

**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): March 14, 2024

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.)

**321 Harrison Avenue, Suite 900
Boston, MA 02118**
(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 2.02. Results of Operations and Financial Condition

On March 14, 2024, Monte Rosa Therapeutics, Inc. (the "Company") announced its financial results for the quarter and year ended December 31, 2023. The full text of the press release issued in connection with the announcement is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

Item 7.01. Regulation FD Disclosure

On March 14, 2024, the Company issued a corporate presentation that it intends to utilize in various meetings with securities analysts, investors and others. A copy of the corporate presentation is furnished as Exhibit 99.2 to this Current Report on Form 8-K.

The information under Item 2.02 and Item 7.01 in this Current Report on Form 8-K (including Exhibit 99.1 and Exhibit 99.2) 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 | Press Release issued by Monte Rosa Therapeutics, Inc. dated March 14, 2024. |
| 99.2 | Corporate Presentation furnished by Monte Rosa Therapeutics, Inc. on March 14, 2024. |
| 104 | Cover Page Interactive Data File (embedded within the Inline XBRL document). |
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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: March 14, 2024

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

Monte Rosa Therapeutics Announces Fourth Quarter and Full Year 2023 Financial Results and Provides Corporate Update

MRT-2359, a molecular glue degrader (MGD) being developed for MYC-driven solid tumors, advancing in ongoing Phase 1/2 clinical trial; program on track with determination of recommended Phase 2 dose expected in Q2 2024

MRT-6160, a VAV1-directed MGD designed to treat systemic and neurological autoimmune diseases, progressing toward expected IND submission in Q2 2024 and initiation of Phase 1 SAD/MAD study mid-year

MRT-8102 nominated as first development candidate for NEK7 program, targeting diseases driven by IL-1b and the NLRP3 inflammasome; IND submission expected in Q1 2025

Entered into strategic discovery collaboration with Roche, further expanding potential applications of QuEEN™ discovery engine

Strong cash position expected to fund operations into H1 2026 and enable advancement of MRT-2359, MRT-6160, and MRT-8102 programs through clinical milestones

BOSTON, Mass., March 14, 2024 – Monte Rosa Therapeutics, Inc. (Nasdaq: GLUE), a clinical-stage biotechnology company developing novel molecular glue degrader (MGD)-based medicines, today reported business highlights and financial results for the full year and fourth quarter ended December 31, 2023.

“We made excellent pipeline and corporate progress during 2023 and early 2024, highlighted by the encouraging initial clinical results reported from our MRT-2359 Phase 1/2 study in October. We also continued to advance our VAV1-directed MGD, MRT-6160, for autoimmune diseases toward the clinic, and we progressed MRT-8102, a NEK7-directed MGD targeting IL-1b and the NLRP3 inflammasome, into IND-enabling studies. We are excited about the broad potential of MRT-2359 in MYC-driven cancers, as well as the opportunity that exists with both the VAV1 and NEK7 programs to address pathways of emerging clinical significance in systemic and neurological autoimmune and inflammatory diseases,” said Markus Warmuth, M.D., Chief Executive Officer of Monte Rosa Therapeutics. “In addition, we entered into a strategic research collaboration with Roche to enable broader application of our technology. All combined, the terrific progress we made in the last 12 month highlights the uniqueness and differentiation of our approach and the strength of our ML/AI-driven QuEEN™ discovery engine. We look forward to building on that success with continued pipeline execution across multiple programs targeting substantial patient populations, and our anticipated cash runway into the first half of 2026 positions us well to do so.”

2023 AND RECENT HIGHLIGHTS

- In October 2023, Monte Rosa announced interim clinical data from the Phase 1 dose escalation part of the ongoing Phase 1/2 clinical trial of MRT-2359 in MYC-driven solid tumors demonstrating tumor size reductions in heavily pretreated patients with biomarker-positive cancers and favorable pharmacokinetic (PK), pharmacodynamic (PD), and tolerability profiles. Enrollment is ongoing in backfill cohorts at clinically active doses using a 5-days-on-drug, 9-days-off-drug schedule and in dose escalation cohorts using a 21-days-on, 7-days-off-drug schedule. The Company anticipates determining
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the recommended Phase 2 dose in Q2 2024, reporting updated Phase 1 study results thereafter, and initiating the Phase 2 portion of the study before year-end.

- In December 2023, Monte Rosa received U.S. Food & Drug Administration (FDA) Fast Track Designation for MRT-2359 for the treatment of patients with previously treated, metastatic small cell lung cancer (SCLC) with L-MYC or N-MYC expression. MRT-2359 previously received Fast Track designation from the FDA for the treatment of patients with previously treated, metastatic NSCLC with L-MYC or N-MYC expression.
- MRT-6160, a VAV1-targeting MGD designed to treat multiple systemic and neurological immunological and inflammatory diseases, is on track towards an anticipated Investigational New Drug (IND) application filing with the FDA in Q2 2024, and a Phase 1 single ascending dose/multiple ascending dose (SAD/MAD) study initiation in healthy volunteers in midyear 2024. The Company recently completed preclinical GLP toxicology studies in rats and non-human primates, demonstrating a highly favorable profile with no significant changes in peripheral immunophenotyping assessments.
- Monte Rosa recently announced the nomination of MRT-8102 as the first development candidate for its NEK7 program, targeting diseases driven by IL-1b and the NLRP3 inflammasome. MRT-8102 is an orally bioavailable MGD that has shown potent, selective, and durable degradation of NEK7 and near-complete reduction of IL-1b in a non-human primate model following *ex vivo* stimulation of whole blood. IND-enabling studies are ongoing, and an IND submission is anticipated in Q1 2025. The Company is also advancing other differentiated NEK7-directed MGDs.
- In October 2023, Monte Rosa entered into a strategic collaboration and licensing agreement with global healthcare leader Roche to discover and develop MGDs against targets in cancer and neurological diseases. Under the terms of the agreement, Monte Rosa Therapeutics received an upfront payment of \$50 million and is eligible to receive future preclinical, clinical, commercial, and sales milestone payments that could exceed \$2 billion, as well as tiered royalties. Roche has the option to expand the collaboration with an additional set of targets. If exercised, Monte Rosa would be eligible for an additional upfront payment of up to \$28 million and potential preclinical, clinical, commercial, and sales milestones exceeding \$1 billion, as well as tiered royalties.
- Edmund Dunn was recently promoted to Principal Accounting Officer. Edmund has more than 25 years of experience as a finance professional and has been with Monte Rosa since March of 2021. Andrew Funderburk was recently appointed as Senior Vice President, Head of Investor Relations and Strategic Finance. He was previously Managing Director at Kendall Investor Relations, LLC, and Managing Director and Partner at the healthcare and life sciences consulting firm Health Advances.

ANTICIPATED UPCOMING MILESTONES

- Announce the recommended Phase 2 dose for the MRT-2359 Phase 1/2 study in Q2 2024 and report updated Phase 1 clinical results thereafter. Initiate the Phase 2 portion of the study before year-end. The Company is exploring Phase 2 expansion cohorts in high-prevalence c-MYC-driven tumors such as hormone receptor-positive breast cancer and prostate cancer, as well as tumor types and patient populations driven by L- and N-MYC including NSCLC, SCLC, and solid tumors with amplifications of L- and N-MYC.
 - Submit an IND application for MRT-6160 in Q2 2024 and initiate a Phase 1 SAD/MAD study in healthy volunteers in mid-2024. Monte Rosa expects to subsequently initiate proof-of-concept studies in autoimmune diseases spanning gastroenterology, dermatology, rheumatology, and neurology indications.
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- Submit an IND application for MRT-8102 in Q1 2025.
- Nominate a development candidate for the CDK2 preclinical program in 2024.

UPCOMING PRESENTATIONS

- Monte Rosa plans to present a poster at the upcoming American Association for Cancer Research (AACR) Annual Meeting demonstrating that treatment with MRT-2359 resulted in marked tumor regressions in an AR-V7-expressing 22RV1 xenograft mouse model of c-MYC-driven prostate cancer associated with resistance to anti-androgen agents. The Company also plans to present at an educational session at AACR on molecular glue degraders.
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FOURTH QUARTER AND FULL YEAR 2023 FINANCIAL RESULTS

Research and Development (R&D) Expenses: R&D expenses for the fourth quarter of 2023 were \$27.1 million, compared to \$24.9 million for the fourth quarter of 2022, and \$111.3 million for the year ended December 31, 2023, compared to \$85.1 million for the year ended December 31, 2022. These increases were driven by the successful achievement of key milestones in our R&D organization, including the continuation of the MRT-2359 clinical study, the progression and growth of our preclinical pipeline, the preparation of MRT-6160 to enter the clinic, and the continued development of the Company's QuEEN™ discovery engine, and reflect increased personnel expense and external R&D costs including laboratory-related expenses to achieve these milestones. Non-cash stock-based compensation constituted \$2.2 million of R&D expenses for Q4 2023, compared to \$1.8 million in the same period in 2022, and \$8.9 million and \$5.6 million for the years ended December 31, 2023 and 2022, respectively.

General and Administrative (G&A) Expenses: G&A expenses for the fourth quarter of 2023 were \$7.7 million compared to \$7.6 million for the fourth quarter of 2022, and \$32.0 million for the year ended December 31, 2023, compared to \$27.3 million for the year ended December 31, 2022. The increase in G&A expenses was a result of increased headcount and expenses in support of the Company's growth and operations. G&A expenses included non-cash stock-based compensation of \$1.8 million for the fourth quarter of 2023, compared to \$1.6 million for the same period in 2022, and \$7.7 million and \$6.1 million for the years ended December 31, 2023 and 2022, respectively.

Net Loss: Net loss for the fourth quarter of 2023 was \$33.3 million, compared to \$30.8 million for the fourth quarter of 2022, and \$135.4 million for the year ended December 31, 2023, compared to \$108.5 million for the year ended December 31, 2022.

Cash Position and Financial Guidance: Cash, cash equivalents, restricted cash, and marketable securities as of December 31, 2023, were \$237.0 million, compared to cash, cash equivalents, restricted cash, and marketable securities of \$183.0 million as of September 30, 2023. The increase of \$54 million was primarily related to the proceeds from the Roche collaboration and registered direct offering in Q4 2023.

The Company expects its cash and cash equivalents, including proceeds from the Roche collaboration, to be sufficient to fund planned operations and capital expenditures into the first half of 2026.

About MRT-2359

MRT-2359 is a potent, highly selective and orally bioavailable investigational molecular glue degrader (MGD) that induces the interaction between the E3 ubiquitin ligase component cereblon and the translation termination factor GSPT1, leading to the targeted degradation of GSPT1 protein. The MYC transcription factors (c-MYC, L-MYC and N-MYC) are well-established drivers of human cancers that maintain high levels of protein translation, which is critical for uncontrolled cell proliferation and tumor growth. Preclinical studies have shown this addiction to MYC-induced protein translation creates a dependency on GSPT1. By inducing degradation of GSPT1, MRT-2359 is designed to exploit this vulnerability, disrupting the protein synthesis machinery, leading to anti-tumor activity in MYC-driven tumors.

About MRT-6160



MRT-6160 is a potent, highly selective, and orally bioavailable investigational molecular glue degrader of VAV1, which in our *in vitro* studies has shown deep degradation of its target with no detectable effects on other proteins. VAV1, a Rho-family guanine nucleotide exchange factor, is a key signaling protein downstream of both the T- and B-cell receptors. VAV1 expression is restricted to blood and immune cells, including T and B cells. Preclinical studies have shown that targeted degradation of VAV1 protein via an MGD modulates both T- and B-cell receptor-mediated activity. This modulation is evident both *in vitro* and *in vivo*, demonstrated by a significant decrease in cytokine secretion, proteins vital for maintaining autoimmune diseases. Moreover, VAV1-directed MGDs have shown promising activity in preclinical models of autoimmune diseases and thus have the potential to provide therapeutic benefits in multiple systemic and neurological autoimmune indications, such as multiple sclerosis, rheumatoid arthritis, inflammatory bowel disease, and dermatological disorders. Preclinical studies demonstrate MRT-6160 inhibits disease progression in *in vivo* autoimmunity models.

About MRT-8102

MRT-8102 is a potent, highly selective, and orally bioavailable investigational molecular glue degrader (MGD) that targets NEK7 for the treatment of inflammatory diseases driven by IL-1b and the NLRP3 inflammasome. NEK7 has been shown to be required for NLRP3 inflammasome assembly, activation and IL-1b release both *in vitro* and *in vivo*. Aberrant NLRP3 inflammasome activation and the subsequent release of active IL-1b and interleukin-18 (IL-18) has been implicated in multiple inflammatory disorders, including gout, cardiovascular disease, neurologic disorders including Parkinson's disease and Alzheimer's disease, ocular disease, diabetes, obesity, and liver disease. In a non-human primate model, MRT-8102 potently, selectively, and durably degrades NEK7 and results in near-complete reductions of IL-1b models following *ex vivo* stimulation of whole blood. MRT-8102 has shown a favorable profile in non-GLP toxicology studies.

About Monte Rosa

Monte Rosa Therapeutics is a clinical-stage biotechnology company developing highly selective molecular glue degrader (MGD) medicines for patients living with serious diseases in the areas of oncology, autoimmune and inflammatory diseases, and more. MGDs are small molecule protein degraders that have the potential to treat many diseases that other modalities, including other degraders, cannot. Monte Rosa's QuEEN™ (Quantitative and Engineered Elimination of Neosubstrates) discovery engine combines AI-guided chemistry, diverse chemical libraries, structural biology and proteomics to identify degradable protein targets and rationally design MGDs with unprecedented selectivity. The QuEEN discovery engine enables access to a wide-ranging and differentiated target space of well-validated biology across multiple therapeutic areas. Monte Rosa has developed the industry's leading pipeline of MGDs, which spans oncology, autoimmune and inflammatory disease and beyond, and has a strategic collaboration with Roche to discover and develop MGDs against targets in cancer and neurological diseases previously considered impossible to drug. For more information, visit www.monterosatx.com.

Forward-Looking Statements

This communication includes 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 herein include, but are not limited to, statements about our product development

activities, our ability to grow our product pipeline, our ongoing clinical development of our GSPT1 degrader referred to as MRT-2359, including our expectations for the nature, significance, and timing for our disclosure of any initial data from our Phase 1/2 clinical trial of MRT-2359 in MYC-driven solid tumors, timing for our identification and any disclosure of a recommended phase 2 dose for MRT-2359, statements the Company's QuEEN™ discovery engine and the Company's view of its potential to identify degradable protein targets and rationally design MGDs with unprecedented selectivity, statements about our collaboration with Roche, statements about the advancement and timeline of our preclinical and clinical programs, pipeline and the various products therein, including the ongoing development of our VAV1-directed degrader, referred to as MRT-6160, the planned submission of an IND to the FDA for MRT-6160 in Q2 2024, and our expectations of timing for commencing any Phase 1 single ascending dose / multiple ascending dose (SAD/MAD) study initiation in healthy volunteers, our expectations regarding the potential clinical benefit for our programs and our expectations of timings for the program, the ongoing development of our NEK7-directed degrader, referred to as MRT-8102, the planned submission of an IND to the FDA for MRT-8102 in the first quarter of 2025, and our expectations of timing for clinical advancement for MRT-8102, statements around the identification and the timing of a development candidate for CDK2 and other programs, statements around the advancement and application of our platform, and statements concerning our expectations regarding our ability to nominate and the timing of our nominations of additional targets, product candidates, and development candidates, as well as our expectations of success for our programs and the strength of our financial position, our use of capital, expenses and other financial results in the future, availability of funding for existing programs, ability to fund operations into the first half of 2026, among others. By their nature, these statements are subject to numerous risks and uncertainties, including those risks and uncertainties set forth in our most recent Annual Report on Form 10-K for the year ended December 31, 2023, filed with the U.S. Securities and Exchange Commission on March 14, 2024, and any subsequent filings, 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.

Consolidated Balance Sheets
(in thousands, except share amounts)

	December 31,	
	2023	2022
Assets		
Current assets:		
Cash and cash equivalents	\$ 128,101	\$ 54,912
Marketable securities	104,312	207,914
Other receivables	505	7,656
Prepaid expenses and other current assets	3,294	4,444
Current restricted cash	—	960
Total current assets	236,212	275,886
Property and equipment, net	33,803	27,075
Operating lease right-of-use assets	28,808	34,832
Restricted cash, net of current	4,580	4,318
Other long-term assets	352	278
Total assets	\$ 303,755	\$ 342,389
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 11,152	\$ 7,862
Accrued expenses and other current liabilities	14,600	14,580
Current deferred revenue	17,678	—
Current portion of operating lease liability	3,162	3,127
Total current liabilities	46,592	25,569
Deferred revenue, net of current	32,323	—
Defined benefit plan liability	2,713	1,533
Operating lease liability	42,877	43,874
Total liabilities	124,505	70,976
Commitments and contingencies		
Stockholders' equity		
Common stock, \$0.0001 par value; 500,000,000 shares authorized, 50,154,929 shares issued and 50,140,233 shares outstanding as of December 31, 2023; and 500,000,000 shares authorized, 49,445,802 shares issued and 49,323,531 shares outstanding as of December 31, 2022	5	5
Additional paid-in capital	547,857	503,696
Accumulated other comprehensive loss	(2,724)	(1,752)
Accumulated deficit	(365,888)	(230,536)
Total stockholders' equity	179,250	271,413
Total liabilities and stockholders' equity	\$ 303,755	\$ 342,389

Consolidated Statements of Operations and Comprehensive Income (Loss)
(In thousands, except share and per share amounts)

	Three months ended December 31,		Year ended December 31,	
	2023	2022	2023	2022
Operating expenses:				
Research and development	\$ 27,135	\$ 24,868	\$ 111,272	\$ 85,061
General and administrative	7,728	7,621	32,039	27,323
Total operating expenses	34,863	32,489	143,311	112,384
Loss from operations	(34,863)	(32,489)	(143,311)	(112,384)
Other income (expense):				
Interest income, net	2,368	1,990	9,334	3,764
Foreign currency exchange gain (loss), net	(779)	(283)	(930)	10
Gain on disposal of fixed assets	—	—	24	109
Loss on sale of marketable securities	—	—	(131)	—
Total other income	1,589	1,707	8,297	3,883
Net loss before income taxes	\$ (33,274)	\$ (30,782)	\$ (135,014)	\$ (108,501)
Provision for income taxes	22	—	(338)	—
Net loss	\$ (33,252)	\$ (30,782)	\$ (135,352)	\$ (108,501)
Net loss per share attributable to common stockholders—basic and diluted	\$ (0.58)	\$ (0.63)	\$ (2.63)	\$ (2.30)
Weighted-average number of shares outstanding used in computing net loss per common share—basic and diluted	56,927,647	48,893,160	51,396,961	47,227,370
Comprehensive loss:				
Net loss	\$ (33,252)	\$ (30,782)	\$ (135,352)	\$ (108,501)
Provision for pension benefit obligation	(1,411)	619	(1,369)	718
Unrealized gain (loss) on available-for-sale securities	142	231	397	(449)
Comprehensive loss	\$ (34,521)	\$ (29,932)	\$ (136,324)	\$ (108,232)

Investors

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Media

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From Serendipity to Rational Design

Taking Molecular Glue Degradors to New Heights | March 2024



Forward-Looking Statements

This communication includes 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 herein include, but are not limited to, statements about our product development activities, our ability to grow our product pipeline, our ongoing clinical development of our GSPT1 degrader referred to as MRT-2359, including our expectations for the nature, significance, and timing for our disclosure of any initial data from our Phase 1/2 clinical trial of MRT-2359 in MYC-driven solid tumors, timing for our identification and any disclosure of a recommended phase 2 dose for MRT-2359, statements the Company's QUEEN™ discovery engine and the Company's view of its potential to identify degradable protein targets and rationally design MGDs with unprecedented selectivity, statements about our collaboration with Roche, statements about the advancement and timeline of our preclinical and clinical programs, pipeline and the various products therein, including the ongoing development of our VAV1-directed degrader, referred to as MRT-6160, the planned submission of an IND to the FDA for MRT-6160 in Q2 2024, and our expectations of timing for commencing any Phase 1 single ascending dose / multiple ascending dose (SAD/MAD) study initiation in healthy volunteers, our expectations regarding the potential clinical benefit for our programs and our expectations of timings for the program, the ongoing development of our NEK7-directed degrader, referred to as MRT-8102, the planned submission of an IND to the FDA for MRT-8102 in the first quarter of 2025, and our expectations of timing for clinical advancement for MRT-8102, statements around the identification and the timing of a development candidate for CDK2 and other programs, statements around the advancement and application of our platform, and statements concerning our expectations regarding our ability to nominate and the timing of our nominations of additional targets, product candidates, and development candidates, as well as our expectations of success for our programs and the strength of our financial position, our use of capital, expenses and other financial results in the future, availability of funding for existing programs, ability to fund operations into the first half of 2026, among others. By their nature, these statements are subject to numerous risks and uncertainties, including those risks and uncertainties set forth in our most recent Annual Report on Form 10-K for the year ended December 31, 2023, filed with the U.S. Securities and Exchange Commission on March 14, 2024, and any subsequent filings, 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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Monte Rosa Therapeutics – Company Overview

Taking molecular glue degraders (MGDs) to new heights



Arsenal of rationally designed MGDs with potential to solve many of the limitations of other modalities by degrading therapeutically relevant proteins with unprecedented precision



Phase 1/2 clinical study ongoing with MRT-2359 in MYC-driven cancers; interim data demonstrated optimal pharmacodynamic modulation and **early signs of clinical activity**; **RP2D expected in Q2 2024**



Highly productive, **industry-leading discovery engine** combining experimentation **with AI to enable rational design of novel MGDs**



MRT-6160, highly selective VAV1-directed MGD, being rapidly advanced with IND expected in mid-2024; broad potential applications across autoimmune diseases



Partnership with Roche to develop MGDs for oncology and neurological conditions – **expands platform reach into neurology**



MRT-8102, highly selective NEK7-directed MGD for IL-1 β /NLRP3-driven inflammatory diseases with IND anticipated Q1 2025

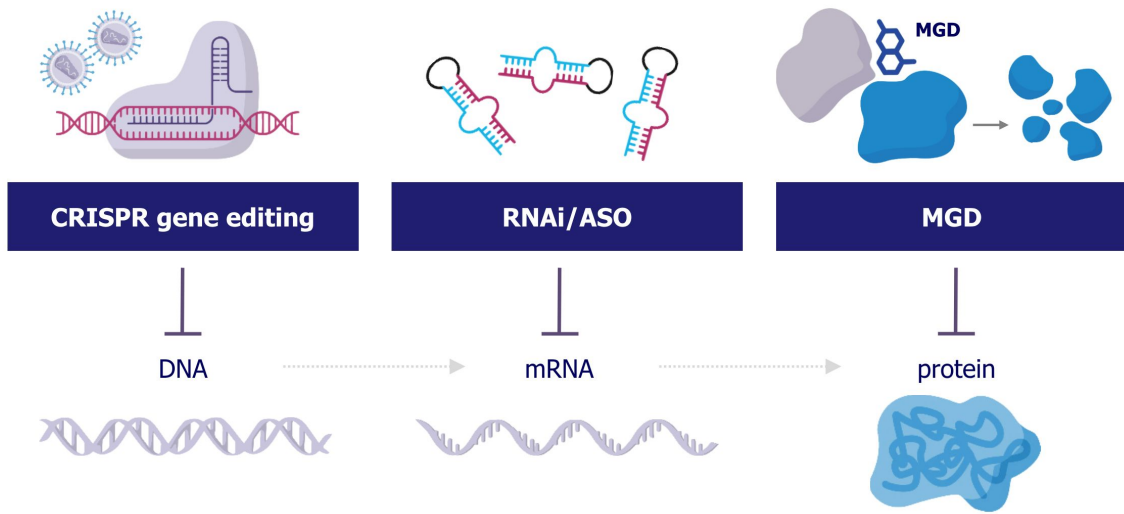


Strong financial position providing cash runway into H1 2026 and through multiple anticipated clinical readouts, including MRT-2359 Phase 1/2 and SAD/MAD for VAV1 and NEK7

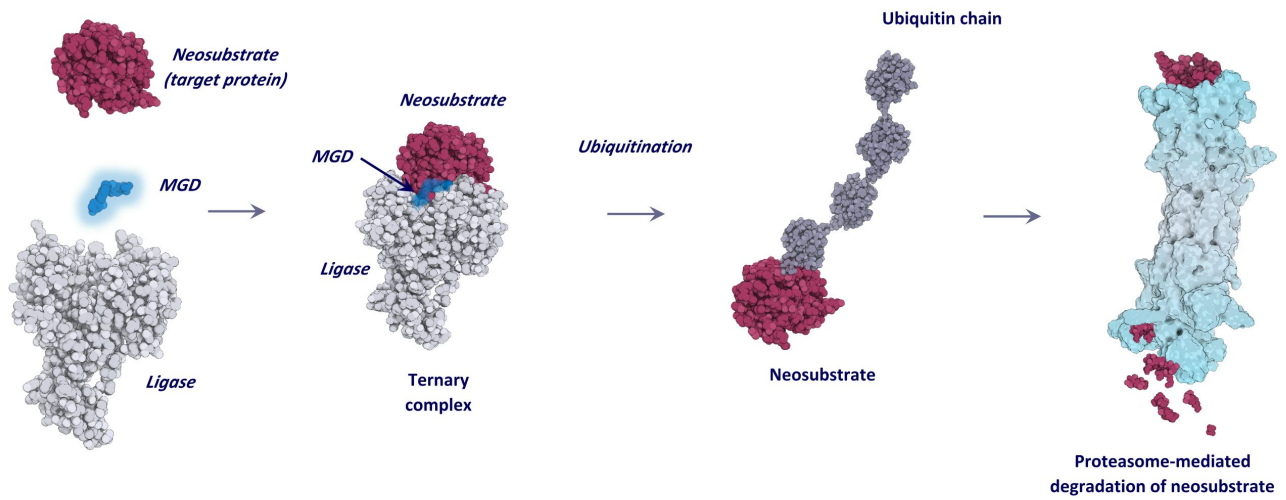


Three Ways to Eliminate a Disease-Causing Protein

MGDs can directly and precisely target proteins that cause disease



Our Molecular Glue Degraders (MGDs) Edit the Proteome

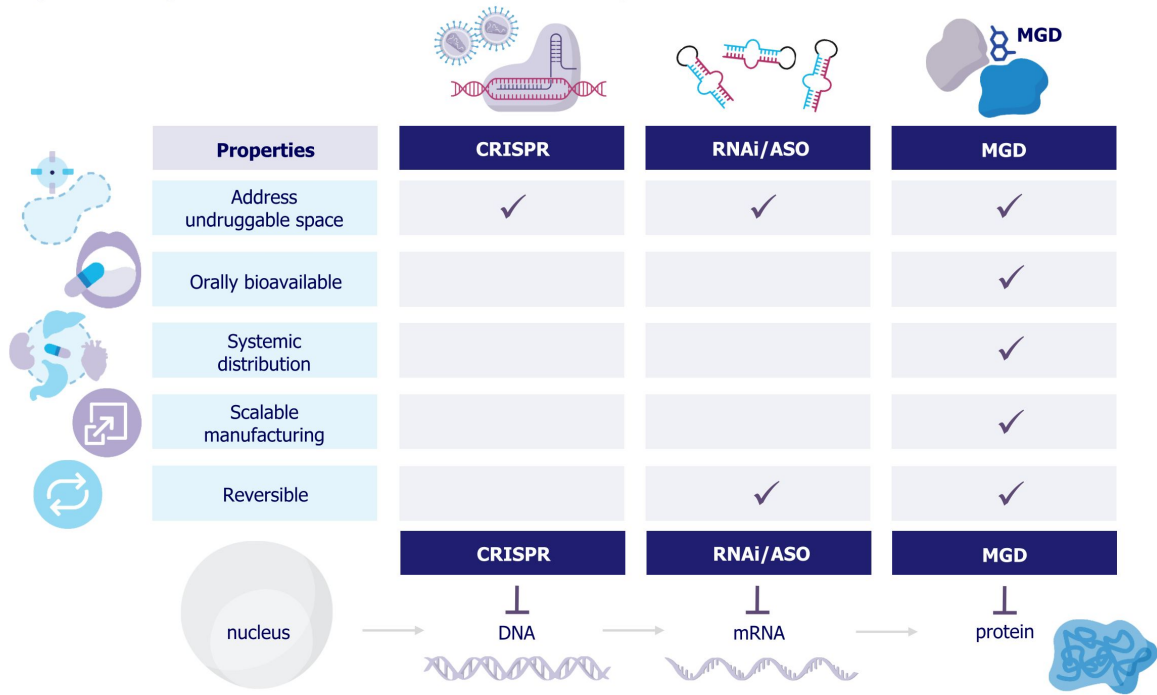


Monte Rosa's rationally designed MGDs have potential applications in Oncology, Immunology, Neuroscience and other therapeutic areas



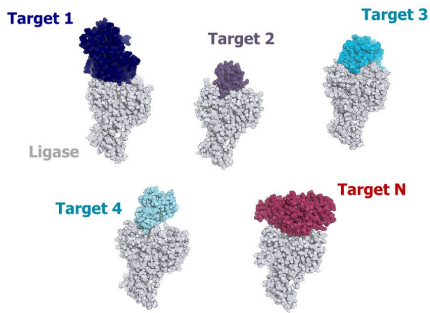
Molecular Glue Degraders (MGDs) – A Highly Differentiated Modality

Advantages of large molecule modalities with orally dosed small molecules

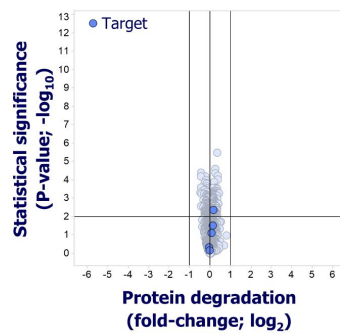


Key Advantages of Our Rationally Designed MGDs

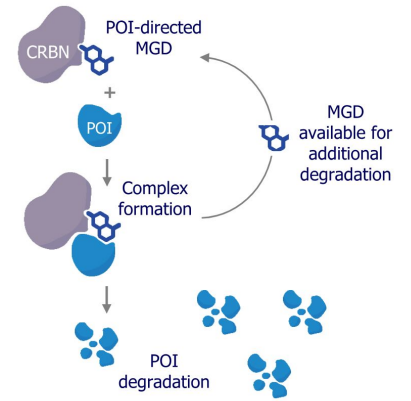
Unique Target Space



Unprecedented Selectivity



Catalytic Mechanism of Action



Disease-agnostic platform with initial focus on highly credentialed, undruggable oncology and immunology/inflammation targets

Unique insights into anatomy of protein-protein-MGD interaction allows unprecedented MGD selectivity

Long lasting, catalytic protein degradation effect creates differentiated target product profiles

POI = protein of interest

Monte Rosa Therapeutics – Key Firsts and Accomplishments

From serendipity to rational design of MGDs



Built a **proprietary molecular glue-based targeted protein degradation platform** developing breakthrough therapeutics that selectively degrade disease-causing proteins

Established a **target-centric** drug discovery approach combining experimentation with AI enabling **rational design** of highly potent and selective MGDs

Presented interim data from **Phase 1/2 trial of GSPT1-directed MGD MRT-2359 for the treatment of MYC-driven tumors; optimal pharmacodynamics*, favorable safety profile and initial clinical activity observed**

Progressed VAV1 MGD MRT-6160 and NEK7 MGD MRT-8102 into IND enabling studies; MRT-6160 is the *first* known MGD specifically developed for a non-oncology indication

Advanced several additional **highly credentialed targets** as amenable to degradation through our platform including CDK2 and multiple discovery targets; began expanding approach to **E3 ligases** beyond cereblon

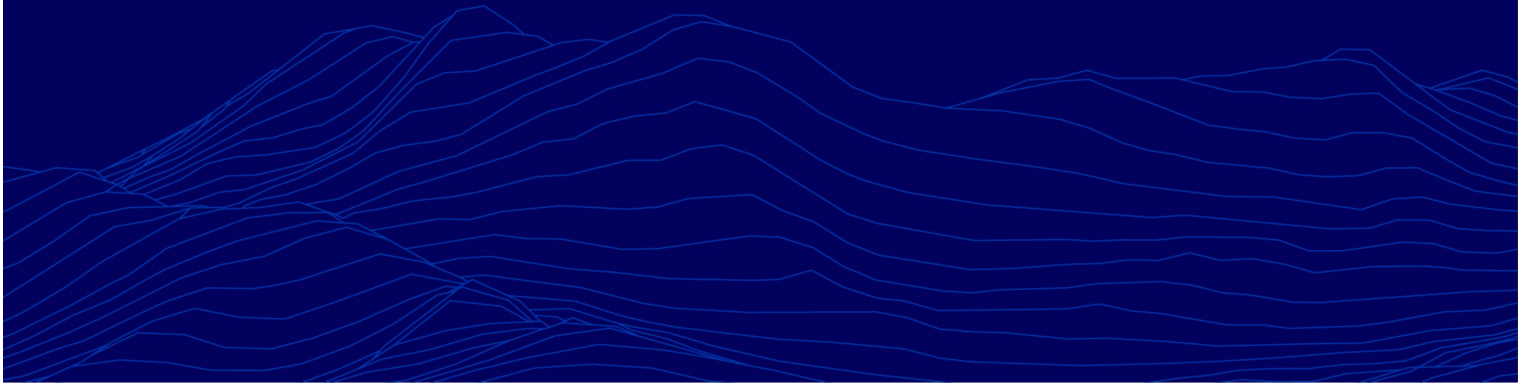
Established **validating discovery collaboration with Roche** in oncology and neurological diseases

* Based on optimal PD modulation in preclinical studies





Portfolio



Monte Rosa Pipeline and Upcoming Milestones

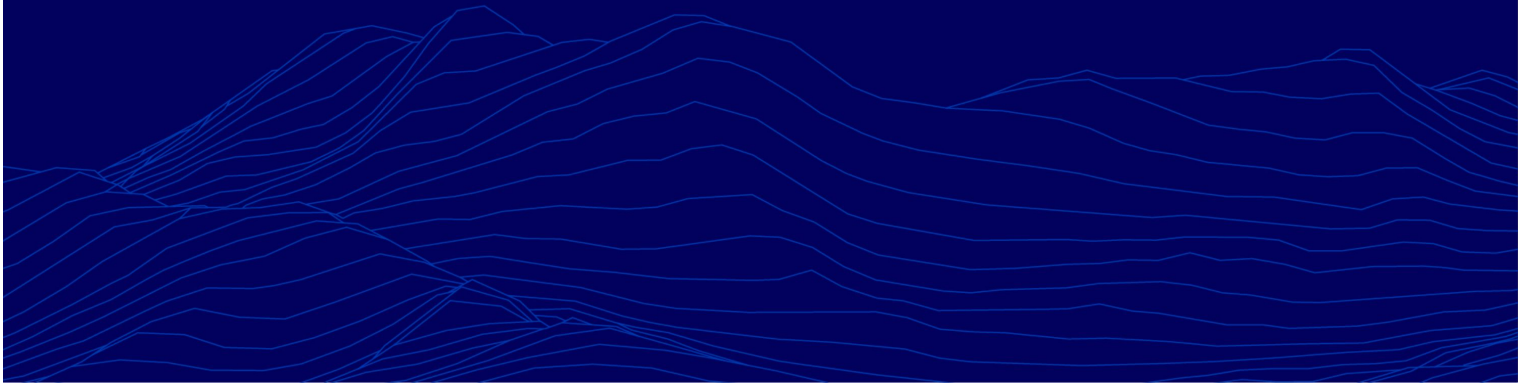
Target	Compound	Indication(s)	Discovery	IND-Enabling	Clinical	Next Anticipated Milestone	Ownership
GSPT1	MRT-2359	NSCLC, SCLC and other MYC-driven Malignancies				RP2D in Q2 2024	
VAV1	MRT-6160	Autoimmune Disease – Systemic and CNS				IND in Q2 2024	
NEK7	MRT-8102 LO (2 nd generation)	IL-1 β /NLRP3 driven Inflammatory Diseases				IND in Q1 2025	
						Development candidate	
CDK2	LO	Breast Cancer				Development candidate in 2024	
Discovery Targets	-	Multiple				Lead optimization	
Discovery Targets	-	Oncology and Neurological Diseases				Undisclosed	

● Oncology
 ● Immunology
 ● Inflammation
 ● Various





GSPT1 program (MRT-2359)



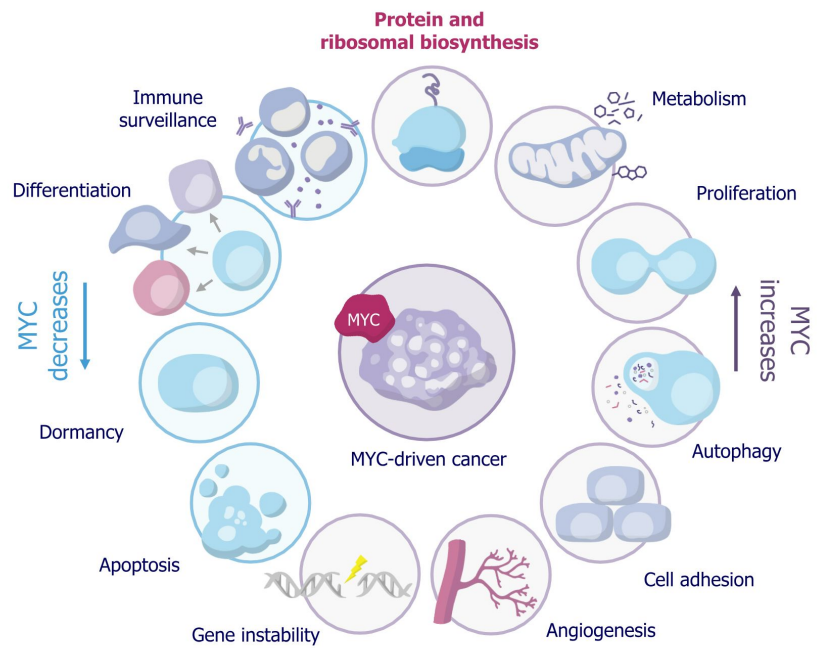
MYC is a Key Regulator of Cancer Growth and Immune Evasion

- Frequently activated across many cancers including some of the most common (e.g. lung, prostate, breast)
- Drives cancer progression through effects on both cancer cells and tumor microenvironment
- MYC signaling can enable tumor cells to evade immune response
- Very challenging to drug with conventional approaches; no approved MYC-targeted therapies



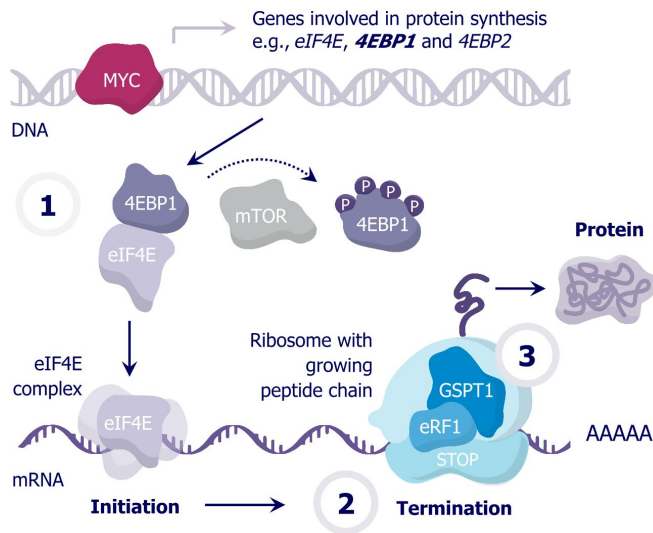
- MRT-2359 is designed to specifically target MYC-driven tumors

MYC Impacts Many "Hallmarks of Cancer"



Source: Dhanasekaran R et al. Nat Rev Clin Oncol 2022

Targeting MYC-driven Tumors and Their Addiction to Protein Translation Through GSPT1 degradation



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

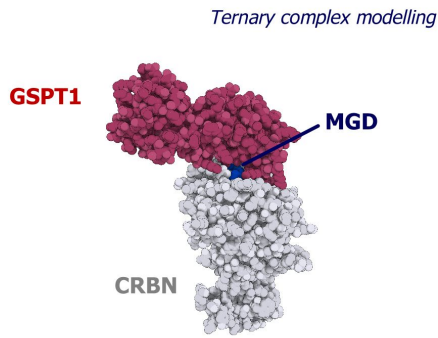
Therapeutic vulnerability

GSPT1 is a therapeutic vulnerability of MYC-driven tumors

leading to preferential activity of GSPT1 MGDs

MRT-2359 is a Potent and Highly Selective GSPT1-directed MGD

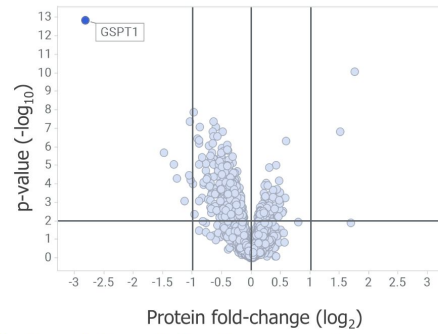
MRT-2359 is a potent GSPT1-directed MGD



in vitro data

CRBN binding, K_i	113 nM
Ternary complex, EC_{50}	< 7 nM
Degradation, DC_{50} (in disease relevant cell lines)	1 - 20 nM

MRT-2359 induces selective GSPT1 degradation and shows favorable ADME/DMPK profile

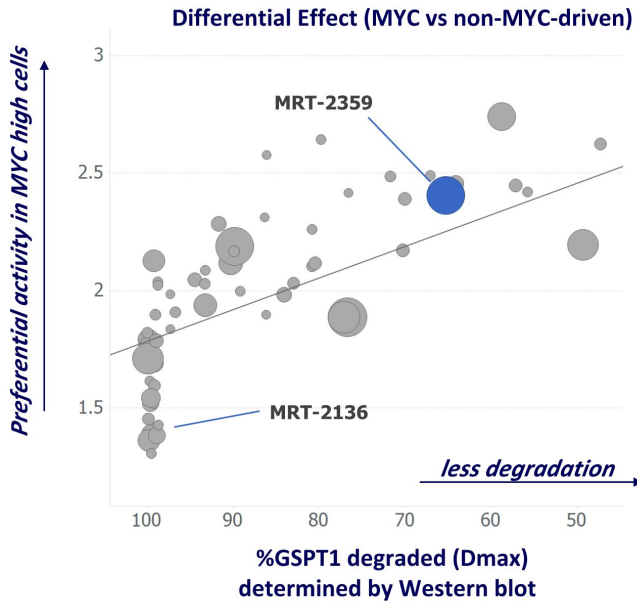


No degradation of other known cereblon neosubstrates

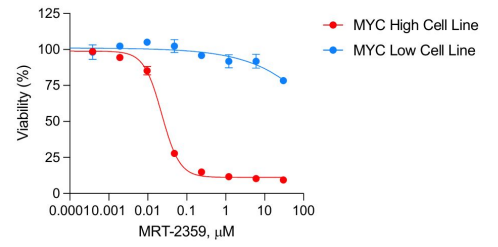
ADMET profile

CYP DDIs	> 30 μ M
hERG inhibition patch clamp	EC_{50} > 30 μ M
Oral bioavailability all species	~50%

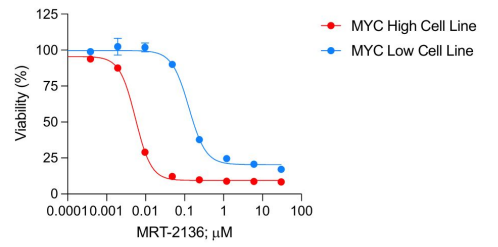
MRT-2359 Has Optimized Depth of Degradation To Achieve Preferential Activity in MYC High Cancer Cells



MRT-2359 displays preferential activity in MYC driven NSCLC cells



Non-optimal GSPT1 MGD (MRT-2136) shows limited preferential activity



Three Mechanisms Driving Preferential Activity in MYC High Tumor Cells

Preferential GSPT1 degradation

MRT-2359 leads to deeper degradation of GSPT1 in cancer cells with high MYC expression



Inhibition of translation

MRT-2359-induced reduction of GSPT1 preferentially impairs protein synthesis in tumor cells with high MYC expression



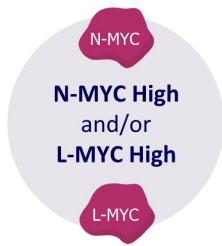
MYC down-modulation

In a feedback loop, MRT-2359 decreases MYC expression and transcriptional activity

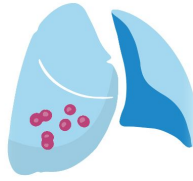


Large Potential Opportunities in MYC-Driven Tumors

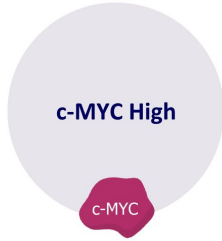
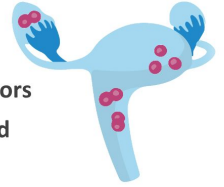
High unmet need with no currently approved therapies specifically for MYC high tumors



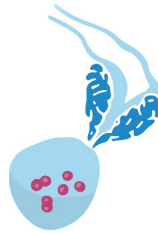
SCLC (70-80% L/N-MYC high)
NSCLC
N-MYC high (5-10%)
SCLC/NE transformation
Neuroendocrine lung cancer



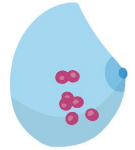
Neuroendocrine tumors
L-/N-MYC amplified tumors



Prostate cancer
Including ARV7 positive



Breast cancer
ER positive metastatic

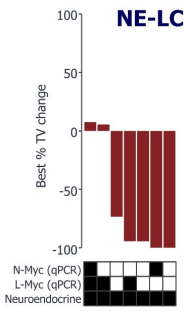
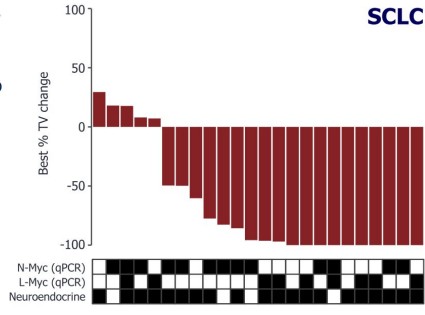
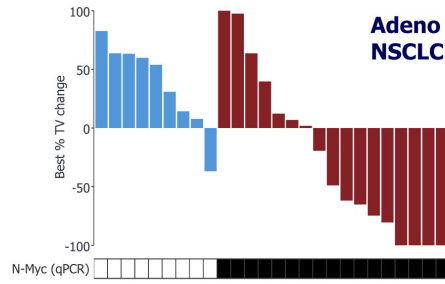


Preclinical Validation of Activity of MRT-2359 in Lung Cancer PDX Models

Collection of PDX models

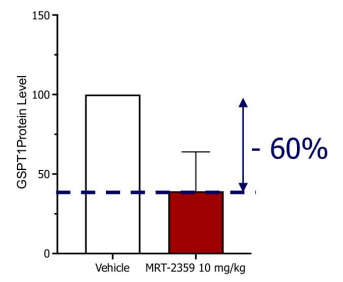


MRT-2359
10 mg/kg QD



PD modulation

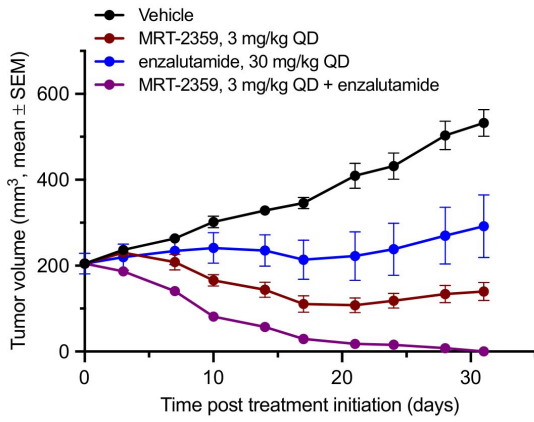
Targeted mass spectrometry in 7 representative models



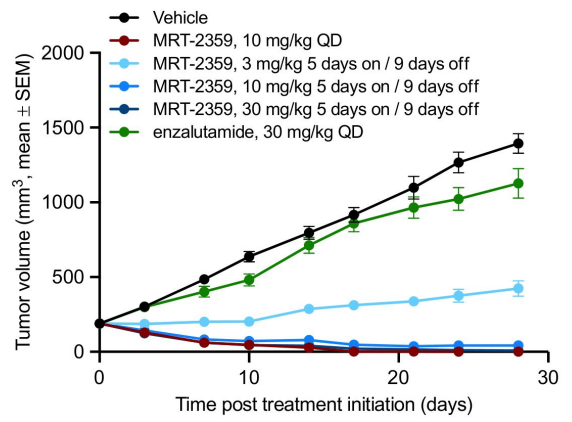
■ biomarker negative ■ biomarker positive

MRT-2359 Leads to Tumor Regressions in Preclinical Models of Castration Resistant Prostate Cancer and ARV7-driven Prostate Cancer

MRT-2359 displays activity in castrate resistant VCAP model

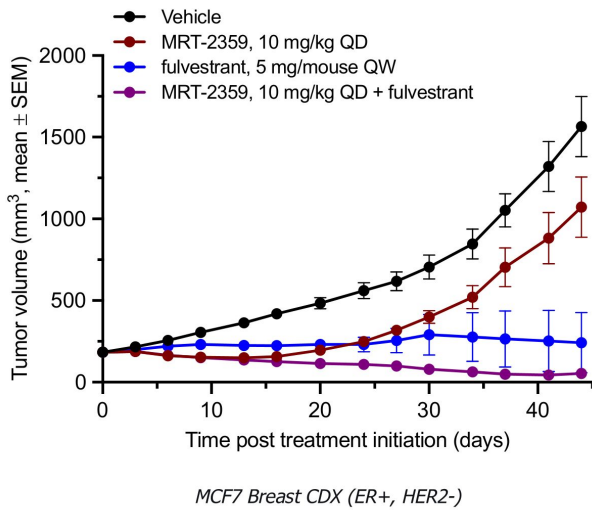


MRT-2359 displays activity in ARV7 driven 22RV1 model

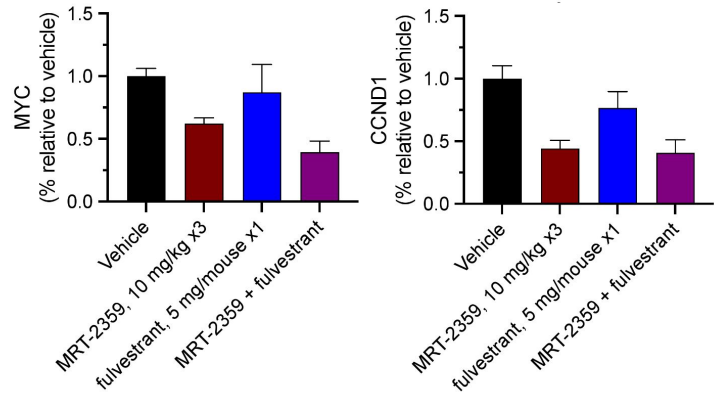


MRT-2359 Leads to Tumor Regressions in Preclinical Model of ER-positive Breast Cancer

MRT-2359 displays activity in MCF7 model of ER-positive breast cancer



MRT-2359 reduces MYC and CCND1 *in vivo*

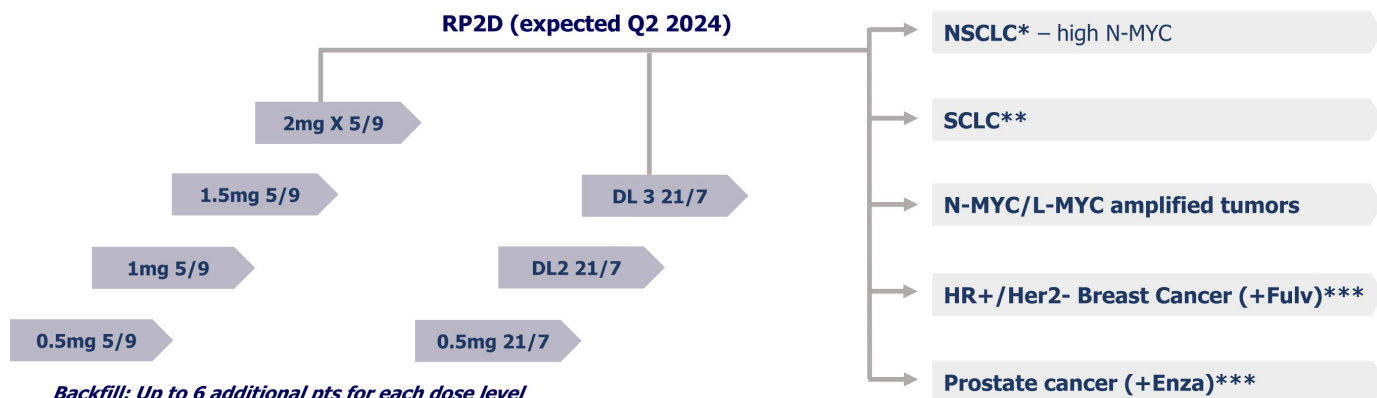


MRT-2359-001 Phase 1/2 Clinical Study Design

Phase 1: Dose Escalation

*Lung cancer, high-grade neuroendocrine tumors
and solid tumors with N-/L-MYC amplification*

Phase 2: Expansion Cohorts



Backfill: Up to 6 additional pts for each dose level

5/9 = 5 days on drug, 9 days off drug.
21/7 = 21 days on drug, 7 days off drug.

* Efficacy guided stratification per N-/L-MYC expression
** Retrospective stratification per N-/L-MYC expression
*** Planned cohorts, to be confirmed





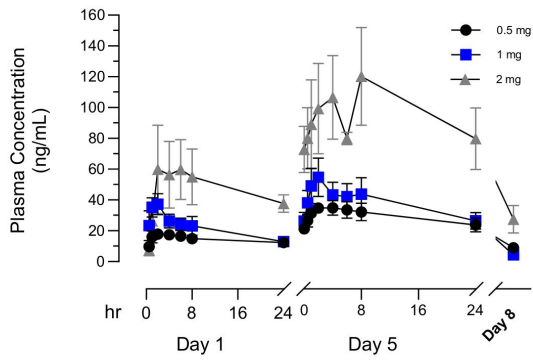
MRT-2359 Phase I Interim Data – October 2023

Objectives of Phase I interim analysis

- ✓ Demonstrate dose dependent PK
 - ✓ Demonstrate significant GSPT1 degradation at safe dose levels in PBMCs and tissue biopsies (60% based on preclinical data)
 - ✓ Share potential preliminary efficacy signals in biomarker positive patients
-

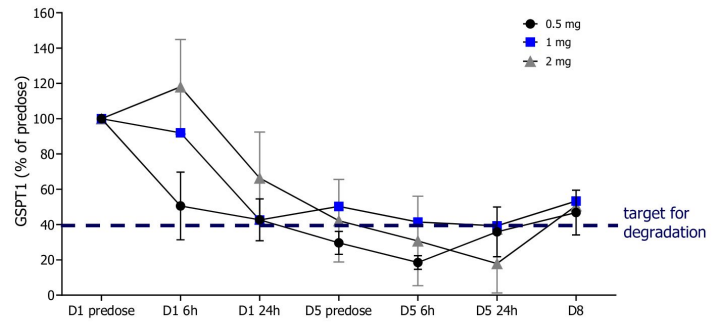
MRT-2359 Induces Optimal GSPT1 Degradation in PBMCs*

MRT-2359 displayed dose dependent plasma exposure



- Dose dependent exposure in line with preclinical PK models
- No food effect observed

MRT-2359 displayed deep GSPT1 degradation in PBMCs at all dose levels



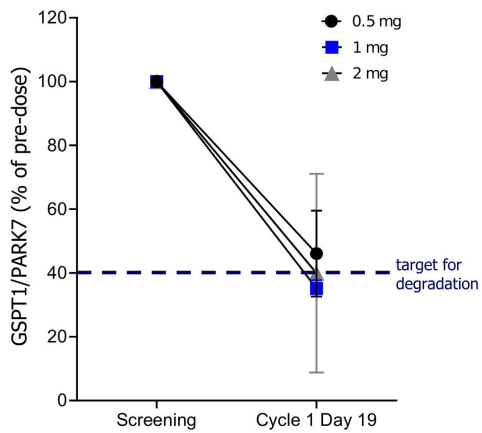
- GSPT1 expression assessed using targeted mass spectrometry
- PD modulation in PBMCs observed across all dose levels; level of degradation (~ 60%) in line with maximal degradation observed in preclinical studies using the same method
- Level of degradation equivalent across all dose levels, suggesting saturated PD response from 0.5 to 2 mg



* as presented on 10/17/23

MRT-2359 Induces Optimal GSPT1 Degradation in Tissue Biopsies*

MRT-2359 reduced GSPT1 protein expression in human tissue biopsies



- GSPT1 degradation assessed from pre-treatment screening biopsies and biopsies taken at day 19
- Matched biopsies obtained from 11 patients across the 3 cohorts analyzed
- GSPT1 expression assessed using targeted mass spectrometry
- PD modulation seen in tissue biopsies in line with PD modulation seen preclinically at efficacious dose levels using same assay (targeted mass spectrometry)



* Based on optimal PD modulation in preclinical studies as presented on 10/17/23

Summary of Treatment-Related Adverse Events (AEs) in ≥ 2 patients[#]

No observed clinically significant hypocalcemia or hypotension/cytokine release syndrome

AE Preferred Term	0.5 mg (N=9) ^{##}		1 mg (N=7) ^{##}		2 mg (N=5) ^{##}		Overall (N=21)	
	Any Grade	Grade ≥ 3	Any Grade	Grade ≥ 3	Any Grade	Grade ≥ 3	Any Grade	Grade ≥ 3
Thrombocytopenia ^{###}	0	0	0	0	4 (80%)	3 (60%) ^{***}	4 (19%)	3 (14%)
Neutropenia [*]	0	0	0	0	2 (40%)	1 (20%)	2 (10%)	1 (5%)
Leukopenia	0	0	0	0	2 (40%)	2 (40%)	2 (10%)	2 (10%)
Nausea	3 (33%)	0	2 (29%)	0	1 (20%)	0	6 (33%)	0
Vomiting	1 (11%)	0	2 (29%)	0	1 (20%)	0	4 (19%)	0
Diarrhea ^{**}	1 (11%)	0	3 (43%)	0	1 (20%)	0	5 (24%)	0
Hypokalemia	0	0	1 (14%)	0	1 (20%)	0	2 (10%)	0
Fatigue	0	0	2 (29%)	0	0	0	2 (10%)	0
Decreased appetite	0	0	2 (29%)	0	0	0	2 (10%)	0
Rash	2 (22%)	0	0	0	0	0	2 (10%)	0

Note: As presented on 10/17/23

[#] Data cut-off: 7 SEP 2023

^{##} MRT-2359 was given orally daily on the 5 days on and 9 days off schedule

^{###} Data combined for 'thrombocytopenia' and 'platelet count decreased'

^{*} Data combined for 'neutropenia' and 'neutrophil count decreased'

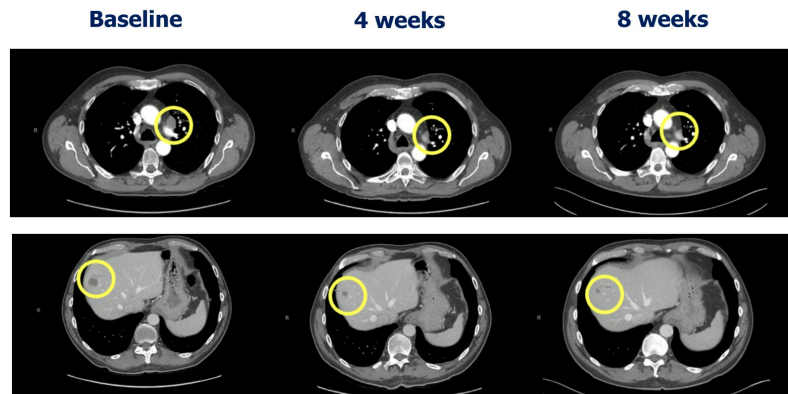
^{**} Data combined for 'diarrhea' and 'feces soft'

^{***} Dose limiting toxicity: Grade 4 thrombocytopenia in 2 patients



Confirmed Partial Response in High Grade Neuroendocrine Bladder Cancer*

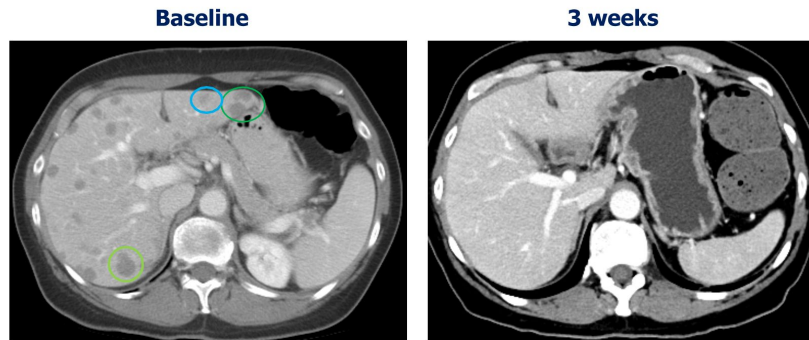
- High Grade (HG) neuroendocrine bladder cancer
- Baseline tumor biopsy demonstrated high N-MYC expression
- 4 prior lines of therapy including chemotherapy and pembrolizumab
- Patient initiated on 2 mg for first 5/9 regimen, then lowered to 1 mg and 0.5 mg and remains on therapy (> 3 month)
- CT scan after 4 weeks demonstrated PR (-34% per RECIST 1.1) that continued to improve at week 8 (-59% per RECIST 1.1)



* as presented on 10/17/23

Unconfirmed Partial Response in NSCLC with SCLC/NE Transformation*

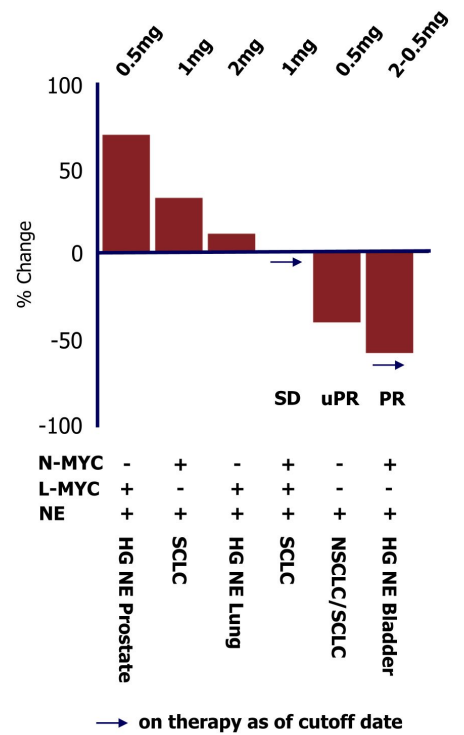
- NSCLC (adenocarcinoma)
- Baseline tumor biopsy demonstrated SCLC/NE transformation, low N- and L-MYC expression
- Multiple lines of prior therapy including chemotherapy, pembrolizumab and atezolizumab
- Patient initiated on 0.5 mg
- CT on C1D22 demonstrated resolution of liver metastases (-41% per RECIST 1.1)
- Patient experienced frequent dose interruptions due to bowel obstruction unrelated to MRT-2359



* as presented on 10/17/23

MRT-2359-001 – Preliminary Efficacy Data*

- As of September 7th, 2023, of 15 evaluable patients treated across 3 cohorts, tumors from 6 patients were identified as biomarker positive
- Of these 6 biomarker positive patients, 2 have experienced a PR (1 confirmed, 1 unconfirmed) and 1 patient has SD
 - PR (-59%) – HG NE bladder carcinoma
 - uPR (-41%) – NSCLC with SCLC/NE transformation
 - SD (0%) – SCLC (remains on therapy for > 4 months)
- In addition, one patient with NSCLC and unclear biomarker status remains on therapy for > 7 months with stable disease
- No clinical activity seen in biomarker negative patients



* as presented on 10/17/23

Favorable Safety at Clinically Active Doses*

Safety profile supports further development

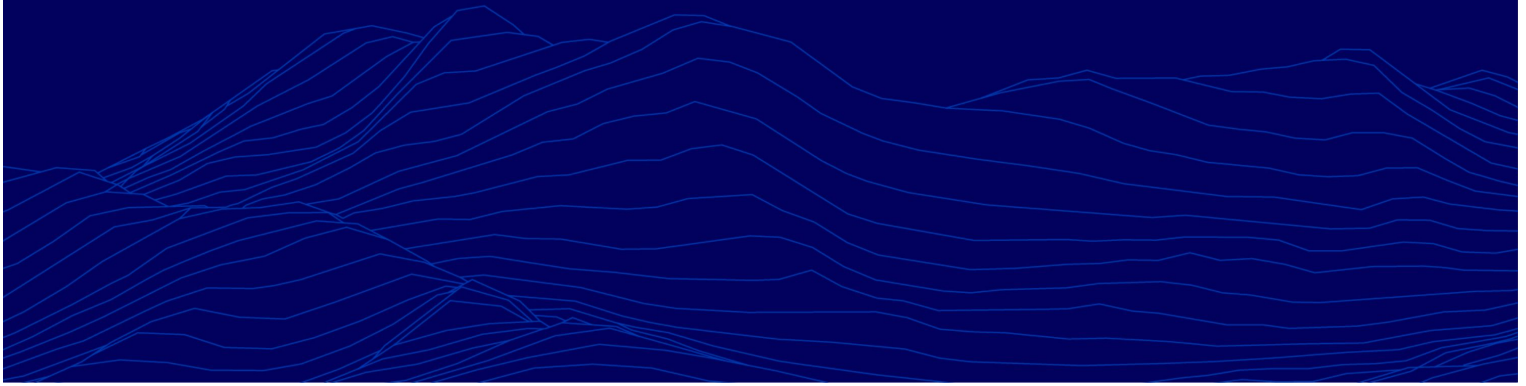
- Preferential and more rapid degradation of GSPT1 in MYC high tumor cells enables favorable adverse event (AE) profile at clinically active doses of 0.5 and 1 mg – no Grade ≥ 3 AEs
 - Grade 1-2 AEs primarily GI-related and manageable
- No observations of previously reported limitations of other GSPT1-targeted agents
 - No observed clinically significant hypocalcemia or hypotension/cytokine release syndrome at any dose level
- Grade 4 thrombocytopenia identified as dose limiting toxicity (DLT) at 2 mg
- Favorable safety profile with lack of hypocalcemia has enabled exploration of 21/7 schedule, starting at 0.5 mg
- RP2D expected in Q2 of 2024



* as presented on 10/17/23

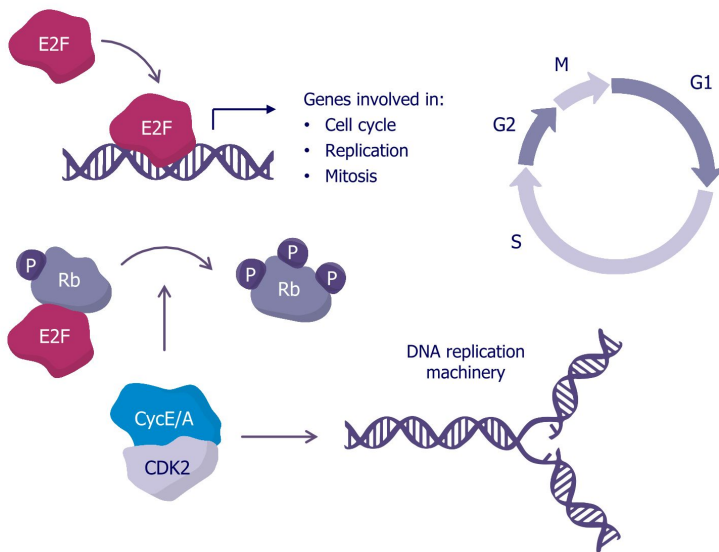


CDK2 Program



CDK2 as a Key Driver of Cell Cycle Progression in Cancer

CDK2 a key cell cycle regulator



Therapeutic hypothesis:

- CDK2 is a key driver of cancers with cyclin dependent kinase pathway alterations
- MGDs will achieve greater selectivity against other CDKs and kinases in general, as well as more sustained pathway inhibition compared to inhibitors

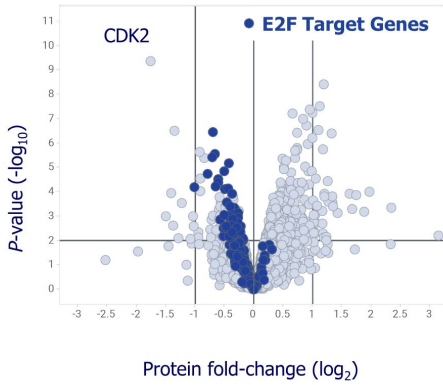
Clinical Opportunity:

- ER positive breast cancer pre and post treatment with CDK4/6 inhibitors (474K patients)
- Ovarian cancer (64K patients), endometrial cancer (124K patients) and other tumors with CCNE1 amplification



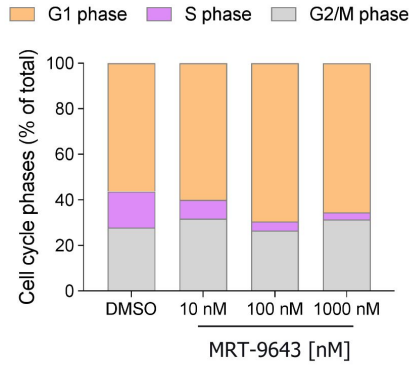
Orally Bioavailable MGD MRT-9643 is Selective and Shows Biological Activity in a CDK2 Dependent Cell Line

Selective CDK2 degradation reduces E2F pathway genes



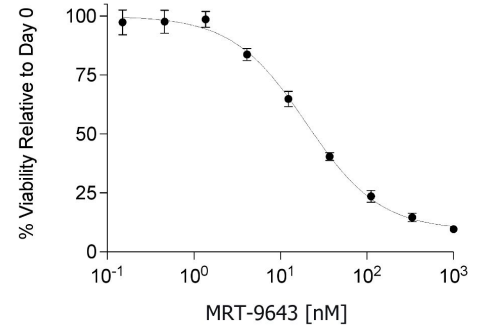
TMT Proteomics (24 hr/1 μ M)
MDA-MB-157

CDK2 degradation arrest CDK2-dependent cells in G1 phase



Cell cycle profile (24 hr)
MDA-MB-157

CDK2-directed MGD inhibits proliferation of CDK2 dependent cells



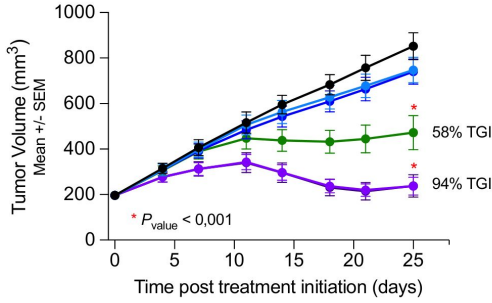
CyQuant Assay (7 d)
MDA-MB-157



Orally Bioavailable MGD MRT-9643 Demonstrates Activity as Single Agent and in Combination with CDK4/6i in ER+ Breast Cancer

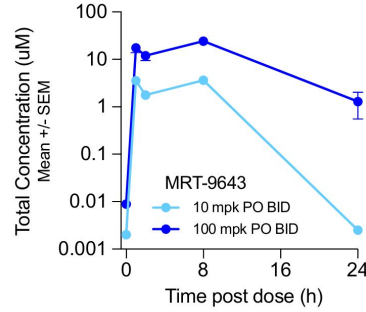
Orally dosed CDK2 MGD induces strong TGI in combination with CDK4/6i *in vivo*

- G1: Vehicle 0.5% MC PO BID
- G2: MRT-9643 30 mpk PO BID
- G3: MRT-9643 100 mpk PO BID
- G4: CDK4/6i (Ribociclib) 75 mpk PO QD
- G5: MRT-9643 30 mpk + Ribociclib 75 mpk
- G6: MRT-9643 100 mpk + Ribociclib 75 mpk

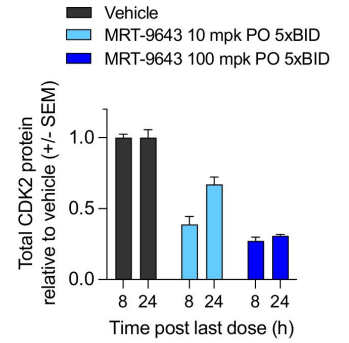


Efficacy evaluation, 25-day treatment
MCF7 ER+ BC CDX Model

CDK2 MGD is orally bioavailable and degrades CDK2 *in vivo*



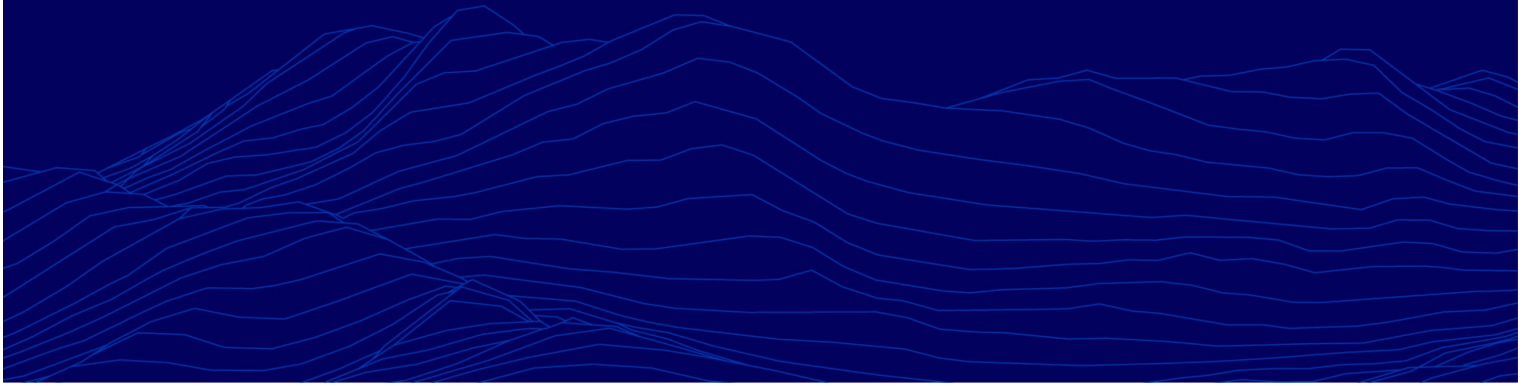
Plasma PK exposure
MCF7 ER+ BC CDX



Oral PK/PD study
HCC1159 BC CDX

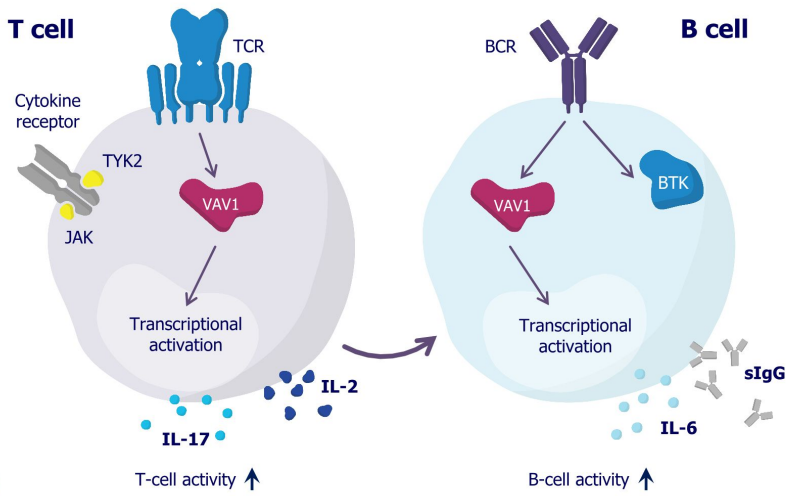


VAV1 Program (MRT-6160)



VAV1 is a Key Regulator of T- and B-cell Receptor Activity

VAV1-directed MGDs have the potential to modulate T- and B-cell function



VAV1 signaling increases cytokine production, proliferation, and differentiation

TCR = T-cell receptor. BCR = B-cell receptor. IL-2, IL-17 and IL-6 are cell signaling molecules (cytokines) that promote immune response. sIgG is the most common circulating antibody.

Therapeutic hypothesis:

- VAV1 is a pivotal scaffolding protein and signaling molecule downstream of both the T-cell and B-cell receptors – confirmed by multiple CRISPR screens VAV1 knockout (KO) mice
- VAV1 degradation is predicted to impact both T- & B-cell function and has the potential to treat a broad set of autoimmune diseases

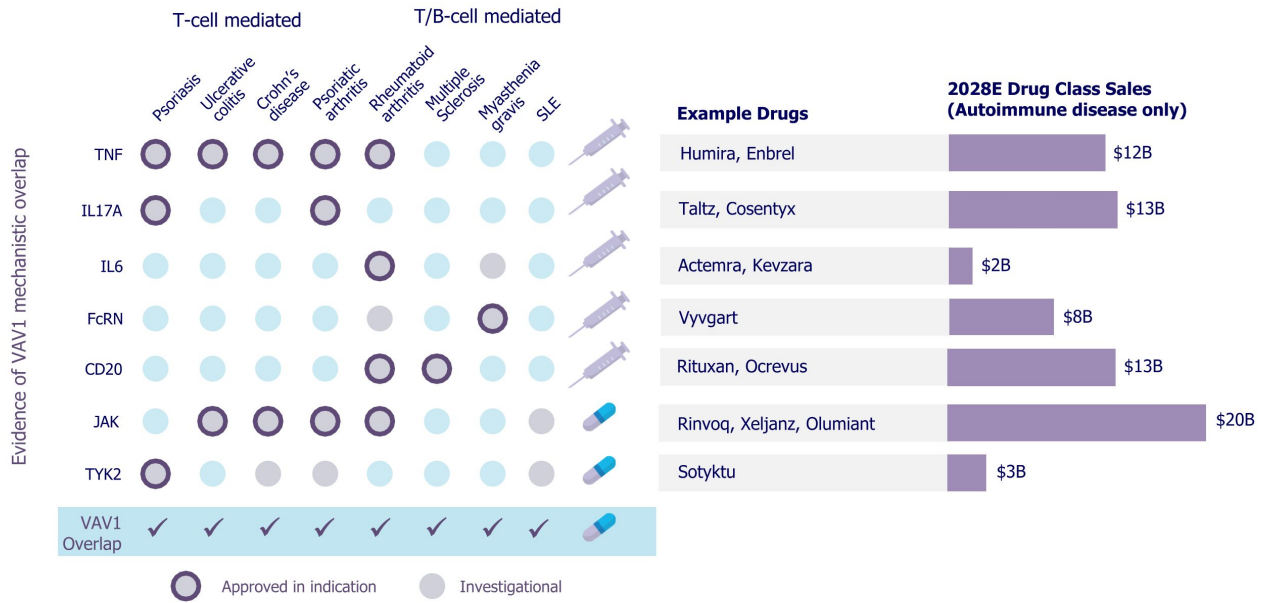
Clinical Opportunity:

Autoimmune disorders including rheumatoid arthritis (6.2M patients), multiple sclerosis (1.3M patients), and myasthenia gravis (36K – 60K patients in US)

Patient diagnosed incidence #s, major markets (US, EU and JP): Decision Resources Group (DRG)

VAV1: Unique Mechanism with Broad Potential Applications

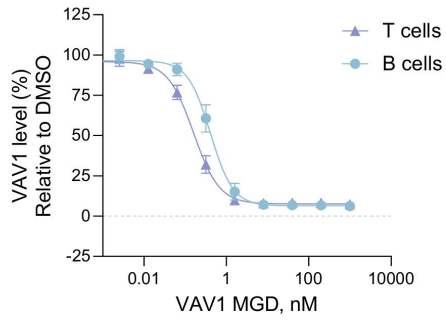
Potential to address multiple autoimmune diseases with safe, oral therapy



Note: Chart adapted from Hosack et al., Nat Rev Immunol 2023. Drug class sales from Evaluate Pharma. 2028E sales may include sales from anticipated future approvals.

MRT-6160 is a Potent and Selective VAV1-directed MGD

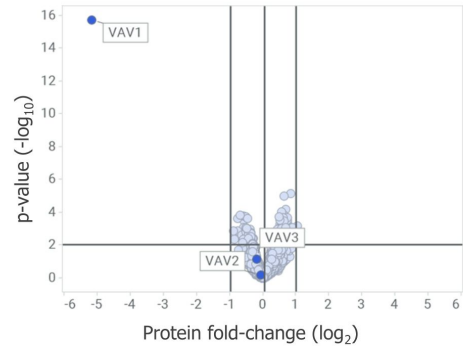
MRT-6160 is a potent VAV1-directed MGD



in vitro data

CRBN binding, IC ₅₀	670 nM
Ternary complex, EC ₅₀	11 nM
Degradation, DC ₅₀ /D _{max} (Jurkat)	7 nM / 97 %

MRT-6160 induces highly selective VAV1 degradation and has a favorable ADME/DMPK profile



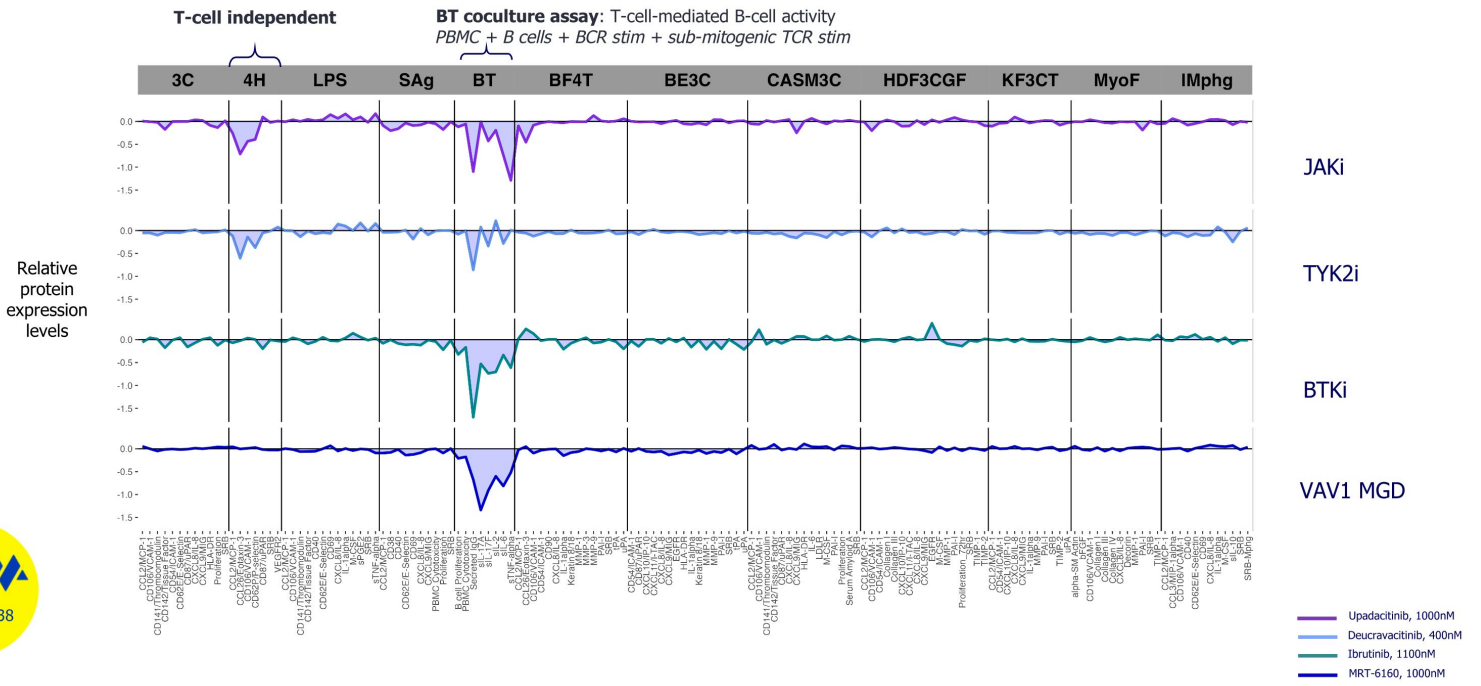
No degradation of other known cereblon neosubstrates

ADMET profile

CYP DDIs	IC ₅₀ > 30 μM
hERG inhibition patch clamp	EC ₅₀ > 30 μM
Oral bioavailability all species	> 50%

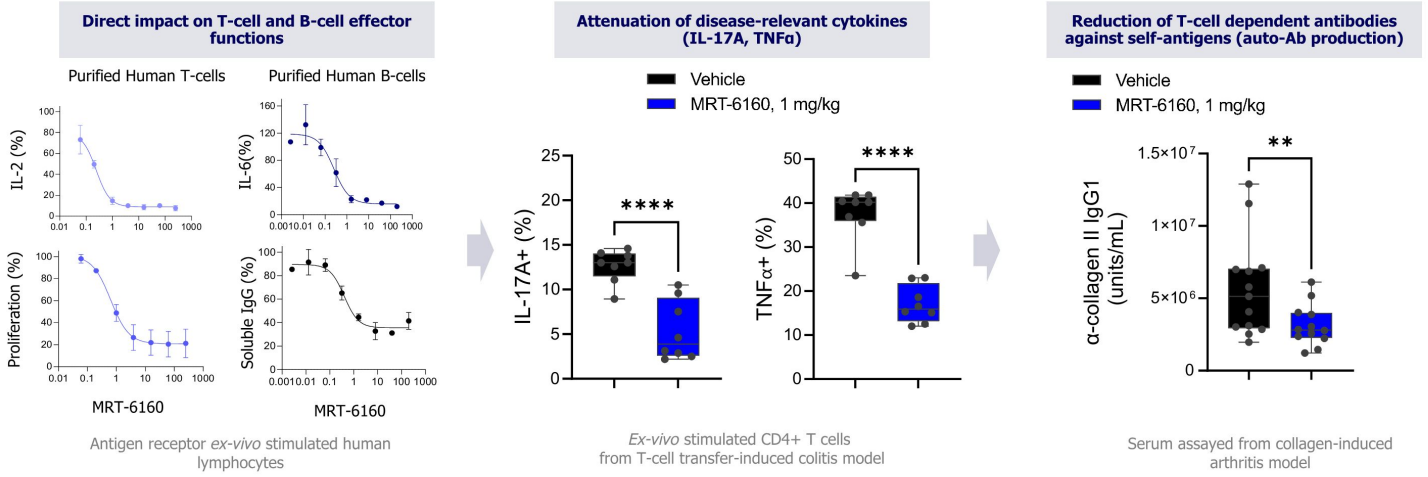


MRT-6160 Demonstrates Differentiated Activity (BioMAP) Profile



MRT-6160 Attenuates T- and B-Cell Activity and Cytokine Production

Experimental demonstration of activity overlapping with clinically validated mechanisms



VAV1 MOA Overlap

- ✓ JAK1
- ✓ IL6 antagonists
- ✓ BTKi
- ✓ anti-CD20

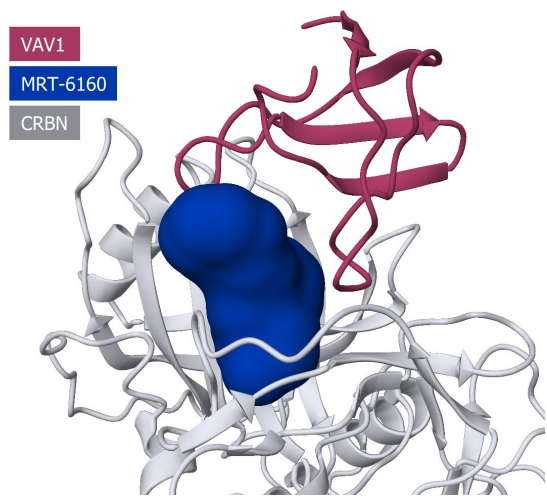
- ✓ TYK2i
- ✓ IL17A/F antagonists
- ✓ anti-TNFα

- ✓ anti-FcRN



MRT-6160 is a Potent, Selective VAV1 MGD with a Favorable Drug-like Profile

VAV1 ternary complex (Cryo-EM)



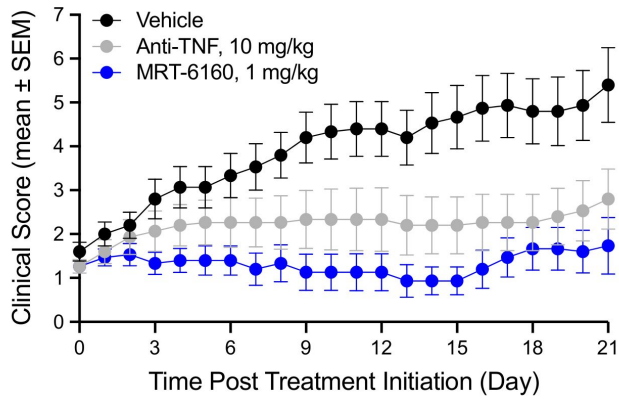
Cryo-EM structure of MRT-6160 in ternary complex with CRBN and VAV1

MGD Activity Profile	
CRBN Binding (HTRF, IC ₅₀)	0.67 μM
VAV1 Ternary Complex (HTRF, EC ₅₀)	11 nM
VAV1 Degradation (Jurkat, DC ₅₀ /Dmax)	7 nM / 97%
Selectivity (TMT proteomics)	Large VAV1 selectivity window
Physicochemical Properties	
LogD	1.5
MW	<400
Thermodynamic Solubility	7 μM
ADMET Profile	
Oral bioavailability (all species)	> 50 %
Metabolite Profile (<i>in vitro</i>)	No unique human metabolites or GSH adducts (mics)
CYP DDI (9 isoforms)	IC ₅₀ > 30 μM
Safety Pharmacology	
Mini-Ames	Negative
hERG inhibition (patch clamp)	No inhibition (EC ₅₀ > 30 μM)
Counterscreens (panel with 98 targets)	No inhibition

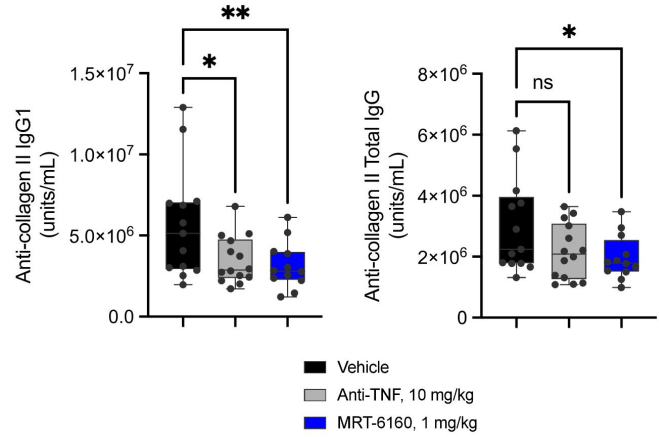
Preclinical GLP tox studies in rats and NHPs demonstrates highly favorable profile including no significant changes in peripheral immunophenotyping assessments

MRT-6160 Inhibits Disease Progression, Joint Inflammation & Auto-Antibody Production in the Collagen-Induced Arthritis Disease Model

MRT-6160 inhibits disease progression



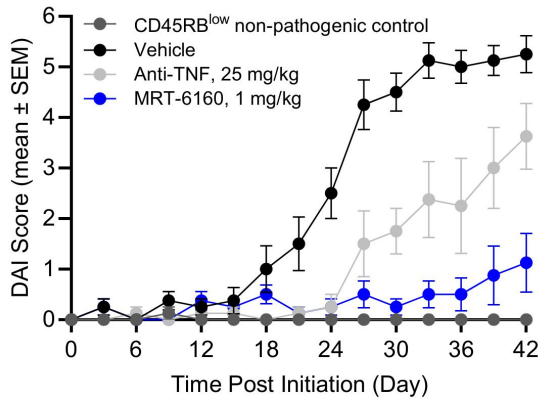
MRT-6160 inhibits anti-collagen II auto-antibodies



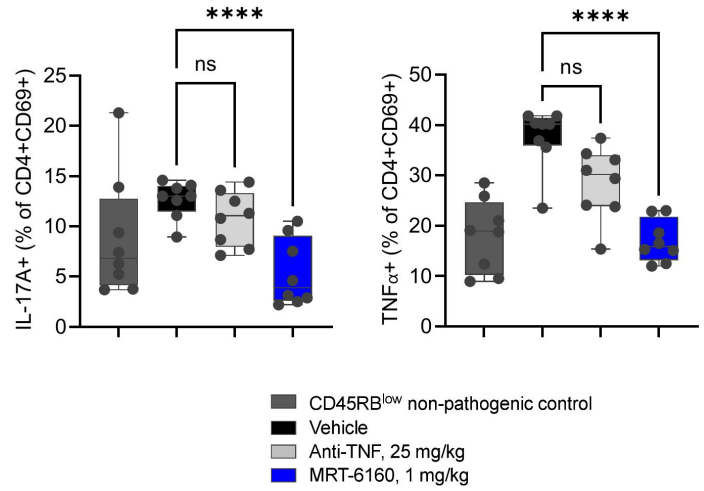
Collagen-induced arthritis T/B-cell (auto-antibody) driven model

MRT-6160 Inhibits Disease Progression and Cytokine Production in a Model of Inflammatory Bowel Disease

MRT-6160 inhibits disease progression in a model of colitis



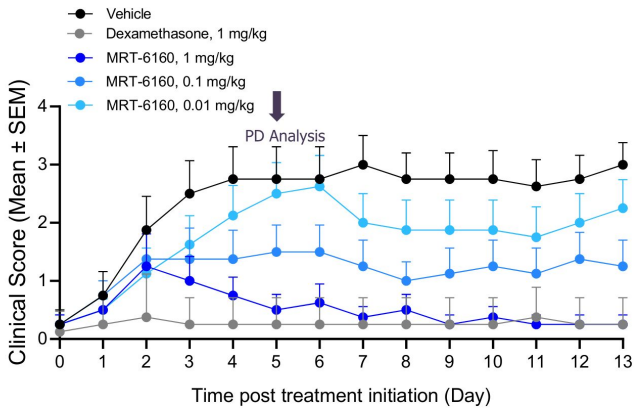
MRT-6160 reduces pro-inflammatory cytokine production by CD4⁺ T cells



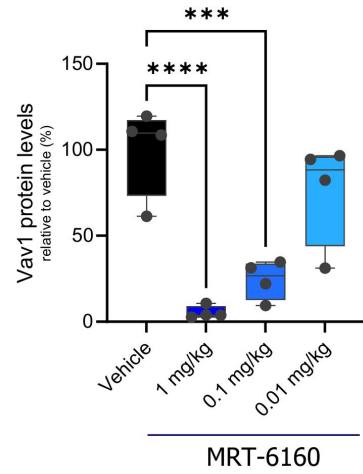
CD4⁺ T cell transfer-induced colitis model

MRT-6160 Elicits Dose-Dependent Activity in T-cell-mediated Multiple Sclerosis Autoimmune Disease Model

MRT-6160 inhibits disease progression in a mouse model of multiple sclerosis

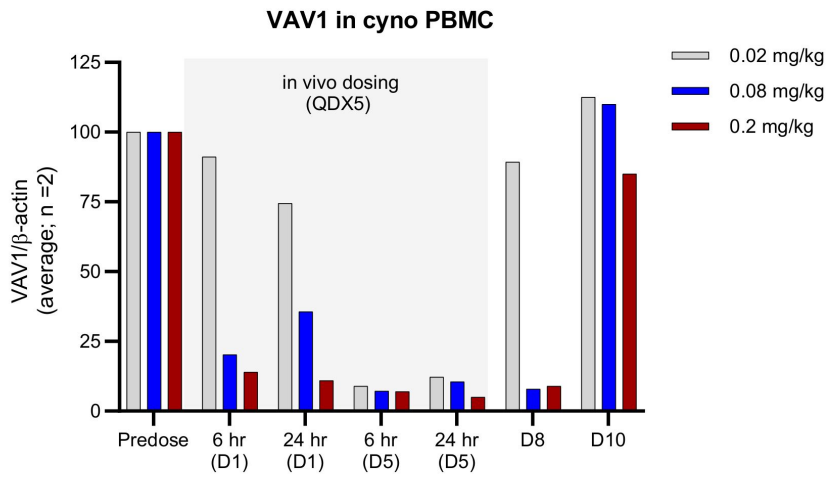


MRT-6160-mediated activity correlates with VAV1 levels



T-cell mediated experimental autoimmune encephalitis (EAE) model

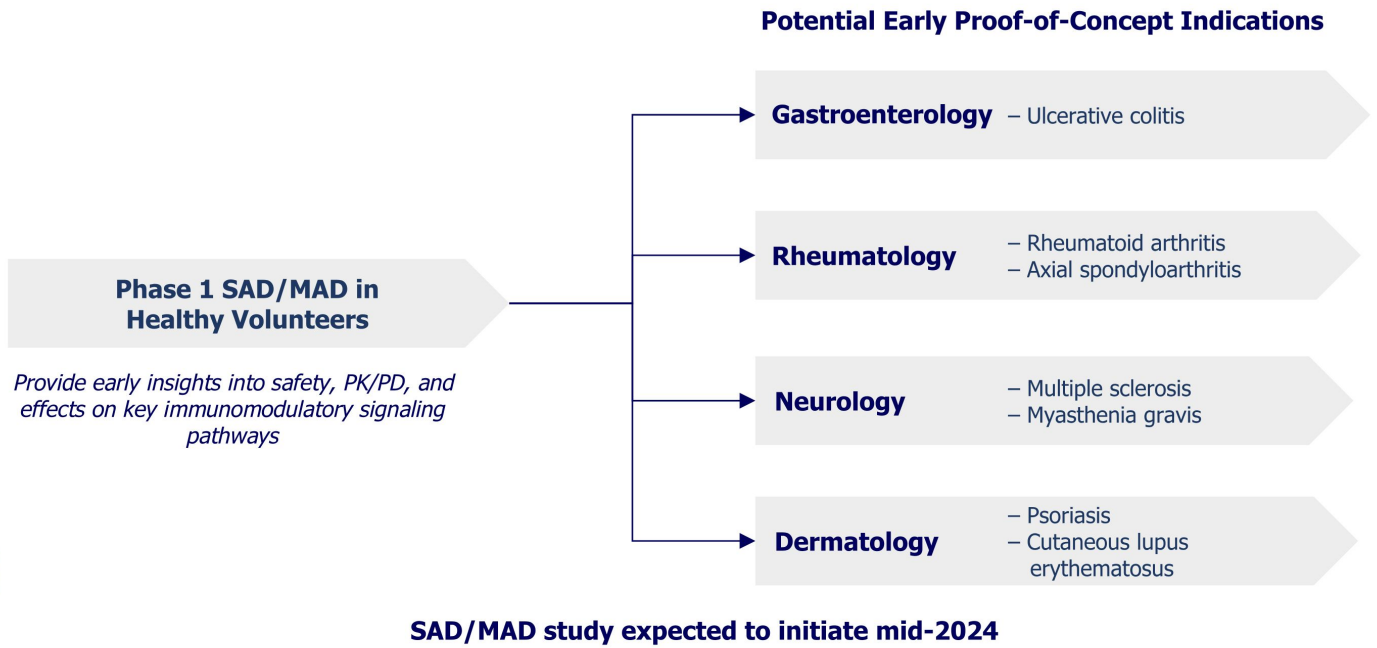
MRT-6160 Induces Significant VAV1 Degradation in Non-human Primates



- Increased degradation with repeat dosing
- Maximal VAV1 degradation at very low doses
- VAV1 levels return to baseline within 5 days of last dose

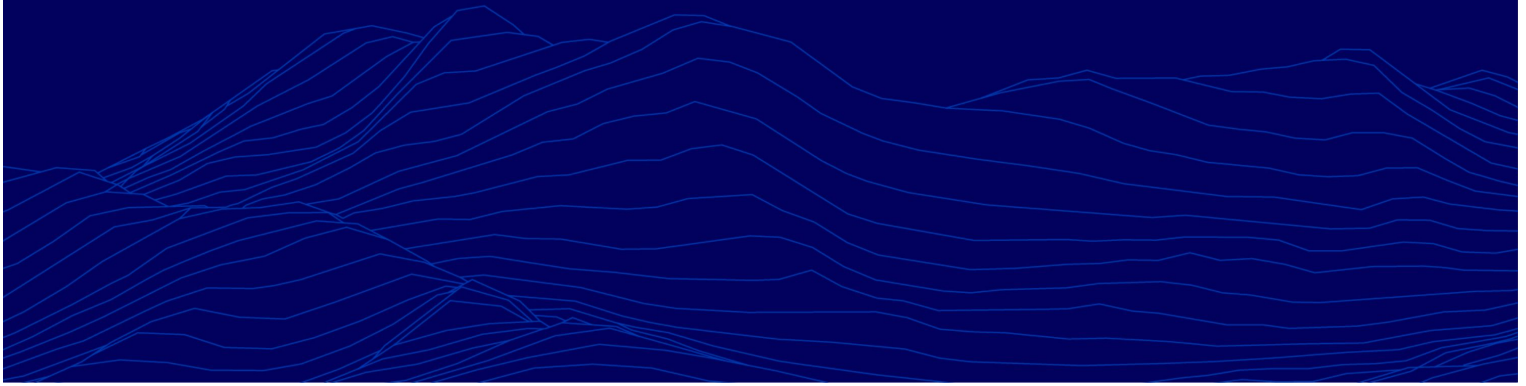
Preliminary MRT-6160 Development Plan through Early POC

Potential in multiple I&I indications with T cell and T/B cell-mediated pathophysiology

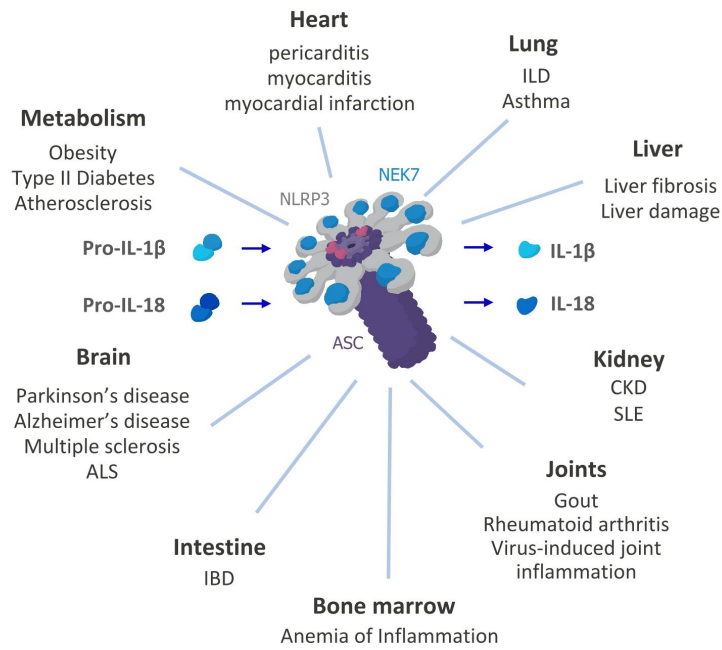




NEK7 Program (MRT-8102)



NEK7 is a Key Regulator of NLRP3 Inflammasomes and IL-1 β and IL-18 Production



Therapeutic hypothesis:

Activation of the NLRP3 inflammasome critically depends on NEK7

- NEK7 licenses NLRP3 assembly in a kinase-independent manner
- NEK7-deficient macrophages are severely impaired in IL-1 β and IL-18 secretion

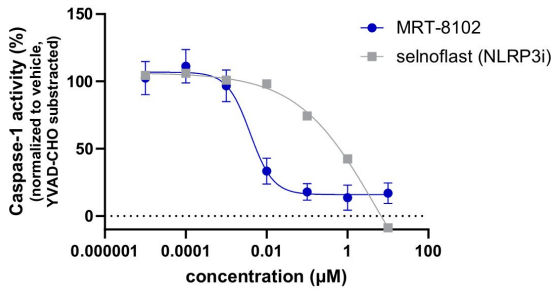
Consequently, NEK7 degradation has the potential to become an important treatment modality for a variety of inflammatory diseases

Clinical Opportunity:

Diseases driven by IL-1 β and the NLRP3 inflammasome including gout, cardiovascular disease, neurologic disorders including Parkinson's disease and Alzheimer's disease, ocular disease, diabetes, obesity, and liver disease

MRT-8102 is a Potent and Selective NEK7-directed MGD

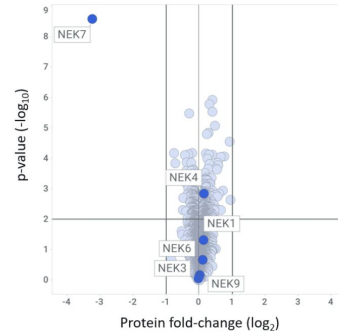
MRT-8102 potently suppresses inflammasome activation in primary human macrophages



in vitro data

CRBN binding, IC ₅₀	200 nM
Degradation, DC ₅₀ /D _{max} (CAL51)	10 nM / 89 %

MRT-8102 induces highly selective NEK7 degradation



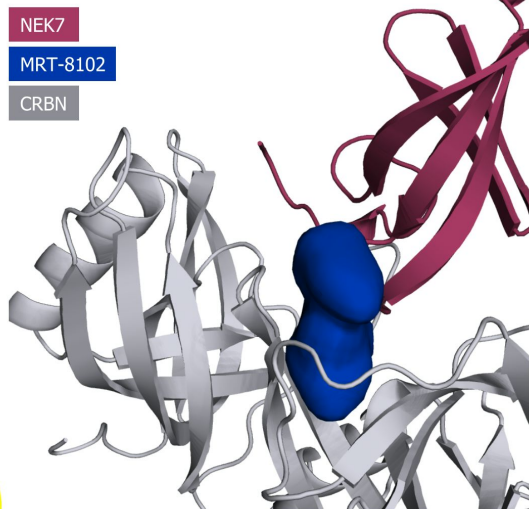
No degradation of other known cereblon neosubstrates

ADMET profile

hERG	No inhibition
Oral bioavailability	Yes

MRT-8102 is a Potent, Selective NEK7-Directed MGD With a Favorable Drug-like Profile

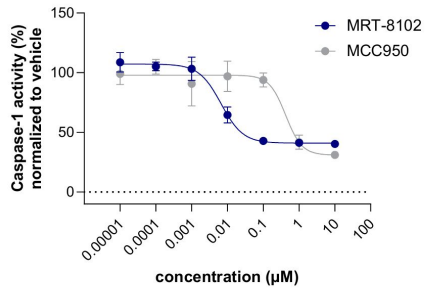
NEK7 Ternary Complex (Crystal Structure)



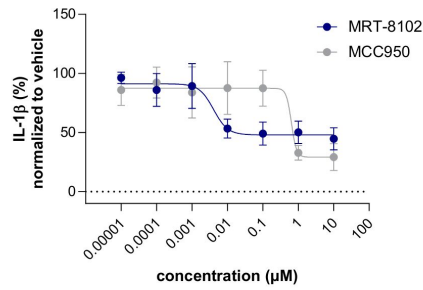
MGD Activity Profile	
CRBN Binding (HTRF, IC ₅₀)	0.2 μM
NEK7 Degradation (CAL51, DC ₅₀ /Dmax)	10 nM / 89%
Selectivity (TMT proteomics)	Excellent selectivity profile in different cell lines
Physicochemical Properties	
LogD	1.47
MW	<450
Thermodynamic Solubility	166 μM
ADMET Profile	
Oral Bioavailability	Yes
Metabolite Profile (<i>in vitro</i>)	No unique human metabolites or GSH adducts (mics)
Safety Pharmacology	
Mini-Ames	Negative
hERG (patch clamp)	No inhibition (EC50 > 30 μM)
Counterscreens (panel with 44 proteins)	No inhibition

MRT-8102 Potently Inhibits NLRP3 Inflammasome-mediated Activation in Human Monocyte-derived Macrophages

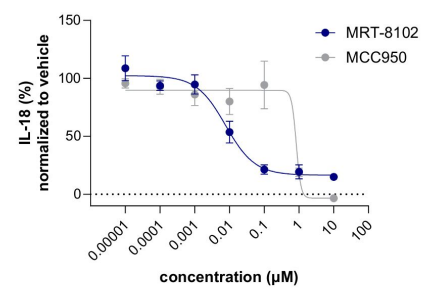
MRT-8102 inhibits caspase-1 activity in hMDMs after stimulation



MRT-8102 inhibits IL-1 β secretion by hMDMs after stimulation



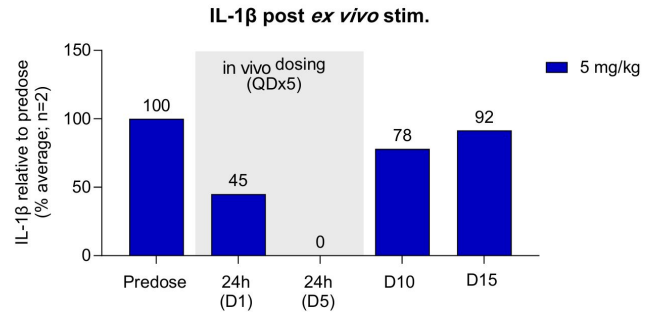
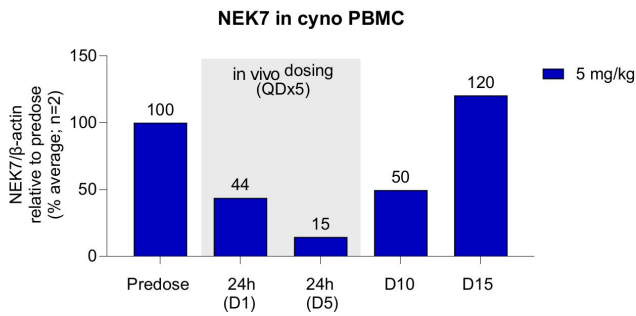
MRT-8102 inhibits IL-18 secretion by hMDMs after stimulation



Suppression of *Ex Vivo* Inflammasome Activation Following Degradation of NEK7 After Single and Multi-dose Study in Non-human Primates

MRT-8102 induces degradation of NEK7 *in vivo* over several days

***In vivo* NEK7 degradation leads to inhibition of NLRP3 inflammasome in *ex vivo* stimulation assay**



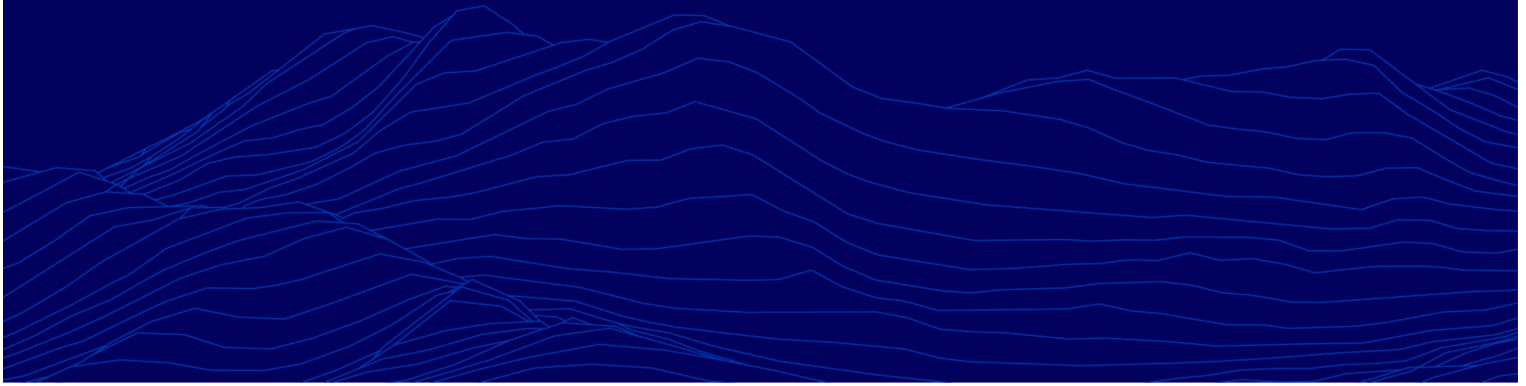
No clinical observations reported

- IL-1β in plasma after *ex vivo* stimulation with LPS + nigericin
- Similar results for Caspase-1 activity from same study
- Follow-up study with 1 mg/kg MRT-8102, *i.v.* at 4 hr showed similar results


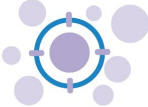






QuEEN™ Discovery Engine

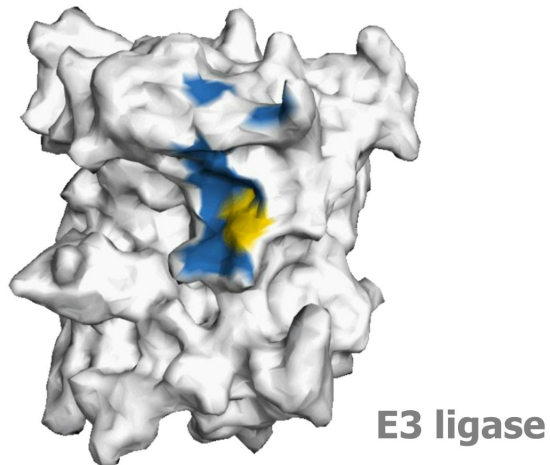


Overcoming Past Limitations of Molecular Glue Degraders

Traditional thinking	Monte Rosa Therapeutics approach
'Target space is limited'	 <p>QuEEN™ has vastly expanded the degradable target space across a broad range of undruggable protein classes</p>
'MGDs are identified by serendipity'	 <p>QuEEN™ enables target centric and systematic discovery of MGDs</p>
'MGDs are not selective'	 <p>AI-driven and structure-based design enable rational Med Chem optimization of MGDs</p>
'Med Chem rules don't apply to MGDs'	 <p>High selectivity achievable even within the same protein class, family and isoforms</p>

Our Critical Insight: Surfaces are Critical for MGD Discovery

Surfaces, not structures, mediate PPIs and targeted protein degradation

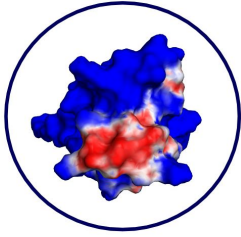


■ Neosubstrate footprint
■ MGD footprint

- Rationally-designed MGDs create diverse E3 ligase neosurfaces, enabling recruitment of new targets
- Our geometric deep learning algorithms use surfaces to **predict** targets.
- Our surface-based algorithms **design** MGDs to recruit targets.
- Our platforms generate **actionable data-at-scale** to test & train ("data moat")

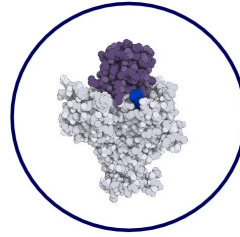


QuEEN™ Discovery Engine: Unique Capabilities Enable Our Rational and Target-Centric Approach to MGDs



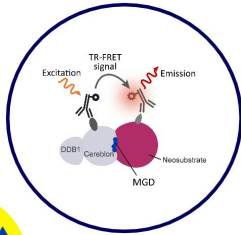
AI/ML

In silico discovery using proprietary AI-powered algorithms



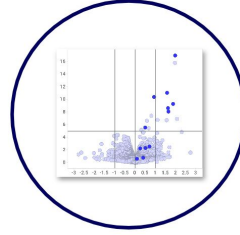
Structure-based Design

Proprietary database of protein structures to enable rapid optimization of MGD chemistry



Proximity Screening

Specialized suite of biochemical, cellular and proteomics assays to assess proximity and degradation in high throughput

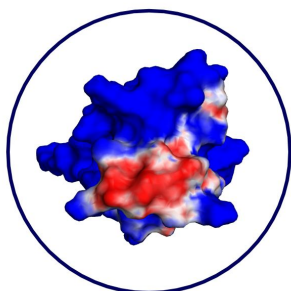


Proteomics

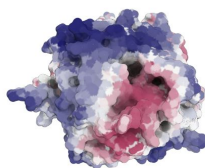
Integrated proteomics engine and database to identify novel targets and explore cellular complex formation and protein degradation

Proprietary AI/ML Engines Enable the Discovery of Reprogrammable Ligases, Neosubstrates, and Selective MGDs

**Proprietary
AI/ML engines**



Ligase reprogrammability



Discover protein interaction hotspots

Target identification



Match interaction sites on neosubstrates

MGD discovery



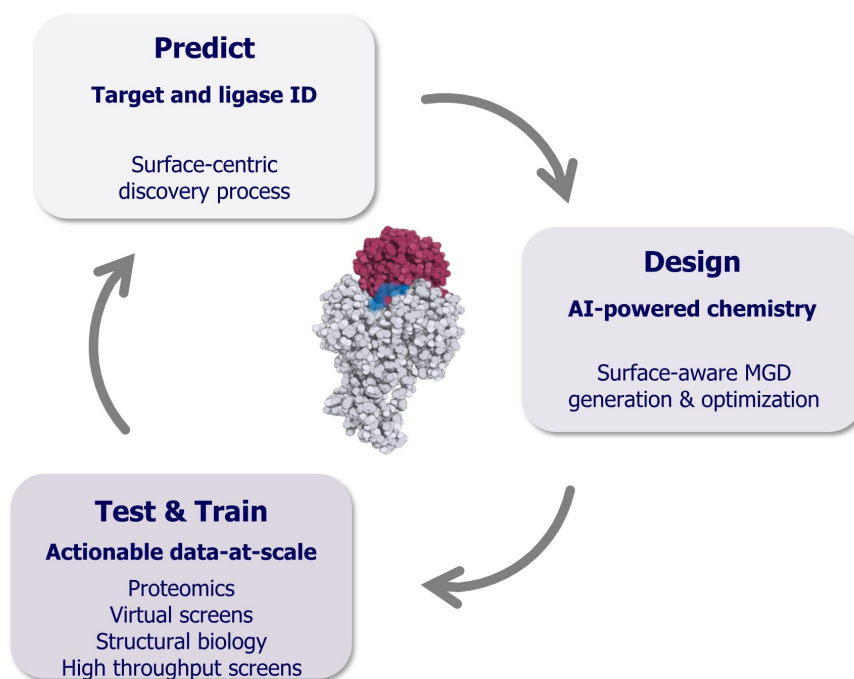
Generate MGDs with drug-like properties

***In silico* screening**

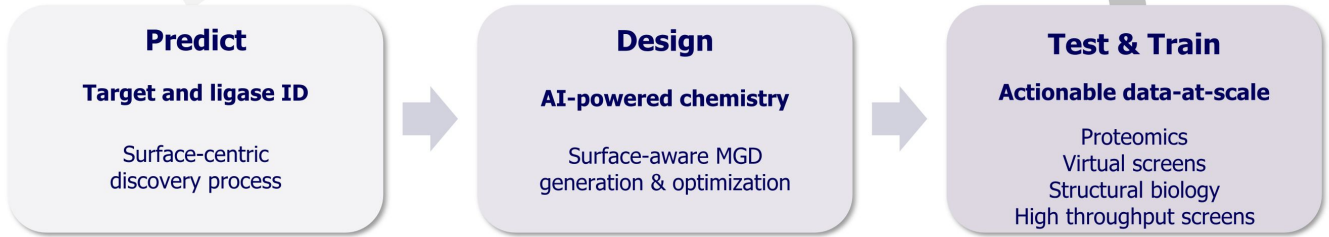


Screen for activity in ternary complexes

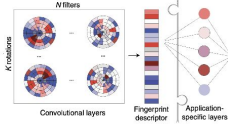
QuEEN™: How it Works



QuEEN™ Toolbox to Rapid Discovery Oral MGDs



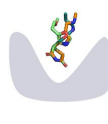
fAIceit™ Ultra-fast fingerprint search for surface-based matchmaking



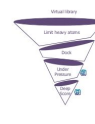
FLASH™ virtual library



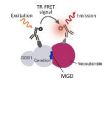
HitMan™ diverse library



Headlong™ virtual screens



HT library screening



E3 ligase reprogrammability



fAIceit mimicry target ID



GlueAID™ ADMET & synthesis



Rhapsody™ ternary complexes









Proteomics mass-spec farm



Structural biology X-ray & cryo-EM



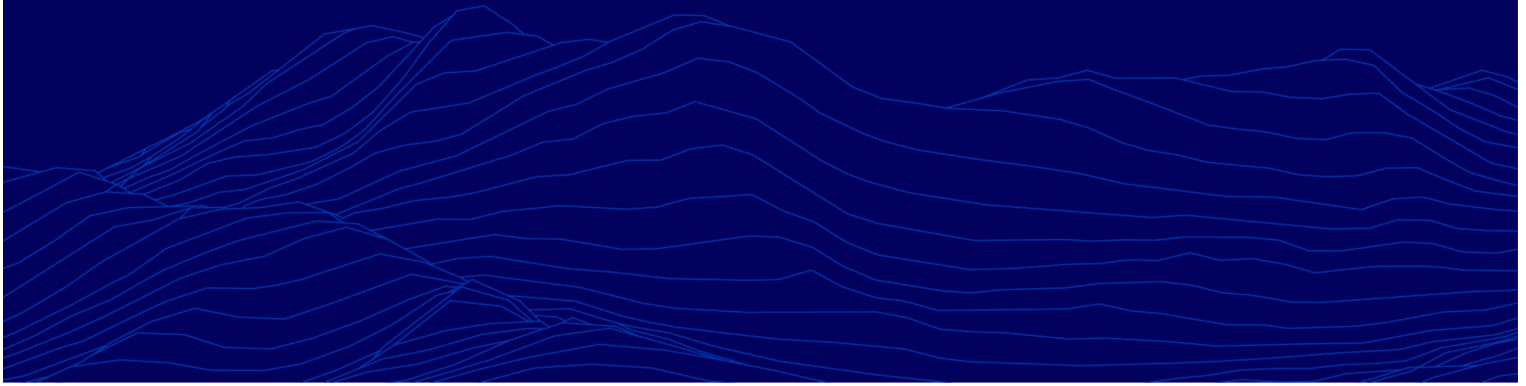
Algorithms Use MGD-focused, Moated Data to Identify Targets and Design MGDs

Lab experimentation			<i>in silico</i> experimentation		
Proteomics mass-spec farm 	HT library screening 	Structural biology X-ray & cryo-EM 	fAIceit mimicry target ID Not degron  Degron	FLASH™ virtual library 	Headlong™ virtual screens 
34 million protein measurements	6 million MGD activity measurements	>100 structures	250 billion protein surface matchings	37 billion virtual MGDs	651 million compounds screened

Cloud First and Cloud Native
Scalable Data Lake with purpose-built data services for seamless data movement and unified governance



Team



World-Class Leadership

Deep expertise in molecular glue discovery, drug development and precision medicine



Markus Warmuth, M.D.
Chief Executive Officer



Owen Wallace, Ph.D.
President of Research and
Preclinical Development



Sharon Townson, Ph.D.
Chief Technology Officer



John Castle, Ph.D.
Chief Data Scientist &
Information Officer



Filip Janku, M.D., Ph.D.
Chief Medical Officer



Phil Nickson, Ph.D., J.D.
General Counsel



Magnus Walter, Ph.D.
SVP, Chemical Sciences and
Process Development



Jennifer Champoux
Chief People & Operations
Officer



Andrew Funderburk
SVP, Investor Relations and
Strategic Finance



Thank You

