Merus

closing in on cancer

Every Day.

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INVESTOR CALL

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 readouts, 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 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.

On the Investor Call

December 2024

Bill Lundberg, MD, MBA
Chief Executive Officer

Fabian Zohren, MD, PhD
Chief Medical Officer

Shannon Campbell
Chief Commercial Officer

Peter B. Silverman, JD
Chief Operating Officer

Kathleen Farren
IR/Corp Comms

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

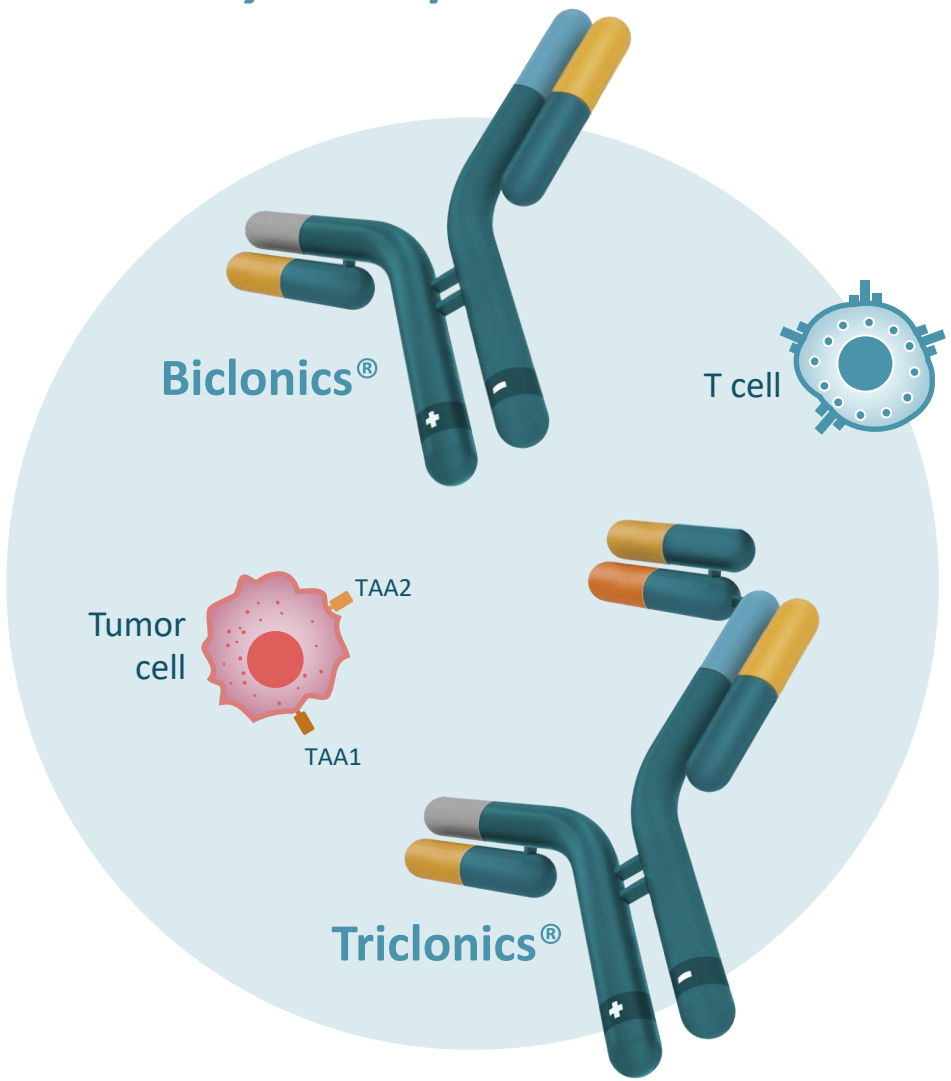
- Low immunogenicity risk and durable, consistent half-life
- Potential for ADCC enhancement and Fc domain silencing

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

- Broad patent estate covering platform technology



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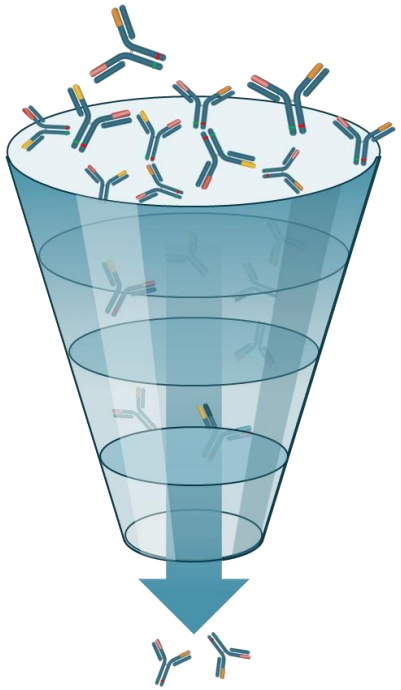
Petosemtamab

Discovery & Mechanism of Action

DISCOVERY



Discovery Screen

- >500 bispecifics: RTK x WNT

Growth Inhibition Score

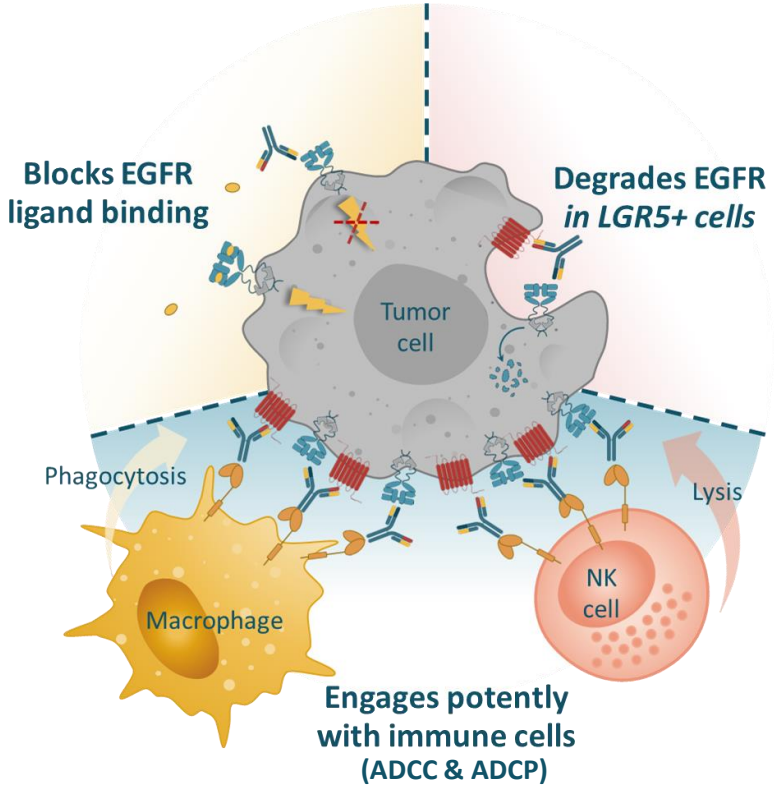
- Tumor vs Normal Organoid size, complexity
- Tumor growth inhibition

BEST COMBO

EGFR x LGR5

- MCLA-158 (Petosemtamab)

MECHANISM OF ACTION



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

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Petosemtamab Monotherapy in 2L+ r/m HNSCC

MoA and Phase 2 Trial Design (NCT03526835)

PETOSEMTAMAB

Petosemtamab is a human common light chain IgG1 bispecific antibody with ADCC-enhanced activity, targeting EGFR and LGR5[1]

Key HNSCC inclusion criteria

- 2L+ r/m HNSCC
- ECOG PS 0–1
- Measurable disease

Single-arm cohort

Petosemtamab 1500 mg (n=54)[a]
IV, Q2W; 28-day cycle

Initial cohort presented[2]

Dose-comparison cohort

Petosemtamab 1500 mg (n=28)
IV, Q2W; 28-day cycle

Petosemtamab 1100 mg (n=28)
IV, Q2W; 28-day cycle

Key objectives

- **Efficacy:** ORR (RECIST v1.1 per investigator), DOR, PFS, OS
- **Safety**, tolerability, and PK characterization
- **Efficacy evaluable population:** patients with ≥2 treatment cycles and ≥1 postbaseline tumor assessment or who discontinued early due to PD or death

Enrollment and analysis population

Data cutoff date
July 5, 2024

Enrollment at 1500 mg
N=82

Enrollment at 1100 mg
N=28

1500 mg efficacy evaluable population
- 75 patients
- 7 patients excluded[b]

1100 mg efficacy evaluable population
- 27 patients
- 1 patient excluded[c]

[a]Initial cohort (n=49) presented at AACR 2023[2] plus 5 enrolled after Feb. 1, 2023 data cutoff. [b]6 patients withdrew due to IRR to first infusion and 1 patient with exclusion criterion deviation. [c]1 patient withdrew consent (<2 months treatment). 2L+: second or subsequent line of therapy; ADCC: antibody-dependent cellular cytotoxicity; DOR: duration of response; ECOG PS: Eastern Cooperative Oncology Group performance status; EGFR: epidermal growth factor receptor; HNSCC: head and neck squamous cell carcinoma; IgG1: immunoglobulin G1; IRR: infusion-related reaction; IV: intravenous; LGR5: leucine-rich repeat-containing G-protein coupled receptor 5; MoA: mechanism of action; ORR: overall response rate; OS: overall survival; PD: progressive disease; PFS: progression-free survival; PK: pharmacokinetic; Q2W: every 2 weeks; RECIST: Response Evaluation Criteria in Solid Tumors; r/m: recurrent/metastatic.

1. Herpers et al. Nat Cancer. 2022;3:418–36; 2. Cohen et al. Cancer Res. 2023;83 (8_suppl): Abst CT012.

Baseline Characteristics, Disposition and Exposure

Baseline characteristics	1500 mg Q2W (N=82)[a]	1100 mg Q2W (N=28)
Age (years), median (range)	60 (31–77)	64 (39–80)
Male / female, n (%)	65 (79) / 17 (21)	22 (79) / 6 (21)
ECOG PS 0 / 1, n (%)	25 (31) / 57 (70)	7 (25) / 21 (75)
Main tumor location, n (%)		
Oropharynx	37 (45)	6 (21)
Oral cavity	25 (31)	11 (39)
Hypopharynx	10 (12)	2 (7)
Larynx	5 (6)	8 (29)
Other[b]	3 (4)	1 (4)
p16 (HPV) status[c] (oropharynx), n (%)		
Positive / negative / unknown	17 (46) / 17 (46) / 3 (8)	1 (17) / 5 (83) / 0 (0)
EGFR (IHC) H-score, median (range)	200 (0–300)	255 (0–300)
Prior systemic therapy, median (range)	2 (1–4)	2 (1–4)
Prior platinum chemotherapy, n (%)	78 (95)	26 (93)
PD-(L)1 inhibitor, n (%)	80 (98)	28 (100)

Disposition and duration of exposure	1500 mg Q2W (N=82)[a]	1100 mg Q2W (N=28)
Petosemtamab treatment ongoing, n (%)	10 (12)	9 (32)
Reason for treatment discontinuation, n (%)		
Disease progression	57 (70)	15 (54)
Symptomatic deterioration	3 (4)	2 (7)
Withdrawal by subject	3 (4)	2 (7)
Study drug-related adverse event	7 (9)	0
Death[d]	1 (1)	0
Other[e]	1 (1)	0
Petosemtamab exposure duration (months), median (range)	4.0 (0.0–37.3)	3.9 (1.3–9.8)

[a]The 1500 mg group includes 54 patients from the single-arm cohort, and 28 patients from the randomized cohort. [b]Other tumor locations included: vocal cord, unknown origin, unknown primary tumor. [c]p16 status is presented only for the 37 and 6 patients with oropharyngeal tumors in the 1500 mg group and 1100 mg group, respectively, and is based on central results. If no central results were available, p16 status was based on local results. [d]Discontinuation due to death was deemed unrelated to treatment. [e]Discontinuation due to investigator's judgement.
HPV: human papillomavirus; IHC H-score: immunohistochemistry histological score; PD-1: programmed cell death protein 1; PD-L1: programmed cell death ligand 1.

Petosemtamab Safety and Pharmacokinetics in 2L+ HNSCC

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

- Petosemtamab 1500 mg Q2W in HNSCC was well tolerated with a manageable safety profile
- IRRs were generally only seen on day 1 of cycle 1; the IRR mitigation strategy reduced the severity and frequency of IRRs

Pharmacokinetics

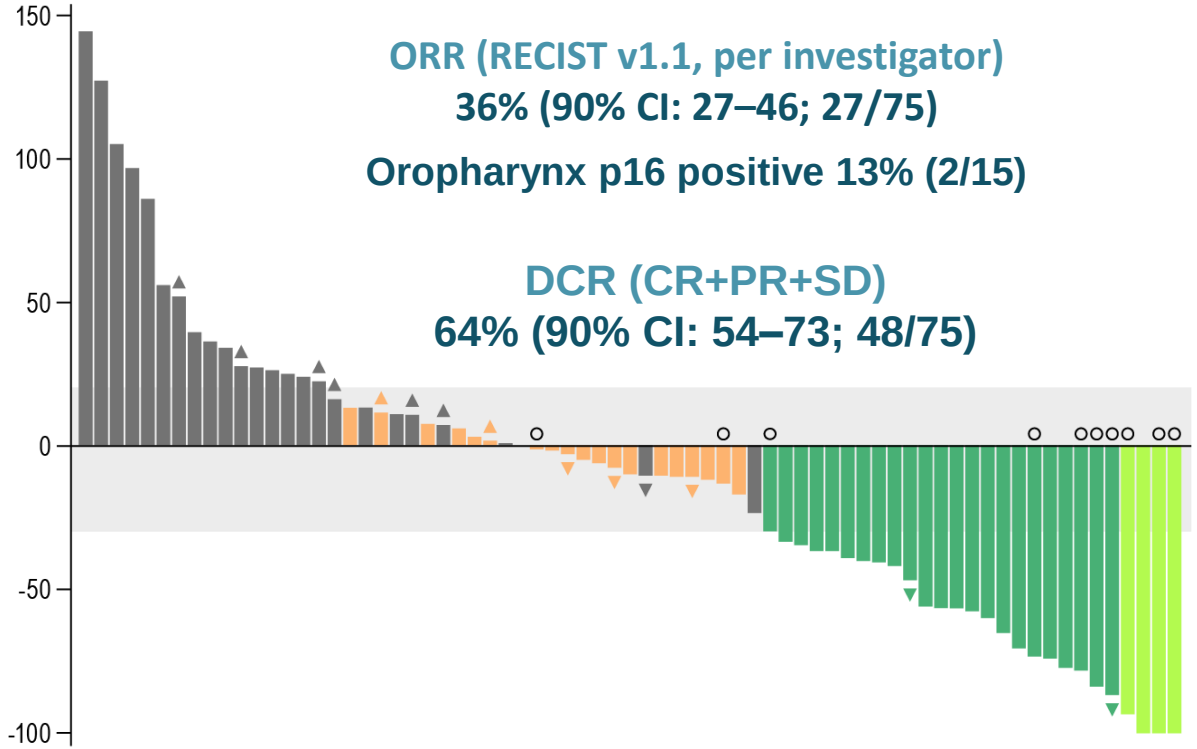
- Geometric mean steady state C_{trough} was 68% higher with 1500 mg Q2W vs. 1100 mg Q2W
  - No positive exposure–safety (Grade ≥3 TEAE) relationship was observed
- 1500 mg Q2W was projected to achieve superior target engagement (*i.e.* ≥98%) for EGFR compared with 1100 mg Q2W dose

AE: adverse event; C_{trough}: trough concentration; TEAE: treatment-emergent adverse event.

Petosemtamab Antitumor Activity in 2L+ HNSCC

Petosemtamab 1500 mg Q2W, efficacy evaluable population (N=75)

Best percentage change in sum of target lesions from baseline (N=75)[a]

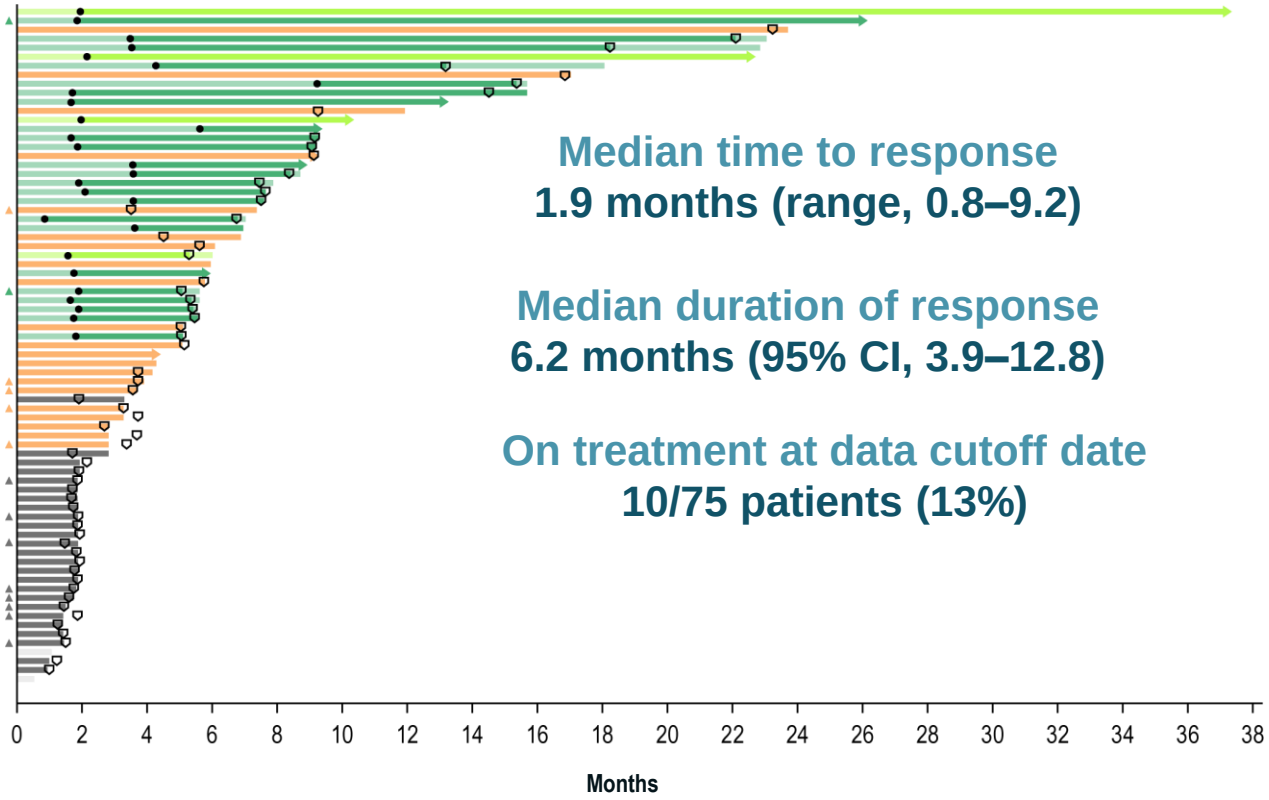


ORR (RECIST v1.1, per investigator)
36% (90% CI: 27–46; 27/75)

Oropharynx p16 positive 13% (2/15)

DCR (CR+PR+SD)
64% (90% CI: 54–73; 48/75)

Time to response and duration of exposure (N=75)



Median time to response
1.9 months (range, 0.8–9.2)

Median duration of response
6.2 months (95% CI, 3.9–12.8)

On treatment at data cutoff date
10/75 patients (13%)

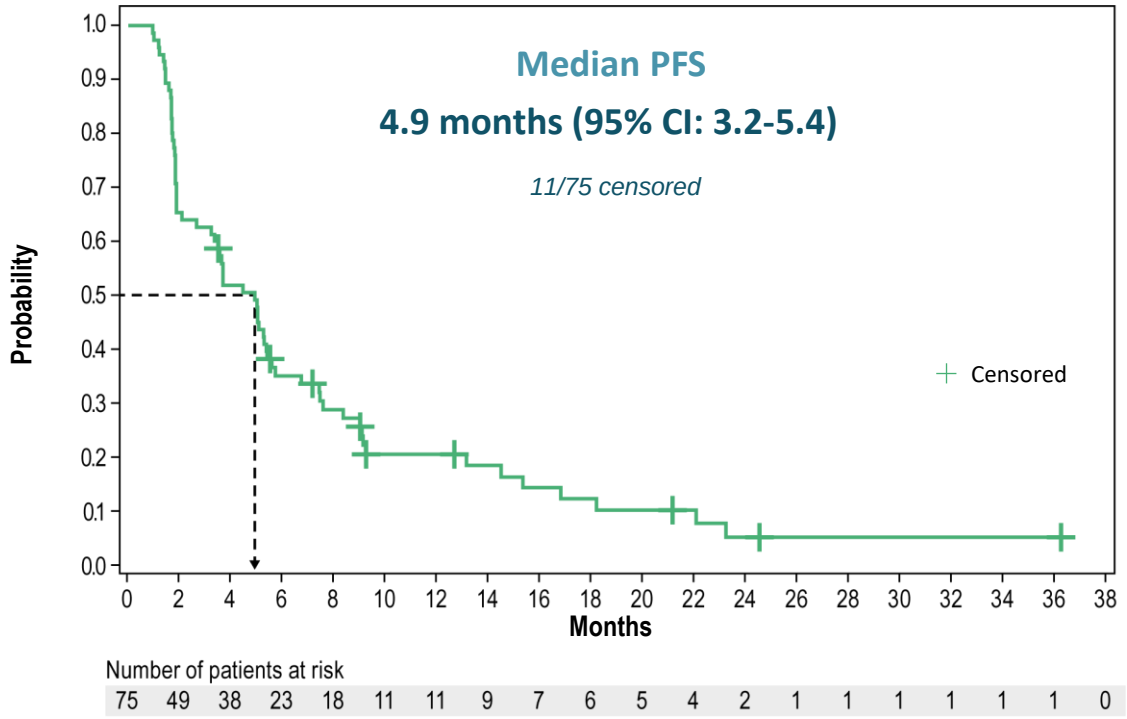
CR | PR | SD | PD | NE | ○ Treatment ongoing | ● First CR/PR | ▽ Progressive disease | △ Oropharynx p16+ (local/central)

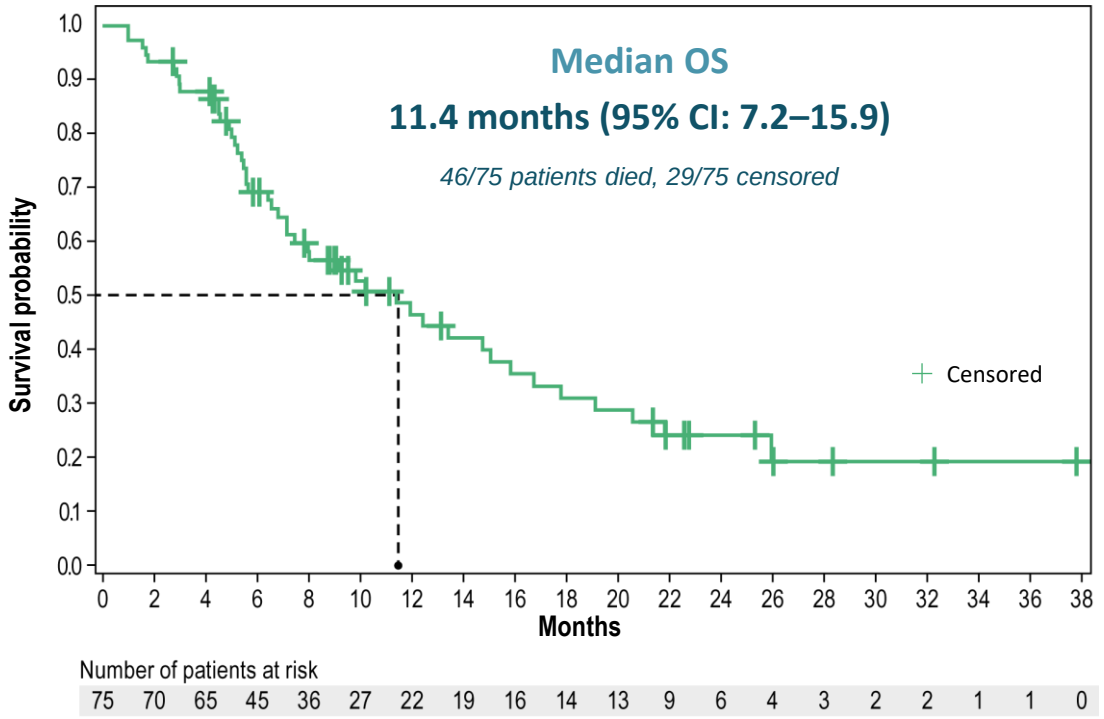
[a]There were 4 patients (including 1 patient who was oropharynx p16+) excluded from the waterfall plot. Two patients were excluded as the target lesions were not assessed, or assessed partially. One patient assessed as PD died prior to the first tumor assessment; the final patient discontinued study treatment due to PD/symptomatic deterioration.

CI: confidence interval; CR: complete response; DCR: disease control rate; NE: not evaluable; PR: partial response; SD: stable disease.

Petosemtamab Antitumor Activity in 2L+ HNSCC

Petosemtamab 1500 mg Q2W, efficacy evaluable population (N=75)





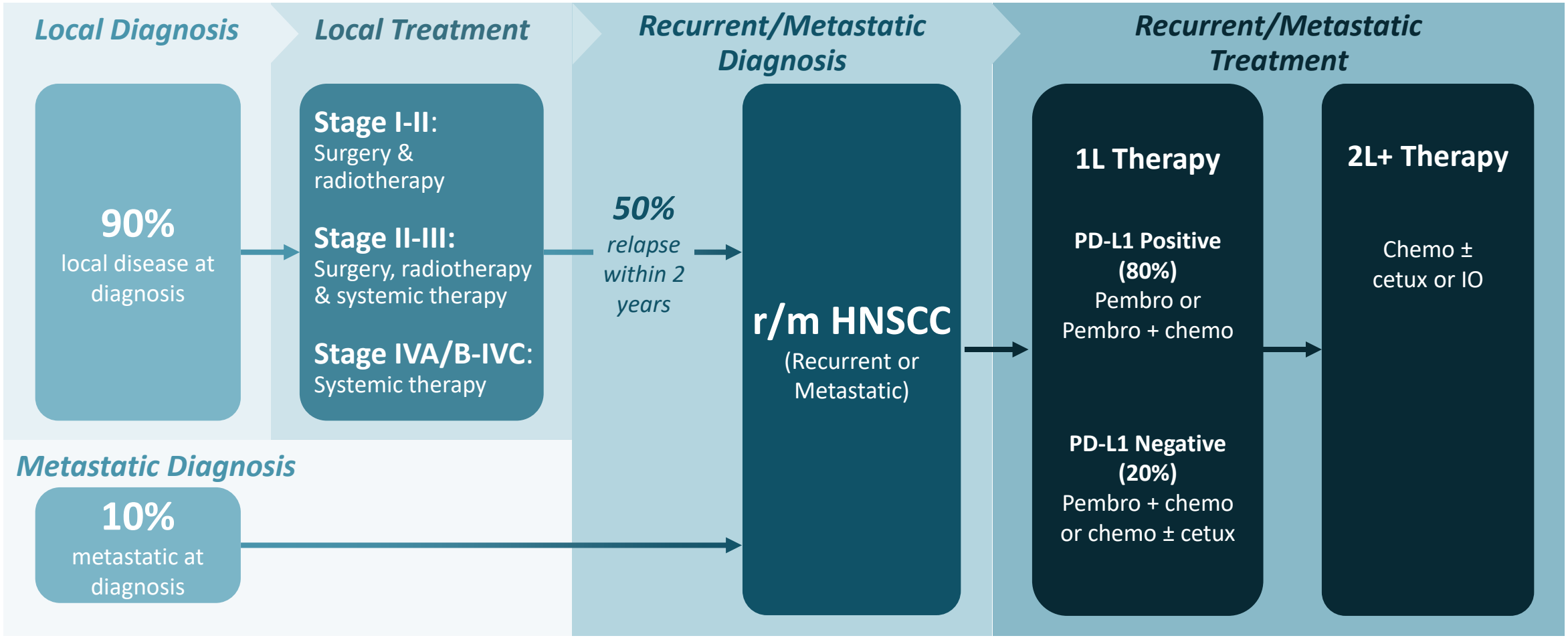
In the single-arm cohort, initially presented at AACR 2023[1], among 48 evaluable patients[a], the median DOR, PFS, and OS were 6.7, 5.2, and 12.5 months, respectively

[a]Efficacy-evaluable population from single-arm cohort, excludes 5 patients who withdrew due to IRR to first infusion and 1 patient with exclusion criterion deviation without clinical evidence of progression.

1. Cohen et al. Cancer Res. 2023;83 (8_suppl): Abst CT012

HNSCC Patient Journey

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



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Significant Market Opportunity in HNSCC

Petosemtamab has the potential to become a new standard of care for r/m HNSCC

ESTIMATED PATIENTS WITH r/m HNSCC IN THE G7

1L Patients in 2024[1]

55K total new G7 cases

17K USA

26K EU 5

12K Japan

2L+ Patients in 2024[1]

22K total new G7 cases

6K USA

11K EU 5

5K Japan

KEY TAKEAWAYS

High prevalence and mortality

- 6th most common cancer
- ~930,000 new cases and 467,000 deaths[2]

Unmet need for more effective and tolerable 1L therapy

- Median survival only 12.3-17.9 mo for pembrolizumab with or without chemotherapy[4,5]

Unmet need in platinum and anti–PD-1 refractory disease

- Limited treatment options after platinum-based chemotherapy and pembrolizumab[5]

Worldwide market projections

- Expected to exceed $5.1 B in 2028[6]

[1]EPI data from *Kantar CancerMPact 2024* reflecting annual pts in 2024; [2]Sung et al. (2021) *CA Cancer J Clin*; [3]Harrington KJ, et al. (2023) *J Clin Oncol*; [4]Burtness 2019; [5]Licitra L, et al. (2024) *Int J Radiat Oncol Biol Phys*; [6]Evaluate Pharma Data, pulled 2/14/2024
[6]Evaluate Pharma Data, accessed 2/14/2024

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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*

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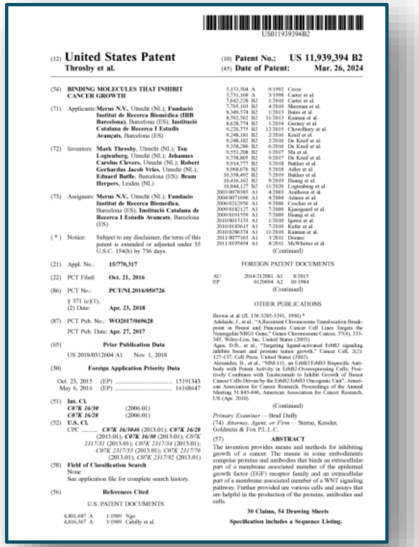
Intellectual Property

*Petosemtamab Patent Estate**

Merus pioneering patent positions

EARLY DISCOVERY → LATE DISCOVERY → IND-ENABLING PHASE → PHASE I → PHASE II → PHASE III → APPROVAL → POST-LAUNCH

COM Patent
Expiring not earlier than Oct. 2036


(12) United States Patent
Throsby et al.
(10) Patent No.: US 11,939,394 B2
(45) Date of Patent: Mar. 26, 2024
(54) BINDING MOLECULES THAT INHIBIT CANCER GROWTH
(71) Applicants: Merus N.V., Utrecht (NL); Fundació Institut de Recerca Biomèdica (IRB Barcelona), Barcelona (ES); Institució Catalana de Recerca I Estudis Avançats, Barcelona (ES)
(72) Inventors: Mark Throsby, Utrecht (NL); Ton Logtenberg, Utrecht (NL); Johannes Carolus Clevers, Utrecht (NL); Robert Gerhardus Jacob Vries, Utrecht (NL); Eduard Batlle, Barcelona (ES); Bram ...

Method of treatment with petosemtamab and a topoisomerase inhibitor
PCT/NL2020/050517
Expiring not earlier than Aug. 2040

Method of treatment G/E/GEJ cancers
PCT/NL2021/050267
Expiring not earlier than Apr. 2041

Petosemtamab formulation
PCT/NL2021/050772
Expiring not earlier than Dec. 2041

Method of treatment H&N cancer and dosage/administration
PCT/NL2021/050763
Expiring not earlier than Dec. 2041

Method of treatment EGFR high cancer with an immune checkpoint inhibitor
PCT/NL2022/050563
Expiring not earlier than Oct. 2042

Combination therapy including in treatment naïve patients
PCT/NL2023/050684
Expiring not earlier than Dec. 2043

Combination therapy with certain chemotherapy agents
PCT/NL2023/050692
Expiring not earlier than Dec. 2043

Method of dosing regimen and administration
Provisional application filed 2024
Expiring not earlier than May 2045

*Expiration dates reflect dates based on potential patent issuances of pending applications of the different patent families, not inclusive of any patent term adjustments, extensions or supplementary protection certificates that may be available

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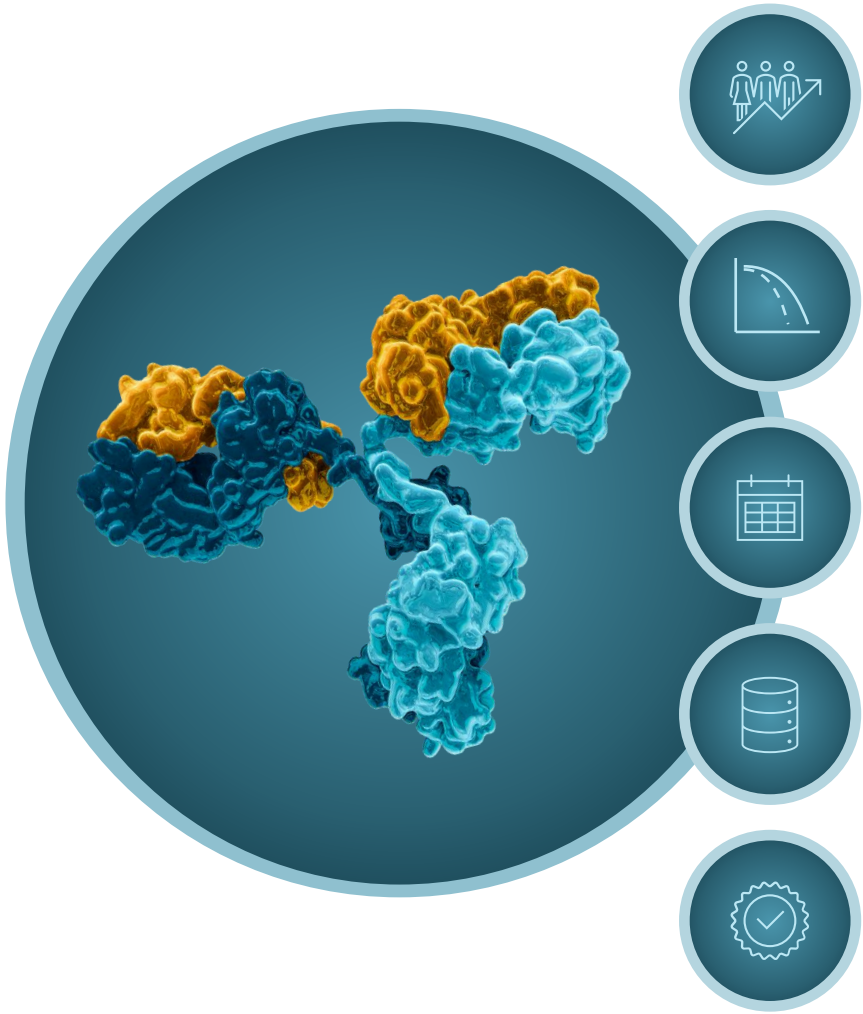
Petosemtamab

Blockbuster Potential



HNSCC is a large market opportunity with high unmet need

- HNSCC is the 6th most common cancer[1]; opportunity in mCRC and beyond

Interim phase 2 clinical efficacy observed to be better than historical data for currently available therapies

- 75 pts: 36% ORR and 11.5 mOS (vs historical cetuximab[2,3] ORR 13-19%, mOS ~6-9 mo)

Monotherapy activity has deepened over time

- CRs observed in 4 out of 27 responders

Larger data set shows activity in HPV+ patients and supports their inclusion

- HPV+ population: 13% ORR with additional 5 patients demonstrating stable disease

Clinical data supports best in class potential

- Favorable safety profile including manageable IRRs
- Strong monotherapy efficacy with deepening of responses in larger data set
- OS in 2L+ HNSCC interim data set compares favorably to current standard of care

[1]Sung et al. (2021) *CA Cancer J Clin;* [2]Vermorken et al. (2007) *J Clin Oncol;* [3]Fayette (2023) *Ann Oncol*

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Merus Ambitious Goals

Achieved This Year

GILEAD
Triclonics® Collaboration

FDA
*Breakthrough Therapy Designation**

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

2024 and Beyond

✓ **Well Capitalized**
with $783M as of 3Q24, expected to be funded into 2028**

✓ **Executing Effectively**
against milestones and on clinical trial progress

2L+ HNSCC
petosemtamab monotherapy including updated AACR 2023 dataset and new dose evaluation at ESMO® ASIA 2024

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

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

Expansion Opportunities
potential for additional exploratory indications

*FDA BTD for petosemtamab for the treatment of patients with recurrent or metastatic HNSCC whose disease has progressed following treatment with platinum based chemotherapy and an anti-programmed cell death receptor-1 (PD-1) or anti-programmed death ligand 1 (PD-L1) antibody **See October 31, 2024 10-Q noting our belief that our cash, cash equivalents and marketable securities expected to fund into 2028, based on current operating plan

THANK YOU

Merus closing in on cancer

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