

**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): January 9, 2023

MERUS N.V.

(Exact name of registrant as specified in its charter)

The Netherlands
(State or other jurisdiction of
incorporation or organization)

001-37773
(Commission
File Number)

Not Applicable
(I.R.S. Employer
Identification No.)

Yalelaan 62
3584 CM Utrecht
The Netherlands
(Address of principal executive offices) (Zip Code)

+31 85 016 2500
(Registrant's telephone number, including area code)

N/A
(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 Shares, €0.09 nominal value per share	MRUS	The Nasdaq Global 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 January 9, 2023, Merus N.V. (the “Company”) posted an updated corporate slide presentation in the “Investors and Media” portion of its website at www.merus.nl providing updates including, among other things, that: (i) as of September 30, 2022, the Company had \$372.9 million in cash and cash equivalents, which after undergoing the Company’s 2023 budgeting process and based on the Company’s current operating plan, the Company’s existing cash, cash equivalents and marketable securities are expected to fund the Company’s operations into the second half of 2025; (ii) the Company has initiated a cohort evaluating zenocutuzumab (“Zeno”) in patients with castration resistant prostate cancer (“CRPC”); and (iii) the Company reports updated planned milestones including a clinical update planned for the phase 1/2 eNRGy trial of Zeno in NRG1 fusion (“NRG1+”) cancer in 2023, an update on the potential registrational path and timeline of Zeno in NRG1+ cancer planned for the first half of 2023, an initial clinical data update on Zeno in patients with CRPC planned for the second half of 2023, a planned update on petosemtamab in previously treated head and neck squamous cell carcinoma and gastric esophageal cancer in the first half of 2023, a planned regulatory path and program update for petosemtamab in the first half of 2023 (correcting the Company’s press release dated as of January 8, 2023, which indicated this update was expected to occur in the second half of 2023), and a planned initial clinical data update for the expansion cohorts of MCLA-129 and development strategy update for MCLA-129 in the second half of 2023. A copy of the slide presentation is attached as Exhibit 99.1 to this Current Report on Form 8-K (“Current Report”).

The information in this Item 7.01 of this Current Report, including Exhibit 99.1 attached hereto, is intended to be furnished and 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 filing. The Company undertakes no obligation to update, supplement or amend the materials attached hereto as Exhibit 99.1.

Forward-Looking Statements

This Current Report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts contained in this Current Report are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplate,” “believe,” “estimate,” “predict,” “potential” or “continue” or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words. All statements other than statements of historical fact contained in this Current Report, including without limitation statements regarding our plans to develop and commercialize our product candidates, the timing of our ongoing or planned clinical trials or updates concerning such trials, the timing of and our ability to obtain and maintain regulatory approvals, the clinical utility and commercial potential of our product candidates, our commercialization, marketing and manufacturing capabilities and strategy, our expectations surrounding our collaborations, our expectations about the willingness of healthcare professionals to use our product candidates, the sufficiency of our cash, cash equivalents and investments to fund our operations, and the plans and objectives of management for future operations and capital expenditures are forward-looking statements.

The forward-looking statements in this Current Report are only predictions and are based largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date

of this Current Report and are subject to a number of known and unknown risks, uncertainties, assumptions and other important factors, including those discussed under the caption "Risk Factors" in our Quarterly Report on Form 10-Q for the period ended September 30, 2022, filed with the Securities and Exchange Commission, or SEC, on November 3, 2022, and our other reports filed with the SEC, which could cause actual results to differ materially from those indicated by the forward-looking statements made in this Current Report. Any such forward-looking statements represent management's estimates as of the date of this Current Report. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in such forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change, except as required under applicable law. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date of this Current Report.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

The following Exhibit 99.1 relating to Item 7.01 shall be deemed to be furnished, and not filed:

<u>Exhibit No.</u>	<u>Description</u>
99.1	Merus N.V. Corporate Slide Presentation as of January 9, 2023
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

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.

MERUS N.V.

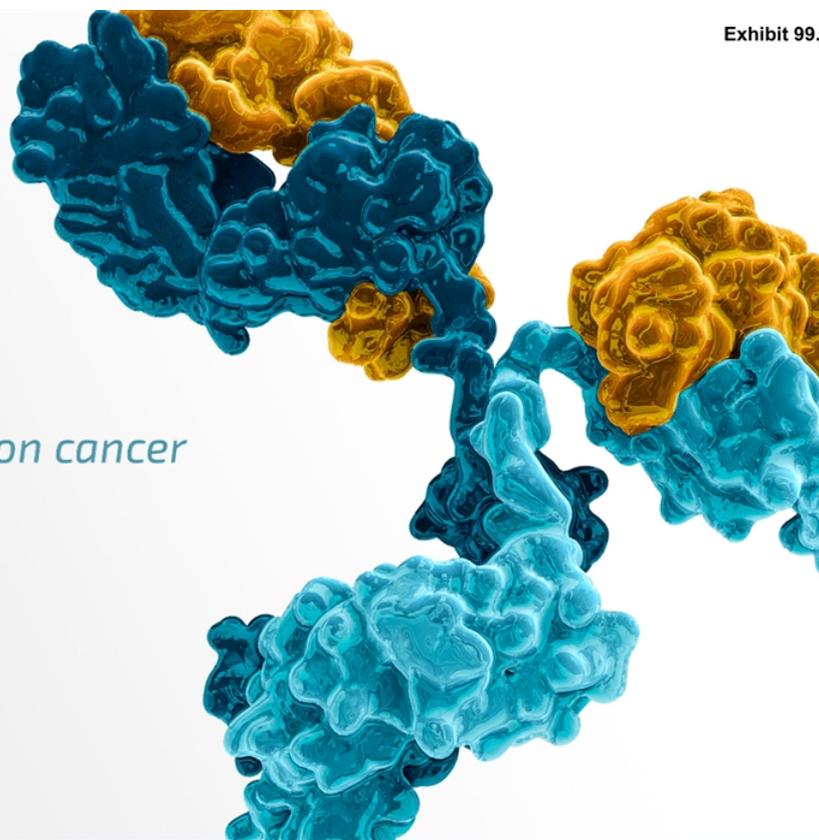
Date: January 9, 2023

By: /s/ Sven A. Lundberg
Name: Sven (Bill) Ante Lundberg
Title: President, Chief Executive Officer and Principal Financial Officer

Merus *closing in on cancer*

Corporate Presentation

January 2023

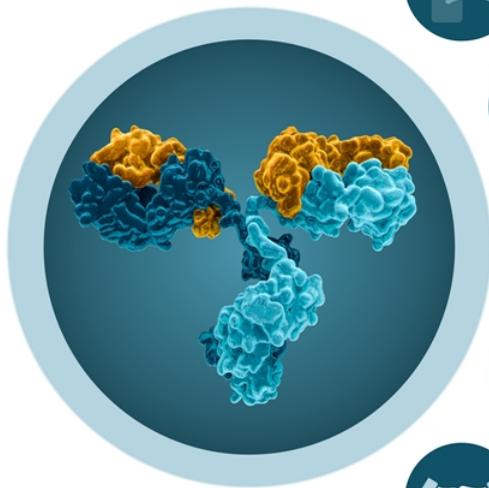


Disclaimer

This presentation (including any oral commentary that accompanies this presentation) contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this presentation that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements regarding the impact our Biclomics® and Triclomics® platforms can have on cancer, our product candidates' potential to treat certain types of tumors, the timing of regulatory filings and the timing and anticipated data read-outs, updates or results from our clinical trials and our collaborations, and anticipated cash runway. These forward-looking statements are based on management's current expectations. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, the following: we have incurred significant losses, are not currently profitable and may never become profitable; our need for additional funding, which may not be available and which may require us to restrict our operations or require us to relinquish rights to our technologies or antibody candidates; potential delays in regulatory approval and impacts of the COVID-19 pandemic, which would impact our ability to commercialize our product candidates and affect our ability to generate revenue; the unproven approach to therapeutic intervention of our Biclomics®, and Triclomics® technology; our limited operating history; economic, political, regulatory and other risks involved with international operations; the lengthy and expensive process of clinical drug development, which has an uncertain outcome; the unpredictable nature of our early stage development efforts for marketable drugs; potential adverse public reaction to the use of cancer therapies; potential delays in enrollment of patients, which could affect the receipt of necessary regulatory approvals; failure to obtain marketing approval internationally; failure to compete successfully against other drug companies; potential competition from other drug companies if we fail to obtain orphan drug designation or maintain orphan drug exclusivity for our products; our reliance on third parties to conduct our clinical trials and perform clinical development and the potential for those third parties to not perform satisfactorily; our reliance on third parties to manufacture our product candidates, which may delay, prevent or impair our development and commercialization efforts; protection of our proprietary technology; our patents being found invalid or unenforceable; potential lawsuits for infringement of third-party intellectual property; our ability to attract and retain key personnel; managing our growth could result in difficulties.

These and other important factors discussed under the caption "Risk Factors" in our Quarterly Report on Form 10-Q for the period ended September 30, 2022 filed on November 3, 2022 with the Securities and Exchange Commission, or SEC, and our other reports filed with the SEC, could cause actual results to differ materially from those indicated by the forward-looking statements made in this presentation. Any such forward-looking statements represent management's estimates as of the date of this presentation. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change.

Merus Overview



Oncology-focused Company Developing Multispecific Antibody Therapies

Bispecific and trispecific cancer therapeutic candidates in the human IgG format



Established Clinical Pipeline with Multiple Near-Term Trial Updates

Robust clinical data from registration-directed trial of Zeno in NRG1 fusion (NRG1+) cancer¹, early encouraging clinical data on petosemtamab in head and neck cancer;² MCLA-129 in solid tumors³



Leading Multispecific Antibody (Multiclronics®) Platforms

Common light chain format permits broad, high throughput evaluation of Biclronics® and Triclronics®, to develop clinical stage assets with potential for meaningful clinical activity in patients



Near Term Planned Trial Updates and Strong Cash Position into 2H 2025[†]

Upcoming clinical milestones and program updates planned over the next 12-18 months: Zeno registration-directed program, petosemtamab clinical update 1H23, and MCLA-129 in 2H23



Strategic Collaborations to Unlock Platform Value

Multiple strategic collaborations and license agreements, leading to multiple Biclronics® candidates in clinical development for potential future milestone and royalty opportunities

¹ Schram et al., ASCO 2022, efficacy data cutoff April 12, 2022 and safety data cutoff January 12, 2022

² Hollebecque et al., AACR-NCI-EORTC 2021, data cutoff August 9, 2021

³ Ou et al., EORTC-NCI-AACR 2022, data cutoff August 15, 2022

[†] Based on 2023 budgeting process and the current operating plan, the existing cash, cash equivalents and marketable securities are expected to fund Merus' operations into second half 2025.

Merus

Merus Clinical Pipeline

PROGRAM	BISPECIFIC TARGETS	INDICATION(S)	PRECLINICAL	PHASE 1	PHASE 1/2	STATUS
Zenocutuzumab (Zeno) (MCLA-128)	HER2 x HER3	NRG1+ cancer				<ul style="list-style-type: none"> Phase 1/2 registration-directed trial ongoing in NRG1+ cancer Clinical update in NRG1+ cancer planned 2023 Initial clinical data update on Zeno in CPRC planned 2H23
		with afatinib in NRG1+ NSCLC				
		Castration resistant prostate cancer				
		Other cancers				
Petosemtamab (MCLA-158)	LGR5 x EGFR	Solid tumors				<ul style="list-style-type: none"> Phase 1 trial ongoing Clinical update planned 1H23
MCLA-145	CD137 x PD-L1	Solid tumors				Phase 1 trial ongoing
		with a PD1 inhibitor in solid tumors				
MCLA-129	EGFR x c-MET	Solid tumors				<ul style="list-style-type: none"> Phase 1/2 trial ongoing Clinical update planned 2H23
		with a 3rd gen EGFR TKI in NSCLC				
ONO-4685*	PD-1 x CD3	Relapsed/Refractory T Cell Lymphoma; Psoriasis				Phase 1 trial ongoing
INCA32459*	LAG3 x PD-1	Not disclosed				Clinical program expected to begin in 2022**

* If commercialized, Merus to receive royalties

** Incyte presentation dated August 2, 2022

Merus

Potential first in class and best in class for NRG1 fusion (NRG1+) cancer

Zenocutuzumab

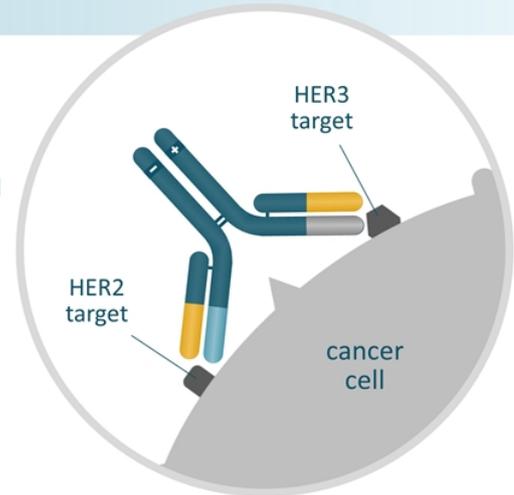
MCLA-128 or “Zeno”
HER2 x HER3 bispecific

• NRG1 fusions

- Translocations of the Neuregulin-1 (NRG1) gene, also called Heregulin, the ligand for the HER3 receptor. Rare events in solid tumors reported to typically occur in the absence of other cancer driver mutations¹
- Reported as associated with poor prognosis¹, lower response rates to standard therapy², and shorter overall survival in lung cancer^{1,3}

• Zeno

- Biclomics[®] antibody binds to HER2 and blocks HER3; 100-fold more potent *in vitro* than anti-HER3 mAbs tested
- Granted orphan and fast track designation by FDA for pancreatic cancer, and NRG1+ cancer post standard of care, respectively
- Enrollment in eNRGy trial continues to support potential BLA⁴ filings in NRG1+ NSCLC⁴ and/or PDAC⁴, with potential subsequent tissue agnostic filing
- Additional clinical study ongoing in CRPC, and planned for NRG1+ NSCLC (Zeno with afatinib)⁴



¹ Chang et al., Clin Cancer Research 2021, ² Drilon et al., J Clin Oncol 2021, ³ Shin et al., Oncotarget 2016, ⁴ BLA, Biologics License Application; NSCLC, non-small cell lung cancer; PDAC, pancreatic ductal adenocarcinoma; and CRPC, castration-resistant prostate cancer

Zeno DOCK & BLOCK[®] Mechanism Potently Blocks NRG1 fusions

Zeno

Common light chain bispecific
Biclomics[®] antibody

DOCKS

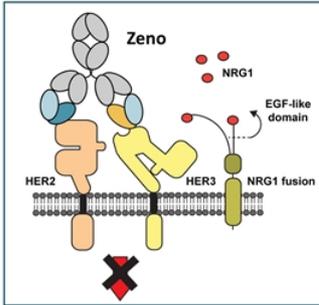
onto the more abundant HER2
protein leads to high local
concentration on the cell surface

BLOCKS

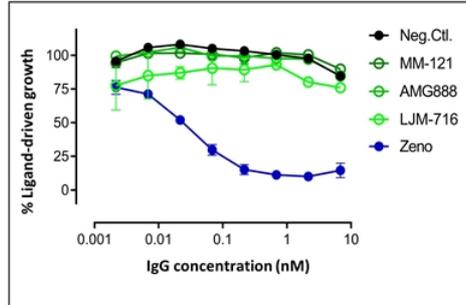
- NRG1 fusion interaction with HER3
- HER3 from interacting with HER2
- Growth signals in cells

INDUCES

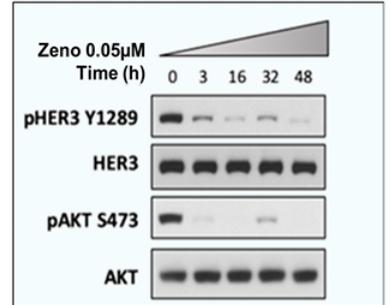
enhanced ADCC
(Antibody-Dependent
Cellular Cytotoxicity)



Unique-Targeting of NRG1+ Cancer



Growth of N87 cells with 12.5 nM HRG and a titration of the indicated antibodies.

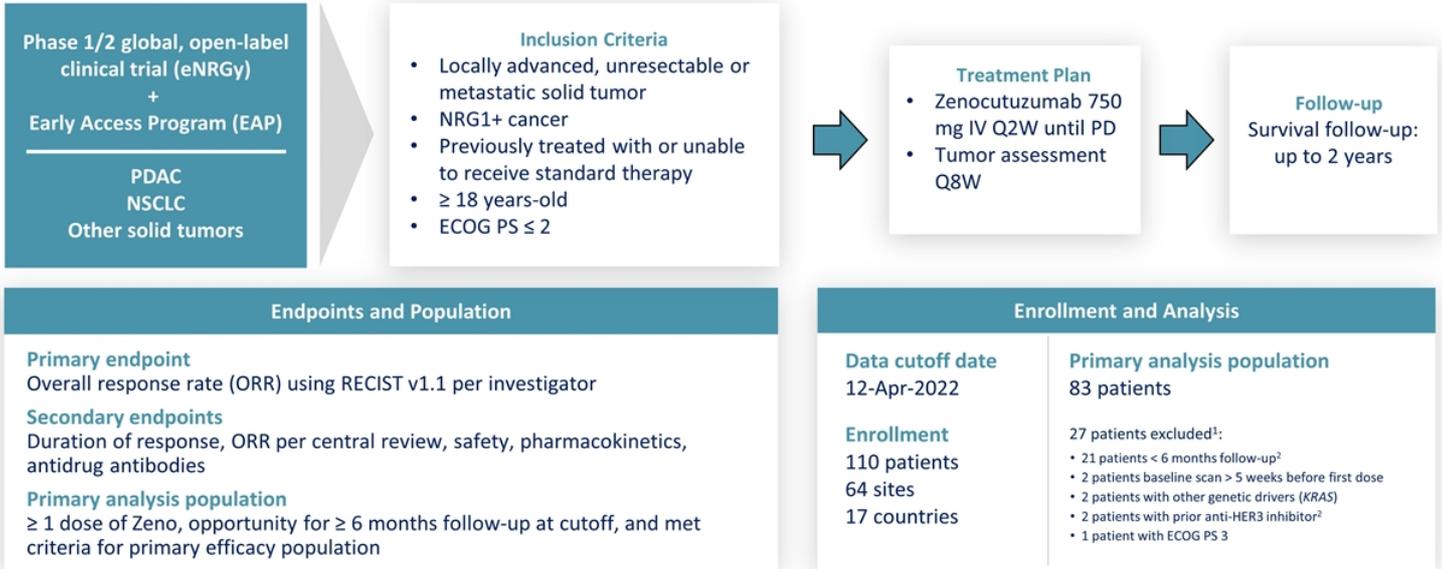


Shown to Potently Inhibit Growth and NRG1:HER3 Signalling Preclinically

Geuijen et al. *Cancer Cell*. 2018;33:922-36; Odintsov et al. *AACR*. 2021; abstract 956;
Schram et al., *ASCO* 2022,

Merus

Zeno in NRG1+ Cancer: Global Phase 1/2 Clinical Trial



Endpoints and Population
<p>Primary endpoint Overall response rate (ORR) using RECIST v1.1 per investigator</p> <p>Secondary endpoints Duration of response, ORR per central review, safety, pharmacokinetics, antidrug antibodies</p> <p>Primary analysis population ≥ 1 dose of Zeno, opportunity for ≥ 6 months follow-up at cutoff, and met criteria for primary efficacy population</p>

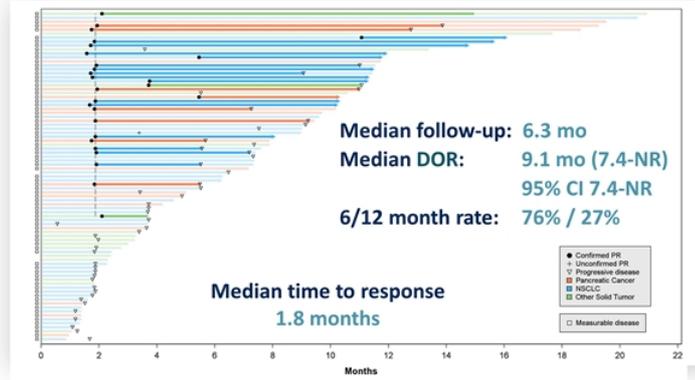
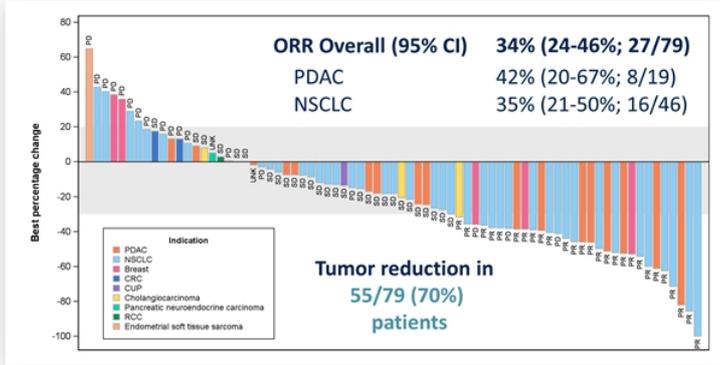
Enrollment and Analysis	
<p>Data cutoff date 12-Apr-2022</p> <p>Enrollment 110 patients 64 sites 17 countries</p>	<p>Primary analysis population 83 patients</p> <p>27 patients excluded¹:</p> <ul style="list-style-type: none"> • 21 patients < 6 months follow-up² • 2 patients baseline scan > 5 weeks before first dose • 2 patients with other genetic drivers (KRAS) • 2 patients with prior anti-HER3 inhibitor² • 1 patient with ECOG PS 3

¹ Schram et al., ASCO 2022, efficacy data cutoff April 12, 2022 and safety data cutoff January 12, 2022

¹ Per protocol/SAP
² One patient had 2 reasons for exclusion

Robust Clinical Efficacy in NRG1+ Cancer

Overall response rate 34%; Median DOR > 9 months



Note: The waterfall plot shows data for 75 of 79 patients. Change in tumor size could not be measured for 4 patients, 3 due to absence of post baseline assessment (early progression) and one due to incomplete assessment. NSCLC, Non-Small Cell Lung Cancer; PDAC, Pancreatic Ductal Adenocarcinoma

Arrows indicate treatment was ongoing at the cutoff date

Zeno: Continued Progress in NRG1+ Cancer and Beyond

Potential First & Best in Class for NRG1+ Cancer

- **Meaningful, durable response rate**
 - ORR 34% (95% CI: 24-46%; n=79)
 - Median DOR 9.1 months (95% CI: 7.4-NR)
 - Antitumor activity observed across multiple tumor types
- **Well tolerated safety profile**
 - Most adverse events were low grade
 - Very low rate of discontinuations due to toxicity

Broad Zeno Clinical Development Program

- **Registration-directed clinical program**
 - Enrollment continues; as of year-end 2022 more than 150 patients treated in the eNRGy trial and EAP;
 - Initial tumor-specific approach planned in NRG1+ NSCLC and/or PDAC with potential agnostic BLA to follow
 - In NRG1+ NSCLC, combination therapy with afatinib currently recruiting
- **Beyond NRG1+ cancer**
 - Castration-resistant prostate cancer cohort initiated, enrolling
 - Additional indications being considered

NRG1 Fusions More Common in Specific Types of Lung and Pancreatic Cancer

	Overall	Enrichment
	Non-Small Cell Lung Cancer (0.3%-1.7%) ^{1,2}	IMA (27%-31%)³ (Invasive mucinous lung adenocarcinoma)
	Pancreatic cancer (0.5%-1.8%) ^{2,4}	KRAS wild-type (up to 6%)⁵ pancreatic cancer
	Other (<1%, eg, breast, cholangiocarcinoma, colorectal cancers) ²	

NGS Testing Rates ⁶

Lung Cancer: 59%



- **20 labs** cover ~80% of market
- ~ **36%** includes NRG1 fusion testing (n=12)

Pancreatic Cancer: 37%



- **20 labs** cover ~87% of market
- ~ **47%** includes NRG1 fusion testing (n=12)

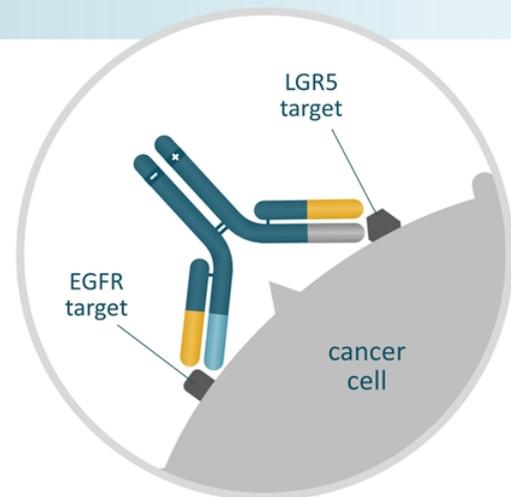
1. Drilon A et al. *Cancer Discov*. 2018;8(6):686-695. 2. Jonna S et al. *Clin Cancer Res*. 2019;25(16):4966-4973. Laskin J et al. *Ann Oncol*. 2020;31(12):1693-1703. 4. Knegger TC et al. *J Clin Oncol*. 2022;40(16 suppl):4155. 5. Jones MR et al. *Clin Cancer Res*. 2019;25(15):4674-4681 6. Data from Diagnostics Data Repository: 1Q2022: Testing rate dashboard (Aug. 2022 assessment) & 3Q2022 Data: Testing coverage from Diagnostics Lab mapping (Nov. 2022 assessment) © 2022 Diagnostics PLC or its affiliates. All rights reserved.

**Potential first in class LGR5xEGFR
Biclomics® designed to potently
block dysregulated signaling and
growth in solid tumors**

MCLA-158

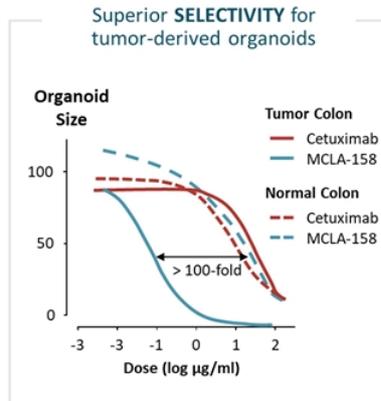
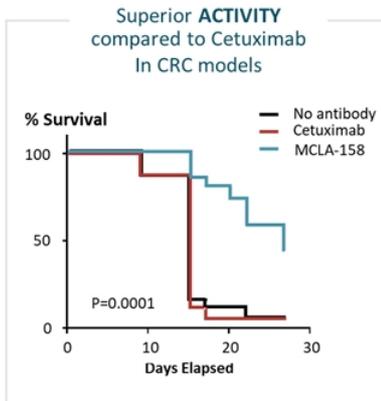
Petosemtamab
LGR5 x EGFR bispecific

- Binds to EGFR and LGR5, a cancer-stem cell antigen
- Blocks growth in WNT-dysregulated tumor models including Ras^{mut}
- Modifications to enhance ADCC
- Phase 1 trial ongoing; clinical update planned for 1H23
- Early evidence of clinical activity in advanced Head & Neck Squamous Cell Carcinoma (HNSCC) reported at AACR-NCI-EORTC 2021*

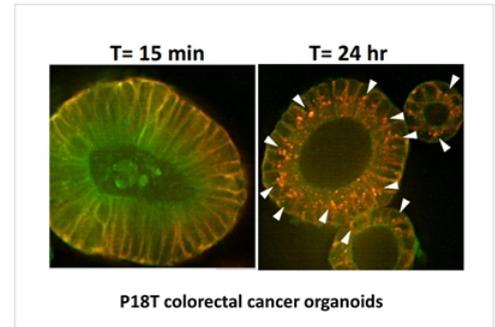


Petosemtamab — Novel Target and Innovative MoA

Superior Growth Inhibition and Selectivity of Tumor Versus Healthy Tissue*



Induces EGFR internalization and degradation**



- Activity observed in xenograft models resistant to treatment with Cetuximab
- Petosemtamab discriminated between organoids from tumor and healthy tissue
- After 24h exposure, MCLA-158 (red) is localized intracellularly and overall EGFR expression (green) is strongly reduced

*Source: Rob C. Roovers (ASCO 2017 Poster Presentation) <https://merus.nl/app/uploads/2019/02/MCLA-158-poster-AACR2017.pdf>

11 ** Source: Guillem Argilés (ASCO GI 2021 Poster Presentation) https://merus.nl/wp-content/uploads/2021/01/MCLA-158_ASCO_GI_final.pdf

Phase 1 Cohort Expansion in Head and Neck Squamous Cell Carcinoma

Petosemtamab Enrollment and Interim Analysis

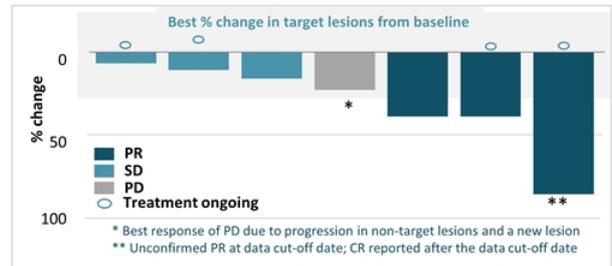
- Cohort expansion at RP2D
 - HNSCC (interim data presented at ENA)
 - Gastric/Esophageal (not yet presented)
- Data cut-off date: 09-Aug-2021
- Enrollment: 10 patients, 7 evaluable for efficacy
 - Three patients recently enrolled excluded from interim analysis (first dose <8 weeks from data cut-off date)

HNSCC Patient Characteristics (N=10)

Age (years), median (range)	65 (50-77)
Male / female	9 (90%) / 1 (10%)
ECOG PS 0 / 1	4 (40%) / 6 (60%)
Squamous cell carcinoma histology	10 (100%)
EGFR IHC score 2+ / 3+ (n=5)	1 (20%) / 4 (80%)
N lines prior therapy, median (range)	2 (1-3)
<ul style="list-style-type: none"> Platinum-based chemotherapy PD-(L)1 inhibitor Cetuximab 	10 (100%) 9 (90%) 0%

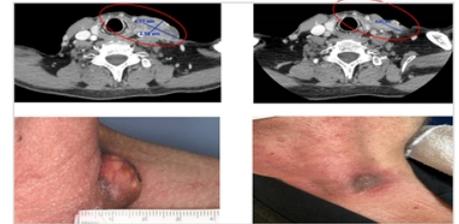
Early Clinical Activity in HNSCC

- Three of 7 patients achieved partial response
- All 7 patients experienced tumor shrinkage



Clinical response in 67-year-old male patient

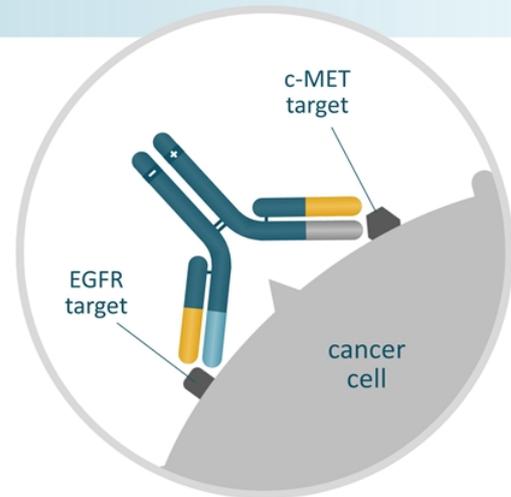
Lesion: larynx
 MCLA-158 cycles: 6+
 Best response: PRc (-41%)
 Prior treatment: platinum + paclitaxel + durvalumab



***Designed to target lung cancer
and other solid tumors
expressing EGFR and c-MET***

MCLA-129
EGFR x c-MET Bispecific

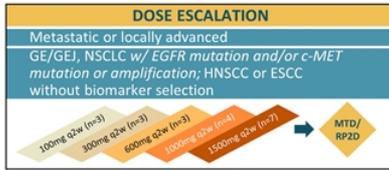
- Targets both EGFR and c-MET on cancer cells
- Modifications to enhance ADCC
- Significant opportunity in lung cancer and other solid tumors
- Phase 1/2 trial ongoing; 2H22 clinical update provided at the EORTC/NCI/AACR 2022
- Expansion cohorts ongoing, including in combination with a third generation EGFR TKI
- Clinical update planned for 2H23



Merus

Dose Escalation Phase of MCLA-129 in NSCLC and Other Solid Tumors*

Study Design



Expansion Cohorts Ongoing

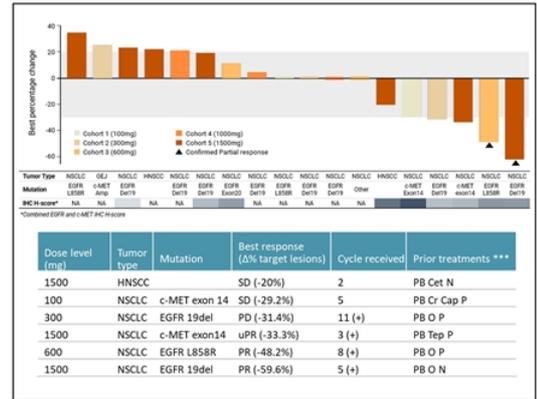
Cohort A: NSCLC with EGFR exon20 insertion
Cohort B: NSCLC with c-MET exon14 skipping
Cohort C: HNSCC
Cohort D + 3rd gen EGFR TKI: NSCLC 1L (EGFR sensitizing mutations)
Cohort E + 3rd gen EGFR TKI: NSCLC post-Osimertinib

Safety

Preferred term	Irrespective of causality		Suspected related	
	All grades n(%)	Grade 3-4 n(%)	All grades n(%)	Grade 3-4 n(%)
-- Any event	19 (95%)	9 (45%)	19 (95%)	4 (20%)
Infusion related reaction**	18 (90%)	1 (5%)	18 (90%)	1 (5%)
Dyspnea	11 (55%)	1 (5%)	9 (45%)	1 (5%)
Flushing	9 (45%)	-	9 (45%)	-
Nausea	9 (45%)	-	8 (40%)	-
Fatigue	6 (30%)	1 (5%)	3 (15%)	-
Back pain	5 (25%)	-	2 (10%)	-
Chills	5 (25%)	-	5 (25%)	-
Myalgia	5 (25%)	-	4 (20%)	-
Vomiting	5 (25%)	-	5 (25%)	-
Cough	4 (20%)	-	3 (15%)	-
Abdominal pain	3 (15%)	-	1 (5%)	-
Arthralgia	3 (15%)	-	2 (10%)	-
Dermatitis acneiform	3 (15%)	-	3 (15%)	-
Lipase increased	(15%)	-	2 (10%)	-
Oedema peripheral	3 (15%)	-	-	-
Pruritus	3 (15%)	1 (5%)	3 (15%)	1 (5%)

- No dose limiting toxicities (DLTs) reported
- The majority of IRR events occurred during the first infusion

Efficacy



* Ou et al., EORTC-NCI-AACR 2022, data cutoff August 15, 2022; Safety: most frequent (>)10% adverse events among n=20 pts as of Aug 15, 2022 data cutoff date;

** Grouped term covering all AEs occurring within 24 hours of the infusion considered by the investigator as an IRR;

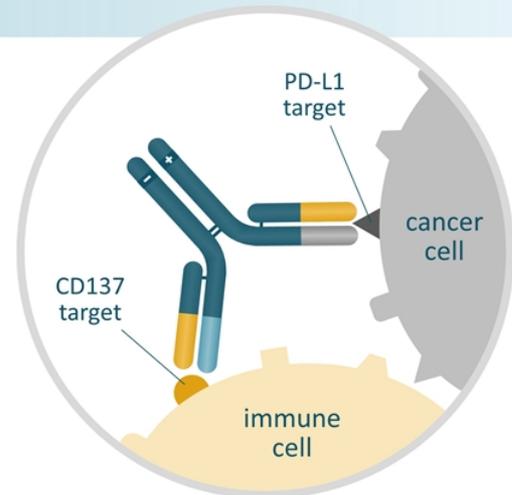
***PB: platinum based chemotherapy; O: osimertinib; N: nivolumab; P: pembrolizumab; Cr: crizotinib; Cap: capmatinib; Cet: cetuximab; Tep: tepotinib; (+) patient ongoing; PR partial response; uPR unconfirmed partial response; SD stable disease; PD progression disease

Designed to recruit and activate tumor infiltrating T-cells

MCLA-145

PD-L1 x CD137 bispecific

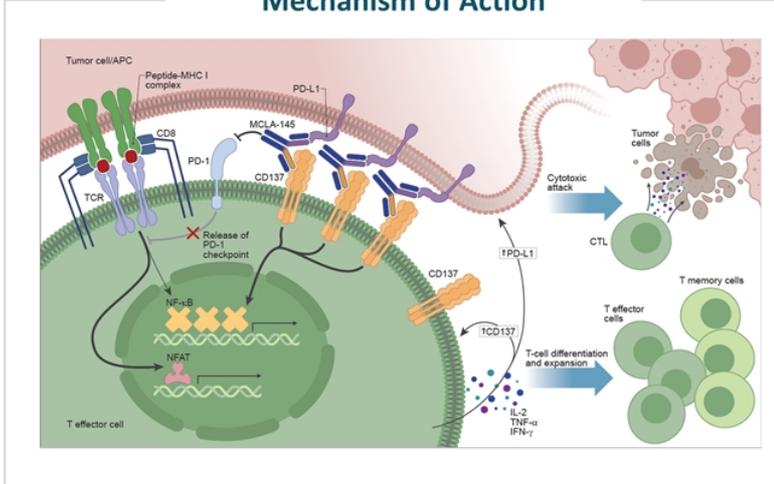
- Binds to PD-L1 on tumor cells and CD137 (4-1BB), a potent activator of tumor infiltrating T-cells, on activated T-cells
- Targets PD-L1 positive cells in the tumor and blocks the PD-1/PD-L1 inhibitory signal
- Potential in a variety of solid tumors
- Global phase 1 trial ongoing, including in combination with a PD1 inhibitor
- Clinical update presented at ESMO Immunology Congress 2021



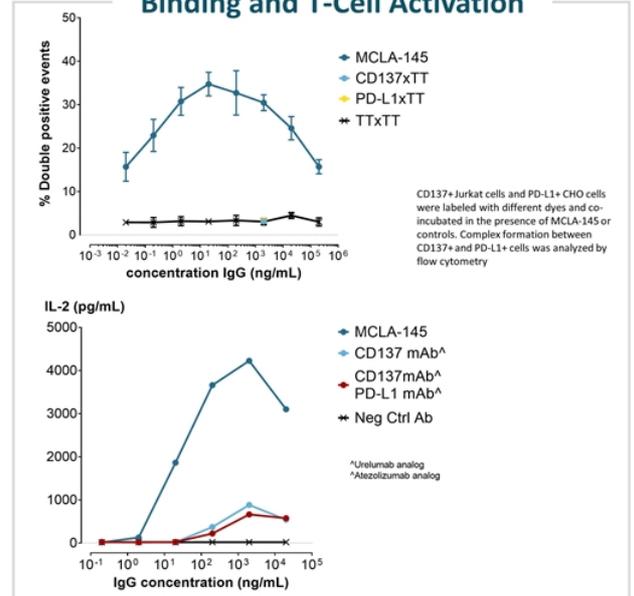
Merus

MCLA-145 — Targets PD-L1 Positive Tumor Cells

Mechanism of Action

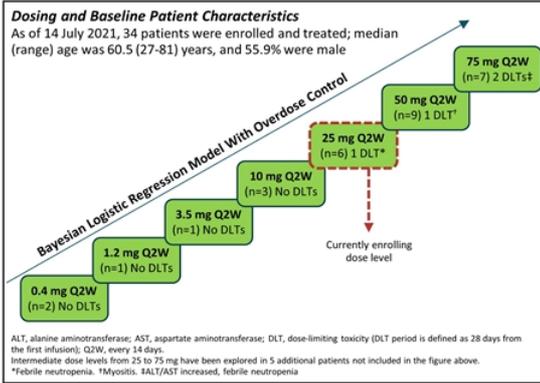


Binding and T-Cell Activation



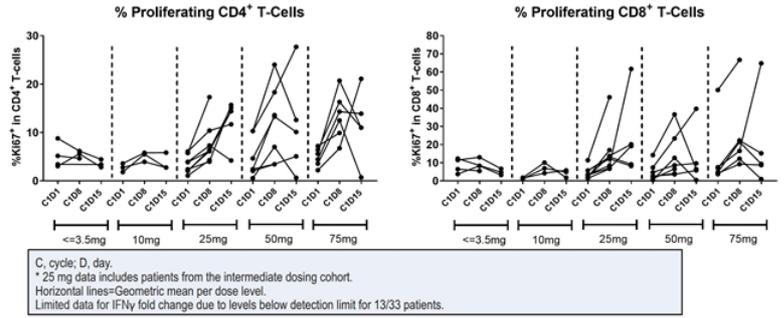
Source: Geuijen https://merus.nl/app/uploads/2019/04/IC171-19E-AACR19-Mayes-MCLA-145-MoA-Poster_MT06_for-approval-032019.pdf
 Source: Preen https://merus.nl/wp-content/uploads/2021/12/MCLA-145-Poster-ESMO-IO_12.3.21_Final.pdf

Phase 1 Clinical Trial



Patient Characteristics (N=34)	
Age (years), median (range)	60.5 (27-81)
Male / female	19 (56%) / 15 (44%)
ECOG PS 0 / 1	16 (47%) / 18 (53%)
PDL-1 expression on tumor cells	
• Unknown/unevaluable	16 (47%)
• 0% / ≥1%	11 (32%) / 7 (21%)
PDL-1 expression on tumor assoc. immune cells	
• Unknown/unevaluable	16 (47%)
• 0% / ≥1%	4 (12%) / 14 (41%)

Peripheral Blood T cell activation



Conclusions

- Thirty-four patients have been treated with MCLA-145 at dose levels from 0.4 – 75 mg q2W
- AEs are consistent with the MOA and can be managed with drug interruption and/or steroids in some patients
- Preliminary evidence of antitumor activity has been observed at doses \geq 25 mg
- Peripheral blood T cell activation has been observed
- Further evaluation of optimal dose in PD-L1+ tumors is planned. Full blockade of PDL1 may be required

Our Platform – Unique Capabilities in Multispecific Antibodies

Generate Human cLC Antibodies



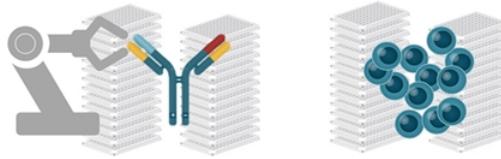
Patented Mouse Technology

“Merus Mouse” (MeMo®) to generate diverse, high quality common light chain (cLC) antibody panels

Established Inventory

Diverse panels of cLC antibodies against numerous targets

Evaluate Thousands of Multispecific Abs



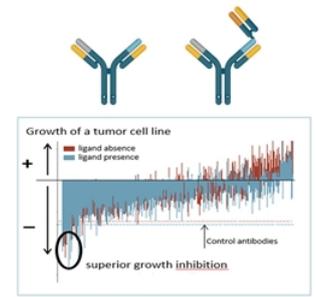
Multiconics® Libraries

Robotics generate thousands of Multiconics® by combining cLC antibody panels and our patented “DEKK” IgG heterodimerization technology

Unbiased Screening

In-format, unbiased functional screening in relevant molecular and cellular assays

Identify Best Candidates



Develop unique, best candidates from thousands of different Biconics® and Triconics® with potential to achieve meaningful clinical activity in patients

Merus Collaborations

Strategic relationships expand pipeline potential and clinical reach



Global collaboration of up to 10 Bionics® programs

\$200M¹ at signing and research funding, option to co-fund development of two programs in return for 50/50 US profit split



Collaboration to develop up to 3 T-cell engaging Bionics® programs

\$60M¹ at signing and research funding, milestones and royalties



MCLA-129, EGFR x c-MET collaboration

Betta has rights for China; Merus retains global rights ex-China, phase 1/2 trials ongoing



Bionics® Licensing Agreement for a Bionics® CD3 bispecific antibody.

Phase 1 trial in Japan for ONO-4685, a PD-1 x CD3 bispecific antibody



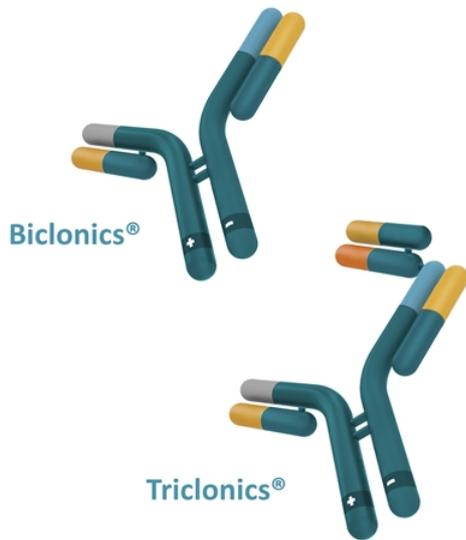
Patient identification agreements

Multiple agreements with top-tier diagnostic companies and industry and academic collaborators

¹ Combination of upfront license payment, and share purchase at a premium (Incyte, Merus collaboration agreement of 120m USD upfront and 80m USD equity investment; Lilly, Merus collaboration agreement of 40m upfront and 20m USD equity investment)

Merus Multiclonics®

*Bispecific and Trispecific therapeutic candidates for cancer
with broad application for human disease*



Large-scale screening of Biclomics® and Triclomics®

- To select the best molecules from up to 1,000s of candidates

Fully human IgG structure

- Ease of manufacturing
- Low immunogenicity risk
- Predictable in vivo behavior
- Durable, consistent half life
- Potential for ADCC enhancement and Fc silencing

Novel, innovative trispecific Triclomics® format

- Stable format with predictable behavior; production similar to monoclonal antibody
- Allows for 3 specificities without the need to engineer each individual Fab
- Leverages Merus' extensive library of established antibody panels against ~50 established cancer targets

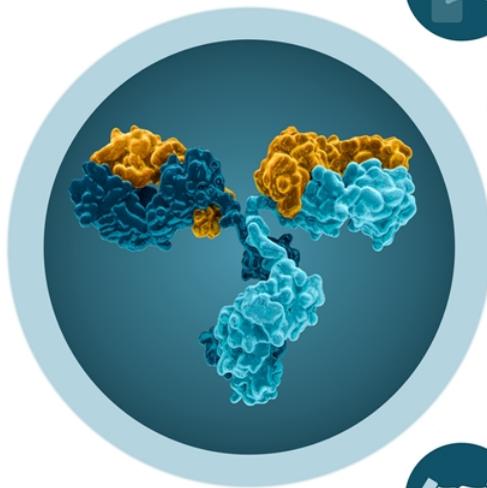
Robust IP portfolio of patents covering the platform technology, including

- Common light chain antibody generation and screening
- Dimerization by charge engineering

Upcoming Milestones 2023

Zenocutuzumab (Zeno, MCLA-128)	Petosemtamab (MCLA-158)	MCLA-129
<ul style="list-style-type: none">• Update potential registrational path and timeline in NRG1+ cancer (planned 1H23)• Update clinical data in NRG1+ cancer (planned 2023)• Initial clinical data on Zeno in castration-resistant prostate cancer (CPRC) (planned 2H23)	<ul style="list-style-type: none">• Update clinical data in previously treated HNSCC (planned 1H23)• Initial clinical data in previously treated gastric esophageal cancer (planned 1H23)• Provide regulatory path and program next steps (planned 1H23)	<ul style="list-style-type: none">• Initial clinical data from expansion cohorts (planned 2H23)• Provide further clinical development strategy (planned 2H23)

Merus Overview



Oncology-focused Company Developing Multispecific Antibody Therapies

Bispecific and trispecific cancer therapeutic candidates in the human IgG format



Established Clinical Pipeline with Multiple Near-Term Trial Updates

Robust clinical data from registration-directed trial of Zeno in NRG1 fusion (NRG1+) cancer¹, early encouraging clinical data on petosemtamab in head and neck cancer;² MCLA-129 in solid tumors³



Leading Multispecific Antibody (Multiclronics®) Platforms

Common light chain format permits broad, high throughput evaluation of Biclronics® and Triclronics®, to develop clinical stage assets with potential for meaningful clinical activity in patients



Near Term Planned Trial Updates and Strong Cash Position into 2H 2025[†]

Upcoming clinical milestones and program updates planned over the next 12-18 months: Zeno registration-directed program, petosemtamab clinical update 1H23, and MCLA-129 in 2H23



Strategic Collaborations to Unlock Platform Value

Multiple strategic collaborations and license agreements, leading to multiple Biclronics® candidates in clinical development for potential future milestone and royalty opportunities

¹ Schram et al., ASCO 2022, efficacy data cutoff April 12, 2022 and safety data cutoff January 12, 2022

² Hollebecque et al., AACR-NCI-EORTC 2021, data cutoff August 9, 2021

³ Ou et al., EORTC-NCI-AACR 2022, data cutoff August 15, 2022

[†] Based on 2023 budgeting process and the current operating plan, the existing cash, cash equivalents and marketable securities are expected to fund Merus' operations into second half 2025.

Merus

Merus *closing in on cancer*

