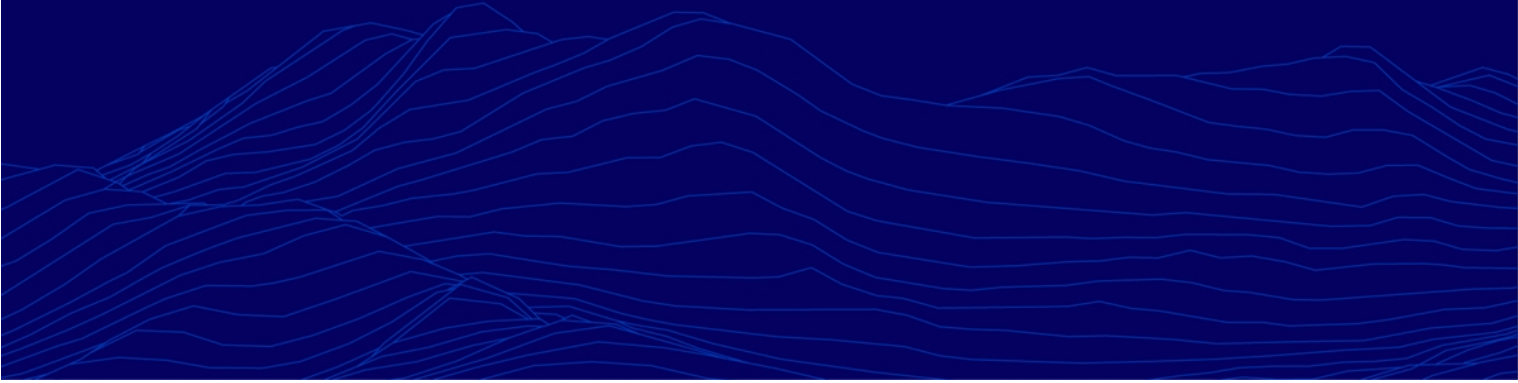


**"TEMPUS**





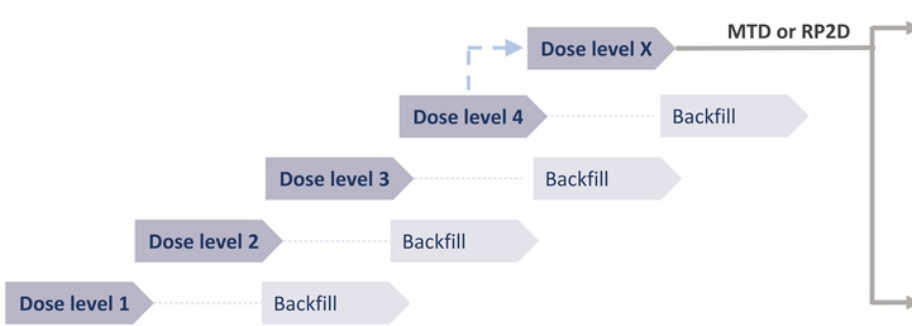
# Phase 1/2 Clinical Study



# MRT-2359-001 Clinical Study Design

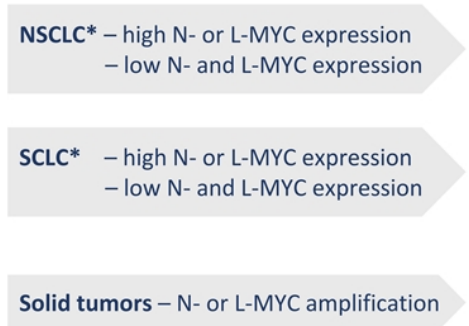
## Phase 1: Dose Escalation

Lung cancer (NSCLC & SCLC), DLBCL, high-grade neuroendocrine tumors, and N-/L-MYC amplified solid tumors



*Backfill slots for additional patients for each dose level*

## Phase 2: Expansion Cohorts



\* Efficacy guided stratification per N-/L-MYC expression

## Clinical Sites

Clinical Site	PI	Expertise
MDACC	Dr. Rodon	Phase I/Lung
SCRI	Dr. Spigel	Lung
MSKCC	Dr. Choudhury	Phase I/Lung
DFCI	Dr. Janne	Lung
Mary Crowley CR	Dr. Barve	Phase I
START TX	Dr. Papadopoulos	Phase I
Honor Health	Dr. Tsai	Phase I
Indiana University	Dr. Opyrchal	Phase I

[ClinicalTrials.gov](https://clinicaltrials.gov) Identifier: [NCT05546268](https://clinicaltrials.gov/ct2/show/study/NCT05546268)



Thank You

