

# Transforming **radiotherapy** for patients with cancer

August 2023



# Forward-Looking Statements

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This presentation contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, our clinical results and other future conditions. All statements other than statements of historical facts contained in this presentation, including statements regarding future results of operations and financial position, the expected financial and operational impacts of our recent reduction in force, our ability to continue operations, business strategy including plans to evaluate strategic alternatives, the safety, efficacy, regulatory and clinical progress and timing thereof, and therapeutic potential of current and prospective product candidates, plans and timing for the commencement of, and the release of data from, clinical trials, plans and timing for the submission of applications for marketing approval to regulatory authorities and timing of any such approval, our intention to request and hold a Type A meeting with the U.S. Food and Drug Administration regarding the Complete Response Letter for avasopasem and the outcome thereof, the anticipated direct and indirect impact of COVID-19 on Galera's business and operations, planned clinical trials, potential product approvals and related commercial opportunity, current and prospective collaborations, and timing and likelihood of success, plans and objectives of management for future operations, are forward-looking statements. The words "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "estimate," "believe," "predict," "potential" or "continue" or the negative of these terms or other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The information in this presentation, including without limitation the forward-looking statements contained herein, represent our views as of the date of this presentation. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. Accordingly, readers are cautioned not to place undue reliance on these forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. No representations or warranties (expressed or implied) are made about the accuracy of any such forward-looking statements. The forward-looking statements in this presentation involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements. Risks and uncertainties that may cause actual results to differ materially include uncertainties inherent in the drug development process and the regulatory approval process, our reliance on third parties over which we may not always have full control, and other important risks and uncertainties that are described in Galera's Annual Report on Form 10-K for the year ended December 31, 2022 filed with the U.S. Securities Exchange Commission (SEC) and Galera's other filings with the SEC. New risk factors and uncertainties may emerge from time to time, and it is not possible to predict all risk factors and uncertainties.

Whenever the Company uses the terms "transform radiotherapy" or "transforming radiotherapy" in this presentation, it is referring to its mission statement.

# Radiation Therapy – Key Role in Cancer Treatment

Two million new cancers annually<sup>1</sup> in US; over 50% of patients receive radiation therapy as part of their treatment

## IMRT

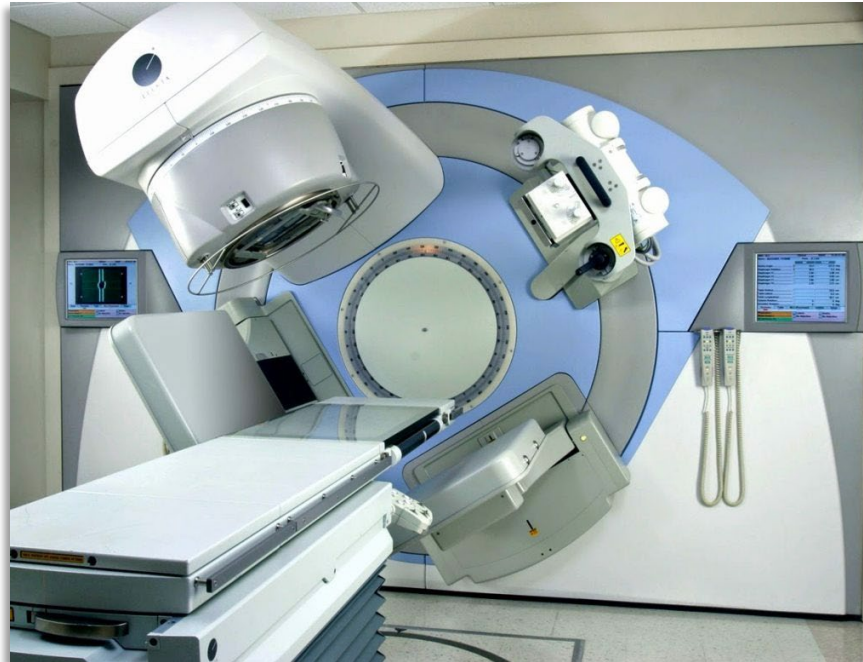
**Intensity Modulated Radiation Therapy**

Low doses for weeks  
(~2 Gy/day)

Most used form of external beam RT

Toxicity

**Galera's Goal**  
**Radioprotection**



## SBRT

**Stereotactic Body Radiation Therapy**

High doses for days  
(>5 Gy/day)

Cutting edge form of external beam RT

Efficacy

**Galera's Goal**  
**Radiosensitization**

<sup>1</sup>US SEER Data in CA Cancer J Clin 2023

# Galera's Technology: Dismutase Mimetics

Mechanism of action is to convert RT-induced burst of Superoxide to Hydrogen Peroxide

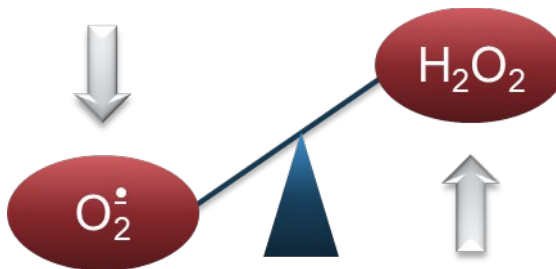
## Avasopasem (GC4419)

Superoxide ( $O_2^{\bullet-}$ ) is more damaging to normal cells than cancer cells<sup>1</sup>

Toxicity

Radioprotection  
of Low Dose RT

Shifts balance in normal & cancer cells  
from superoxide to hydrogen peroxide



## Rucosopasem (GC4711)

Hydrogen Peroxide ( $H_2O_2$ ) is more toxic to cancer cells than normal cells<sup>2</sup>

Efficacy

Radiosensitization  
of High Dose RT

<sup>1</sup>Sonis S. Drug Design, Development and Therapy 2021;15 1021–1029

<sup>2</sup>Park WH: Oncol Rep 40: 1787-1794, 2018



# Transforming Radiotherapy for Patients with Cancer

Potential to improve both sides of the therapeutic index

## Rucosopasem

### Increasing SBRT Efficacy

#### ➤ Locally Advanced Pancreatic Cancer (LAPC)

Encouraging survival data in pancreatic cancer trial<sup>1</sup>

Rucosopasem + SBRT x 5 fractions

- GRECO-2 in LAPC (n=220)
- GRECO-1 in NSCLC (up to 66 pts)

Data-readout for both by end 2024

## Avasopasem

### Reducing IMRT Toxicity

#### ➤ Severe Oral Mucositis in Head & Neck Cancer (HNC)

Positive placebo-controlled HNC trials

- GT-201 Phase 2b (n=223)
- ROMAN Phase 3 (n=455)

Breakthrough Therapy Designation

Received CRL in August 2023 and plan to meet with FDA on next steps

## Avasopasem

### Reducing Cisplatin Toxicity

#### ➤ Cisplatin-induced Chronic Kidney Disease (CKD)

CKD halved at 1 year after cisplatin

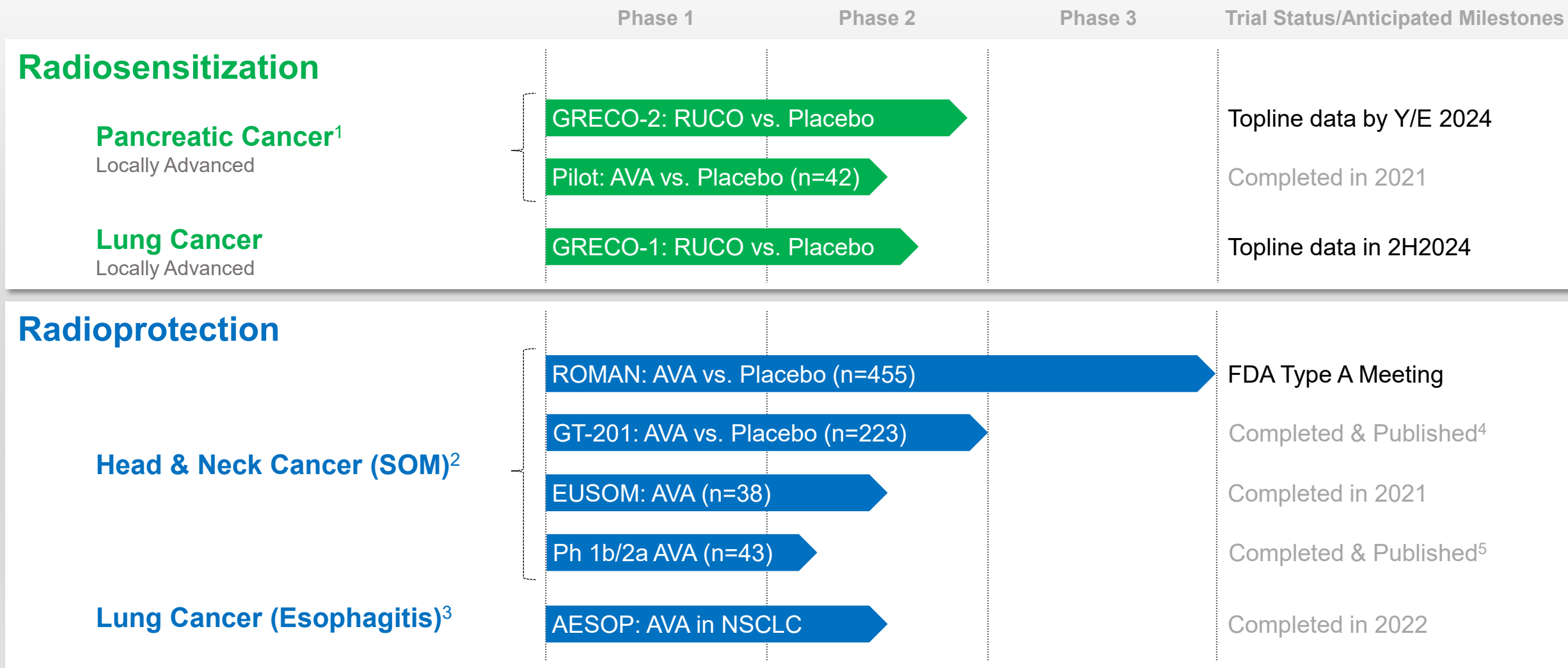
- 10% on AVA vs. 20% on PBO
- Prospectively defined endpoint in ROMAN trial (n=351 at 1 year)

Superoxide drives cisplatin nephrotoxicity, independent of RT

CRL = Complete Response Letter; FDA=U.S. Food and Drug Administration; AVA = avasopasem manganese; PBO = placebo

<sup>1</sup>The first SBRT combination trial used GC4419 (avasopasem). Observations from this pilot trial used to guide development of rucosopasem in combination with SBRT.

# Clinical Stage Pipeline



<sup>1</sup>First SBRT combination trial was a pilot & used avasopasem (AVA). Subsequent SBRT trials combine rucosopasem (RUCO) with SBRT.

<sup>2</sup>EUSOM was a single-arm multi-center trial evaluating the safety and efficacy of avasopasem in patients with HNC in Europe.

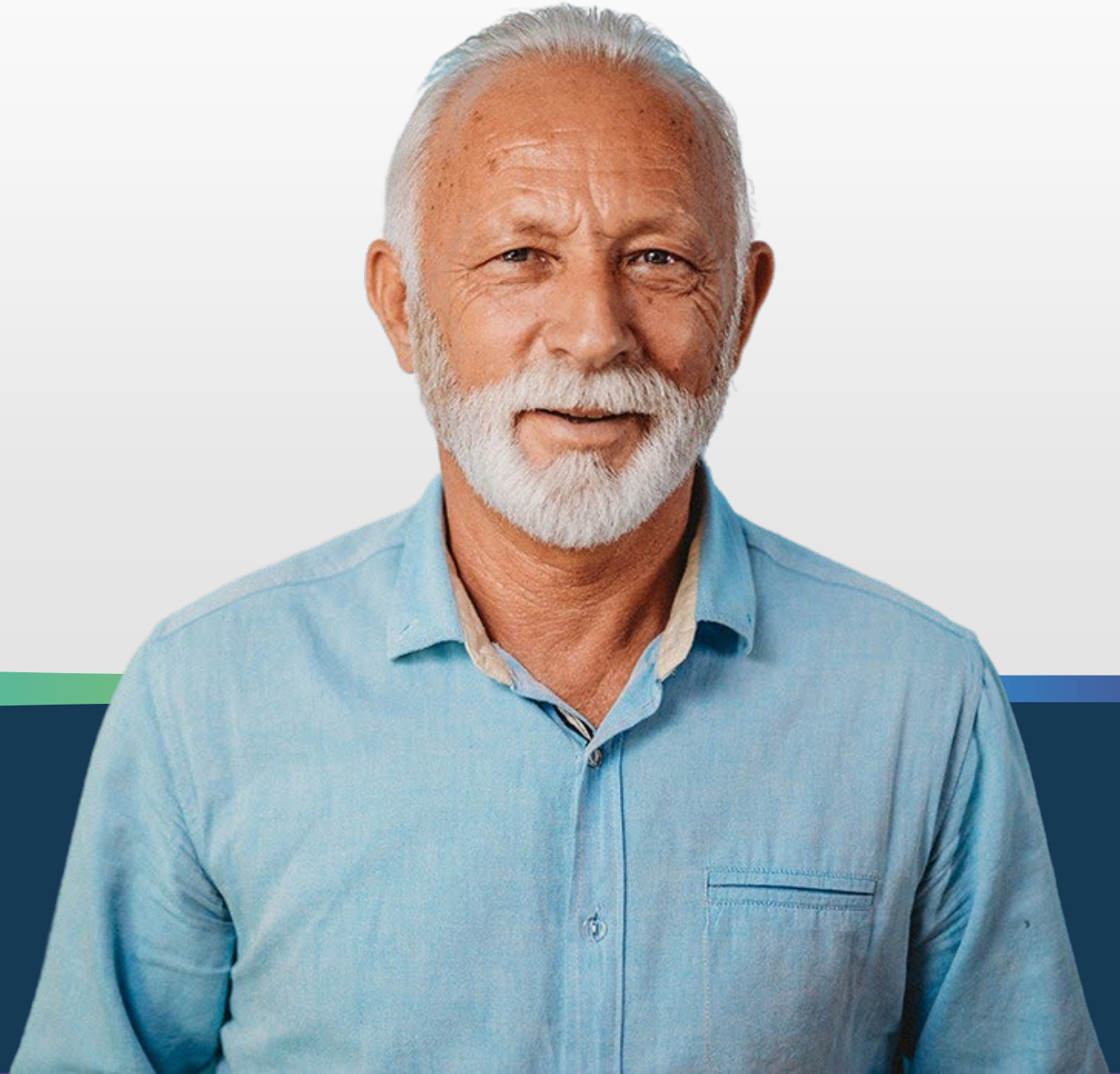
<sup>3</sup>Phase 2a trial that evaluated incidence of esophagitis in patients with lung cancer receiving standard-of-care chemoradiation.

<sup>4</sup>Anderson CM et al. J Clin Oncol. 2019;37(34):3256-3265.

<sup>5</sup>Anderson CM et al. Int J Radiat Oncol Biol Phys. 2018 Feb 1;100(2):427-435.

Rucosopasem = RUCO  
 Avasopasem = AVA  
 Severe Oral Mucositis = SOM  
 U.S. Food & Drug Administration = FDA

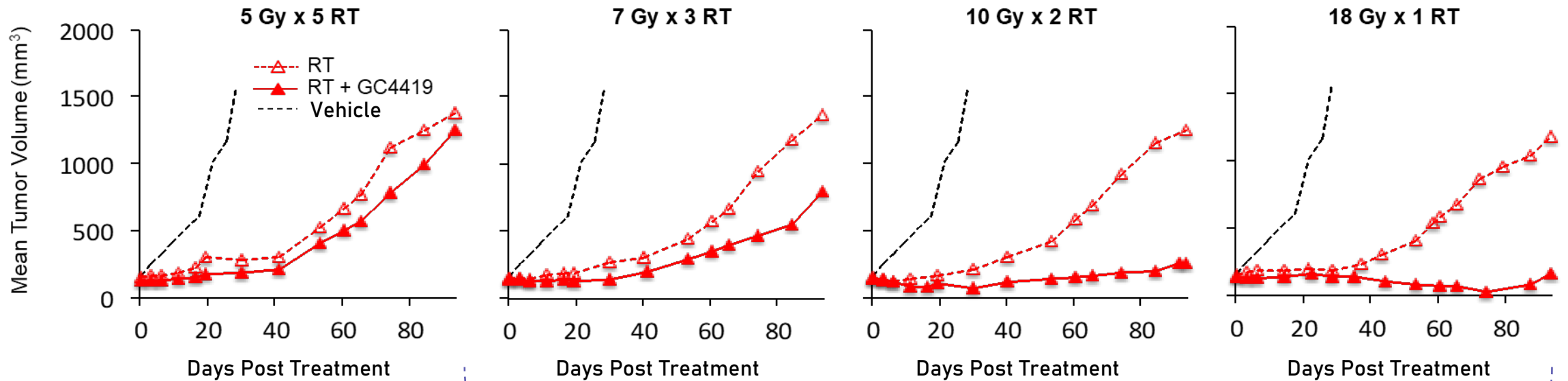
# Increasing SBRT Efficacy



# Synergy with High-Dose RT (SBRT)

High-fraction focal irradiation of human tumor xenografts (H1299 NSCLC) in mice

## RT with Biological Equivalent Doses



SBRT

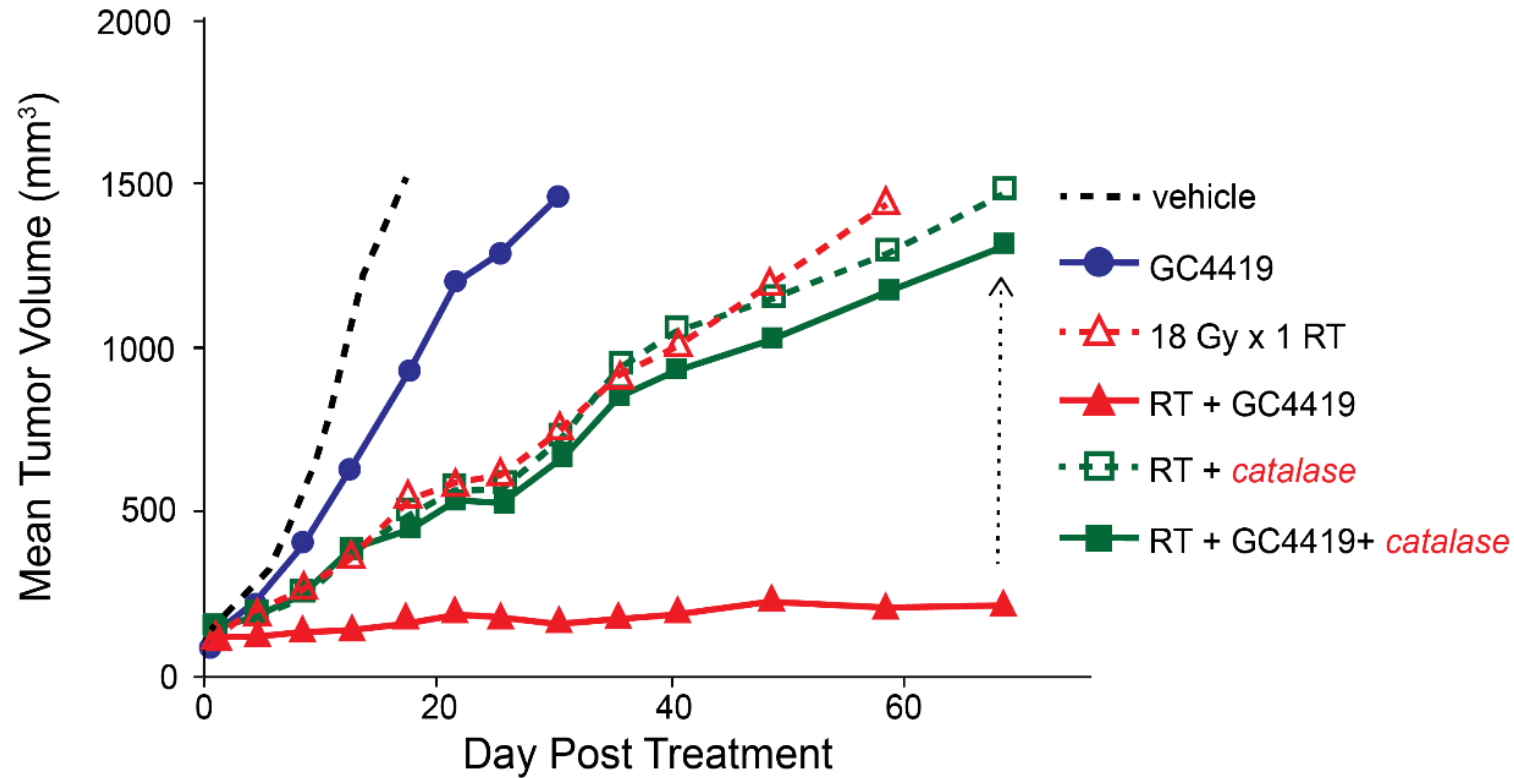
Stereotactic Body Radiation Therapy

Preclinical results; Sishc, et al., Science Translational Medicine 12 May 2021:Vol. 13, Issue 593



# H<sub>2</sub>O<sub>2</sub> build-up in Cancer Cell → Synergy with SBRT

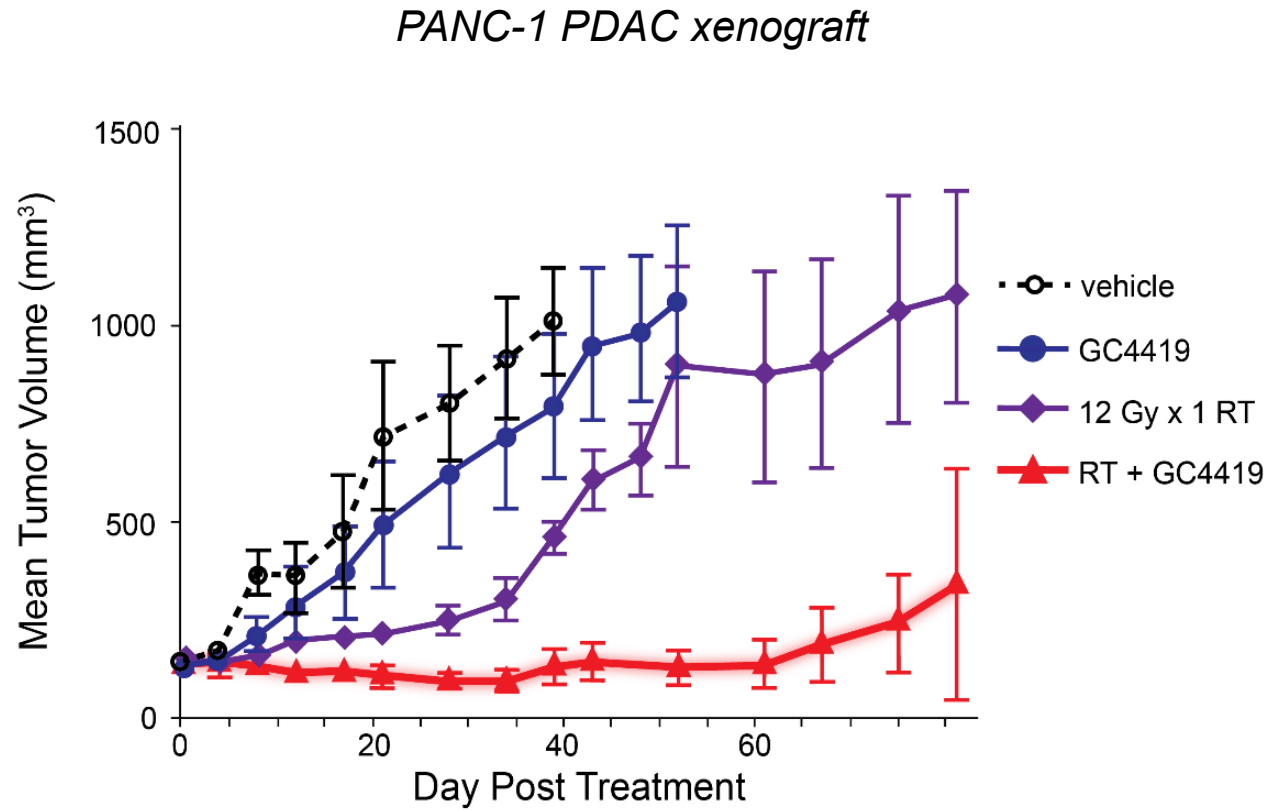
Synergy eliminated with doxycycline-induced catalase in genetically modified H1299<sup>CAT</sup> cells



Preclinical results; Sishc, et al., Science Translational Medicine 12 May 2021:Vol. 13, Issue 593

# Pancreatic Tumor Model → Synergy with SBRT

Marked synergy of Dismutase Mimetic with 12 Gray Radiotherapy



Preclinical results; Sishc, et al., Science Translational Medicine 12 May 2021:Vol. 13, Issue 593

# Pancreatic Cancer

High Unmet Medical Need With Limited Therapeutic Options

**500,000**

Global Incidence

**64,000**

US Patients Diagnosed each year

**18,000**

Patients with Unresectable Locally Advanced Tumors

**Initial  
Target  
Population**

5-year survival rate is only ~10%

SBRT use increasing for locoregional control  
of pancreatic cancer

Source: Globocan 2020 and US SEER Data in CA Cancer J Clin 2023

# Proof of Concept Trial in Pancreatic Cancer

Completed 42-Patient Double-blind, Placebo-controlled, Randomized Trial



## Population

- Patients with Locally-advanced Pancreatic Cancer (LAPC)
- Screened after 4-6 months of chemotherapy



## Treatment

R

SBRT + GC4419 90mg x 5 doses

SBRT+ Placebo x 5 doses

- 60-minute IV infusion before SBRT
- 4 Centers: MDA, Moffitt, Duke, UTSW



## Endpoints

- Primary: Safety and feasibility of dismutase mimetic with SBRT
- Secondary: Survival (OS, PFS), Tumor Control (LRC, DMC), Response Rate

# Final Analysis of Safety & Efficacy

Minimum of One Year Follow-up on All Patients

Baseline Characteristics	Placebo (n=18)	GC4419 (n=24)
Median age (range), yrs	68 (48–82)	72 (41–83)
Male / Female	39% / 61%	67% / 33%
Borderline resectable / Unresectable	11% / 89%	29% / 71%
ECOG Performance status 0/1/2	50% / 50% / 0%	50% / 46% / 4%
Prior chemo, duration median (range), wks	22 (12.0–36.3)	18 (9.1–67.1)
CA19-9 at randomization, median (range)	71 (0.5–5505)	31 (0.3–719)
Smokers/Nonsmokers	17% / 83%	8% / 92%

CA 19-9 = Carbohydrate Antigen 19-9 is a tumor marker for pancreatic cancer  
ECOG = Eastern Cooperative Oncology Group Performance Status Criteria



# Final Safety Analysis - Regimen Generally Well Tolerated

12-Month Safety Follow-up (% of Patients)

## Similar SBRT Toxicity Across Arms

AEs Considered related by Investigator to SBRT		SBRT + PBO	SBRT + GC
≤90 days after SBRT	Any AE	67%	46%
	GI AE	44%	42%
	Severe AE	0%	0%
>90 days after SBRT	Any AE	22%	25%
	GI AE	17%	21%
	Severe AE	11%	8%

- *No bleeding ulcers by 12-week endoscopy*

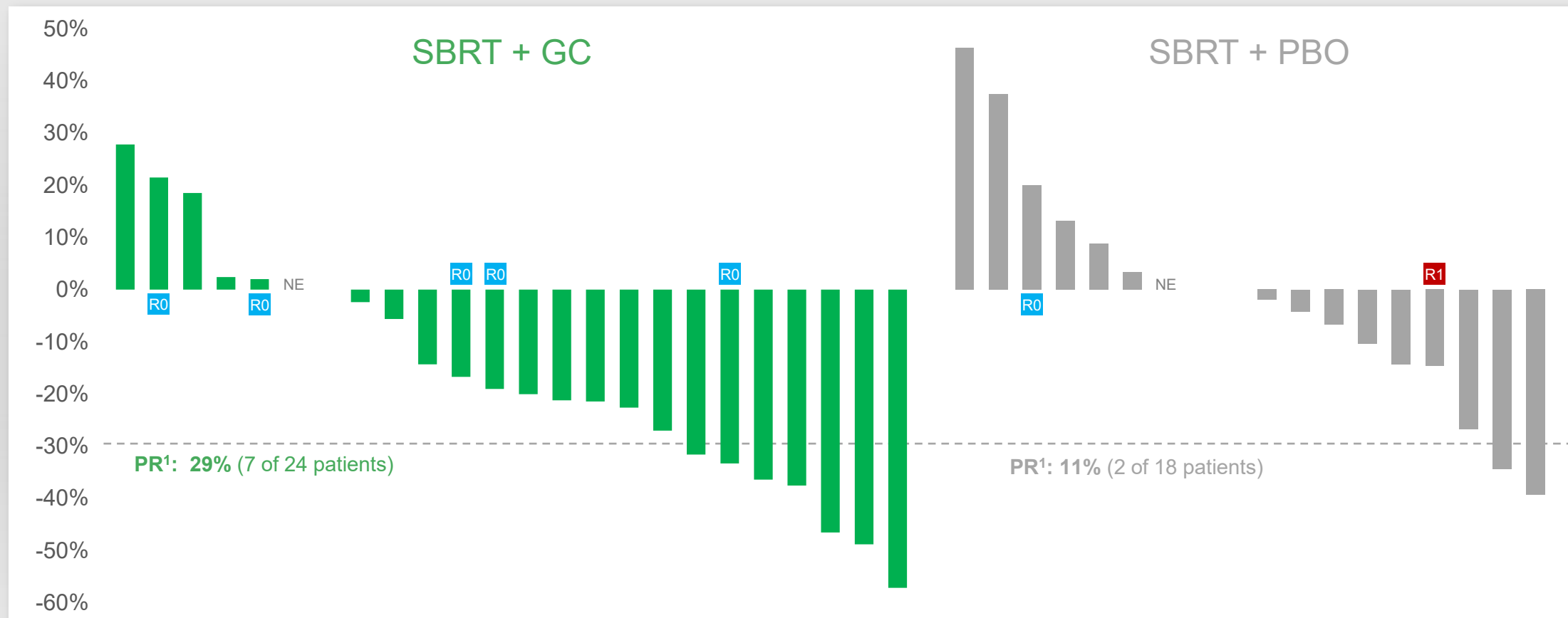
## No Early or Late Toxicity Signal for GC

AEs Considered related by Investigator to GC/PBO		SBRT + PBO	SBRT + GC
≤90 days after SBRT	Any AE	67%	46%
	GI AE	44%	42%
	Severe AE	0%	0%
>90 days after SBRT	Any AE	17%	21%
	GI AE	17%	17%
	Severe AE	11%	4%

AE = Adverse Event, GI AE = Gastrointestinal AE

# Partial Response Rate Increased 2.5-fold

Best Local Response with follow-up of at least 12 months on all patients (ITT, n=42)



<sup>1</sup>Partial response per modified RECIST (Response Evaluation Criteria in Solid Tumors)

R0 = margins free of microscopic tumor (5/5 patients on GC and 1/2 patients on placebo had clear margins at surgery)

Censored for surgery, treatment post SBRT and new malignancy

NE = not evaluable (scans not performed post SBRT)

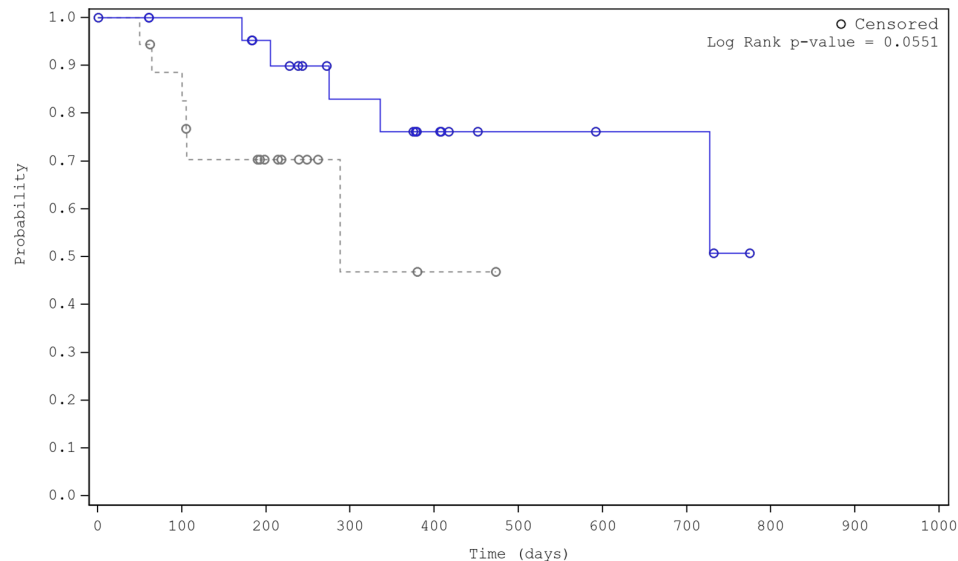
R1 = positive tumor margins at surgery

# Improved Control of Both Local and Distant Disease

Median LRC on GC arm not yet reached at data cut-off; Increased median DMC by 100% at data cut-off

## Locoregional Control (LRC)

– within RT Field



Number of Patients at Risk

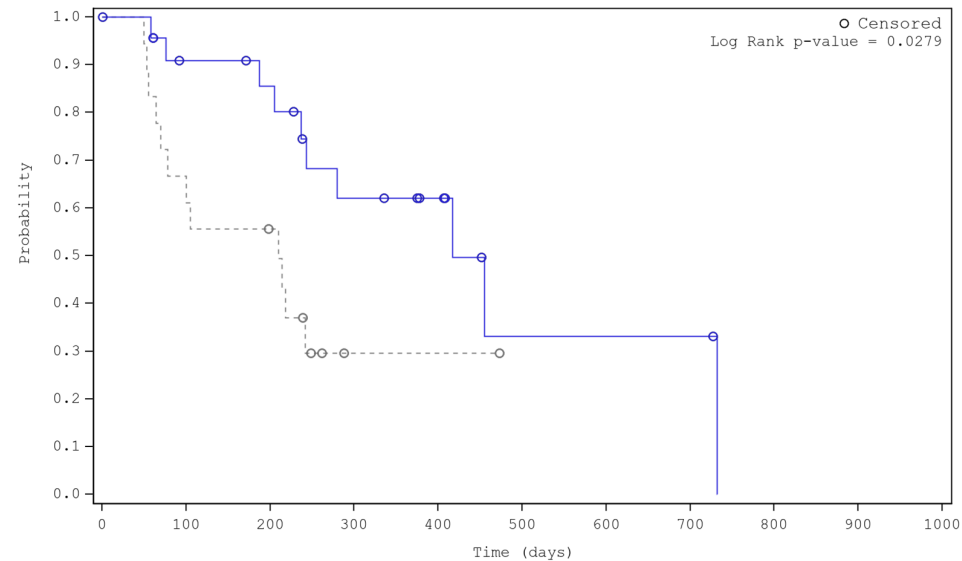
Placebo	18	15	8	2	1	0	0	0	0	0	0
GC4419 90 mg	24	21	18	12	8	4	3	3	0	0	0

P-value = 0.0551

Hazard Ratio = 0.30

## Distant Metastases Control

– outside RT Field



Number of Patients at Risk

Placebo	18	12	9	1	1	0	0	0	0	0	0
GC4419 90 mg	24	18	16	10	7	2	2	2	0	0	0

P-value = 0.0279

Hazard Ratio = 0.39

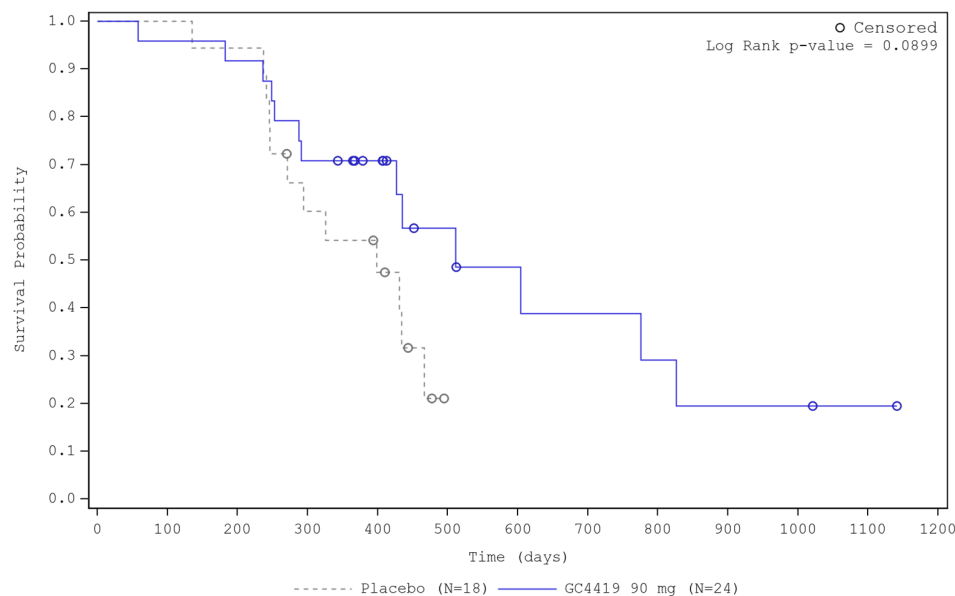
Minimum 12-month follow-up on all patients, HR = Hazard Ratio

DMC and LRC defined as distant metastasis or local regional progression, not censored for treatment post SBRT

# Improved Overall and Progression-Free Survival

46% (11/24) alive on GC arm at last follow up compared to 33% (6/18) on placebo

## Overall Survival (OS)



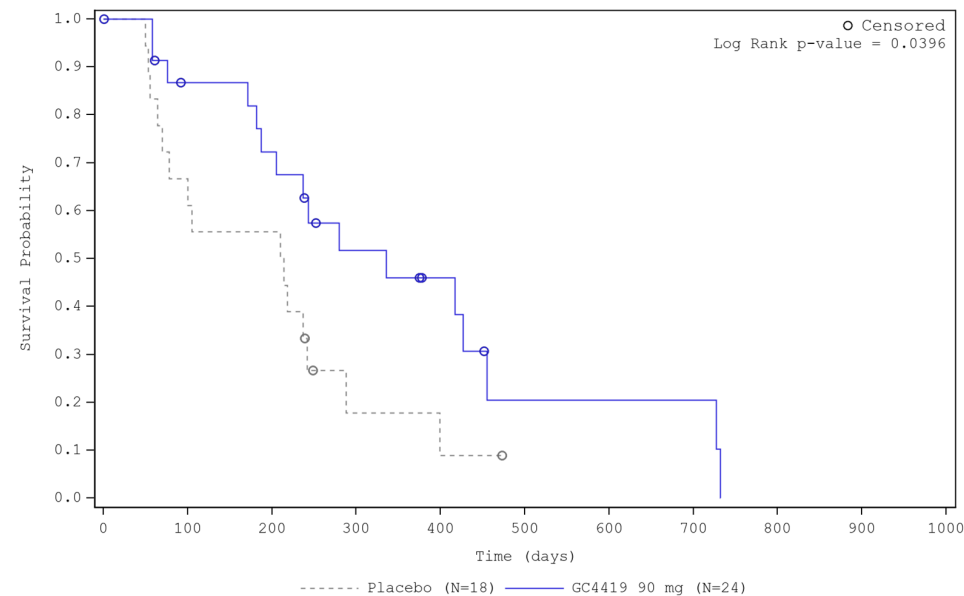
Number of Patients at Risk

Placebo	18	18	17	10	7	0	0	0	0	0	0	0
GC4419 90 mg	24	23	22	17	13	7	5	4	3	2	2	1

P-value = 0.0899

Hazard Ratio = 0.48

## Progression-Free Survival (PFS)



Number of Patients at Risk

Placebo	18	12	10	2	1	0	0	0	0	0	0
GC4419 90 mg	24	18	15	9	6	2	2	2	0	0	0

P-value = 0.0396

Hazard Ratio = 0.46

Minimum 12-month follow-up on all patients,

PFS defined as local progression or distant metastasis, not censored for treatment post SBRT

# Final Efficacy Analysis – Improvements Across All Parameters

Encouraging hazard ratios across all endpoints

## Hazard Ratios Below 0.5 Overall & Progression-Free Survival

### Survival

Median	OS	PFS (mos)
GC	<b>17.0</b>	<b>11.2</b>
PBO	<b>13.3</b>	<b>7.1</b>

Survival	OS	PFS
<b>Hazard Ratio</b>	0.48	0.46

## Hazard Ratios Below 0.4 Local & Distant Tumor Control

### Tumor Control

Median	LRC	DMC (mos)
GC	<b>NR</b>	<b>13.9</b>
PBO	<b>9.6</b>	<b>7.0</b>

Tumor Control	LRC	DMC
<b>Hazard Ratio</b>	0.30	0.39

## 2.5-fold Increase in Response Rate

### Response

Partial Response Rate	
GC	<b>29%</b>
PBO	<b>11%</b>

Surgery	GC	PBO
<b>R0*</b>	5	1

\*R0 = margins free of microscopic tumor (5/5 patients on GC and 1/2 patients on placebo had clear margins at surgery)

LRC = Locoregional Control; DMC = Control of Distant Metastases; PFS = Progression-Free Survival; OS = Overall Survival; NR = Not Reached

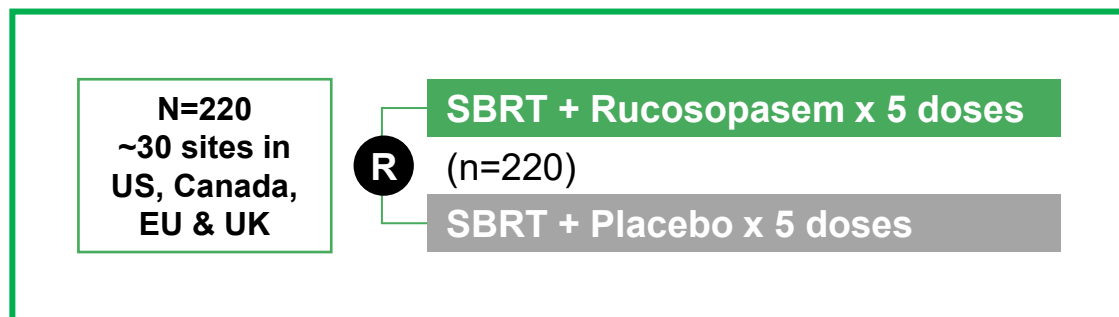


# GRECO-2 Trial of Rucosopasem + SBRT in LAPC

Galera Radiotherapy Efficacy Cancer Optimization

- Multicenter, double-blinded, placebo-controlled trial
- 220 patients, 1:1 randomization
- Locally Advanced Pancreatic Cancer (LAPC) – unresectable or borderline resectable, non-metastatic
- ECOG Performance 0-2
- Must have 6 weeks or more of chemotherapy (FOLFIRINOX or Gemcitabine doublet regimen)
- Stratified for borderline resectable vs. unresectable

Rucosopasem 100mg IV or placebo administered over 15 mins  
<3 hrs before SBRT (5 fractions of 10 Gy each)

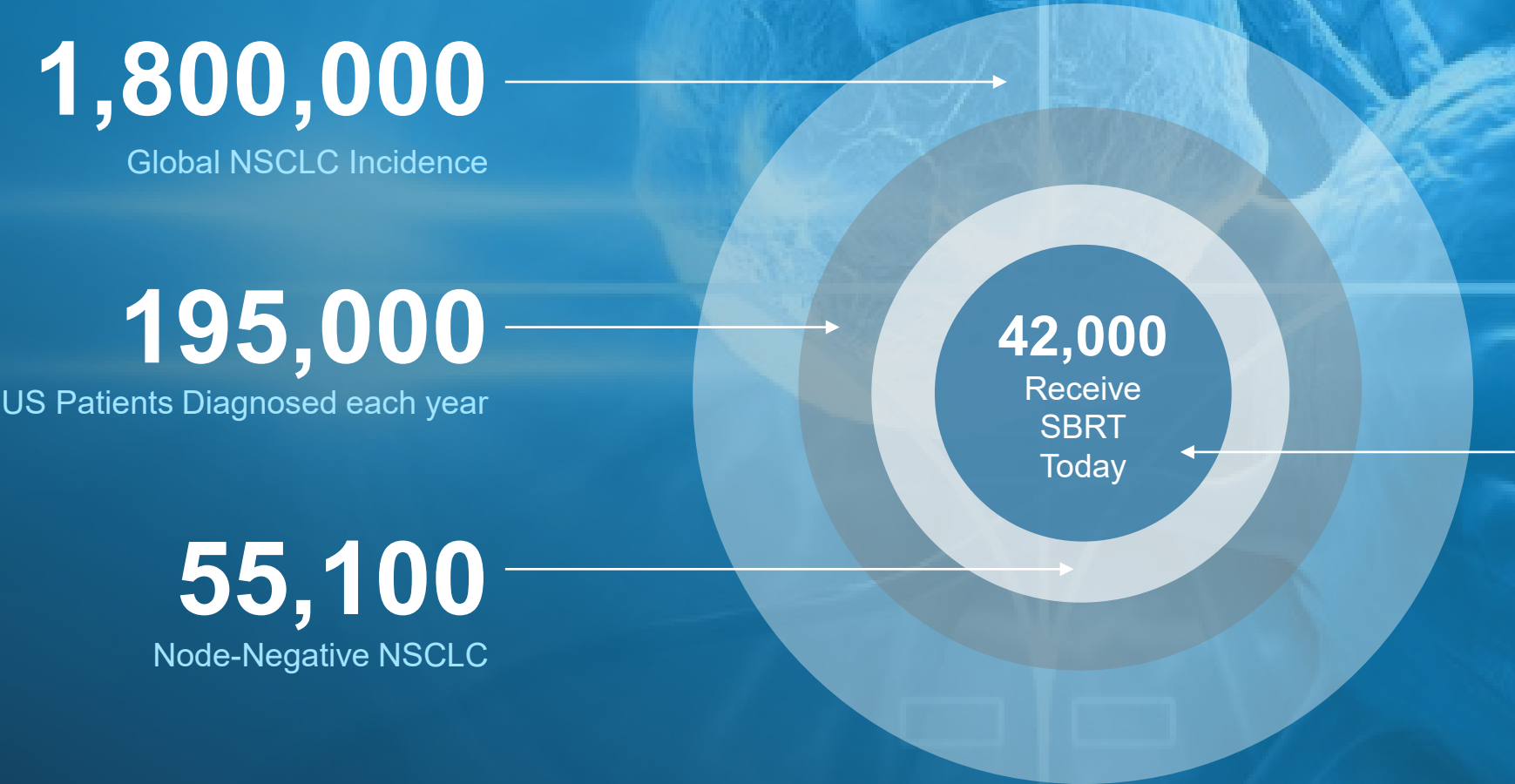


- Primary Endpoint: Overall Survival
- Secondary Endpoints: PFS, LRC, TDM, surgical resection, in-field response rate, acute & late toxicity

PFS = Progression-Free Survival; LRC = Locoregional Control; TDM = Time to Distant Metastasis

# SBRT for Non-Small Cell Lung Cancer

SBRT is an established treatment for central and large peripheral NSCLC tumors



All SBRT	14,600	12,120	15,430
Node-Negative NSCLC	Peripheral Tumor >3cm	Central Tumor <3cm	Central Tumor >3cm
Surgery ONLY	16%	30%	12%
SBRT (+/- other modalities)	81%	67%	85%
Other	3%	2%	4%

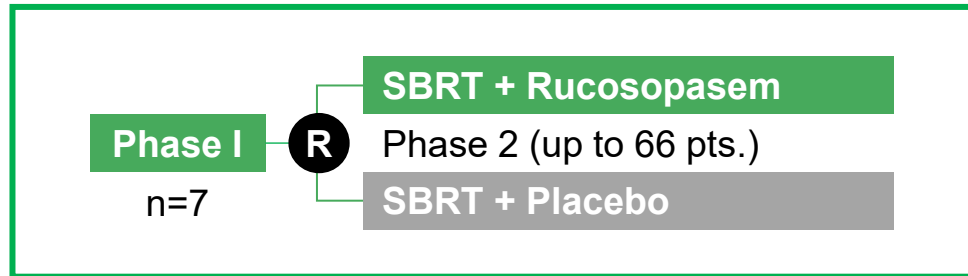
Source: Globocan 2020 and US SEER Data in CA Cancer J Clin 2023; Decision Resources Market Sizing Report, Oct 2020

# GRECO-1 Trial of Rucosopasem + SBRT in NSCLC

Galera Radiotherapy Efficacy Cancer Optimization

## GRECO-1 Trial

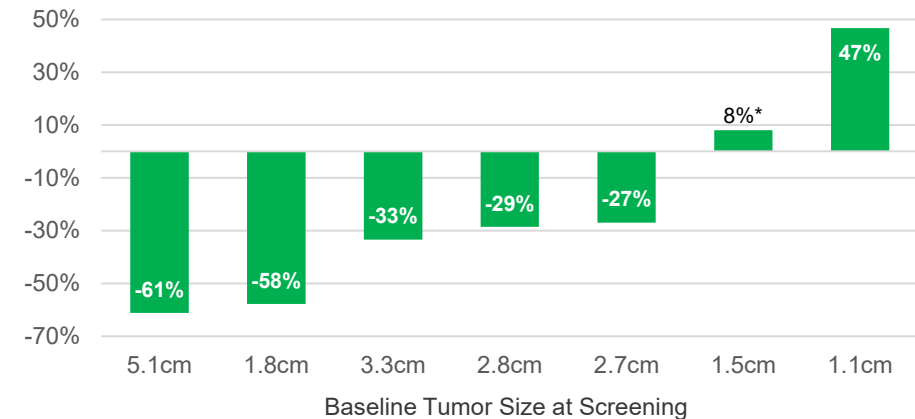
Rucosopasem 100mg IV or placebo over 15 mins  
before each SBRT fraction



- Patients with central and/or large NSCLC tumors
- Single-arm open label Phase 1 stage complete
- Multicenter, double-blinded, placebo-controlled Phase 2 stage actively enrolling; anticipate topline data in 2H2024
- SBRT Dose Schedule:
  - Phase 1: 5 fractions x 10 Gy
  - Phase 2: 5 x 10 Gy or 3 x 18 Gy

## Phase 1 Results

- Rucosopasem + SBRT was well tolerated in Phase 1 with fatigue, cough & nausea most frequent adverse events (common in patients receiving RT)
- Pulmonary function preserved:
  - No Grade 2-4 declines in DLCO<sup>1</sup> (RTOG scale) with rucosopasem
  - Historical expectation 7-12% in prospective trial<sup>2</sup> evaluating effect of lung SBRT on pulmonary function (4-5 fractions, n=127)
- Target tumor volume at 6 months post SBRT + Rucosopasem, as follows:



\* Measurement at 3 months, target lesion unevaluable at 6 months; progressed out of RT field at 6 months; only patient with prior chemotherapy

<sup>1</sup>DLCO is the diffusing capacity of the lung for carbon monoxide, a measurement of the lung's ability to transfer gas from inspired air to the bloodstream.

<sup>2</sup>Stone B, Mangona VS, Johnson MD et.al. Changes in pulmonary function following image-guided stereotactic lung radiotherapy. J Thorac Oncol. 2015;10: 1762-1769

RTOG=Radiation Therapy Oncology Group

# Rucosopasem

Potential to increase anti-cancer efficacy of stereotactic body radiation therapy

- **Rucosopasem shows strong potential as anti-cancer agent in combination with SBRT**
  - Clinical pilot trial demonstrated meaningful improvements in multiple cancer endpoints<sup>1</sup>
  - Preclinical data illustrate potent mechanism-of-action
- **Large market opportunities with little competition and composition-of-matter patent to 2038**
  - Locally-advanced pancreatic cancer ~18k patients
  - Early-stage lung cancer ~55k patients
- **Rucosopasem anti-cancer trials enrolling with topline data expected in 2024**
  - GRECO-1 topline in NSCLC in 2H 2024
  - GRECO-2 topline in LAPC by Y/E 2024

<sup>1</sup>The first SBRT combination trial used GC4419 (avasopasem). Observations from this pilot trial used to guide development of rucosopasem in combination with SBRT.

# Reducing IMRT Toxicity





# Avasopasem NDA Update

Complete Response Letter (CRL) received in August 2023; plan to meet with FDA on next steps

- No FDA-approved drugs for radiotherapy-induced SOM in HNC
- Avasopasem has Breakthrough Therapy and Fast Track Designations
- NDA was submitted in December 2022 based on statistically significant, clinically meaningful data from two placebo-controlled randomized trials: ROMAN and GT-201
- NDA was granted priority review by FDA with August 9<sup>th</sup> PDUFA Date
- Received CRL in August 2023; FDA stated results from an additional clinical trial will be required for resubmission
- Intend to request Type A meeting with FDA to discuss next steps

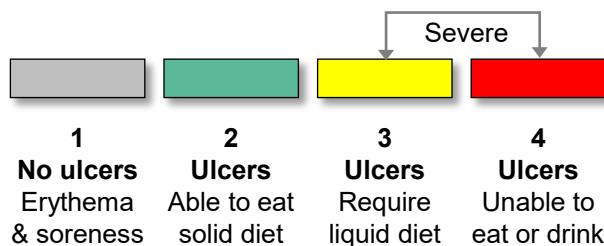
NDA=New Drug Application; FDA=U.S. Food and Drug Administration; PDUFA=Prescription Drug User Fee Act

# Severe Oral Mucositis in Head & Neck Cancer

The most burdensome toxicity of standard-of-care chemoradiotherapy (radiotherapy & cisplatin)<sup>1</sup>

## 70% Patients Get SOM (Grade 3 or 4 OM)

### WHO Scale Criteria for Oral Mucositis



## Current Approaches Lack Efficacy

MASCC Guidelines focus principally on symptoms<sup>2</sup>

- Basic oral care
- Opioids, anesthetics
- Coating agents
- Benzydamine
- Anti-inflammatories
- Laser and other light therapy

## Physicians Consider Topicals Ineffective

Market Research with 150 Radiation Oncologists<sup>1</sup>

- Only 20% of physicians believe topical agents perform well for oral mucositis

<sup>1</sup>Galera Market Research

<sup>2</sup>Elad S et al, MASCC/ISOO Clinical Practice Guidelines for the Management of Mucositis Secondary to Cancer Therapy. Cancer 2020;126:4423-4431

MASCC=Multinational Association of Supportive Care in Cancer

# Avasopasem: First-to-Market Potential for Severe Oral Mucositis

Achieved statistical significance in two randomized trials in patients with head and neck cancer

## Avasopasem Clinical Trials

### Head & Neck Cancer (SOM)<sup>1</sup>

7 weeks IMRT & Cisplatin

### Lung Cancer (Esophagitis)<sup>2</sup>

6 weeks IMRT & Chemo

Phase 1

Phase 2

Phase 3

Trial Status/Anticipated Milestones

ROMAN: AVA vs. Placebo (n=455)

FDA Type A Meeting

GT-201: AVA vs. Placebo (n=223)

Completed & Published<sup>3</sup>

EUSOM: AVA (n=38)

Completed in 2021

Ph 1b/2a AVA (n=43)

Completed & Published<sup>4</sup>

AESOP: AVA in NSCLC

Completed in 2022

**Avasopasem has FDA Breakthrough Therapy Designation based on GT-201 results**

<sup>1</sup>EUSOM was a single-arm multi-center trial evaluating the safety and efficacy of avasopasem in patients with HNC in Europe.

<sup>2</sup>Phase 2a trial that evaluated incidence of esophagitis in patients with lung cancer receiving standard-of-care chemoradiation.

<sup>3</sup>Anderson CM et al. J Clin Oncol. 2019;37(34):3256-3265.

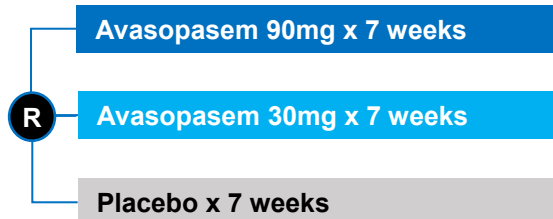
<sup>4</sup>Anderson CM et al. Int J Radiat Oncol Biol Phys. 2018 Feb 1;100(2):427-435.

# Comparison of Galera's Two Placebo-Controlled Trials

Both GT-201 and ROMAN were double-blind placebo-controlled randomized trials

## GT-201 Phase 2b

N=223



### Endpoints

- Primary: Reduction in SOM duration
- Secondary: Reduction in SOM incidence & severity

## Similarities

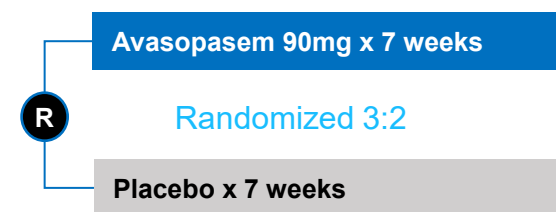


- SoC IMRT + Cisplatin
- 60-minute IV infusion just before IMRT
- WHO Grading
- Multicenter in North America (~90% US)

- Patients with Head & Neck Cancer (locally advanced)
- Same inclusion / exclusion criteria

## ROMAN Phase 3

N=455

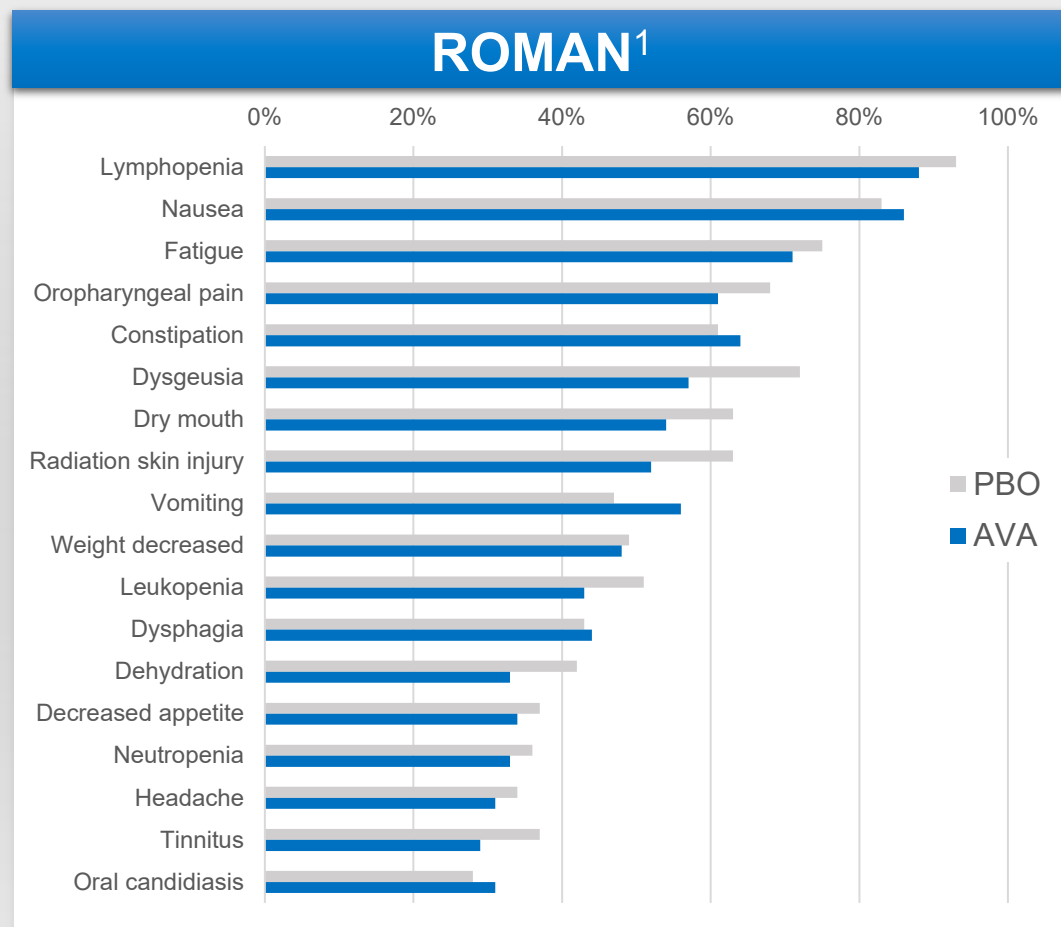


### Endpoints

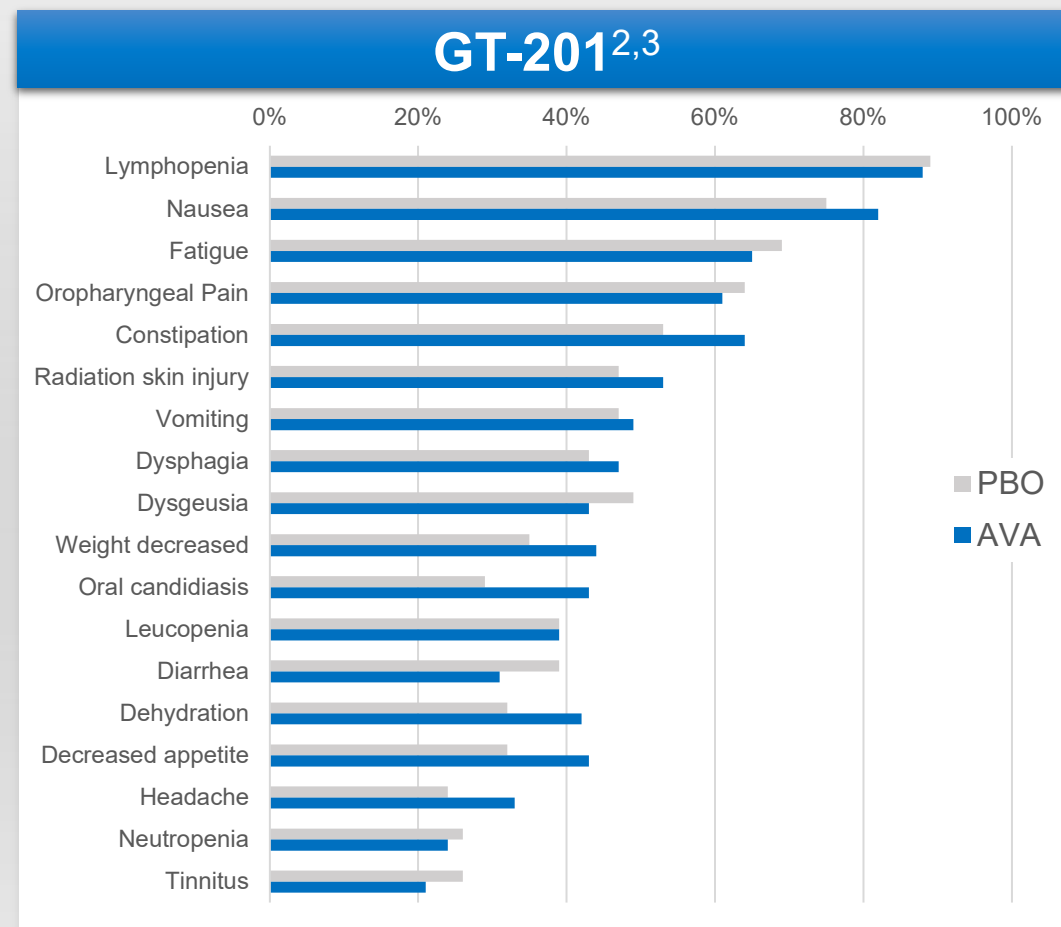
- Primary: Reduction in the incidence of SOM
- Secondary: Reduction in SOM duration & severity

# Most Frequent Adverse Events on the Two Randomized Trials

Avasopasem 90mg appears generally well tolerated (all grades and causes)



<sup>1</sup>ITT population: 166 patients on placebo; 241 on 90mg avasopasem



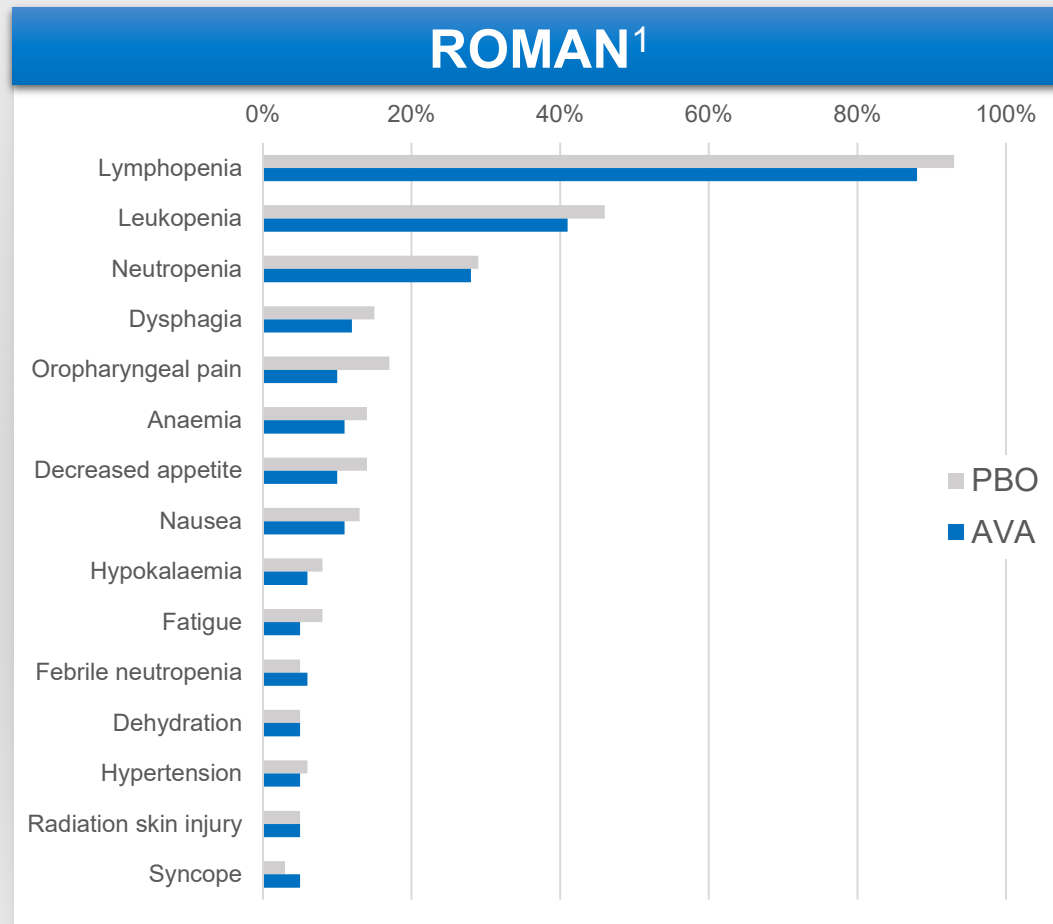
<sup>2</sup>Intent-to-Treat (ITT) population: 72 patients on placebo; 72 patients on 90mg avasopasem

<sup>3</sup>Anderson CM et al. Journal of Clinical Oncology 2019 Dec 1; 37(34): 3256-3265

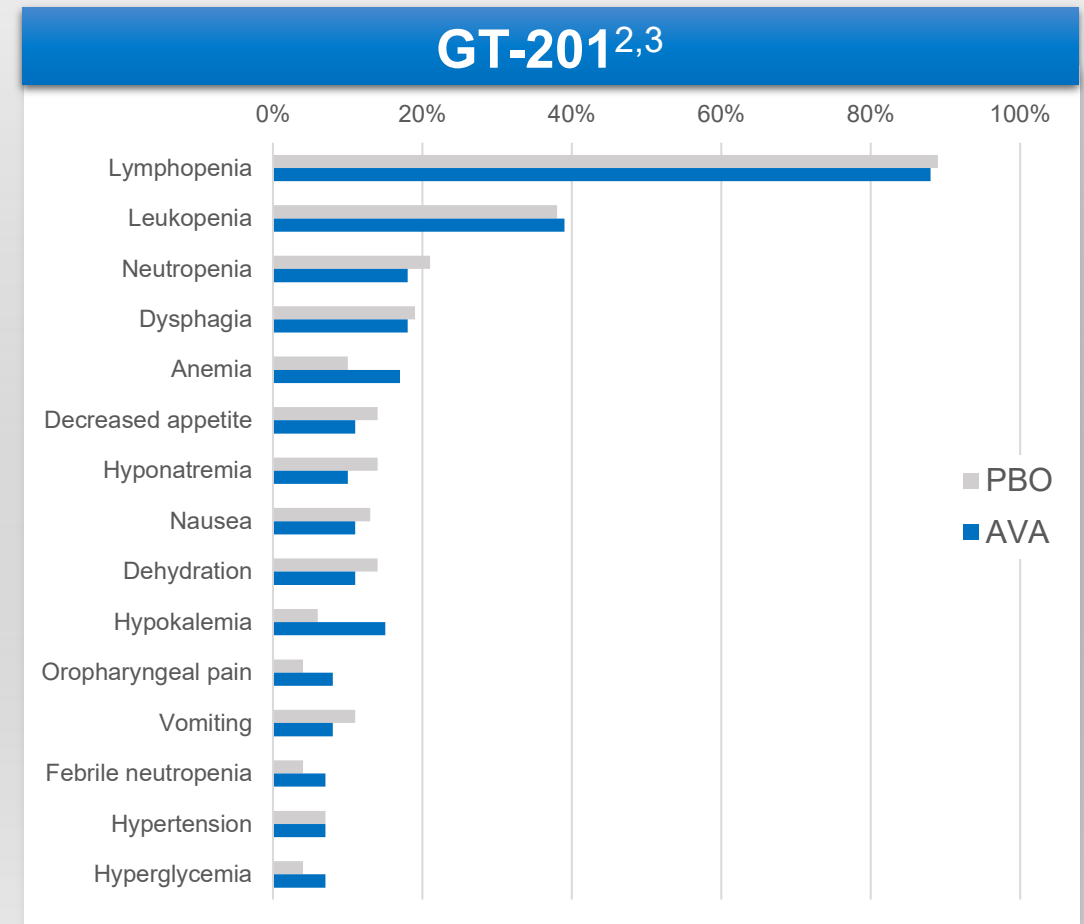


# Most Frequent $\geq$ Grade 3 AEs on the Two Randomized Trials

Avasopasem 90mg appears generally well tolerated



<sup>1</sup>ITT population: 166 patients on placebo; 241 on 90mg avasopasem  
AE = Adverse Event



<sup>2</sup>Intent-to-Treat (ITT) population: 72 patients on placebo; 72 patients on 90mg avasopasem  
<sup>3</sup>Anderson CM et al. Journal of Clinical Oncology 2019 Dec 1; 37(34): 3256-3265

# Multiple Efficacy Parameters Define the Patient Burden of SOM

Incidence doesn't tell full story; real patient examples from ROMAN

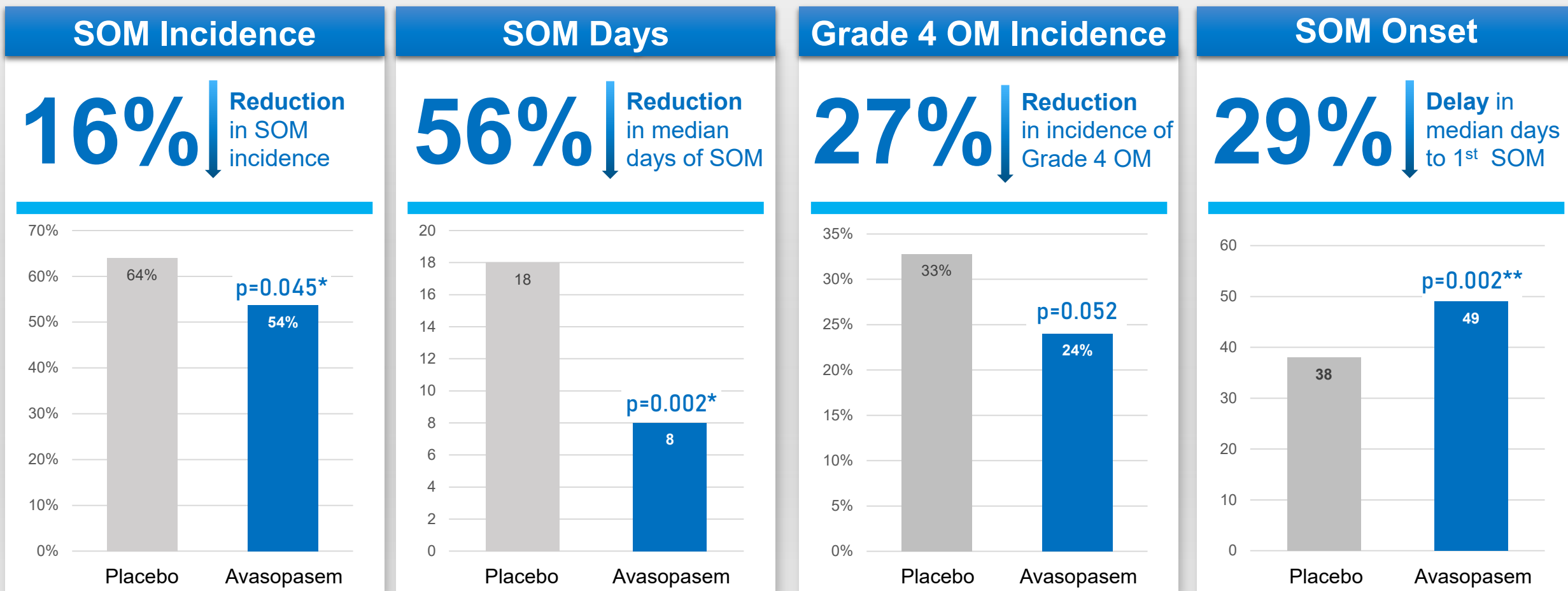
OM evaluation		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	1° endpoint	2° endpoints		Exploratory
Cumulative RT		→ 10 Gy	→ 20 Gy	→ 30 Gy	→ 40 Gy	→ 50 Gy	→ 60 Gy	→ 65–70	Follow-up									SOM incidence	# Days of SOM	Grade 4 incidence	Days to onset
ROMAN patient examples	A	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	---
	B	0	0	0	0	0	0	0	0	0	0	0	1	1	3	0	0	1	7	0	46
	C	0	0	2	2	3	2	2	2	2	2	2	2	0	0	2	2	1	3	0	17
	D	0	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	1	44	0	16
	E	0	0	0	1	2	3	3	4	4	4	4	4	4	4	4	4	1	45	1	20

OM=oral mucositis; RT=radiation therapy

Anderson CM, Lee C, Kelley JR, et al. ROMAN: Phase 3 trial of avasopasem manganese (GC4419) for severe oral mucositis (SOM) in patients receiving chemoradiotherapy (CRT) for locally advanced, nonmetastatic head and neck cancer (LAHNC). Presented at ASCO Annual Meeting, June 3, 2022.

# ROMAN Results (ITT n=407)

Reductions across SOM endpoints; statistical significance on the primary & median days SOM secondary endpoint



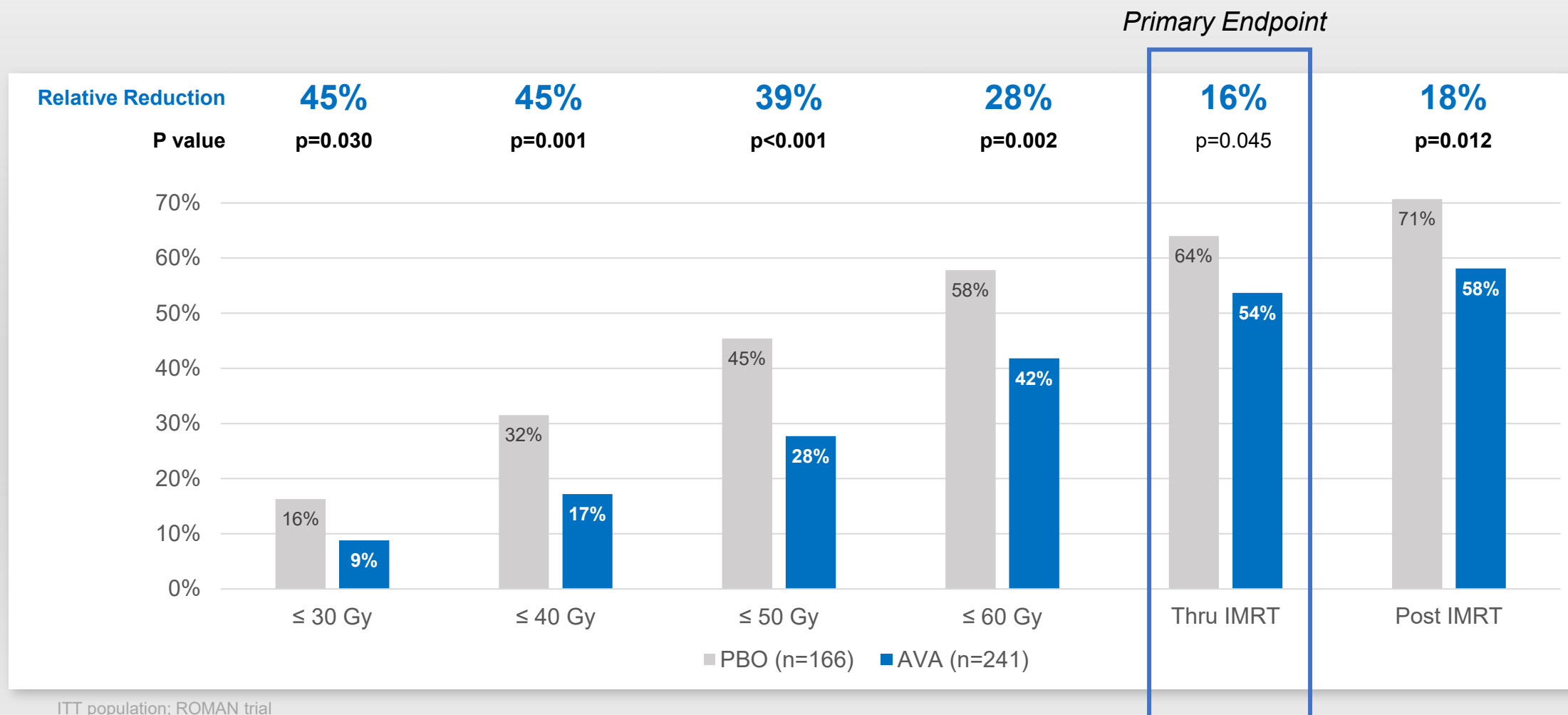
\*Statistical significance per statistical analysis plan for this Phase 3 trial

\*\*Time to Onset was an exploratory endpoint

Anderson CM, Lee C, Kelley JR, et al. ROMAN: Phase 3 trial of avasopasem manganese (GC4419) for severe oral mucositis (SOM) in patients receiving chemoradiotherapy (CRT) for locally advanced, nonmetastatic head and neck cancer (LAHNC). Presented at ASCO Annual Meeting, June 3, 2022.

# Incidence Reduced at All Landmarks of Radiation Therapy

Both before and after primary endpoint at end of IMRT – ITT population

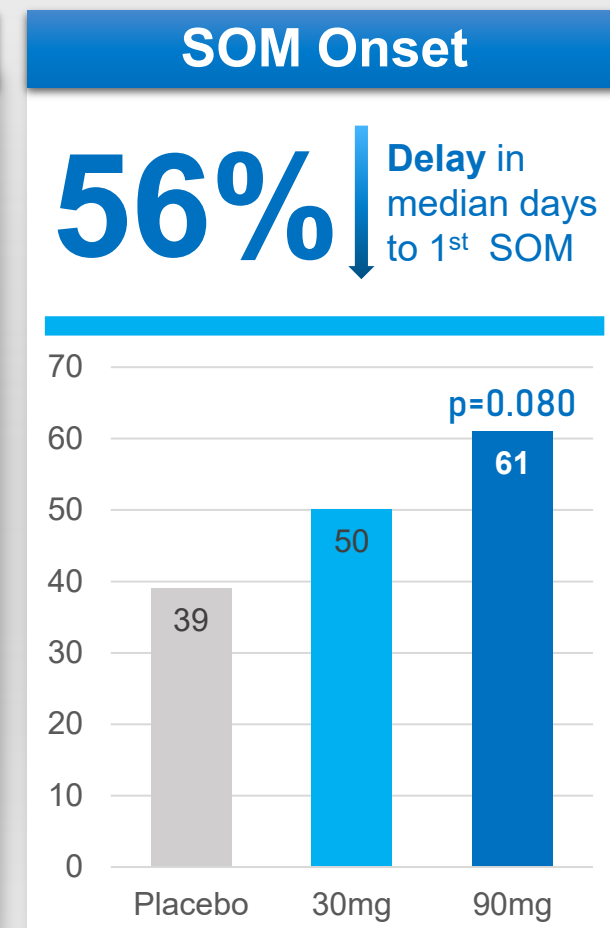
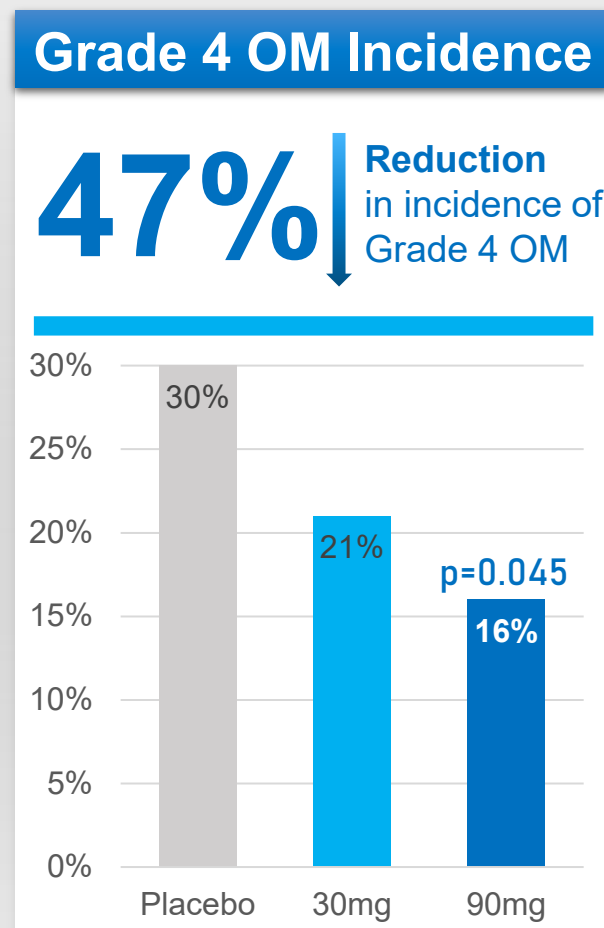
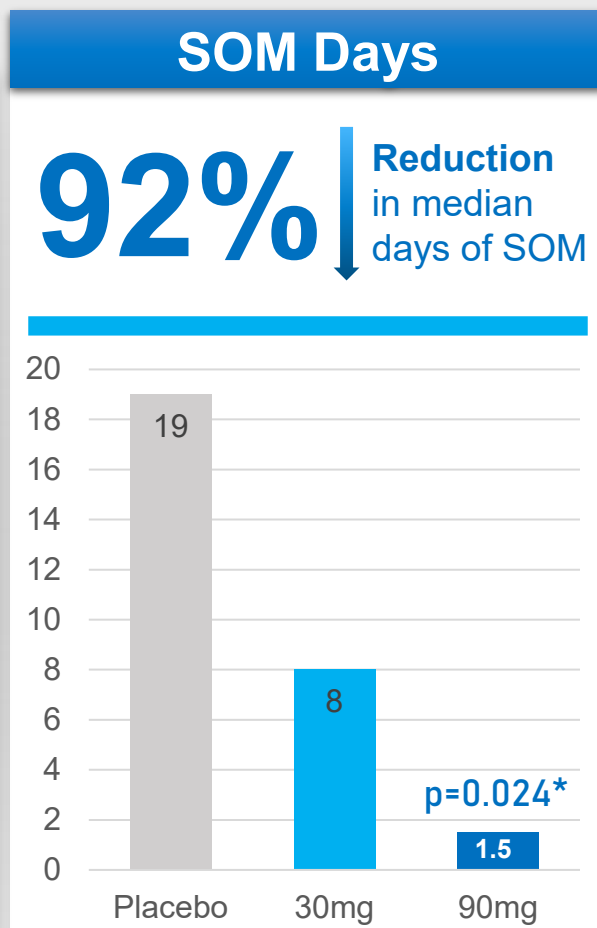
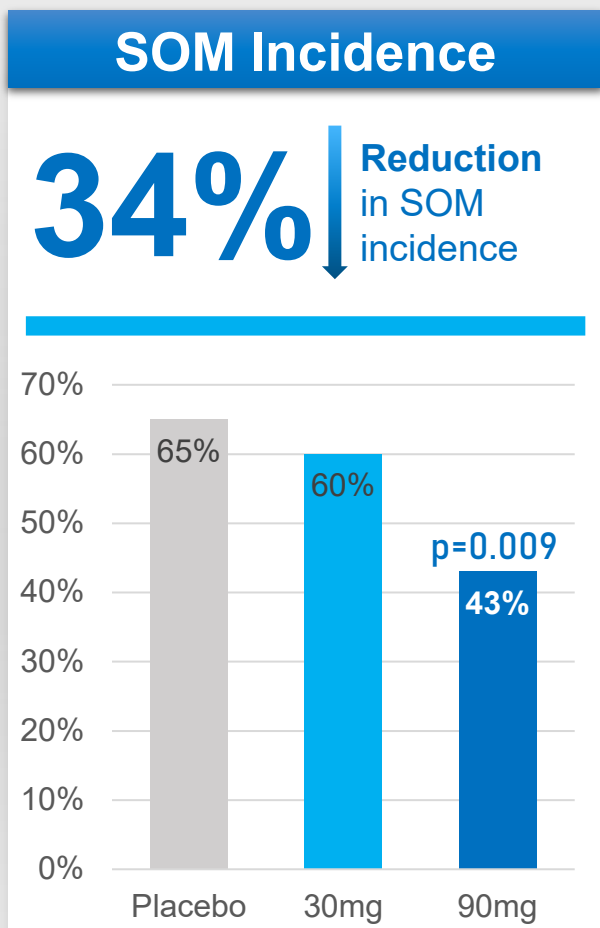


ITT population; ROMAN trial

Anderson CM, Lee C, Kelley JR, et al. ROMAN: Phase 3 trial of avasopasem manganese (GC4419) for severe oral mucositis (SOM) in patients receiving chemoradiotherapy (CRT) for locally advanced, nonmetastatic head and neck cancer (LAHNC). Presented at ASCO Annual Meeting, June 3, 2022.

# GT-201 Results (n=223)

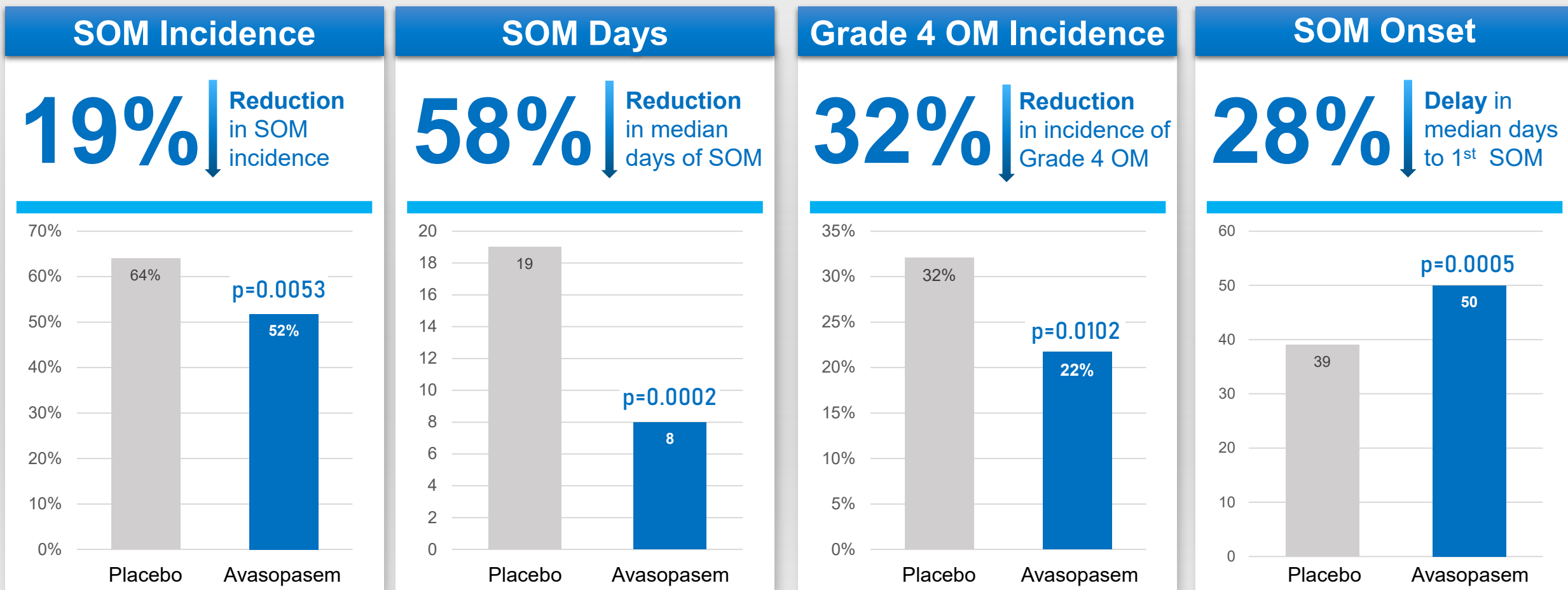
Consistent and encouraging results across SOM endpoints – ITT Population



\*Statistical significance per statistical analysis plan for this trial  
Anderson CM et al. Journal of Clinical Oncology 2019 Dec 1; 37(34): 3256-3265

# Combined Meta-Analysis of the Two Randomized Trials (n=551)

Avasopasem SOM improvement consistent across trials and key parameters



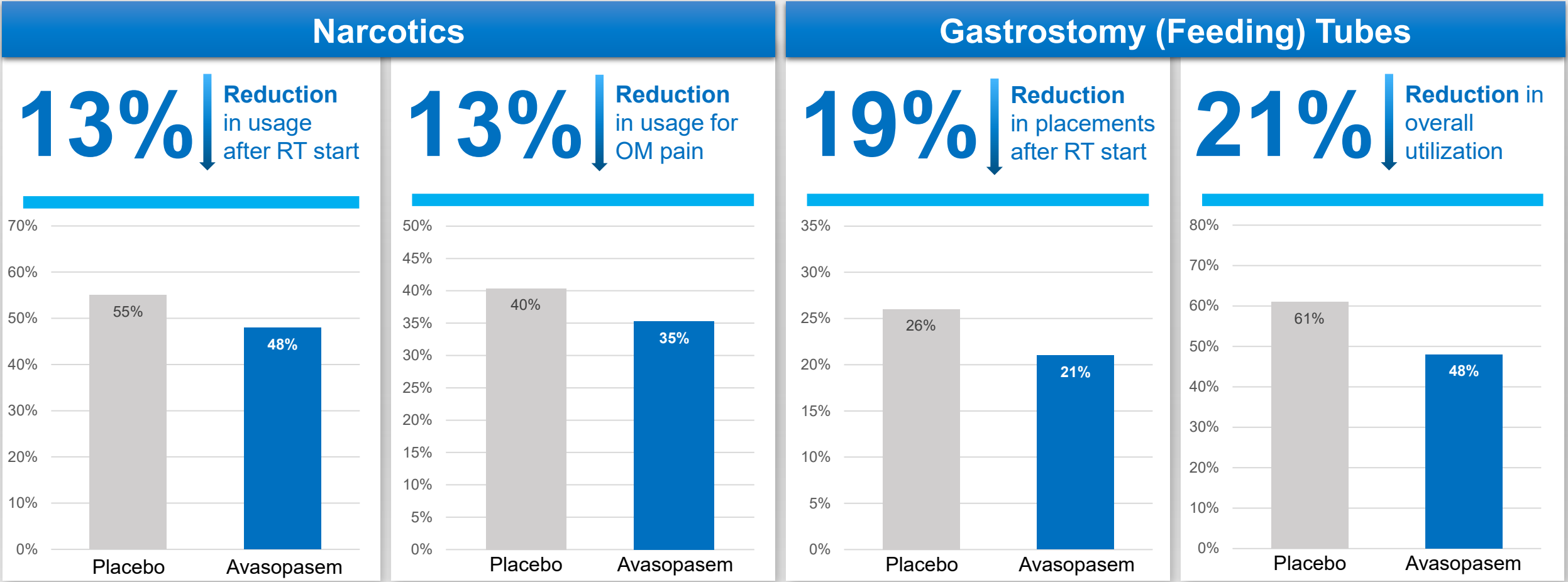
Note: Nominal p values for all endpoints, calculated according to prespecified statistical analysis plan (SAP) for the meta-analysis; 238 patients on placebo; 313 patients on 90mg avasopasem

Anderson CM, Lee C, Kelley JR, et al.. Tumor Outcomes for ROMAN: Phase 3 Trial of Avasopasem Manganese (GC4419) for Severe Oral Mucositis (SOM) in Patients Receiving Chemoradiotherapy (CRT) for Locally Advanced Head and Neck Cancer (LAHNC). Presented at ASTRO Annual Meeting, October 26, 2022.



# Avasopasem Reduced Narcotic and Feeding Tube Usage

Reductions in SOM with avasopasem appeared to decrease utilization in ROMAN trial

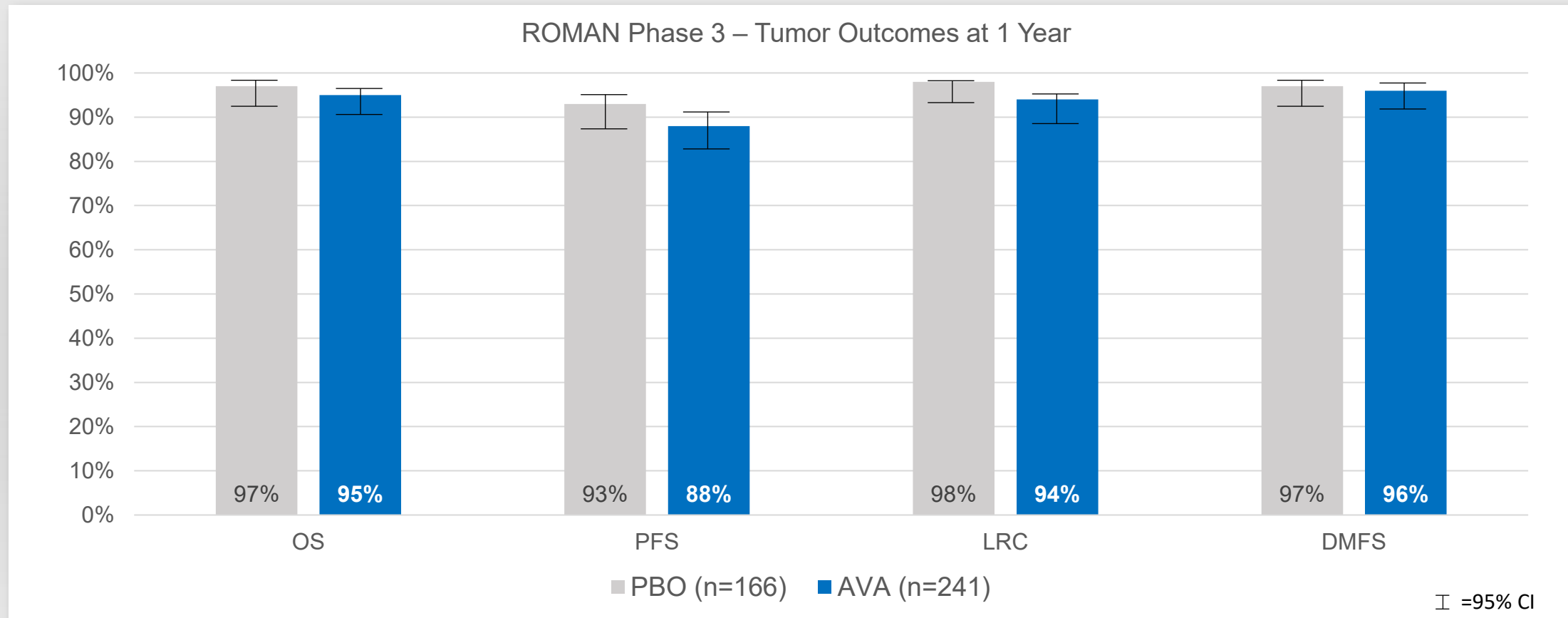


ITT population; ROMAN trial

Saunders D, Lee CM, Kelley JR, et al. ROMAN: Phase 3 trial of avasopasem to reduce chemoradiotherapy (CRT)-related severe oral mucositis (SOM) in patients with head and neck cancer (HNC). Presented at Multinational Association of Supportive Care in Cancer/International Society of Oral Oncology Annual Meeting, June 23-25, 2022.

# ROMAN Long-term Outcomes: Tumor Control & Survival

Overlapping 95% confidence intervals at 1 year; consistent with GT-201 tumor outcomes<sup>1</sup>



OS = overall survival, PFS = progression-free survival, LRC = locoregional control, DMFS = distant metastasis-free survival. 95% Confidence Intervals for each endpoint. Anderson CM, Lee C, Kelley JR, et al.. Tumor Outcomes for ROMAN: Phase 3 Trial of Avasopasem Manganese (GC4419) for Severe Oral Mucositis (SOM) in Patients Receiving Chemoradiotherapy (CRT) for Locally Advanced Head and Neck Cancer (LAHNC). Presented at ASTRO Annual Meeting, October 26, 2022.

<sup>1</sup> Anderson CM, Lee CM, Saunders D, et al. Two-year tumor outcomes of Phase 2B, randomized, double-blind trial of avasopasem manganese (GC4419) versus placebo to reduce severe oral mucositis due to concurrent radiation therapy and cisplatin for head and neck cancer. Int J Radiation Oncol Biol Phys. June 17 2022 [online ahead of print].

# Reducing Cisplatin Toxicity



# Cisplatin – One of the Most Commonly Used Chemo Drugs

Despite available prevention & treatment measures, renal toxicity is one of the major dose-limiting side effects

- **Cisplatin used to treat many tumor types**
  - Head & neck, lung, ovarian, breast, brain, renal and testicular cancers
- **Cisplatin-induced acute kidney injury occurs in as many as 31.5% of cases<sup>1</sup>**
  - Decline in kidney function continues up to 5 years after treatment
- **Published retrospective study showed 29% of patients had chronic kidney disease at one year following cisplatin treatment compared to 11% at baseline<sup>2,3</sup>**
- **Boxed warning for PLATINOL® (cisplatin)**
  - "Cumulative renal toxicity associated with PLATINOL is severe."

<sup>1</sup>ZhiYu D et al. Therapeutic Advances in Medical Oncology 2020, Vol. 12:1-15

<sup>2</sup>Latcha S et al. Clin J Am Soc Nephrol. 2016 Jul 7; 11(7): 1173-1179.

<sup>3</sup>CKD defined by Nat. Kidney Foundation as eGFR (estimated Glomerular Filtration Rate) < 60 mL/min/1.73 m<sup>2</sup> (Grade 3+ according to KDIGO criteria)

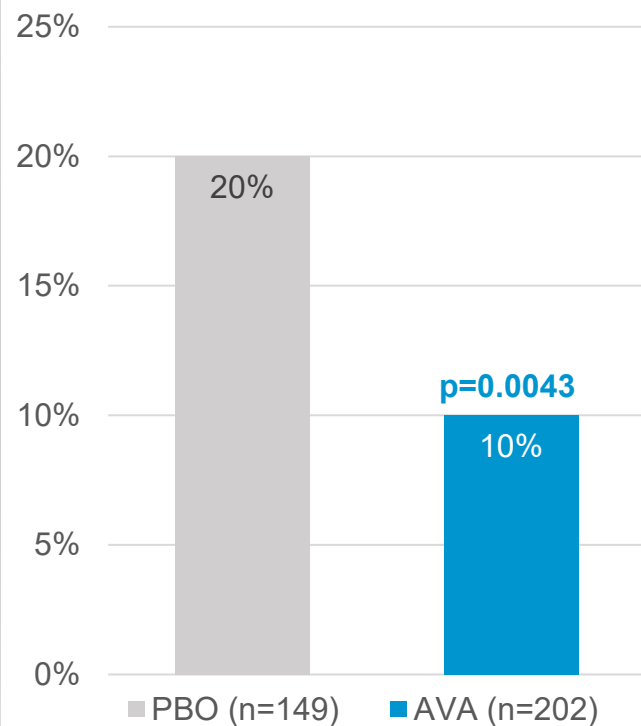
# ROMAN Long-Term Outcomes: Cisplatin Renal Endpoints

Avasopasem halved Chronic Kidney Disease (CKD) at 1 year; a prospectively defined endpoint

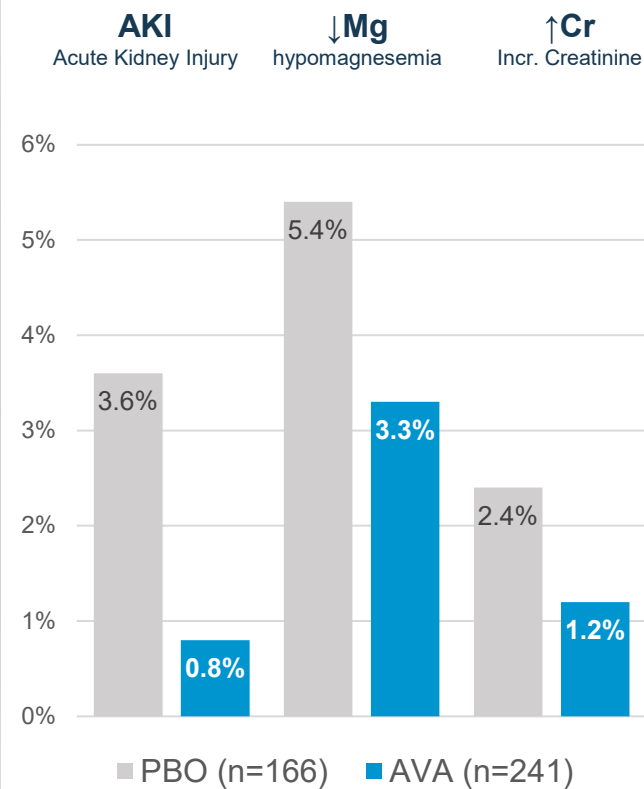
## Previous Scientific Data

- Superoxide drives cisplatin nephrotoxicity
  - Mapuskar, *Redox Biol* 2021
- Avasopasem preclinically prevented cisplatin acute kidney injury
  - Mapuskar, *Antioxid* 2018
- Retrospective analysis of Phase 2b patient subset suggested CKD prevention
  - Steinbach, *ASCO* 2020

## CKD @ 1 Year on ROMAN



## Cisplatin Renal Gr. 3+ AEs

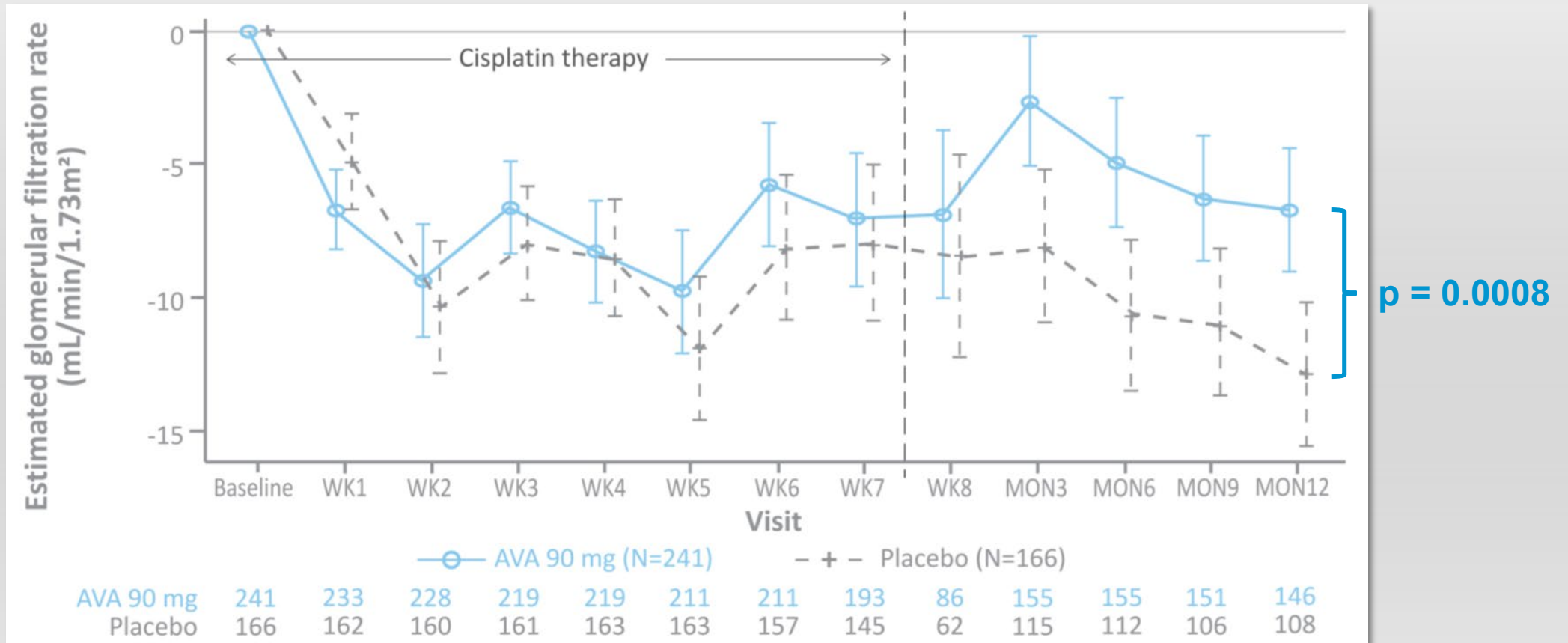


ITT population; CKD defined by Nat. Kidney Foundation as eGFR (estimated Glomerular Filtration Rate) < 60 mL/min/1.73 m<sup>2</sup> (approx. the % of normal kidney function that is working)

Anderson CM, Lee C, Kelley JR, et al.. Tumor Outcomes for ROMAN: Phase 3 Trial of Avasopasem Manganese (GC4419) for Severe Oral Mucositis (SOM) in Patients Receiving Chemoradiotherapy (CRT) for Locally Advanced Head and Neck Cancer (LAHNC). Presented at ASTRO Annual Meeting, October 26, 2022.

# Significant improvements in preservation of kidney function

Beginning by 3 months through one-year end of follow-up



Least squares mean change from baseline were generated using a mixed-effects model repeated measures (MMRM) analysis with parameters treatment, visit, and treatment-by-visit interaction as factors and baseline value as covariate. Error bars represent standard errors. Note: eGFR was calculated using the CKD-EPI equation.

Allen BG, Spitz DR, Mapuskar KA, et al. One-year Reductions in Cisplatin Related Chronic Kidney Disease (CKD) in Patients With Head and Neck (HNC) Cancer Treated With Avasopasem Manganese: A Prespecified Analysis From the Phase 3 ROMAN Trial. Presented at ASCO Annual Meeting, June 5, 2023.

# SOM Market Opportunity





# Head and Neck Cancer – Large Market Opportunity

Severe Oral Mucositis is >\$1.5B total market opportunity in the US<sup>1</sup>

880,000

Global Head & Neck Cancer Incidence

66,900

US Patients Diagnosed each year

43,500

US Patients at Risk for RT-related SOM



Standard-of-care IMRT and cisplatin regimen is highly effective treatment for patients with locally advanced HNC

Source: Globocan 2020 and US SEER Data in CA Cancer J Clin 2023

<sup>1</sup> Based on 43,500 US patients and branded supportive care price analogs

# Concentrated Physician Population

SOM is most burdensome side effect of curative IMRT + cisplatin regimen

**5,000**

Radiation Oncologists  
in US


**2,500**

Radiotherapy  
Treatment Sites

**700**

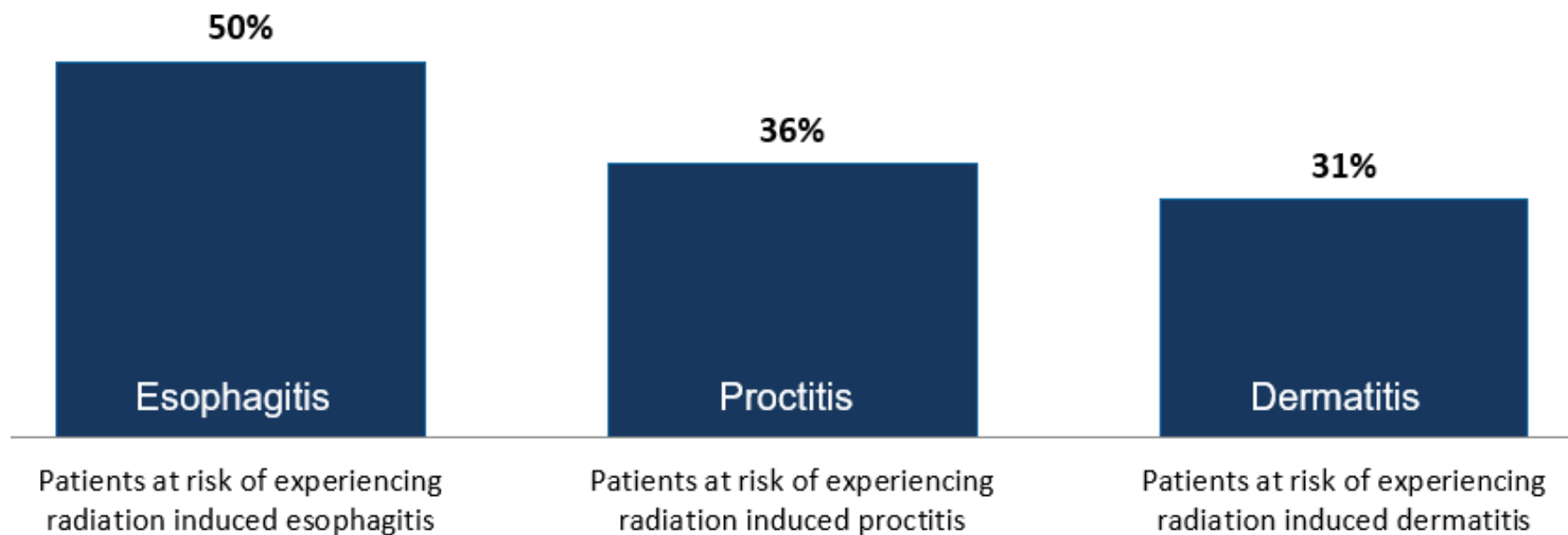
Top centers where >80%  
HNC patients are treated

**Initial  
Sales  
Focus**



# Beyond Oral Mucositis: Other RT-Related Toxicities

Physicians view SOM data as potentially applicable to other radiation-related toxicities



150 Rad Oncs were asked the following: *Given the demonstrated ability of Product X to prevent radiation-induced toxicities in the oral mucosa, please indicate how you might use (maximum %) Product X for the following radiation associated conditions.*

Galera primary research with 150 Radiation Oncologists



# Esophagitis in Lung Cancer

**2,200,000**

Global Lung Cancer Incidence

**238,000**

US Patients Diagnosed each year

**50,000**

US Patients at Risk for RT-related Esophagitis

Initial  
Target  
Population

Locally advanced NSCLC frequently treated  
with IMRT and chemotherapy

Source: Globocan 2020 and US SEER Data in CA Cancer J Clin 2023

# Esophagitis: High Unmet Need in Lung Cancer

Common Side Effect of Chemoradiotherapy (IMRT x 6 weeks)

**50-60% Get Grade 2+<sup>1</sup>**  
**20-30% Get Grade 3+<sup>2,3</sup>**

NCI Grading for esophagitis<sup>4</sup>

- 
- 1** Asymptomatic
  - 2** Symptoms & altered eating/swallowing
  - 3** Severely altered eating or swallowing
  - 4** Required urgent operative intervention
  - 5** Results in death

**Current Approaches  
Lack Efficacy**


No established drug therapy

Supportive care measures:

- Soft bland diet
- Prophylactic antifungals
- Dilation if stricture develops

**AESOP Trial Design  
in Lung Cancer**

Single-arm Phase 2 Trial

- 
- 6 weeks of standard IMRT to  $\geq 5$  cm of esophagus  

  - Will compare esophagitis rate with historical data

<sup>1</sup>Palma, DA. (2013). Int J Radiation Oncol Biol Phys, Vol. 87 (4), 690-696.

<sup>2</sup>LAMP Study. Belani, CP et al. (2005). J Clin Oncol, 23:5883-5891 (carboplatin + paclitaxel chemo).

<sup>3</sup>RTOG 9410. Curran, WJ et al. (2011). J Natl Cancer Inst, 103:1452–1460 (cisplatin + vinblastine).

<sup>4</sup>NCI Common Toxicity Criteria 5.0.

# Esophagitis Trial (AESOP)

Low incidence of Grade 3+ esophagitis with avasopasem compared to literature

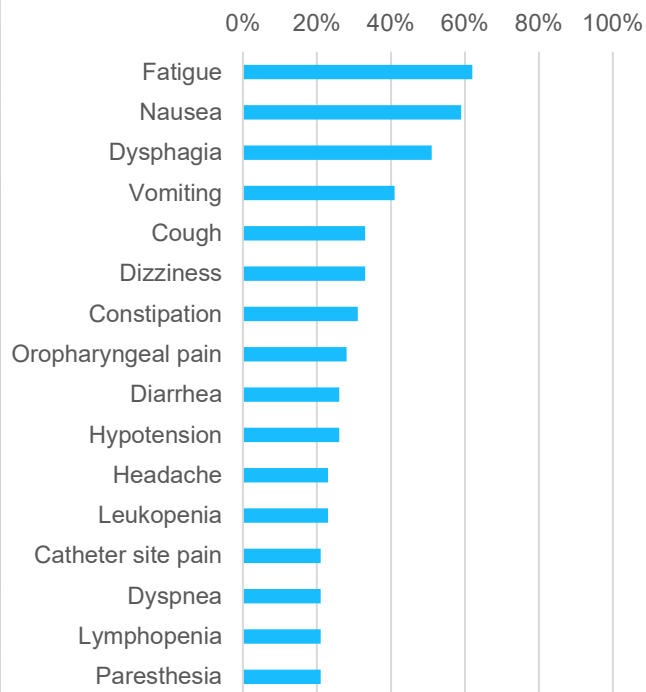
## Trial Design Patients and Treatment

- Single-arm Phase 2a open-label trial
- Patients with lung cancer (NSCLC or SCLC)
- Standard-of-care chemoradiotherapy over 6 weeks (60 Gy IMRT) + avasopasem 90mg
- Eligibility criteria required  $\geq 5$  cm ( $\geq 20\%$ ) of the esophagus in the radiotherapy field
  - Patients who get  $\geq 60$  Gy to  $\geq 17\%$  of their esophagus are considered at highest risk: 59% risk of grade  $\geq 2$  and 22% of grade  $\geq 3$  esophagitis<sup>1</sup>

Pt #	Disposition
39	Enrolled (Safety)
35	Full Chemoradiation (6 weeks)
29	Per Protocol AVA ( $\geq 5$ weeks)

## Safety

AE profile consistent with chemoradiotherapy



AEs  $>20\%$  (n=39)

## AESOP Results (Per Protocol n=29)

### Esophagitis Incidence by Grade<sup>2</sup>

	Weeks of IMRT					
	1	2	3	4	5	6
Gr. 2	-	10%	17%	38%	48%	45%
Gr. 3	-	-	3%	-	-	3%
Gr. 4-5	-	-	-	-	-	-

- Grade 3 esophagitis was much less than in comparable trial results
- Most patients free of Grade 3 for most weeks of treatment—no Grade 4 or 5

Trial	Pt #	CXRT Arms	Grade 3+4
AESOP	29	CT+RT	7%
LAMP Study <sup>3</sup>	74	CT $\rightarrow$ CT+RT	19%
	92	RT+CT $\rightarrow$ CT	28%
RTOG 9410 <sup>4</sup>	193	CT+RT	22%

<sup>1</sup>Palma, DA. (2013). Int J Radiation Oncol Biol Phys, Vol. 87 (4), 690-696.

<sup>2</sup>NCI Common Toxicity Criteria 5.0.

<sup>3</sup>LAMP Study. Belani, CP et al. (2005). J Clin Oncol, 23:5883-5891 (carboplatin + paclitaxel chemo).

<sup>4</sup>RTOG 9410. Curran, WJ et al. (2011). J Natl Cancer Inst, 103:1452-1460 (cisplatin + vinblastine).

# Thank you.

