Merus

closing in on cancer

Every Day.

Corporate Presentation

December 2024

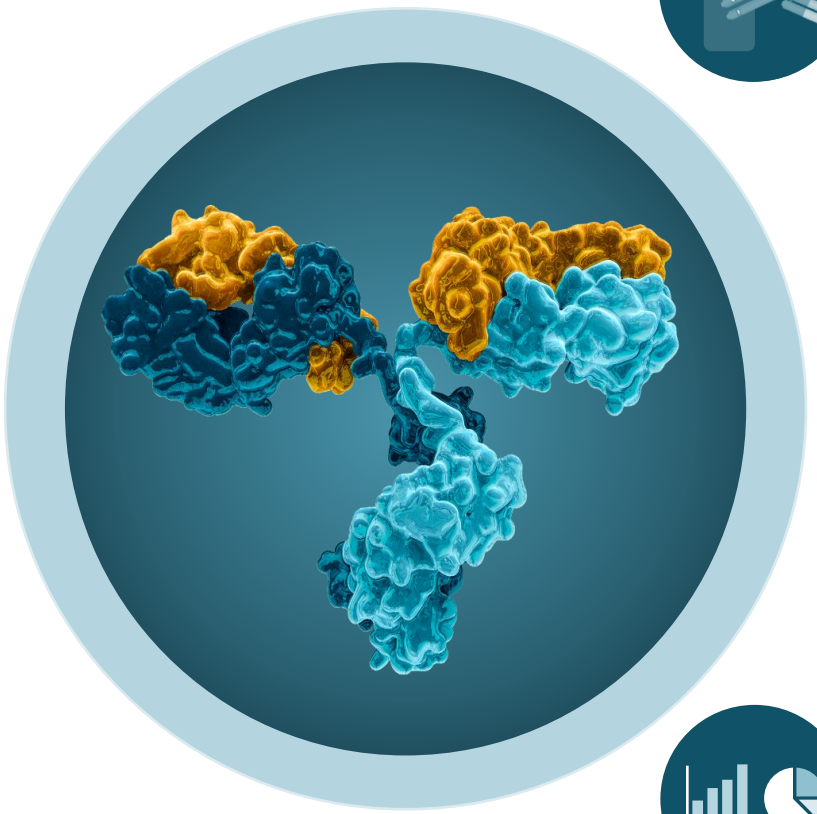
Disclaimer

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 Biclonics® and Triclonics® platforms can have on cancer, our intellectual property, 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 out operations or require us to relinquish rights to our technologies or antibody candidates; potential delays in regulatory approval and impacts of the market volatility, and global conflict in Russia, Ukraine and the Middle East, 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 Biclonics®, and Triclonics® 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 stage of 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, 2024 filed on October 31, 2024 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

Merus Overview



Petosemtamab: Blockbuster Potential in Multiple Oncology Indications

- Compelling clinical data in 1L and 2L+ recurrent/metastatic head and neck squamous cell cancer (r/m HNSCC)[1,2]
- Global r/m HNSCC opportunity expected to exceed $5B in 2028[3]
- Phase 3 trials: 1L (LiGeR-HN1) and 2/3L (LiGeR-HN2) HNSCC enrolling
- 2L metastatic colorectal cancer (mCRC) in combination with standard chemotherapy and 3L+ petosemtamab monotherapy enrolling; 1L in combination with standard chemotherapy planned

Progress Across our Clinical Pipeline

- Merus' first product approval: Bizengri® (zenocutuzumab) approved by U.S. FDA under accelerated approval for NRG1+ pancreatic adenocarcinoma and non-small cell lung cancer (NSCLC)[4]
- MCLA-129 demonstrated strong clinical activity in EGFRm NSCLC and METex14 NSCLC[5]; 2L+ EGFRm NSCLC in combination with chemotherapy enrolling
- Multiple collaboration programs developed from our Multiclonics® platforms advancing into the clinic

Unique Platform Technology Validated by Key Strategic Collaborations

- Using novel, proprietary Multiclonics® platform technologies to discover and develop bispecific and trispecific antibodies essentially like monoclonal antibodies
- Validating discovery collaborations; potential future milestones and royalties
- Versatile platforms with opportunities for expansion beyond oncology focus

Strong Cash Position into 2028[6]

- Cash and cash equivalents of $783M
- Well capitalized, expected to be funded through multiple corporate milestones

[1] Fayette, et al. 2024 ASCO®; [2] Le Tourneau, et al. 2024 ESMO® Asia; [3] Evaluate Pharma data pulled 2/14/2024; [4] For full description of approval see prior release https://ir.merus.nl/news-releases; [5] Brandão et al, 2024 ASCO®; [6] See October 31, 2024 10-Q noting our belief that our cash, cash equivalents and marketable securities are expected to fund the Company into 2028

Merus Ambitious Goals

Achieved in 2024

GILEAD
Triclonics® Collaboration

FDA
Breakthrough Therapy Designation:
Petosemtamab monotherapy in 2L+ r/m HNSCC[1]

Petosemtamab in 1L r/m HNSCC
2024 ASCO ANNUAL MEETING

LiGeR HN1
Bispecific antibody that targets EGFR & LGR5
LiGeR HN2
Bispecific antibody that targets EGFR & LGR5

Bizengri®
zenocutuzumab-zbco
20 mg/mL Injection for IV Use
NOW APPROVED ⊗2

2024 and Beyond

✓ **Executing Effectively**

against milestones and on clinical trial progress

2L+ HNSCC
petosemtamab monotherapy at ESMO® ASIA 2024

1L PD-L1+ HNSCC
petosemtamab with pembrolizumab (clinical data update planned 2025)

mCRC
petosemtamab monotherapy and with chemotherapy (initial clinical data planned 2025)

Expansion Opportunities
potential for additional exploratory indications

[1] For details and complete description of BTD for petosemtamab see prior releases https://ir.merus.nl/news-releases; [2] For full description of approval see prior release https://ir.merus.nl/news-releases

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Merus Clinical Pipeline

PROGRAM	INDICATION(S)	PRECLINICAL	PHASE 1	PHASE 1/2	PHASE 3	APPROVED[1]	STATUS
Petosemtamab (MCLA-158) EGFR X LGR5	LiGeR HN1 Bispecific antibody that targets EGFR & LGR5: 1L Head and neck squamous cell carcinoma (HNSCC) with a PD1 inhibitor						• LiGeR-HN1: Enrolling
	LiGeR HN2 Bispecific antibody that targets EGFR & LGR5: 2/3L HNSCC						• LiGeR-HN2: Enrolling
	2L metastatic colorectal cancer (mCRC) with standard chemotherapy						• 2L mCRC: Enrolling
	1L mCRC with standard chemotherapy						• 1L mCRC: Planned
	3L+ mCRC monotherapy						• 3L mCRC: Enrolling
BIZENGRI® (zenocutuzumab-zbco) HER2 X HER3 Please see full Prescribing Information, incl. Boxed Warning	Pancreatic adenocarcinoma and NSCLC that are advanced unresectable or metastatic and harbor NRG1 gene fusions	PTX[2]					• FDA Approved[1]
	Other cancers						
MCLA-129 EGFR X c-MET	Solid tumors						
	2L+ EGFRm NSCLC with chemotherapy						2L+ EGFRm NSCLC: Enrolling

[1] *Approved under accelerated approval by the U.S. FDA for pancreatic adenocarcinoma or non-small cell lung cancer that is advanced unresectable or metastatic and harbors the NRG1 gene fusion– not approved in any other jurisdiction*
[2] *Merus is eligible to receive milestones and royalty payments for commercialization of Zeno in the U.S. for the treatment of NRG1+ cancer. see prior release https://ir.merus.nl/news-releases*

Strategic Relationships

Funding the company and providing expansion opportunities

CASE STUDY: Gilead Trispecific Antibody Research Collaboration Agreement 1Q24[1]

- Potential development and commercialization milestones, and tiered royalties, on two Triclonics® programs; ability for Merus to opt-in to co-development of a potential third program
- Merus received $56 million upfront and Gilead invested $25 million in MRUS shares at a premium
- Provides external validation of novel Triclonics® platform

[1] *Collaboration on Merus' Triclonics® platform to research up to three T-cell engaging multi-specific antibody products in oncology*

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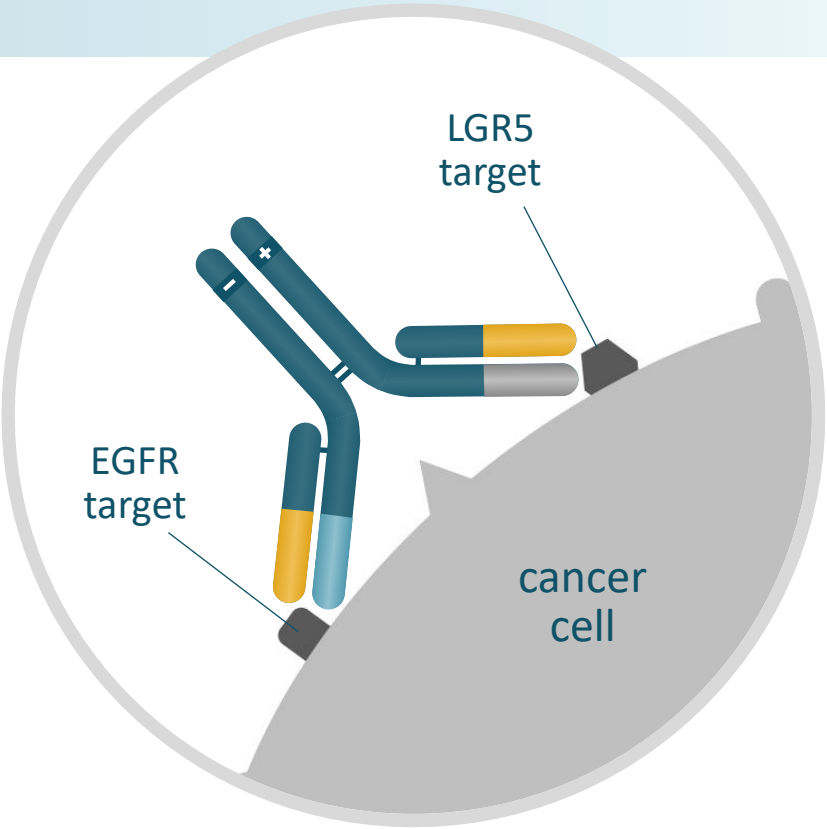
Potential first and best in class EGFR x LGR5 Biclonics® antibody[1]

Petosemtamab

MCLA-158
EGFR x LGR5 bispecific

- Targets EGFR and LGR5, a cancer-stem cell antigen; modifications to enhance antibody-dependent cell-mediated cytotoxicity (ADCC)
- Granted Fast Track Designation (FTD) and Breakthrough Therapy Designation (BTD) for monotherapy in 2L+ recurrent or metastatic HNSCC[2]
- Meaningful clinical activity as monotherapy in 2L+ HNSCC[3] and in combination with pembrolizumab in 1L PDL1+ HNSCC [4]
- Phase 3 trials: 1L PD-L1+ (LiGeR-HN1) and 2/3L (LiGeR-HN2) HNSCC enrolling
- Cohorts in 2L mCRC in combination with standard chemotherapy and 3L+ monotherapy enrolling; 1L cohort in combination with standard chemotherapy planned

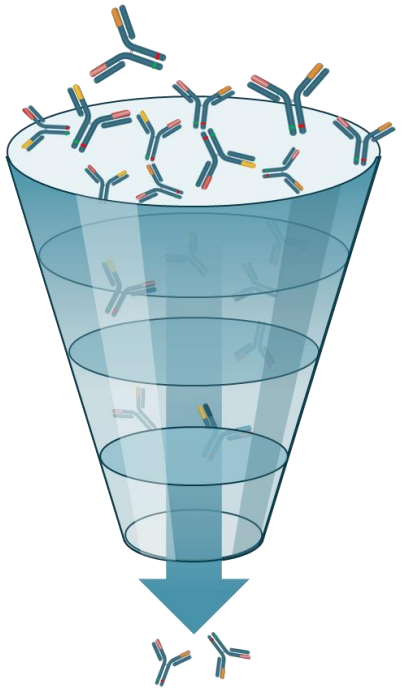


[1] Herpers et al, Nature Cancer, 3, 418–36, 2022; [2] For details and complete description of BTD and FTD see prior releases https://ir.merus.nl/news-releases ; [3] Le Tourneau, et al. ESMO® ASIA 2024; [4] Fayette, et al. 2024 ASCO®

Petosemtamab

Discovery & Mechanism of Action

DISCOVERY



Biclonics® Screen

- >500 bispecifics: RTK x WNT

Growth Inhibition Score

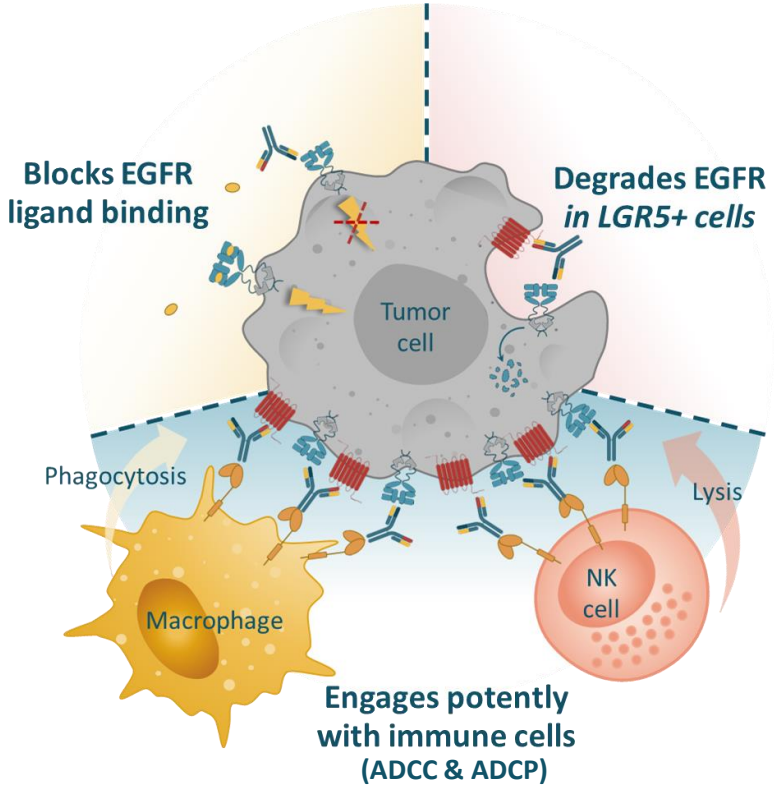
- Tumor vs Normal Organoid size, complexity
- Tumor growth inhibition

BEST COMBO

EGFR x LGR5

- Petosemtamab

MECHANISM OF ACTION



Herpers et al, *Nature Cancer*, 3, 418–36, 2022

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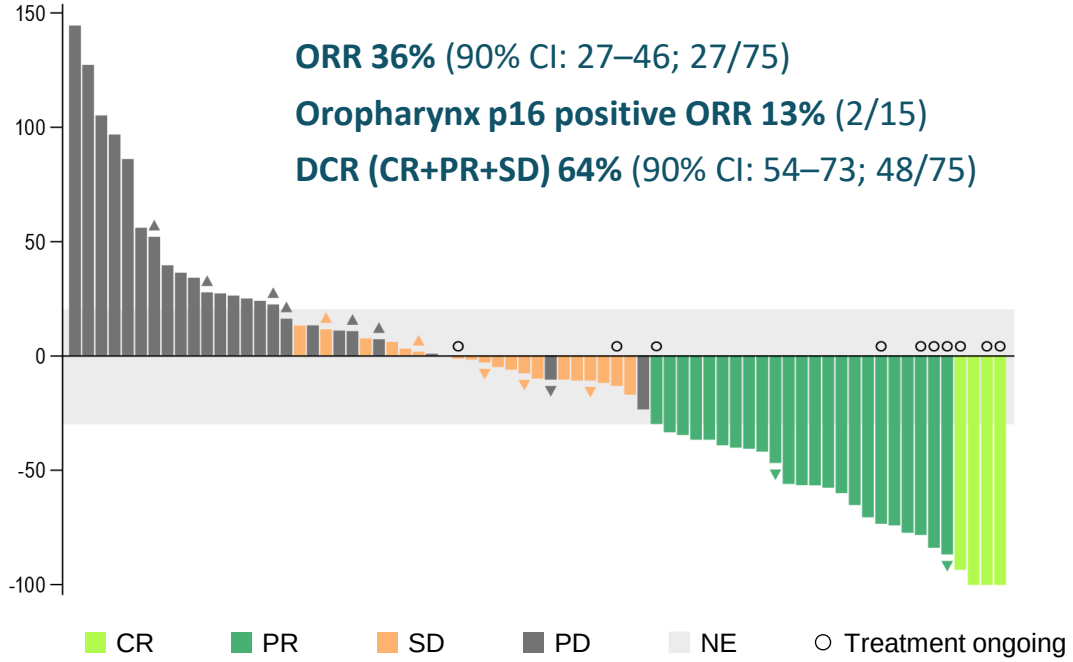
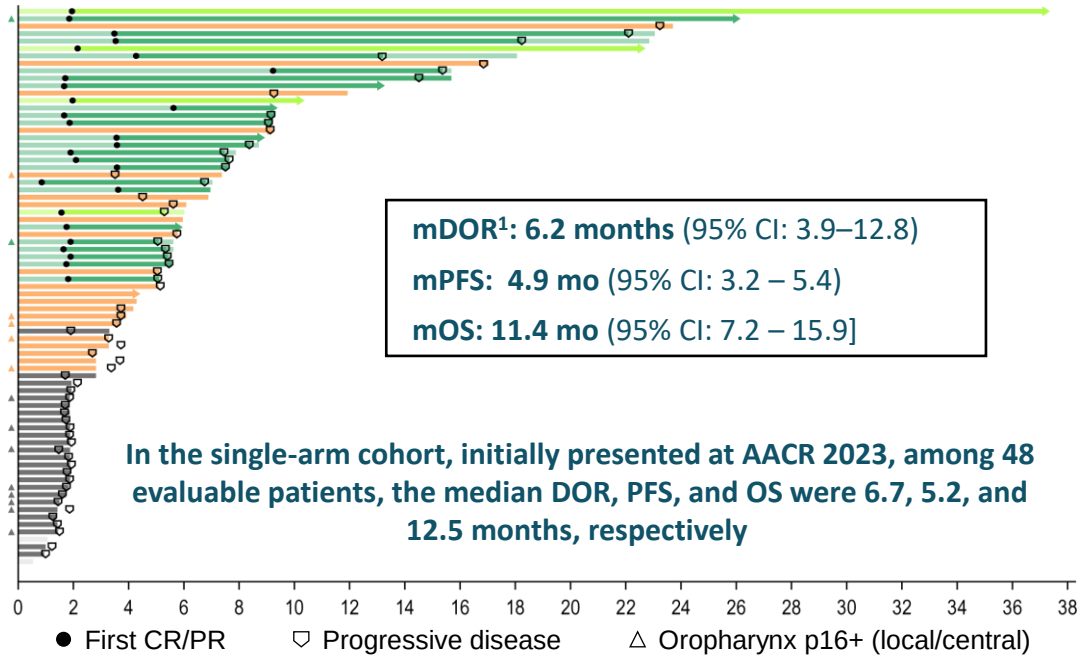
Petosemtamab Monotherapy in 2L+ HNSCC

Confirmed overall response rate (ORR) 36%[1]

Best Percent Change in Sum of Target Lesions From Baseline (N=75)[2]



Time to Response and Duration of Therapy (N=75)



Trial Design

- **Drug:** Petosemtamab 1500 mg IV, Q2W, 28-day cycle
- **Primary endpoint:** ORR using RECIST v1.1 per investigator
- **Data cutoff date:** July 5, 2024

Safety

- Observed to be well-tolerated with a manageable safety profile

[1] Le Tourneau, et al., ESMO Asia 2024; [2] 4 patients (including 1 patient who was oropharynx p16+) excluded from the waterfall plot. Two patients were excluded as the target lesions were not assessed or assessed partially. One patient assessed as PD died prior to the first tumor assessment; the final patient discontinued study treatment due to PD/symptomatic deterioration [3] 6 patients withdrew due to IRR on Day 1, 1 patient with excl. criterion deviation; 1 pt withdrew consent (<2 months treatment); DCR, disease control rate; CR, complete response; PR, partial response; SD, stable disease

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Petosemtamab Safety and Pharmacokinetics in 2L+ HNSCC[1]

Petosemtamab 1500 mg Q2W, safety-evaluable population (N=82)

AEs irrespective of causality (>20% of patients)

Preferred Term	1500 mg Q2W N=82	
	All grades, n (%)	Grade ≥3, n (%)
At least one TEAE	82 (100)	48 (59)
Dermatitis acneiform	34 (41)	3 (4)
Blood magnesium decreased	32 (39)	7 (9)
Rash	24 (29)	0
Fatigue	22 (27)	1 (1)
Nausea	21 (26)	0
Hypotension	20 (24)	4 (5)
Pruritus	20 (24)	1 (1)

Infusion-related reactions (>10% of patients)

Preferred Term	Prior administration regimen N=49		Updated administration regimen N=33	
	All grades, n (%)	Grade 3–4, n (%)	All grades, n (%)	Grade 3, n (%)
At least one TEAE of IRR	33 (67)	12 (24)	15 (45)	3 (9)
Infusion-related reaction	12 (24)	7 (14)	7 (21)	2 (6)
Hypotension	10 (20)	4 (8)	4 (12)	0
Flushing	8 (16)	2 (4)	2 (6)	1 (3)
Nausea	6 (12)	0	2 (6)	0
Dyspnea	5 (10)	1 (2)	0	0
Erythema	5 (10)	0	0	0

Safety

- IRRs were generally only seen on day 1 of cycle 1; the IRR mitigation strategy reduced the severity and frequency of IRRs
- Based on interim clinical data, skin toxicity such as rash and gastrointestinal side effects appear less frequent and less severe than observed for other EGFR directed antibody therapies

Pharmacokinetics

- Geometric mean steady state C_{trough} was 68% higher with 1500 mg Q2W vs. 1100 mg Q2W
  - No positive exposure–safety (Grade ≥3 TEAE) relationship was observed
- 1500 mg Q2W was projected to achieve superior target engagement (*i.e.* ≥98%) for EGFR compared with 1100 mg Q2W dose

[1] *Le Tourneau, et al., ESMO Asia 2024;* AE: adverse event; C_{trough}: trough concentration; TEAE: treatment-emergent adverse event.

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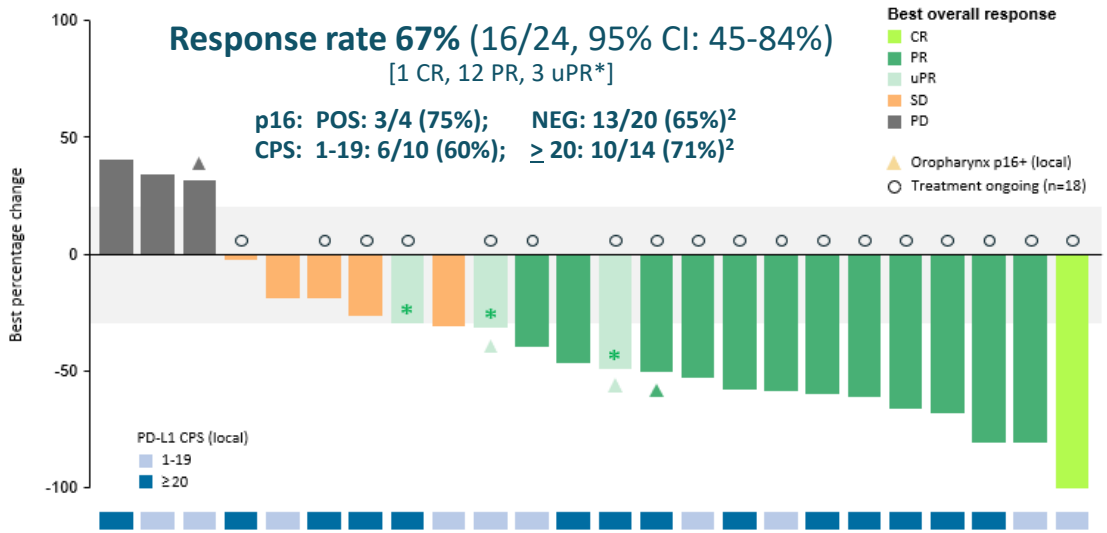
Petosemtamab with Pembrolizumab in 1L HNSCC

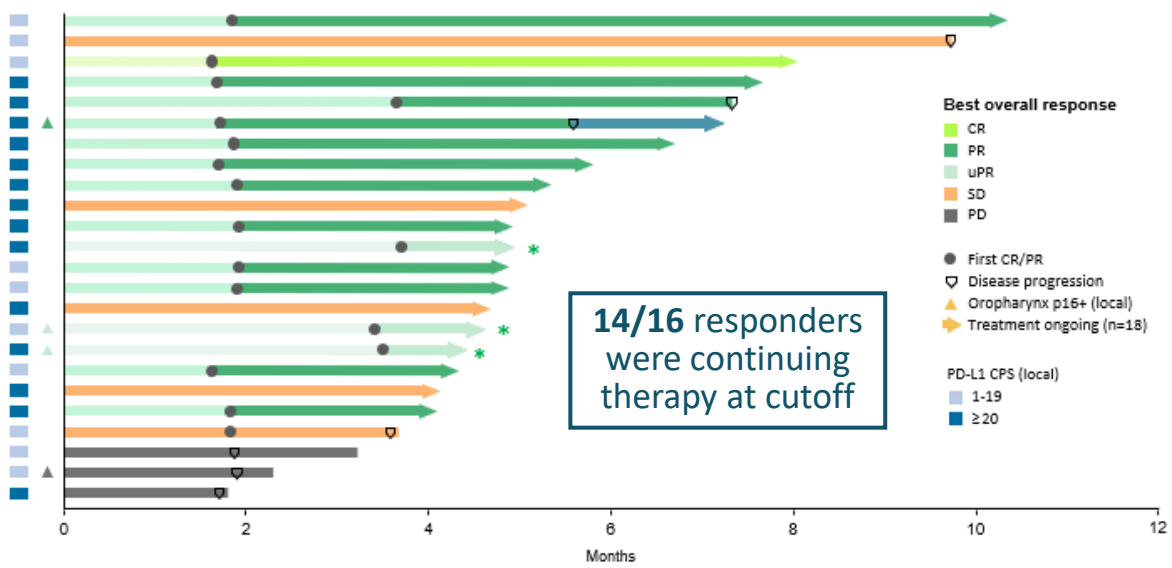
Response rate [confirmed + unconfirmed] 67%*

Best Percent Change in Sum of Target Lesions From Baseline (N=24)



*All 3 uPR were confirmed as PR after data cutoff date

Time to Response and Duration of Therapy



Trial Design

- **Drug:** Petosemtamab 1500 mg IV, Q2W (28-day cycle) with pembrolizumab 400 mg IV Q6W
- **Primary endpoint:** ORR using RECIST v1.1 per investigator
- **Data cutoff date:** March 6, 2024
- **Enrollment/Safety population:** 45 pts; **Efficacy population[2]:** 24 pts

Safety

- Favorable safety profile, no significant overlapping toxicities
- IRRs (composite term) in in 38% of patients, with 7% Grade 3; no Grade 4 or 5, mainly occurred during first infusion and were resolved
- Rechallenge after an IRR was successful in all patients rechallenged

[1] Fayette, et al. 2024 ASCO®; [2] Response values for p16 and PD-L1 CPS subgroups include CR, PR, and uPR. [3] Patients treated as of the abstract cutoff date (who had the opportunity for ≥4 months follow-up), with ≥2 treatment cycles and ≥1 post-baseline tumor assessment, or who discontinued early due to disease progression or death ; 19 patients enrolled after abstract cutoff date, 2 patients were excluded per protocol: 1 patient withdrew consent prior to first tumor assessment, 1 patient discontinued due to toxicity with <2 cycles of treatment (asthenia, diarrhea, creatinine increase (all Grade <3).

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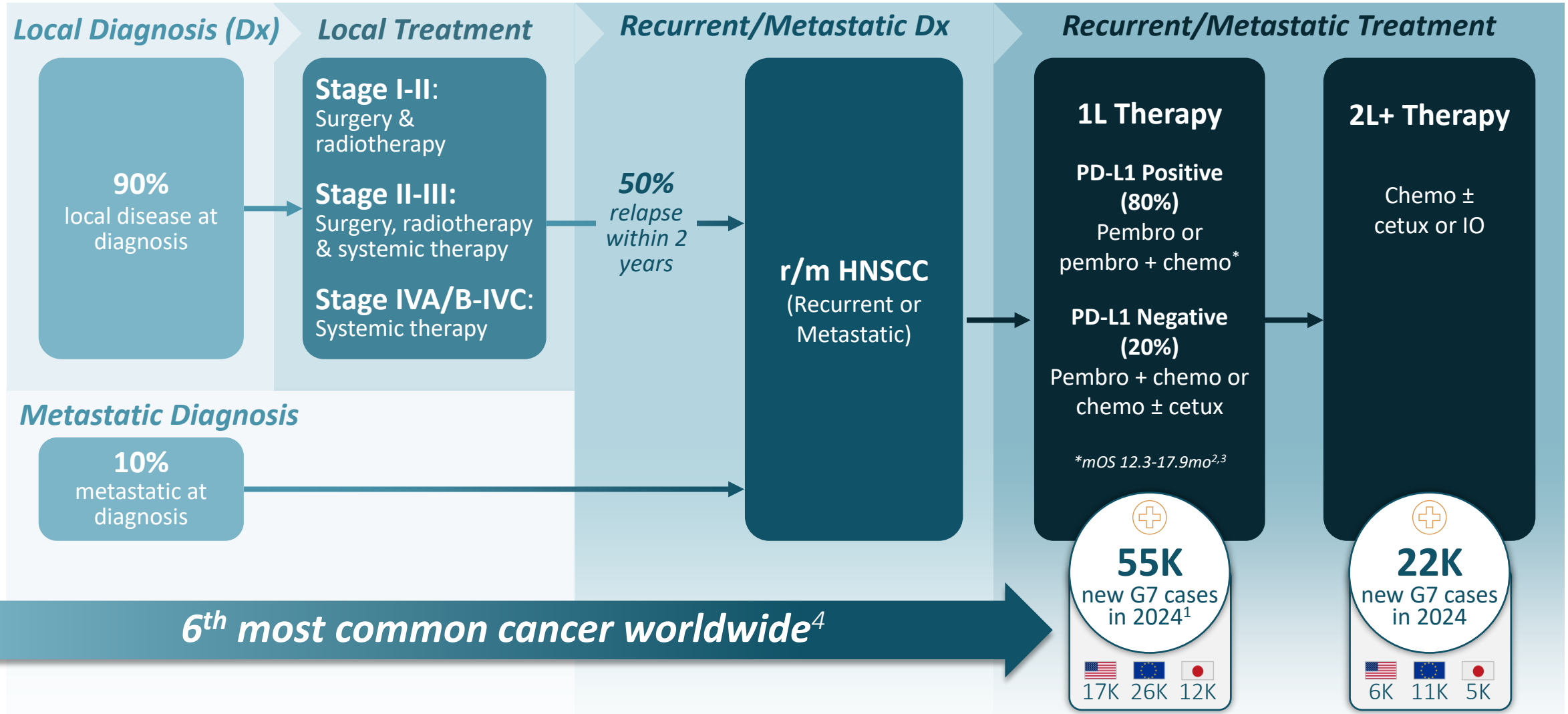
HNSCC Patient Journey

Recurrent/metastatic head and neck cancer 1L and 2L+ treatment paradigm



[1] EPI data from *Kantar CancerMPact 2024* reflecting annual pts in 2024; [2] Burtness 2019; [3] Licitra L, et al. (2024) *Int J Radiat Oncol Biol Phys;* [4] Sung et al. (2021) *CA Cancer J Clin*

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Potential market opportunity in colorectal cancer

COLORECTAL CANCER (CRC) PATIENTS

2022 Global Estimates[1]

1.9M
new cases per year

930K
deaths per year

2040 Global Projections[2]

3.2M
new cases per year (up 63%)

1.6M
deaths per year (up 73%)

Phase 2 Trial Enrolling

- Petosemtamab in combination with 5-fluorouracil (5-FU), leucovorin, and irinotecan (FOLFIRI) as 2L treatment of RAS/RAF wild-type metastatic CRC

mCRC Cohorts Planned

- 1L in combination with standard chemotherapy
- 3L+ petosemtamab monotherapy

[1] *Bray, et al (2024) CA Cancer J Clin.* [2] *Morgan, et al (2022) Gut*

Merus

NOW APPROVED: First and only therapy for NRG1+ pancreatic adenocarcinoma and NRG1+ NSCLC

Bizengri®

MCLA-128 or zenocutuzumab
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 mutations[1]
- Reported as associated with poor prognosis[1], lower response rates to standard therapy[2], and shorter overall survival in lung cancer[1,3]

Zeno

- Biclonics® antibody binds to HER2 and blocks HER3
- Approved under accelerated approval by U.S. FDA for NRG1+ pancreatic adenocarcinoma and NRG1+ NSCLC[4]

Please see full Prescribing Information, including Boxed WARNING, at
www.BIZENGRI.com/pi

[1] Chang et al., Clin Cancer Research 2021,
[2] Drilon et al., J Clin Oncol 2021,
[3] Shin et al., Oncotarget 2016,
[4] For full description of approval see prior release https://ir.merus.nl/news-releases

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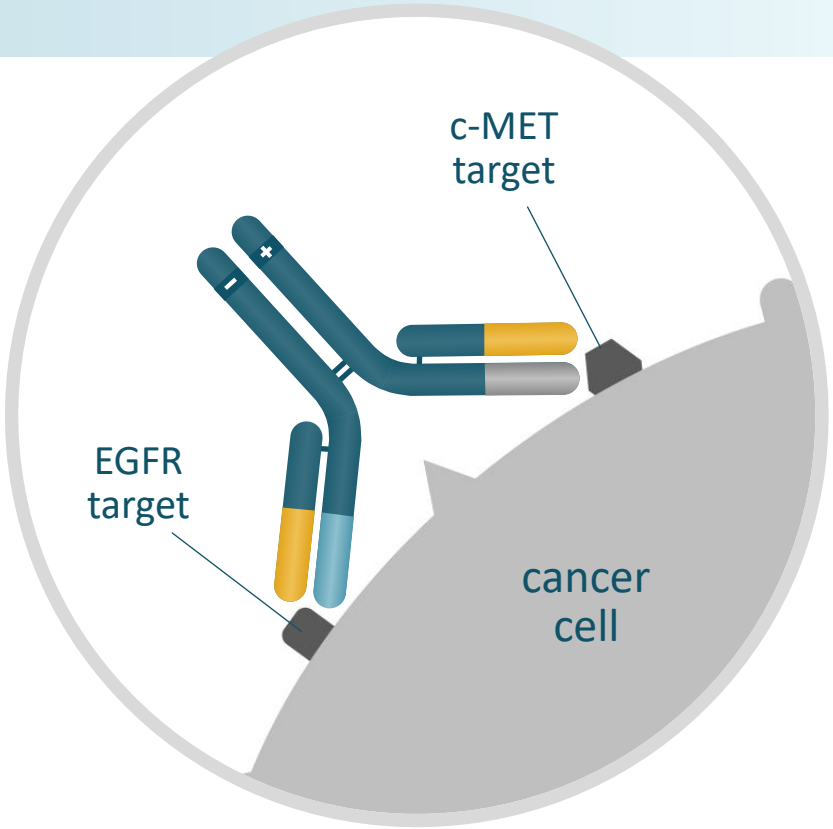
Designed to target lung cancer and other solid tumors expressing EGFR and c-MET

MCLA-129

EGFR x c-MET Bispecific

- Targets both EGFR and c-MET on cancer cells
- Modifications to enhance ADCC, observed preclinically to have greater potency than amivantamab in certain high-affinity (FcγRIII 158V) or low-affinity (FcγRIII 158F) variant effector cells[1]
- Clinically active in 1L and 2L+ EGFR mutant NSCLC[2] and Exon 14 Skipping Mutations (METex14) NSCLC[3]
- MCLA-129 in combination with chemotherapy in 2L+ EGFRm NSCLC enrolling



[1] de Gorter, et al. AACR 2023, [2] Cappuzzo, et al. ESMO Asia, [3]Brandão et al. 2024 ASCO®

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MCLA-129 Monotherapy in METex14 NSCLC[1]

Best % change in target lesions from baseline by RECIST v1.1 per investigator

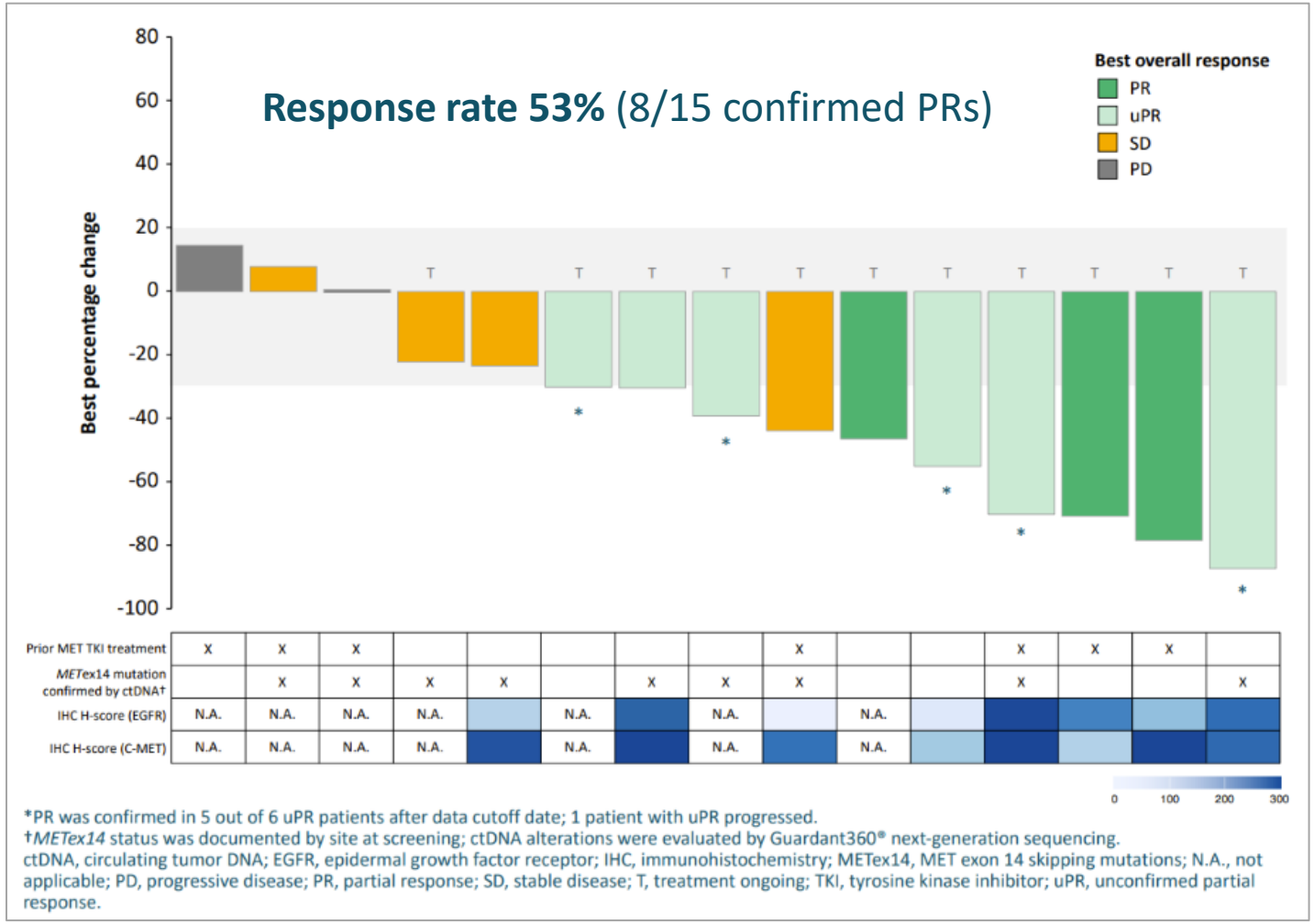
Trial Design

- **Drug:** MCLA-129 1500 mg IV Q2W
- **Primary endpoint:** ORR using RECIST v1.1 per investigator assessment
- **Data cutoff date:** February 6, 2024
- **Enrollment/Safety population:** 22 patients with previously treated METex14 NSCLC
- **Efficacy population[2]:** 15 pts

Safety

- IRRs (composite term) in 86% (18% ≥ grade(G) 3)
- Treatment discontinuations in 4 pts (18%)
- Treatment related interstitial lung disease in 1 pt (G2)
- Venous thromboembolic events in 2 pts; 1 G3 possibly treatment related, 1 G2 not treatment related

	TKI-naïve (n=8)	Prior MET TKI (n=7)
ORR, n (%)	5 (63)	3 (43)



*PR was confirmed in 5 out of 6 uPR patients after data cutoff date; 1 patient with uPR progressed.
†*METex14* status was documented by site at screening; ctDNA alterations were evaluated by Guardant360® next-generation sequencing.
ctDNA, circulating tumor DNA; EGFR, epidermal growth factor receptor; IHC, immunohistochemistry; METex14, MET exon 14 skipping mutations; N.A., not applicable; PD, progressive disease; PR, partial response; SD, stable disease; T, treatment ongoing; TKI, tyrosine kinase inhibitor; uPR, unconfirmed partial response.

[1] Brandão et al, 2024 ASCO®; [2] 7 patients excluded, 4 with < 2 cycles and discontinued for reasons not related to PD; 3 patients with < 2 cycles ongoing at the data cutoff date were not part of the efficacy analysis population

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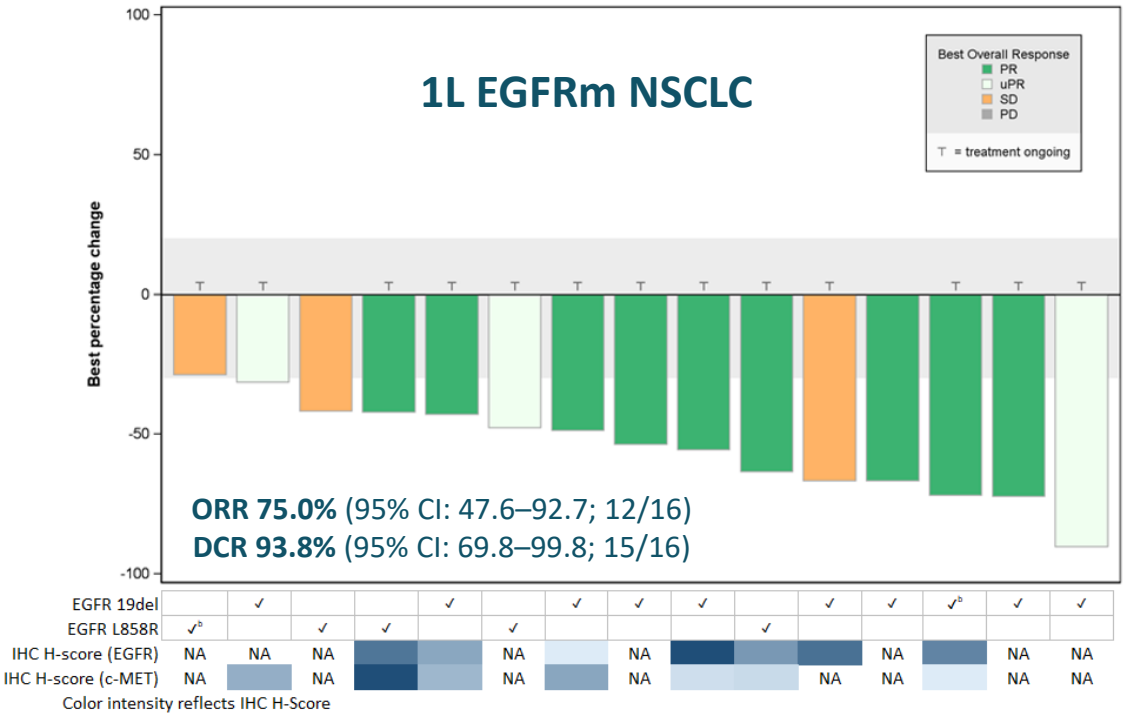
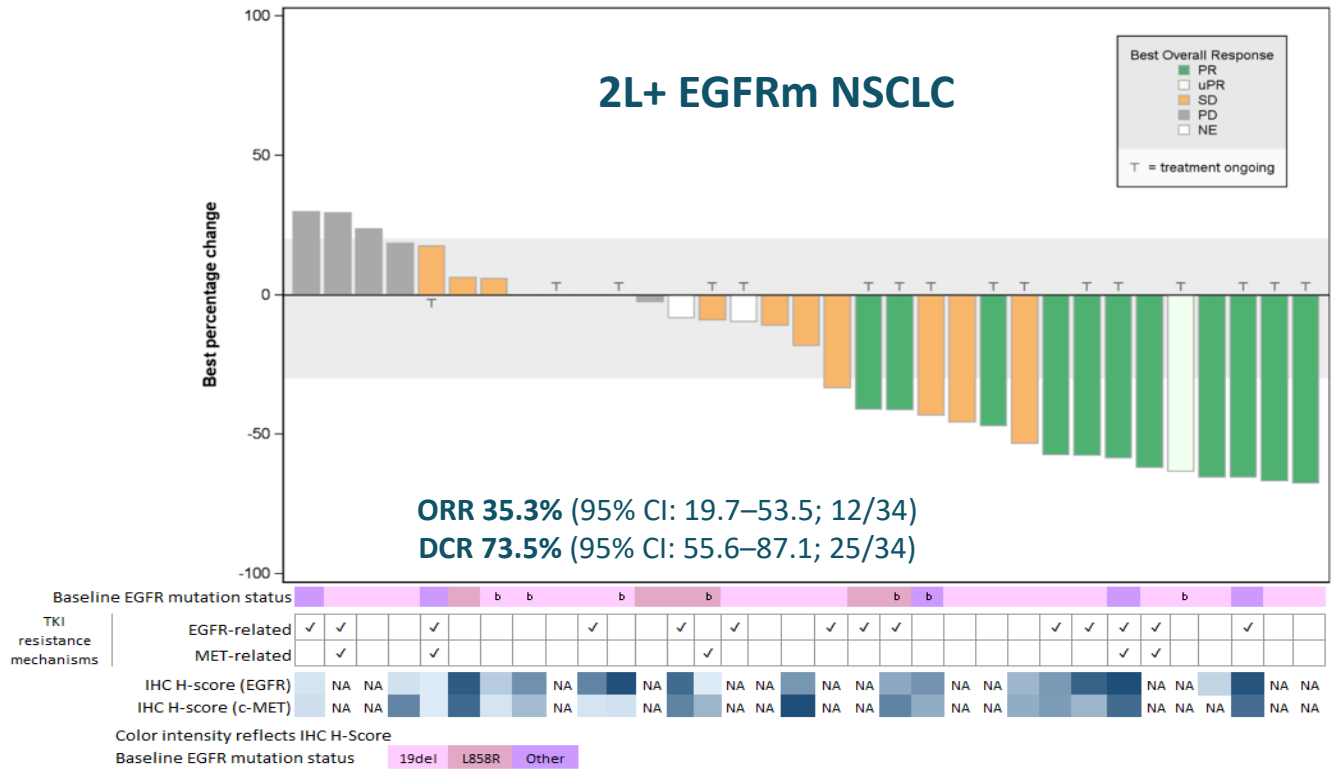
MCLA-129 in Combination with Osimertinib in NSCLC[1]

Best % change in target lesions from baseline by RECIST v1.1 per investigator





Trial Design

- **Drug:** MCLA-129 1500 mg IV Q2W & osimertinib 80 mg QD
- **Primary endpoint:** ORR using RECIST v1.1 per investigator assessment
- **Data cutoff date:** August 10, 2023
- **Enrollment/Safety population:** 60 EGFRm NSCLC pts; 16 1L/44 2L+
- **Efficacy population[2]:** 16 pts in 1L; 34 pts in 2L+

Safety across 1L and 2L+ Cohorts

- IRRs (composite term) in 87% (12% ≥ grade(G) 3)
- Treatment discontinuations in 14 pts (23%)
- Treatment related interstitial lung disease/pneumonitis in 13 pts (22%): four G1, two G2, four G3, and three G5
- Venous thromboembolic events in 23%; 5% treatment related

[1] Cappuzzo et al, ESMO Asia 2023; [2] 9 patients in 2L+ excluded, with < 2 cycles and discontinued for reasons not related to PD; 1 patient in 2L+ with < 2 cycles ongoing at the data cutoff date was not part of the efficacy analysis population

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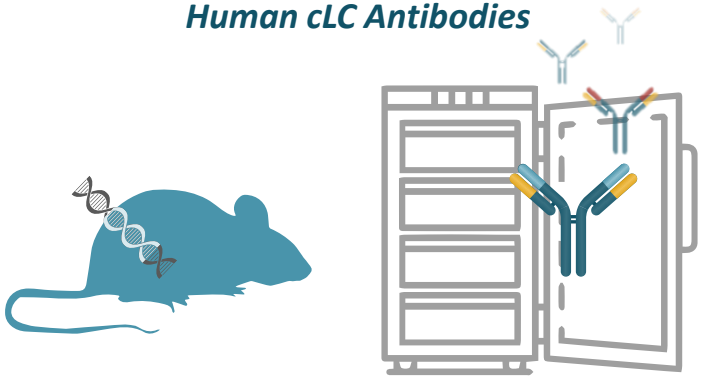
Our Platform – Unique Capabilities in Multispecific Antibodies

Generate

Human cLC Antibodies



Patented Mouse Technology

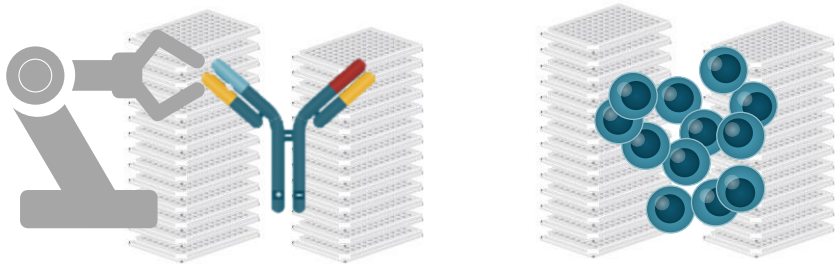
"Merus Mouse" (MeMo®) to generate diverse, high quality common light chain (cLC) antibody panels

Established Inventory

Diverse panels of cLC antibodies against numerous targets

Evaluate

Thousands of Multispecific Abs



Multiclonics® Libraries

Robotics generate thousands of Multiclonics® by combining cLC antibody panels and our patented "DEKK" IgG heterodimerization technology

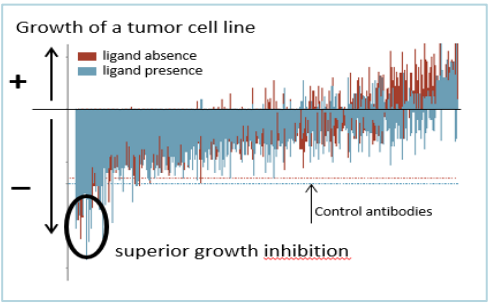
Unbiased Screening

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

Identify

Best Candidates

Biclonics® **Triclonics®** **ADClonics®**



Develop unique, best candidates from thousands of different molecules with potential to achieve meaningful clinical activity in patients

Merus

Merus' Proprietary Biclonics® and Triclonics® Antibody Platform

Leveraging the success of monoclonal antibody therapies

KEY FEATURES OF PLATFORM

Letting the Biology Drive Success

- High throughput screens to select from thousands of molecules
- Biology drives the selection of the 'best' molecules
- Established methods for process development and manufacturing

Fully Human IgG

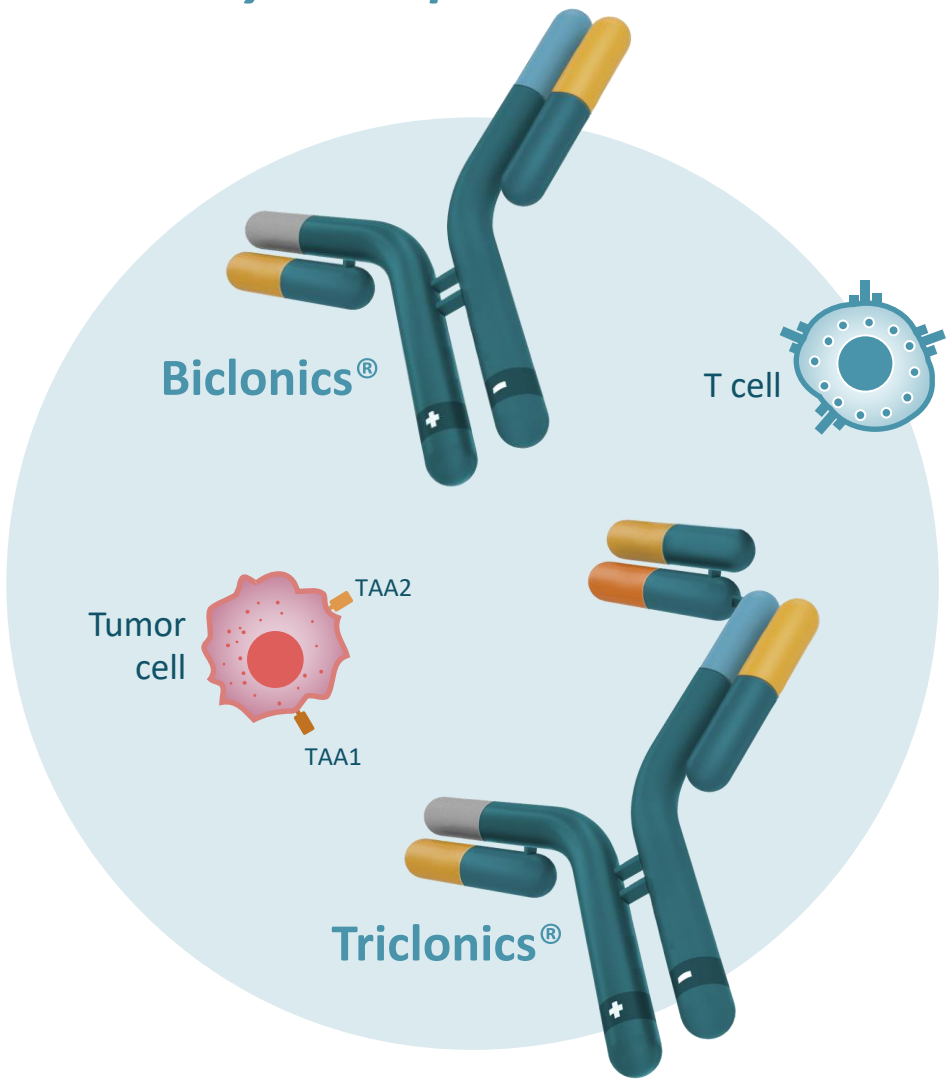
- Low immunogenicity risk and durable, consistent half-life
- Potential for ADCC enhancement and Fc domain silencing

Novel, Innovative Tri-specific Format (Triclonics®)

- Allows for 3 specificities without the need to engineer each individual Fab
- Preferential tumor cell binding with two tumor antigens (TAA1 and TAA2)
- Potent T-cell activation in presence of tumor cells

Robust Intellectual Property

- Pioneering patent estate covering platform technologies



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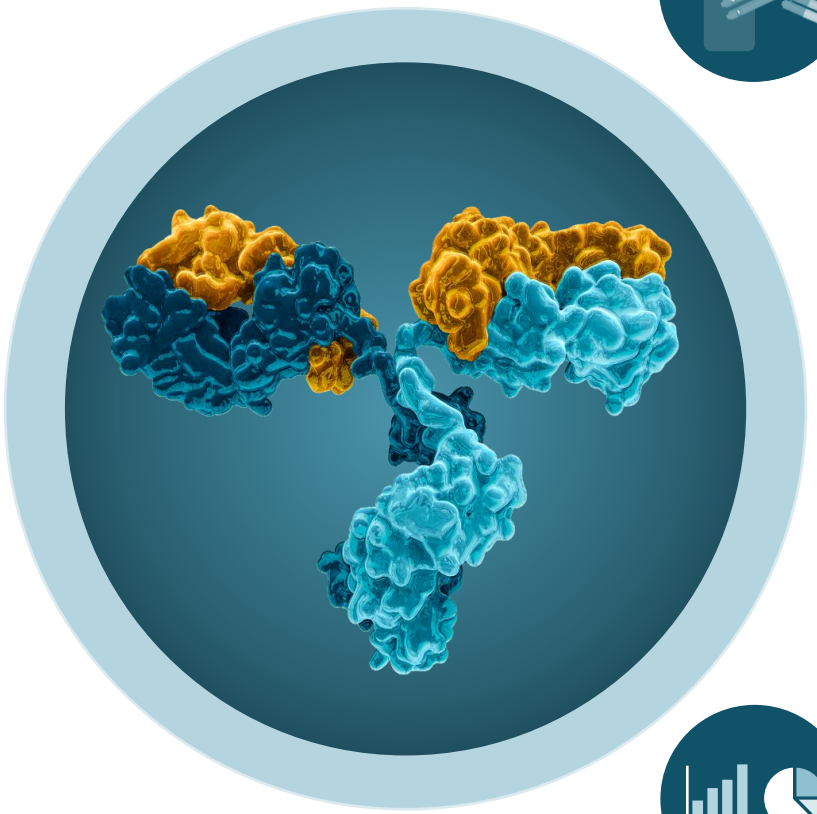
Merus Overview



Petosemtamab: Blockbuster Potential in Multiple Oncology Indications

- Compelling clinical data in 1L and 2L+ recurrent/metastatic head and neck squamous cell cancer (r/m HNSCC)[1,2]
- Global r/m HNSCC opportunity expected to exceed $5B in 2028[3]
- Phase 3 trials: 1L (LiGeR-HN1) and 2/3L (LiGeR-HN2) HNSCC enrolling
- 2L metastatic colorectal cancer (mCRC) in combination with standard chemotherapy and 3L+ petosemtamab monotherapy enrolling; 1L in combination with standard chemotherapy planned

Progress Across our Clinical Pipeline

- Merus' first product approval: Bizengri® (zenocutuzumab) approved by U.S. FDA under accelerated approval for NRG1+ pancreatic adenocarcinoma and non-small cell lung cancer (NSCLC)[4]
- MCLA-129 demonstrated strong clinical activity in EGFRm NSCLC and METex14 NSCLC[5]; 2L+ EGFRm NSCLC in combination with chemotherapy enrolling
- Multiple collaboration programs developed from our Multiclonics® platforms advancing into the clinic

Unique Platform Technology Validated by Key Strategic Collaborations

- Using novel, proprietary Multiclonics® platform technologies to discover and develop bispecific and trispecific antibodies essentially like monoclonal antibodies
- Validating discovery collaborations; potential future milestones and royalties
- Versatile platforms with opportunities for expansion beyond oncology focus

Strong Cash Position into 2028[6]

- Cash and cash equivalents of $783M
- Well capitalized, expected to be funded through multiple corporate milestones

[1] Fayette, et al. 2024 ASCO®; [2] Le Tourneau, et al. 2024 ESMO® Asia; [3] Evaluate Pharma data pulled 2/14/2024; [4] For full description of approval see prior release https://ir.merus.nl/news-releases; [5] Brandão et al, 2024 ASCO®; [6] See October 31, 2024 10-Q noting our belief that our cash, cash equivalents and marketable securities are expected to fund the Company into 2028

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closing in on cancer