

31. Mai – 3. Juni 2024



EUROPEAN  
HEMATOLOGY  
ASSOCIATION

- **Kolorektales Karzinom**
- **Lungenkarzinom**
- **Mammakarzinom**
- **Melanom**
- **Ösophaguskarzinom**
- **Palliativmedizin**
- **Prostatakarzinom**
- **Chronische Myeloische Leukämie**
- **Multiples Myelom**

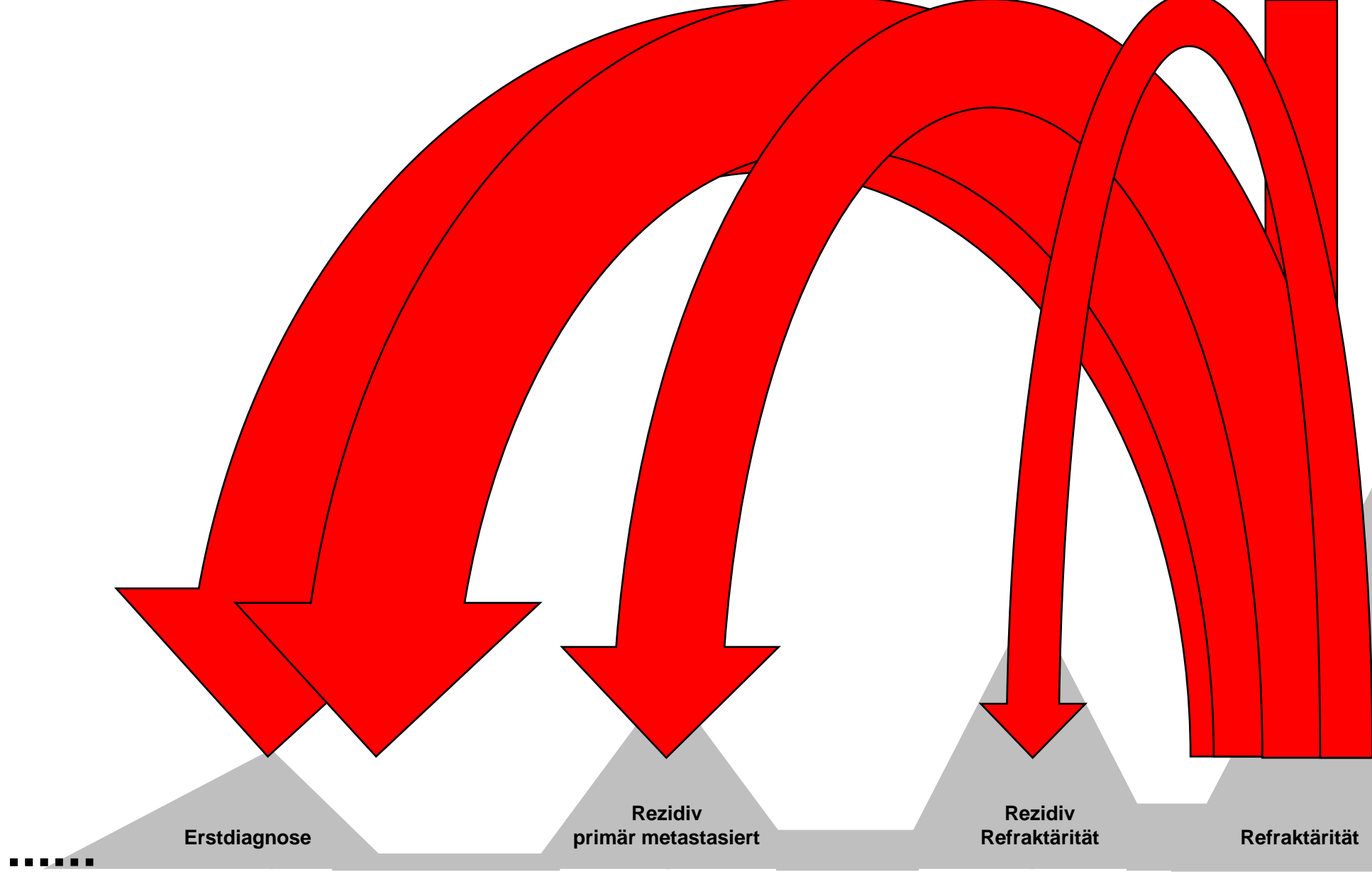


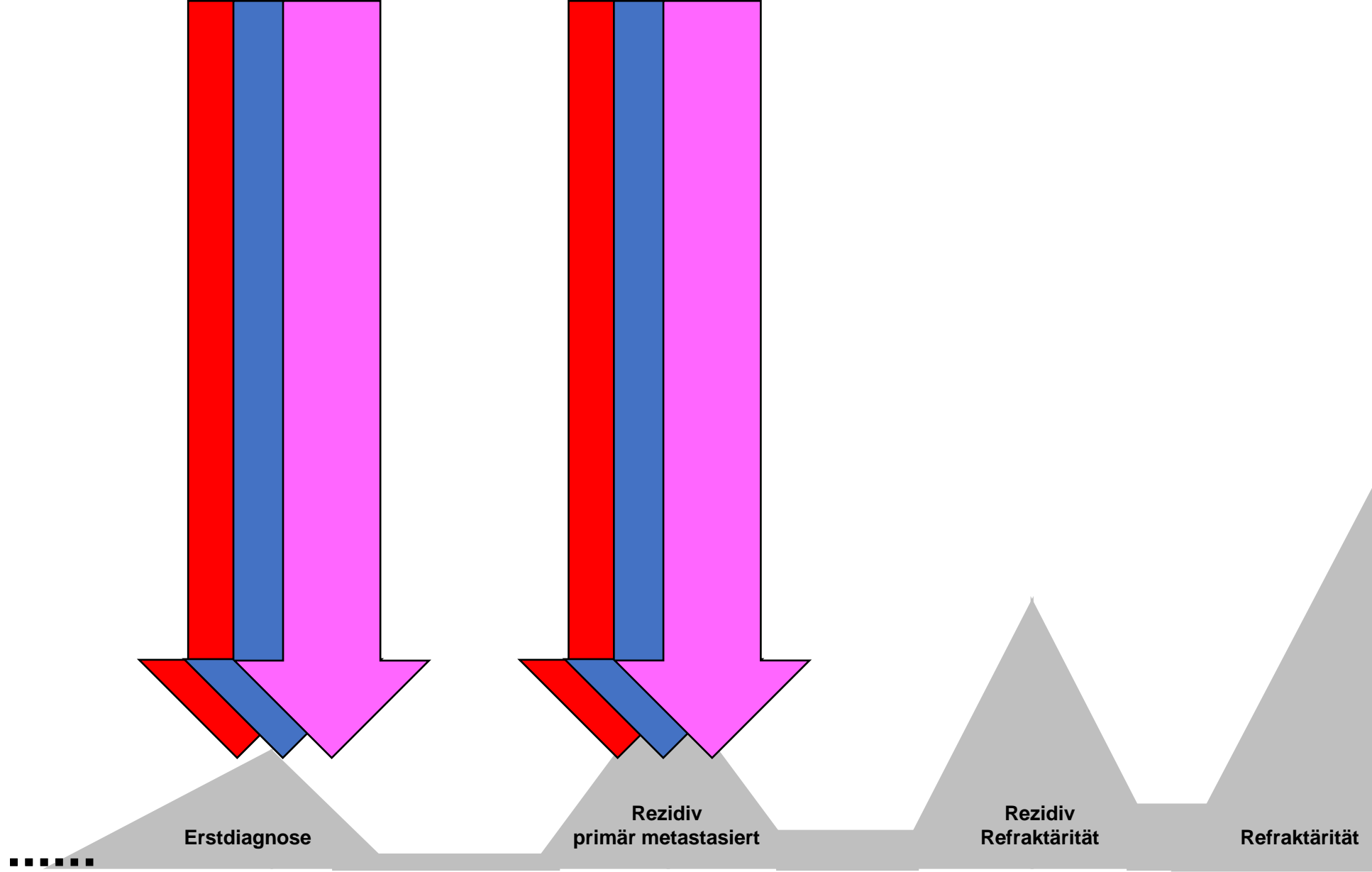
The NEW ENGLAND  
JOURNAL of MEDICINE

**5 Vollpublikationen im NEJM**

- **Kolorektales Karzinom**
- Lungenkarzinom (5)
- **Mammakarzinom**
- **Melanom**
- **Ösophaguskarzinom**
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- **Chronische Myeloische Leukämie**
- **Multiples Myelom (4)**







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# Perioperative Chemotherapy (FLOT) versus Neoadjuvant Chemoradiotherapy (CROSS) for Resectable Esophageal Adenocarcinoma

## The ESOPEC Trial (NCT02509286)

J Hoepfner, F Lordick, T Brunner, C Schmoor, B Kulemann, UP Neumann, G Folprecht, T Keck, F Benedix, M Schmeding, E Reitsamer, CJ Bruns, JF Lock, B Reichert, M Ghadimi, K Wille, I Gockel, JR Izbicki, S Utzolino, P Grimminger

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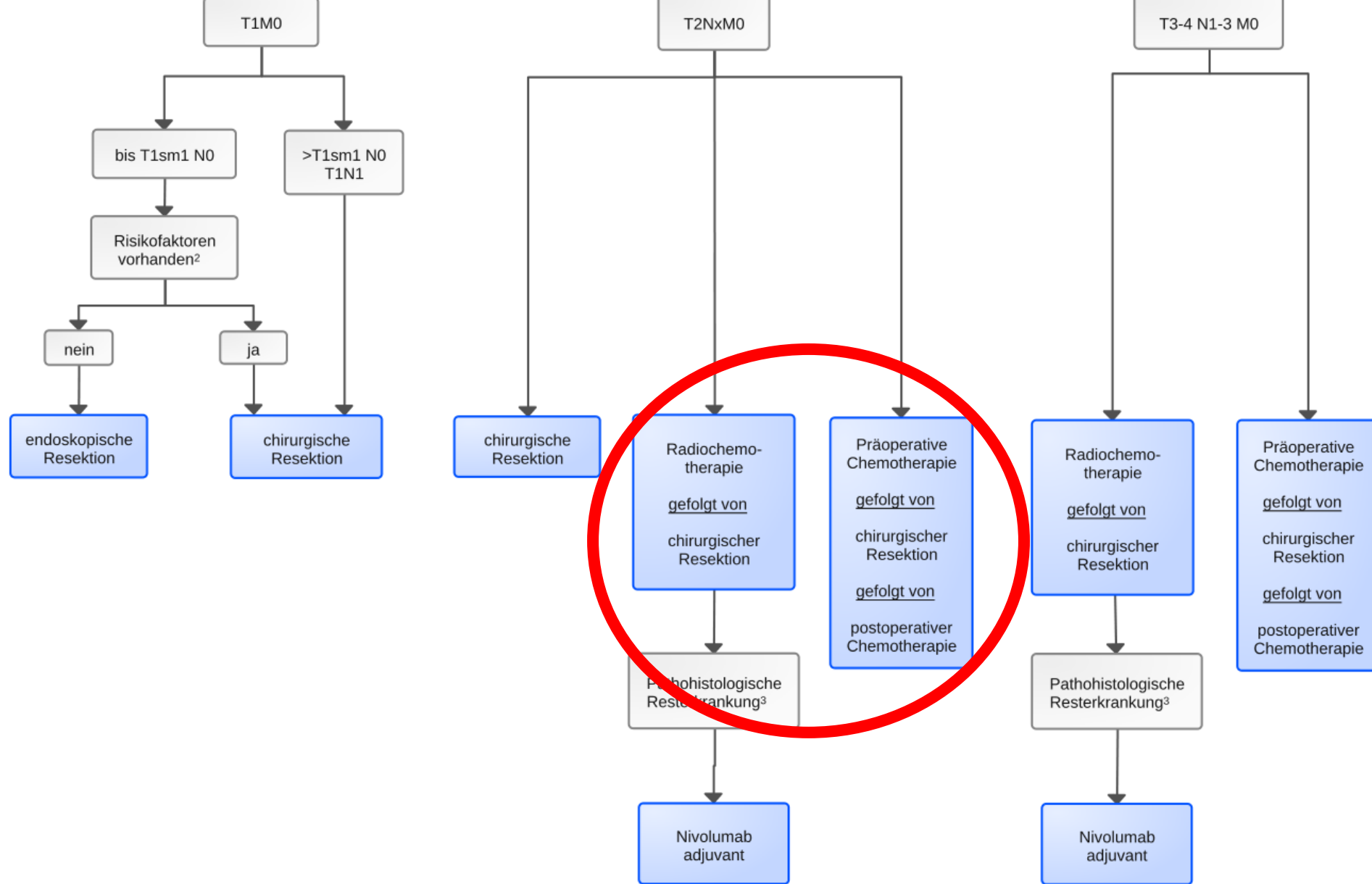
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PRESENTED BY: Jens Hoepfner MD FACS FEBS

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Legende:

**Therapie in kurativer Intention**

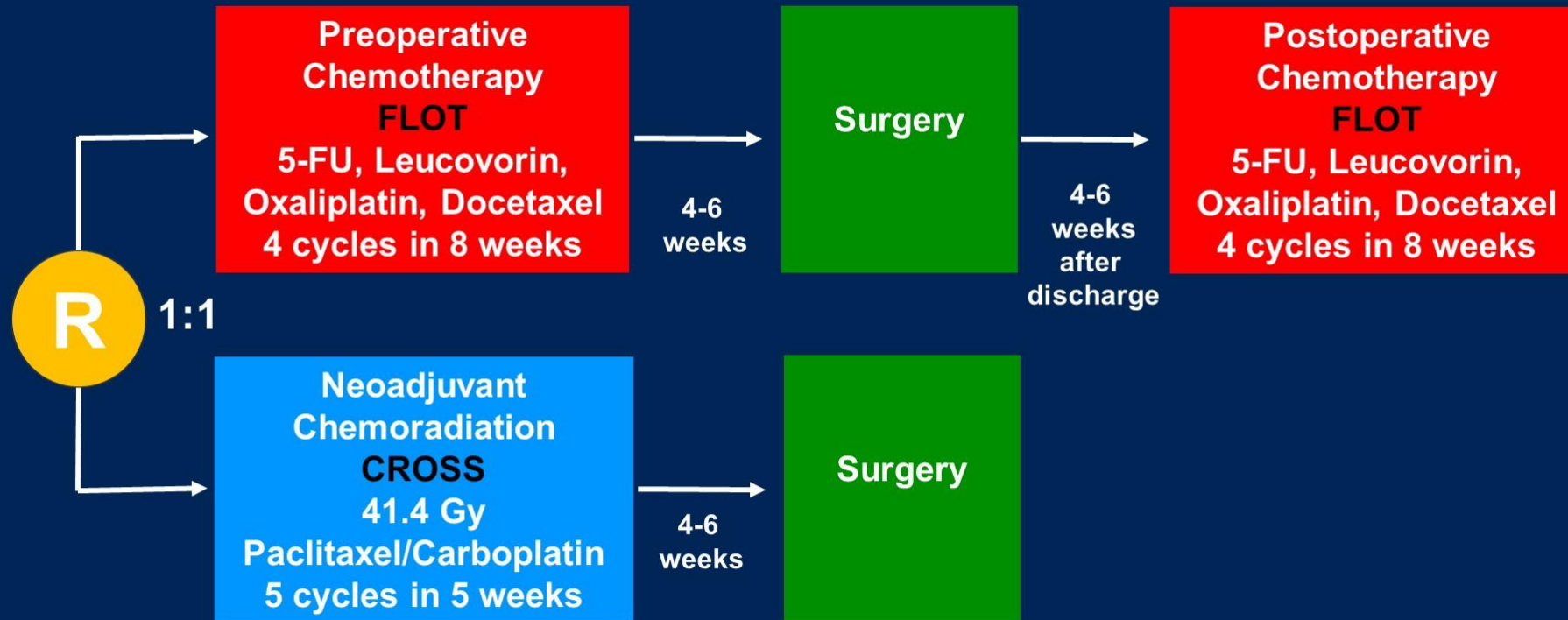
<sup>1</sup> AEG: Adenokarzinom des ösophago-gastraler Übergangs

<sup>2</sup> Risikofaktoren: Ulceration, L1, V1, G3, R1 basal tiefe Submukosainfiltration, multifokale/nicht abtragbare Barrett-Läsionen

<sup>3</sup> R0-Resektion, wenn ypT  $\geq 1$  oder ypN  $\geq 1$

# ESOPEC Trial Scheme

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# Main Eligibility Criteria

## Inclusion Criteria

- **Histology: Adenocarcinoma**
- **Esophageal cancer according UICC (TNM7)<sup>1,\*</sup>**
- **Clinical stage cT1N+ or cT2-4a, cN0/+, cM0**

## Exclusion Criteria

- **Squamous or other non-adenocarcinoma histology**
- **Gastric cancer**
- **Clinical Stage cT1cN0 and cT4b**
- **Metastatic disease**

**\*Tumors of the esophagus and tumors of which the epicenter is within 5 cm of the esophagogastric junction and also extend into the esophagus.**

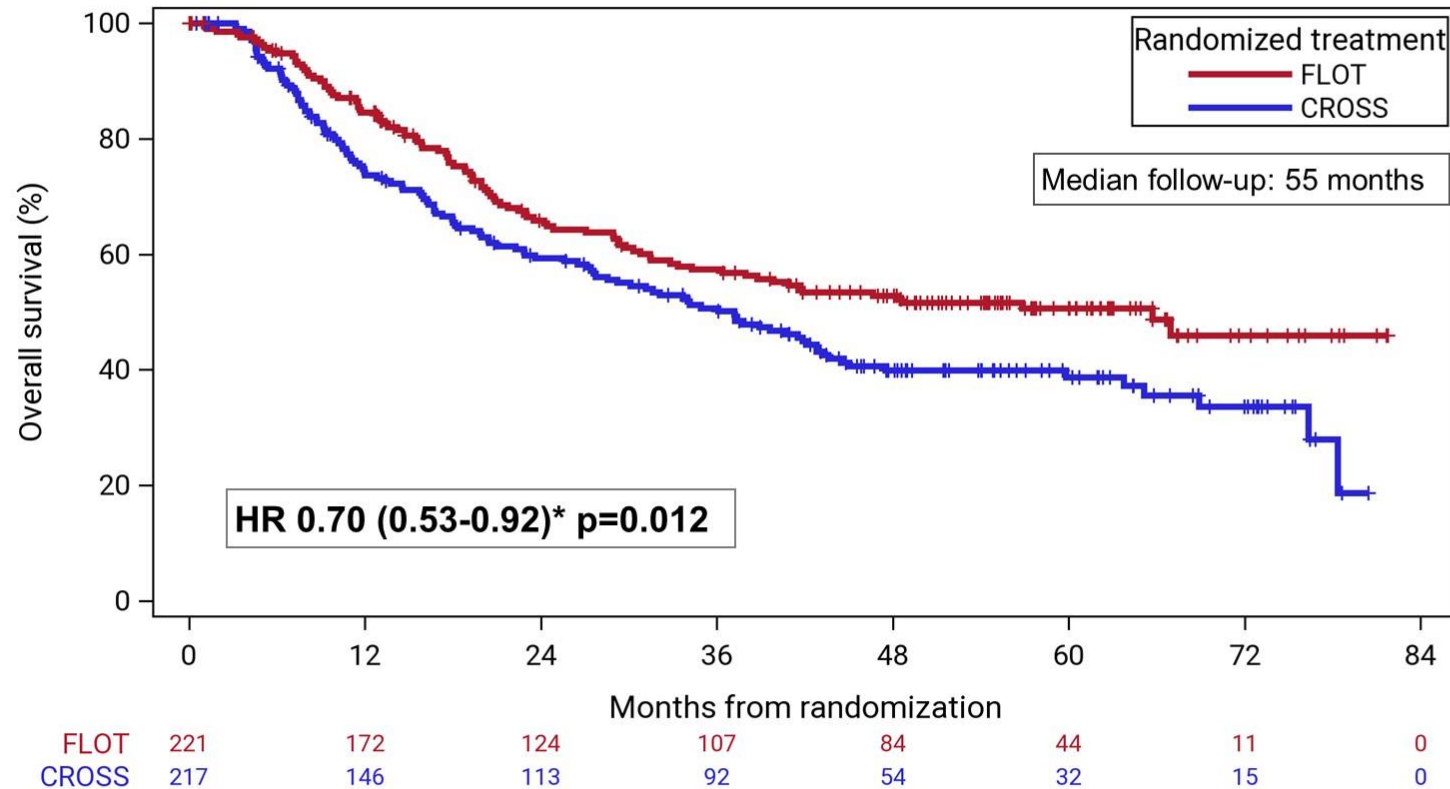


# Characteristics of ESOPEC Trial Patients

	FLOT Group	CROSS Group
<b>N</b>	221	217
<b>Age mean (SD) in years</b>	63.1 (8.6)	62.6 (9.8)
<b>Sex male</b>	89.1 %	89.4 %
<b>ECOG</b>		
<b>&gt; 0</b>	26.7%	28.1%
<b>Clinical T-stage</b>		
<b>cT1-2</b>	19.5%	17.1%
<b>cT3-4</b>	79.1%	81.9%
<b>Clinical N-stage</b>		
<b>cN0</b>	22.2%	18.4%
<b>cN+</b>	77.8%	81.6%

# Overall Survival - ITT Population

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	FLOT	CROSS
Events	97	121
Median OS time (months)	66 95% CI 36 – n.e	37 95% CI 28 – 43
3-year OS rate	57.4%	50.7%
5-year OS rate	50.6%	38.7%

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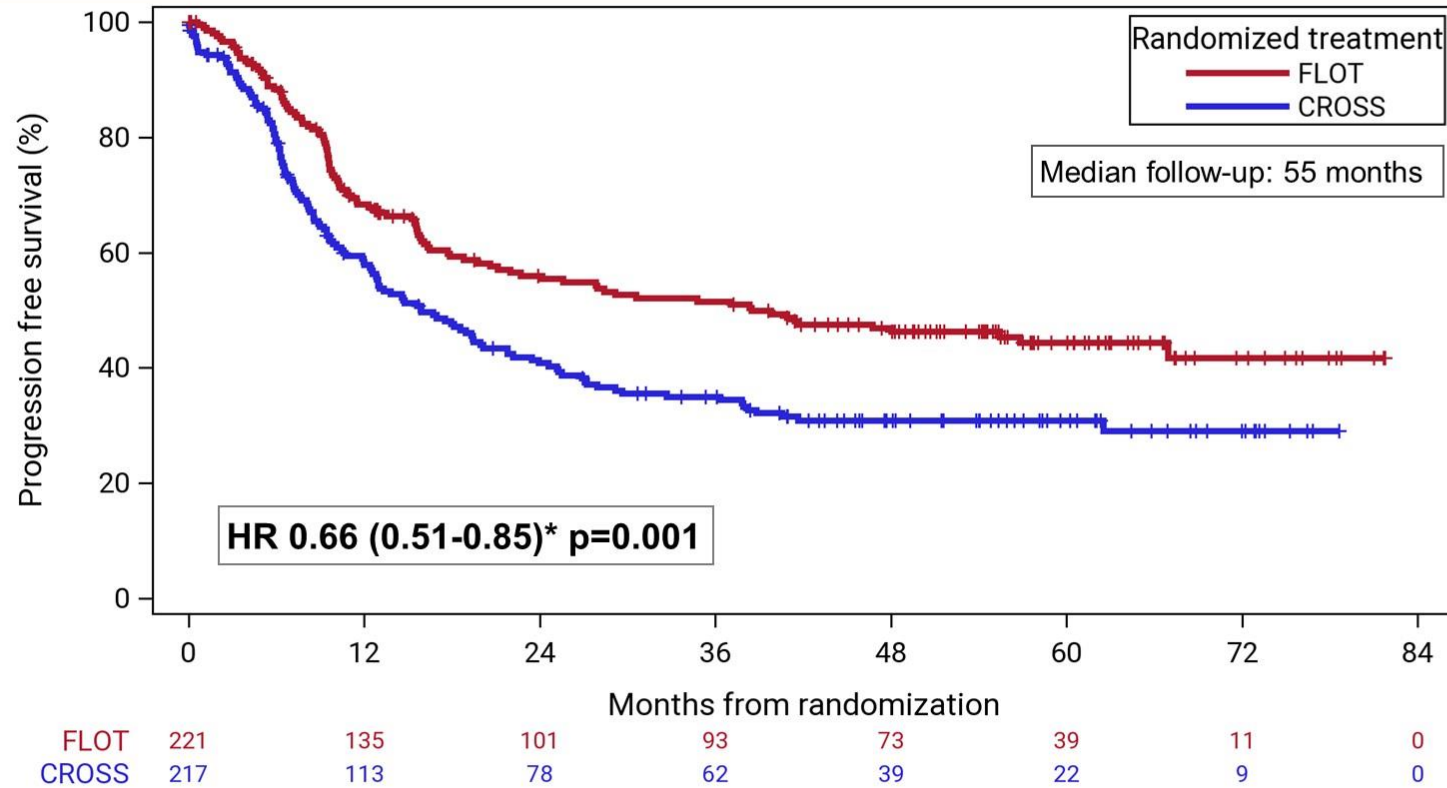
\*Two-sided 95% confidence interval;  
Cox regression adjusted for N stage  
and age, stratified for trial site

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# Progression Free Survival – ITT Population

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	FLOT	CROSS
Events	107	137
Median PFS time (months)	38 95% CI 21 – n.e.	16 95% CI 12 – 22
3-year PFS rate	51.6%	35.0%
5-year PFS rate	44.4%	30.9%

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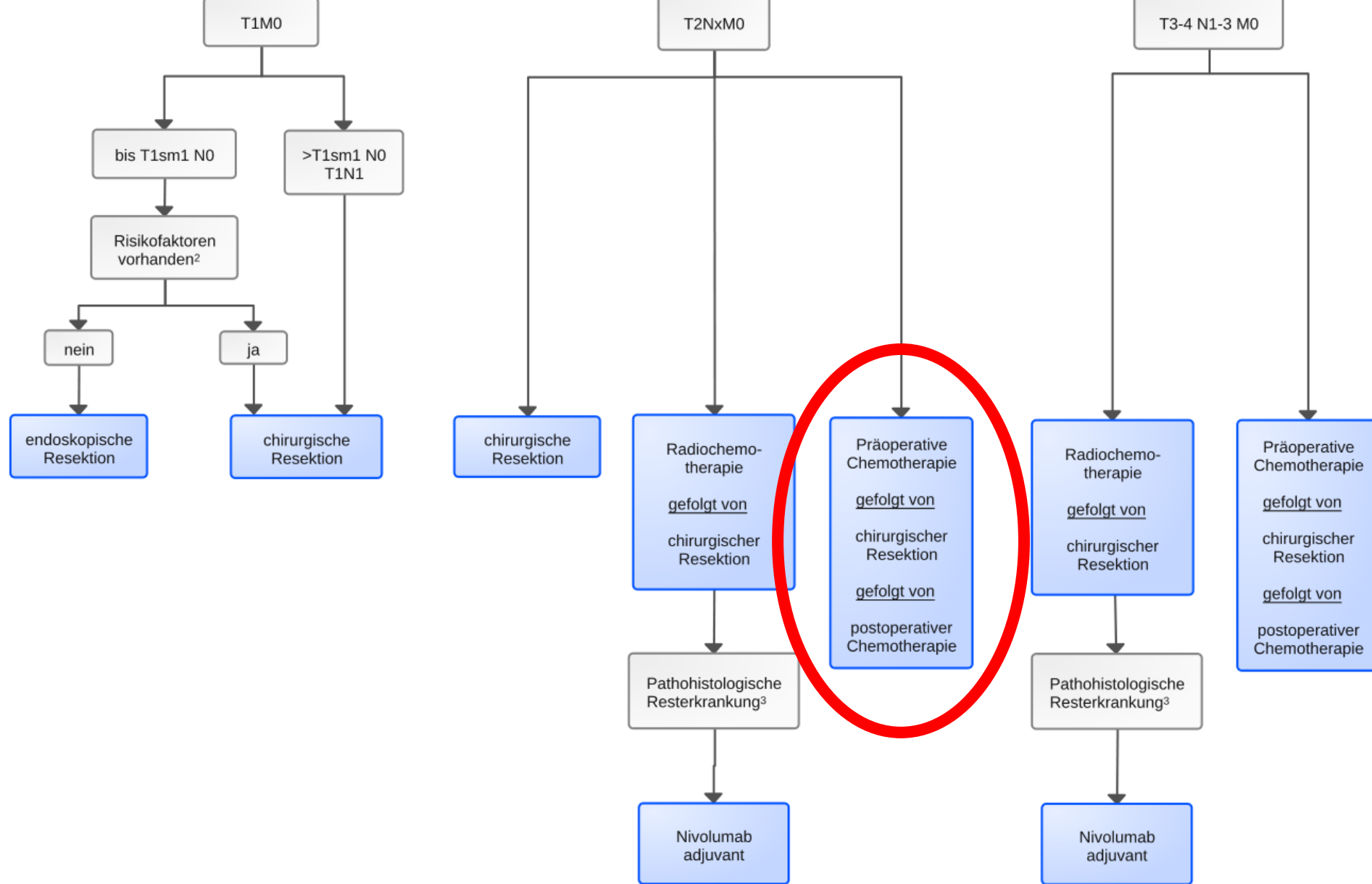
# Postoperative Complications – Surgery Population <sup>19</sup>

	FLOT Group	CROSS Group
<b>N</b>	<b>191</b>	<b>180</b>
<b>Postoperative morbidity</b>		
<b>Clavien Dindo I</b>	<b>20.9%</b>	<b>20.0%</b>
<b>Clavien Dindo II</b>	<b>13.6%</b>	<b>15.0%</b>
<b>Clavien Dindo III</b>	<b>23.0%</b>	<b>23.3%</b>
<b>Clavien Dindo IV</b>	<b>6.8%</b>	<b>4.4%</b>
<b>Postoperative mortality</b>		
<b>30-days</b>	<b>1.0%</b>	<b>1.7%</b>
<b>90-days</b>	<b>3.2%</b>	<b>5.6%</b>



## Trial Summary & Recommendation

- **Perioperative chemotherapy (FLOT) plus surgery improves overall survival compared to neoadjuvant chemoradiation (CROSS) plus surgery for patients with cT1cN+ and cT2-4a,cN-/+ M0 esophageal adenocarcinoma.**
- **Perioperative chemotherapy (FLOT) should be preferred over neoadjuvant chemoradiation (CROSS) for improving survival in resectable esophageal adenocarcinoma.**



Legende:

     Therapie in kurativer Intention

<sup>1</sup> AEG: Adenokarzinom des ösophago-gastralen Übergangs

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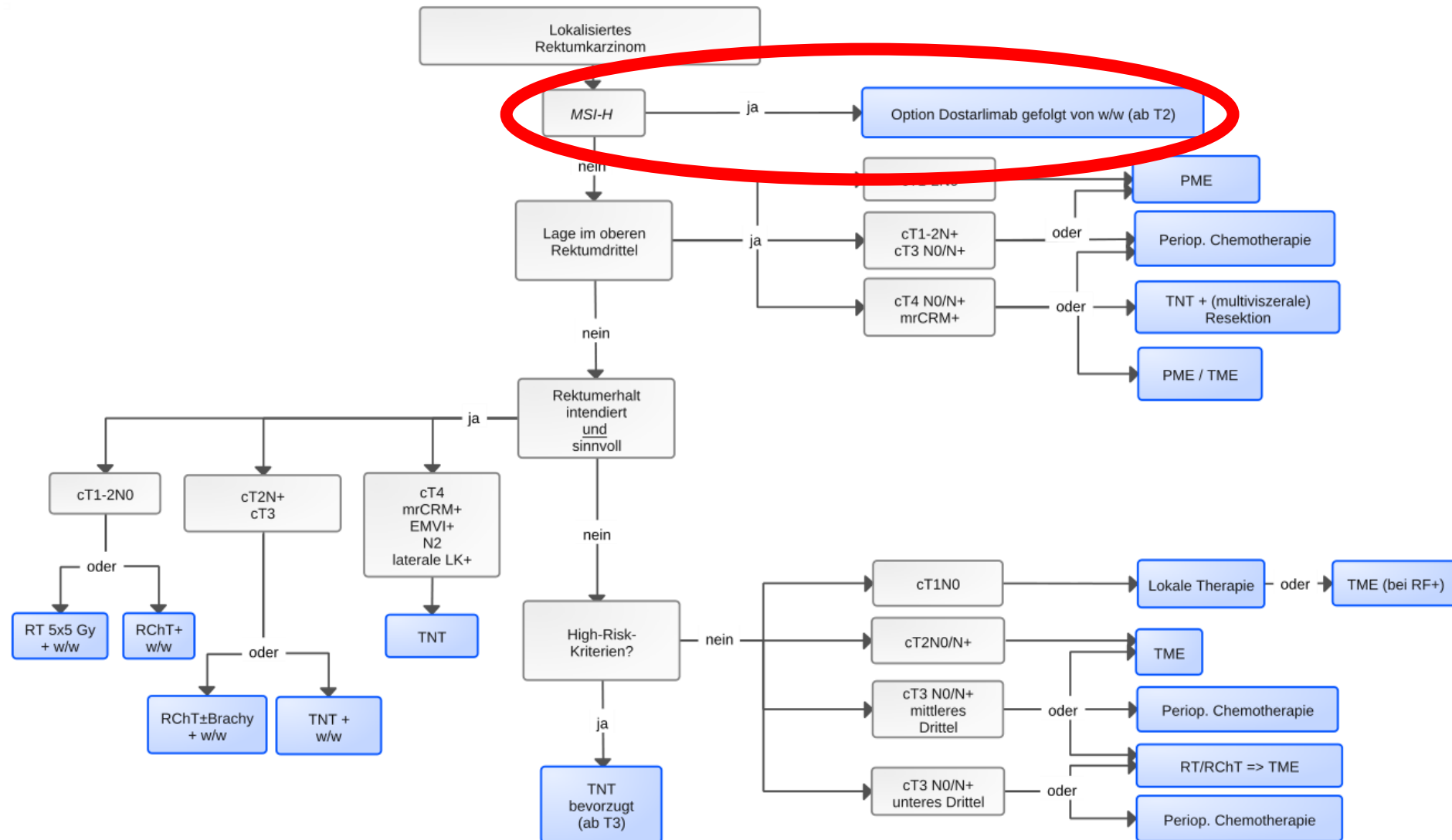


# Durable complete responses to PD-1 blockade alone in dMMR locally advanced rectal cancer

Andrea Cercek, M.D. , J. Joshua Smith, M.D., Ph.D. , Jinru Shia, M.D., Michael B. Foote, M.D., Jenna Sinoploi, N.P. Jill Weiss, B.A., Lindsay Temple, B.A., Henry Walch, M.S. , Miteshkumar Patel, M.S., Callahan Wilde, B.S., Leonard B. Saltz, M.D., Melissa Lumish, M.D., Benoit Rousseau, M.D., Ph.D., Guillem Argiles, M.D. , Zsofia Stadler, M.D. , Rona Yaeger, M.D. , Neil Segal, M.D., Philip Paty M.D., Marina Shcherba, M.D., Ryan Sugarman, M.D., Christopher Crane, M.D., Paul B. Romesser, M.D., Avni Desai, M.D., Imane El Dika, M.D., Maria Widmar, M.D., Iris Wei, M.D., Emmanouil Pappou, M.D., Ph.D., Gerard Fumo, M.D., Santiago Aparo, M.D., Mithat Gonen, M.D., Marc Gollub, M.D., Vetri S. Jayaprakasham, M.B.B.S., F.R.C.R., Tae-Hyung Kim, M.D., Julio Garcia Aguilar, M.D., Ph.D., Martin Weiser, M.D., and Luis A. Diaz, Jr., M.D.

Memorial Sloan Kettering Cancer Center  
New York, NY

# Stadienadaptierter Therapie-Algorithmus für die Stadien I-III

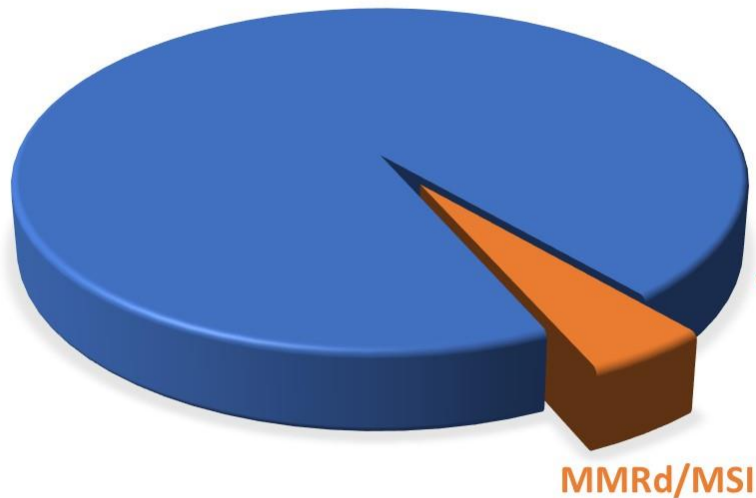


# Rectal Cancer: Mismatch repair deficient (dMMR/MSI)

About 5-10% of all rectal cancers

Less sensitive to chemotherapy

Rectal cancer treated with total neoadjuvant therapy  
chemotherapy and chemoRT followed by TME

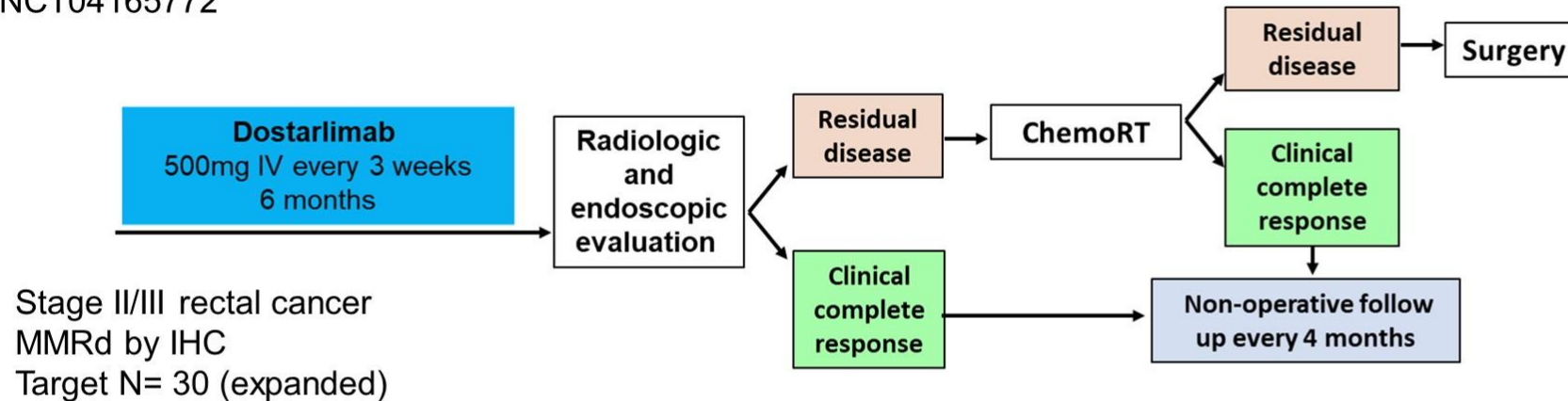


Outcome	No. of patients (%)	
	dMMR	pMMR
FOLFOX as initial treatment	<i>n</i> = 21	<i>n</i> = 63
Progression of disease	6 (29)	0
Response or stable disease	15 (71)	63 (100)
Chemoradiation as initial treatment	<i>n</i> = 16	<i>n</i> = 48
Progression of disease	0	0
Complete pathologic response	2 (13)	8 (17)

dMMR/MSI mCRC sensitive to ICB in metastatic disease

# Neoadjuvant PD1 blockade in dMMR locally advanced rectal cancer

NCT04165772



## Primary Endpoints:

- ORR after completion of PD-1 alone or in combination with chemoRT
- pCR or sustained cCR for 12 mo after completion of PD1 alone or in combination with chemoRT

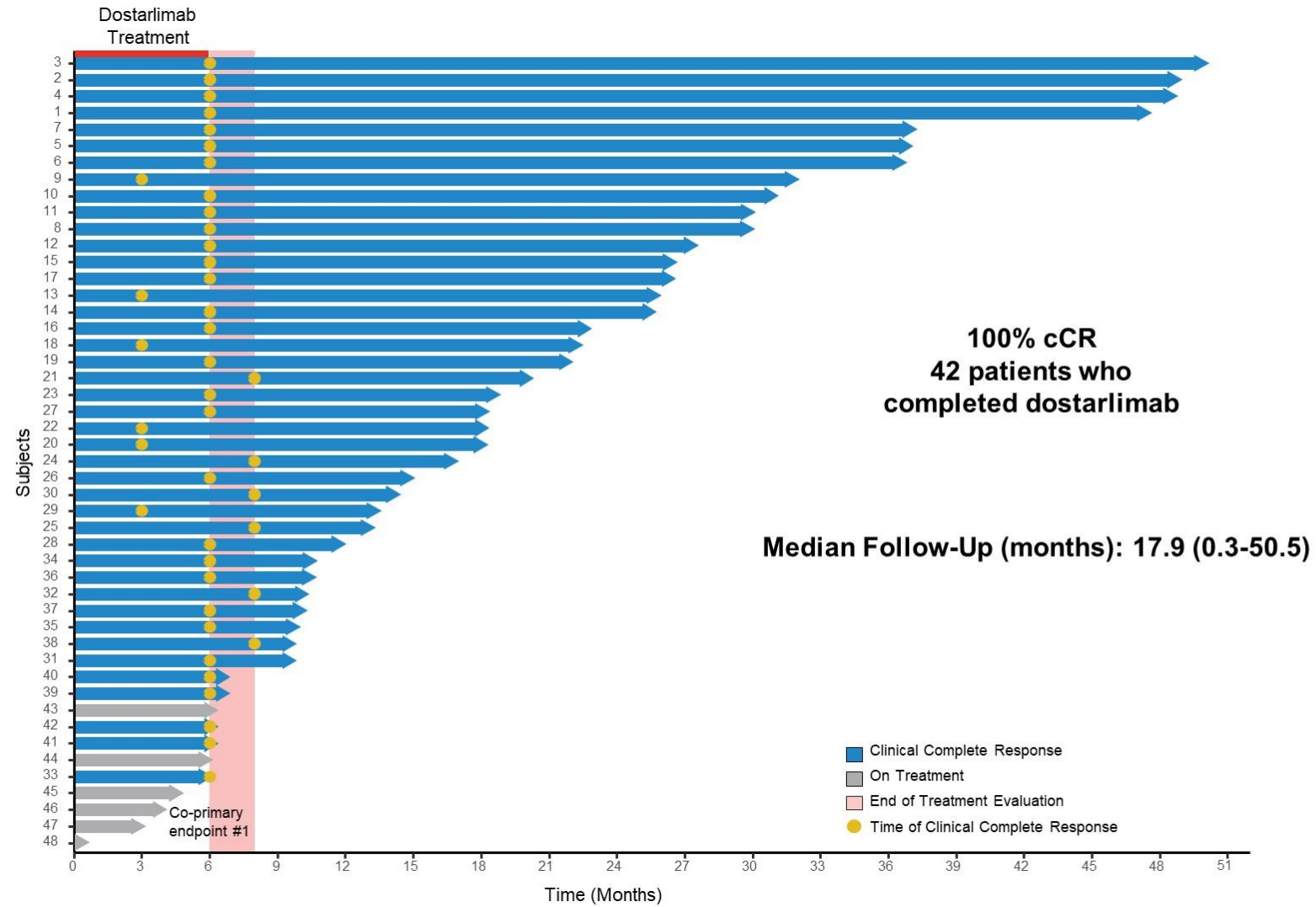
## Sample Collection: ctDNA, biopsy, imaging

Baseline, 6 weeks, 3 mo, 6 mo and q4 mo during NOM

Cercek, et al. NEJM 2022

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Patient Demographics N= 48		N (%)
Female Sex		28 (58)
Median Age (range)		51 (26,78)
Race		
White		37 (77)
Asian		5(10)
Black		6 (13)
Non Hispanic/Latino		42 (85)
Hispanic/Latino		6 (13)
Tumor Stage		
T 0/1/2		10 (21)
T 3		23 (48)
T 4		15 (31)
N +		41 (85)
Median Distance from anal verge (cm)		5.1 (0, 14.8)



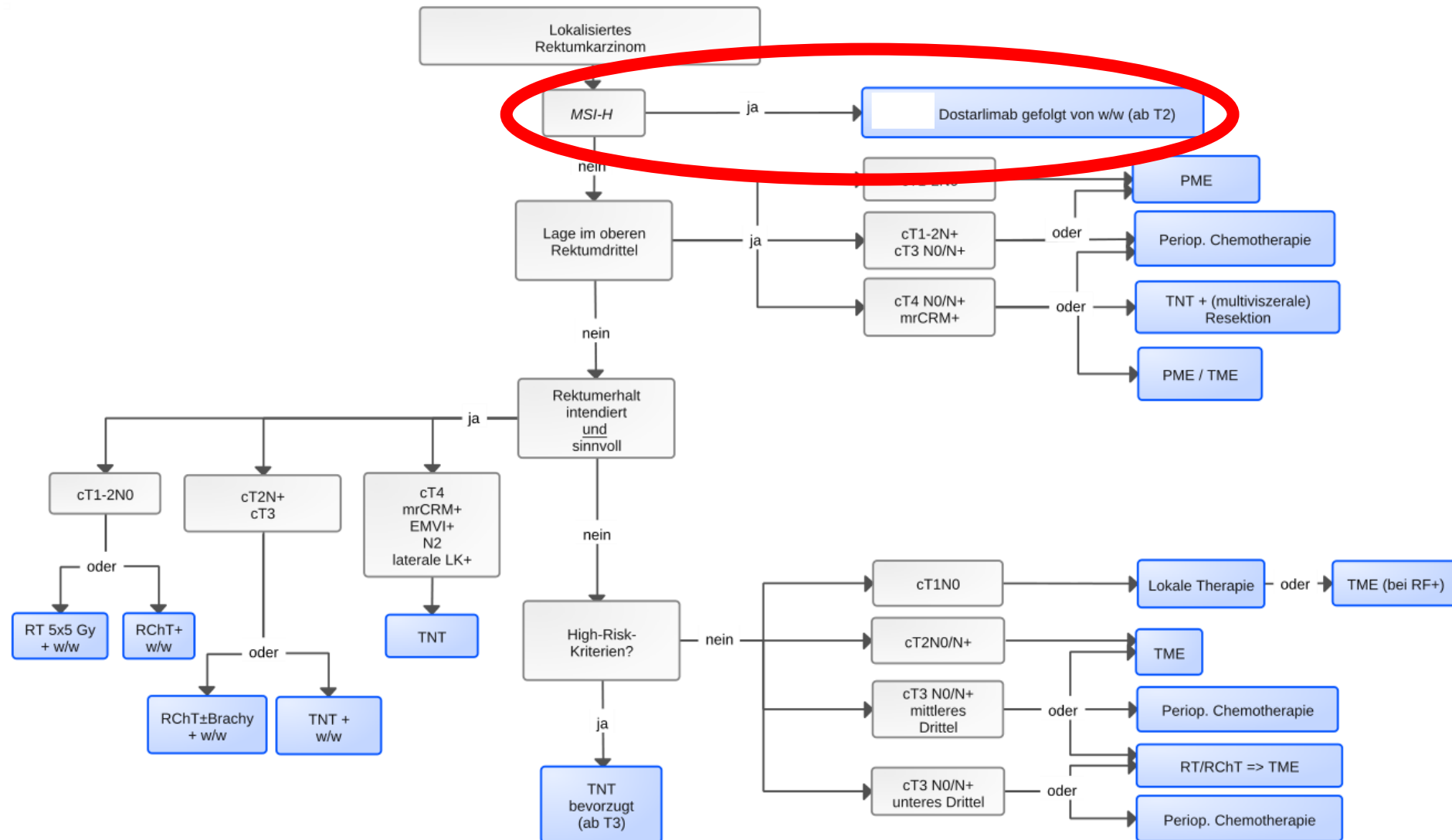
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## Conclusions

- 100% clinical complete response in all 42 patients who completed dostarlimab
- Clinical complete responses are durable over 2 years
- No patients have required chemotherapy, radiation or surgery
- AZUR1 Global confirmatory study of dostarlimab in dMMR rectal cancer is ongoing

# Stadienadaptierter Therapie-Algorithmus für die Stadien I-III



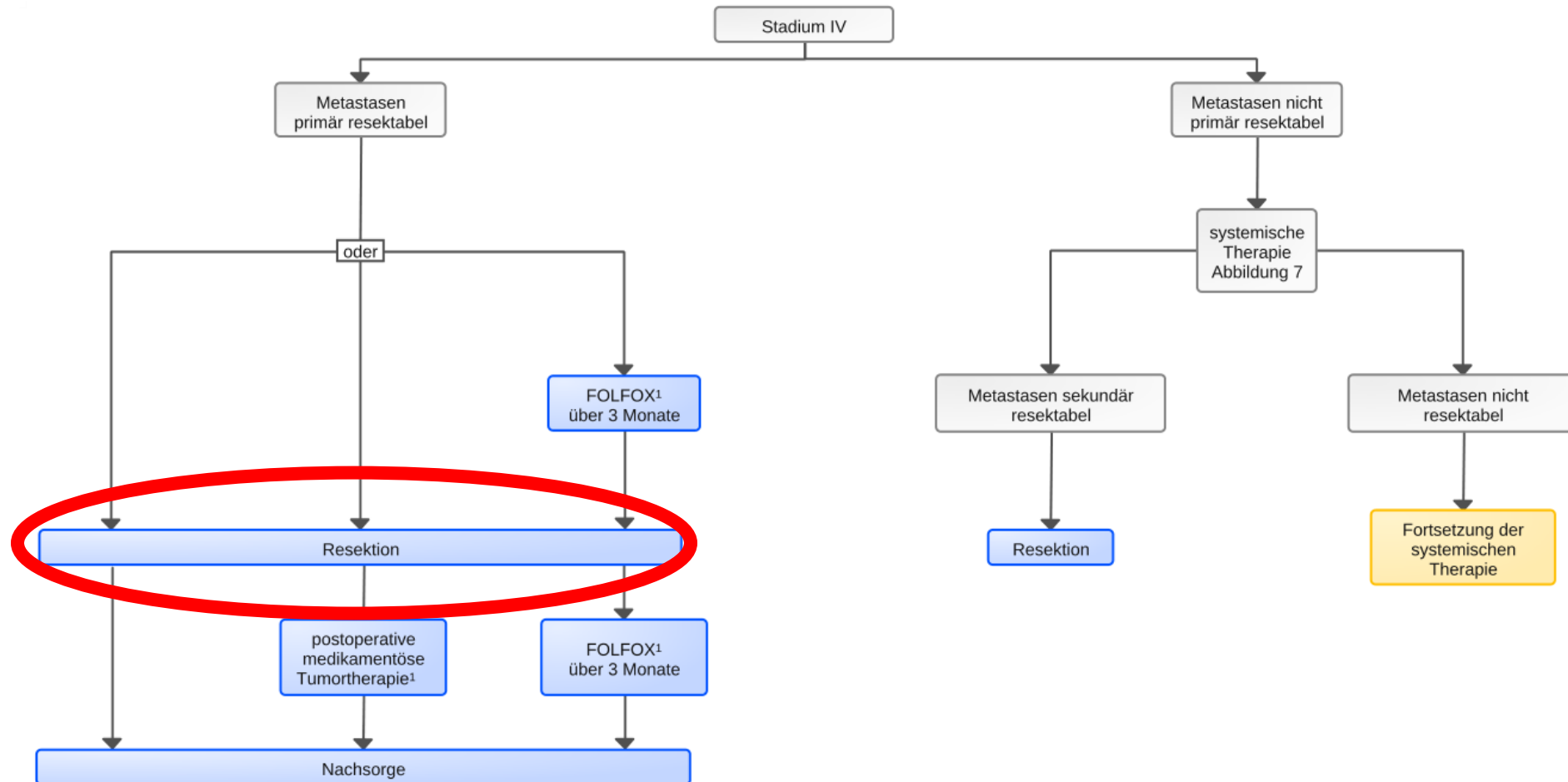
## **Liver Transplantation and Chemotherapy versus Chemotherapy alone in patients with definitively unresectable colorectal liver metastases : results from a prospective, multicentre, randomised trial (TransMet)**

R Adam, C Piedvache, L Chiche, E Salamé, O Scatton, V Granger, M Ducreux, U Cillo, F Cauchy, JY Mabrut, C Verslype, L Coubeau, J Hardwigsen, E Boleslawski, F Muscari, J Lerut, L Grimaldi, F Levi, M Lewin, M Gelli

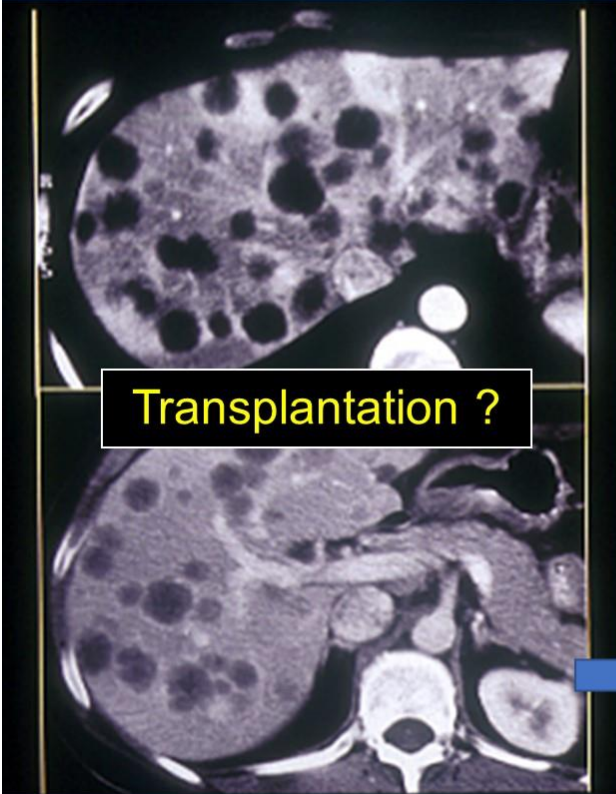
Paris-Saclay – Villejuif – Kremlin Bicêtre (France), Bordeaux (France), Tours (France), Paris (France), Grenoble (France), Villejuif (France), Padova (Italy), Clichy (France), Lyon (France), Leuven (Belgium), Louvain (Belgium), Marseille (France), Lille (France), Toulouse (France), Bruxelles (Belgium)



## Therapiestruktur im Stadium IV



## Definitively Non Resectable Liver Metastases : **Rationale**



- Absolute contraindication in the 2000's because of the low 5-year survival (18%)<sup>1</sup>
- More recently : improved outcome with better patient selection and increased efficacy of chemotherapy (C)<sup>2</sup>
- However, strong evidence for clinical benefit : critical
  - Scarcity of organs
  - Perception “no role for local treatment in an advanced metastatic disease”

Randomised study to assess the efficacy of LT+C compared to C alone

(1) Foss et al, *Transplant Int* 2010

(2) Hagness et al, *Ann Surg* 2013



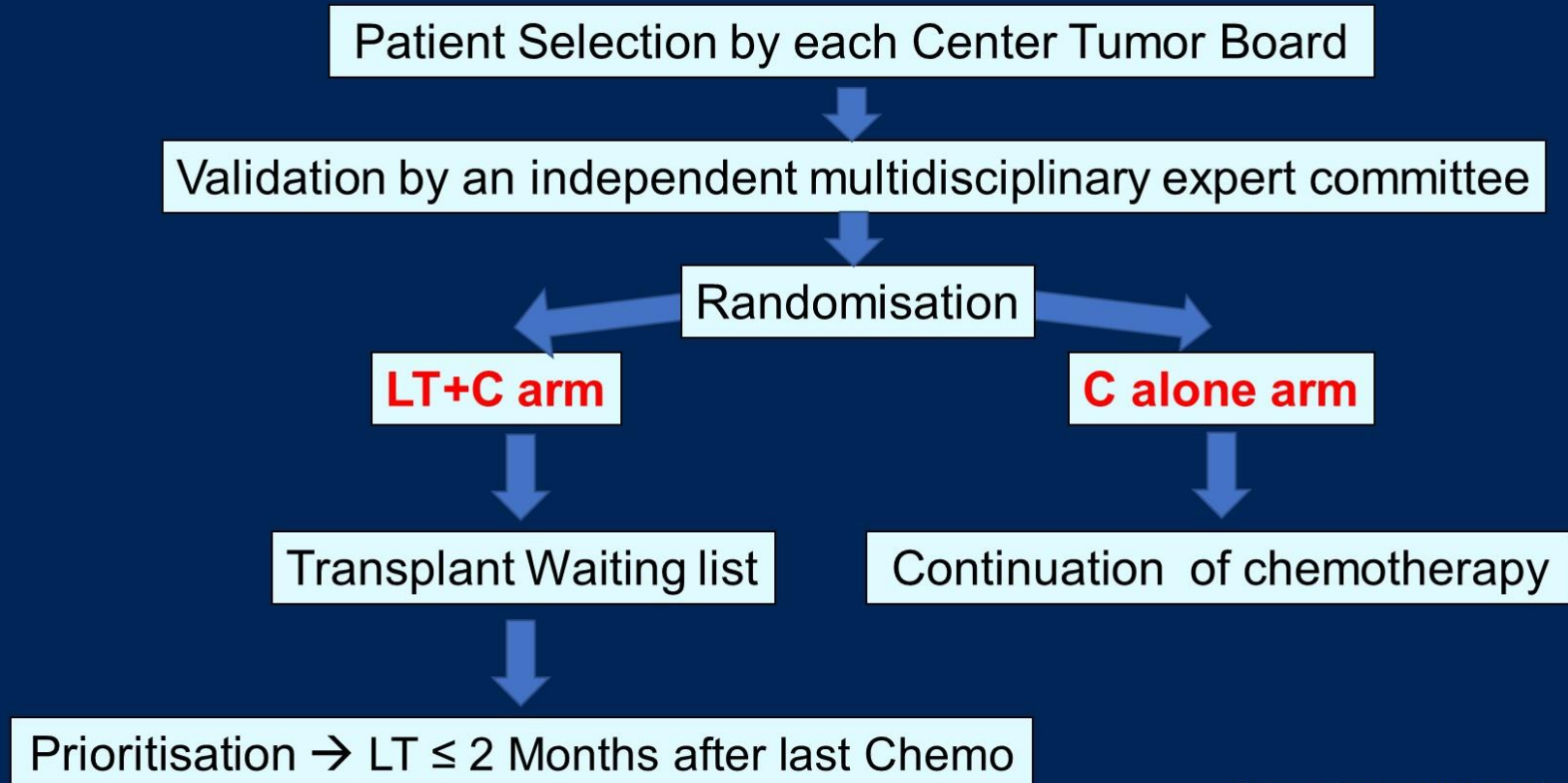
## TransMet Trial : Eligibility criteria

- $\leq 65$  years
- Good performance status (ECOG 0 or 1)
- Confirmed unresectability of CLM by expert surgeons
- Gold standard Resection of the primary
- No extrahepatic disease
- Partial Response or Stability with Chemo :  $\geq 3$  months,  $\leq 3$  lines
- No BRAF mutation
- CEA  $< 80$  ng/ml or 50% decrease from baseline
- Platelets count  $> 80.000$  and white blood cell count  $> 2500$



## TransMet Trial : Study Design

6



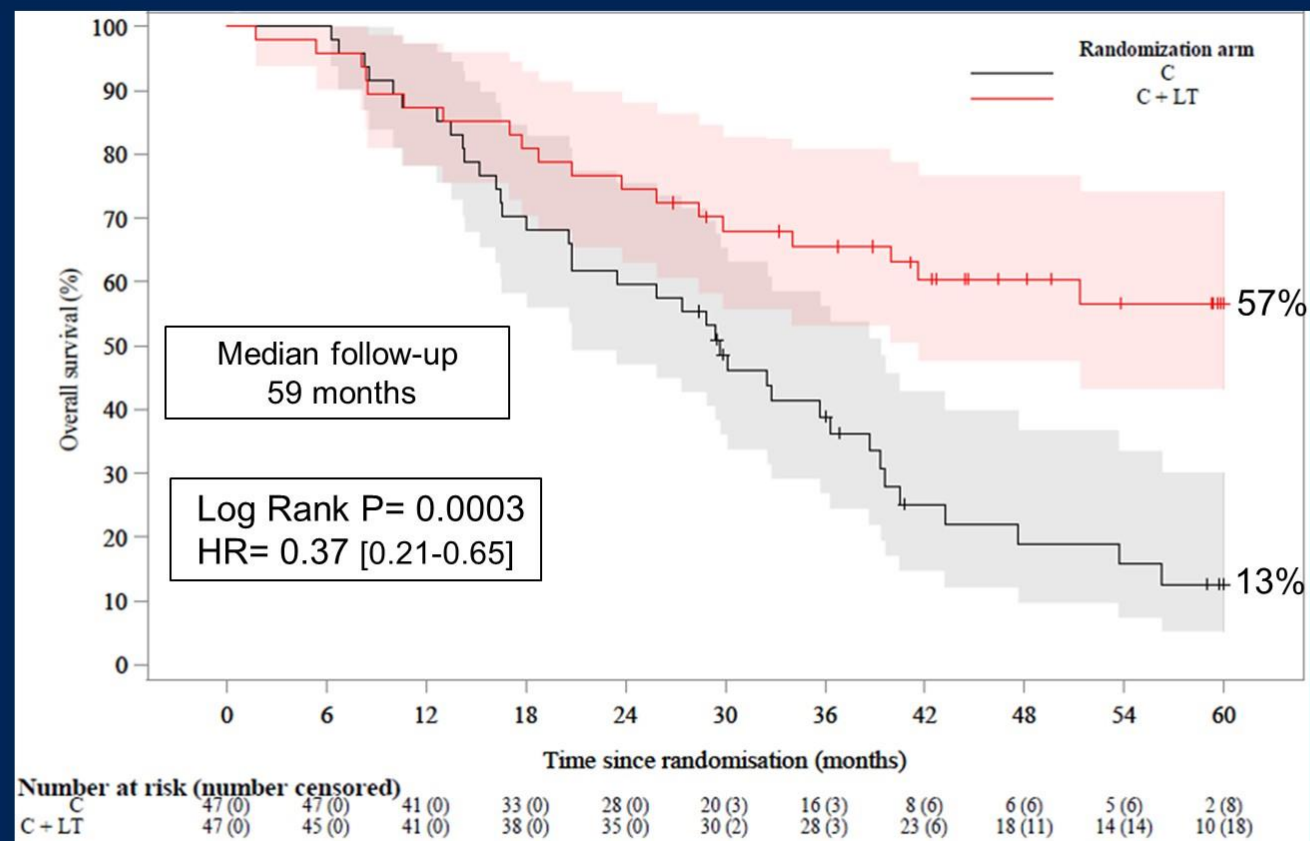
Adam et al, eClinical Medicine 2024

## TransMet Trial : Patients Demographics at Randomisation

	LT+C group (n=47)	C alone group (n=47)
<b>Type of chemotherapy</b>		
5-FU alone	7 (15%)	1 (2%)
Oxaliplatin-based	12 (26%)	11 (23%)
Irinotecan-based	20 (43%)	27 (57%)
Triplet	8 (17%)	8 (17%)
<b>Targeted therapy agent</b>		
None	2 (4%)	4 (9%)
Anti-VEGF	17 (36%)	16 (34%)
Anti-EGFR	28 (60%)	27 (57%)
<b>Total Number of lines</b>		
1	18 (38%)	23 (49%)
2	21 (45%)	17 (36%)
3	8 (17%)	7 (15%)
<b>Total Number of cycles (Median (IQR))</b>	<b>21.0</b> (18.0, 29.0)	<b>17.0</b> (12.0, 24.0)
<b>Tumour response</b>		
Partial response	26 (55%)	21 (45%)
Stable disease	21 (45%)	26 (55%)
<b>Delay primary resection – randomisation (Mo)</b>	<b>16</b> (12 - 26)	<b>13.5</b> (9 - 19)
<b>Delay randomization – LT (days)</b>	51 (30 - 65)	-

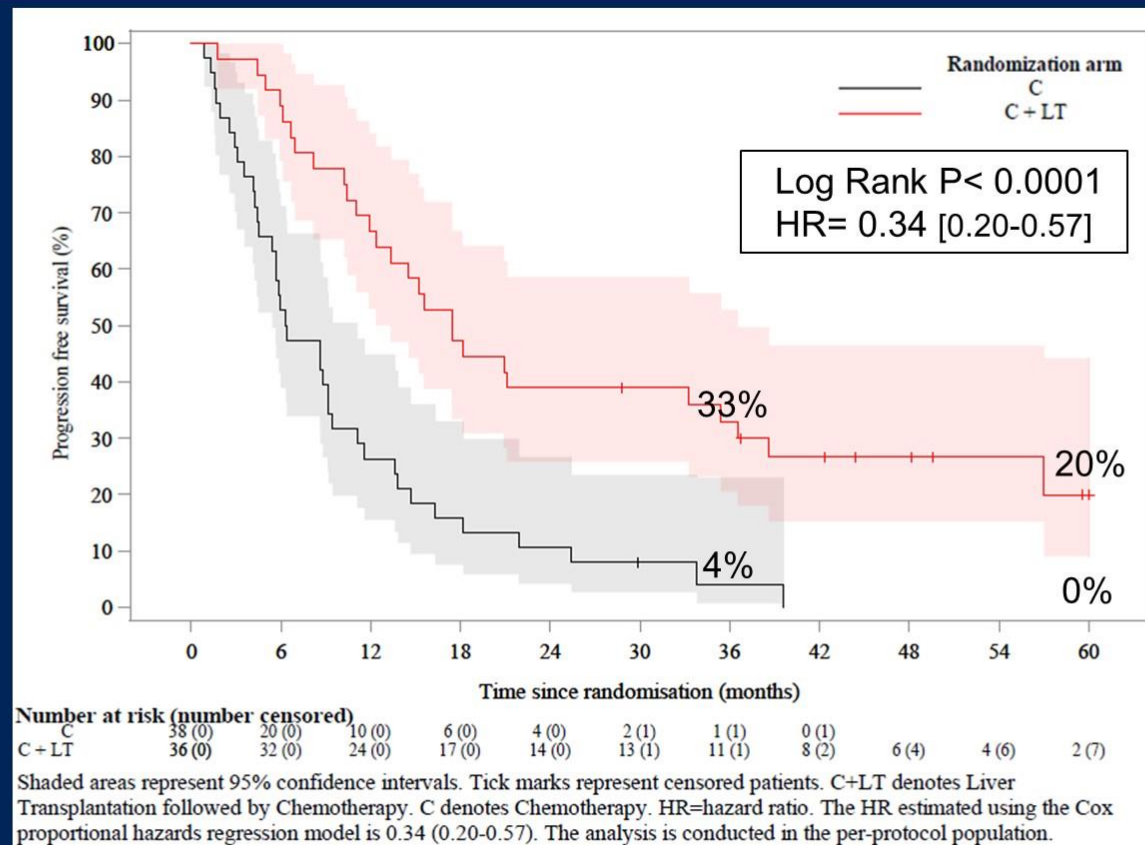
# TransMet Trial : Primary Endpoint 5-Yr OS (ITT)

13



# TransMet Trial : Secondary Endpoint 3–5–Yr PFS (Per Protocol)

16





## Take Home messages from the TransMet trial

- Liver Transplantation + Chemotherapy significantly improves OS and PFS in selected patients with unresectable colorectal liver metastases compared to C alone
- These results were obtained through a rigorous patient selection and a prioritization for organ allocation
- Transplanted patients for CLM have similar survival (73% at 5 years) as those transplanted for established LT indications
- LT +C offers a potential of cure to cancer patients with otherwise poor long-term outcome

➡ These results support LT as a new standard option that could change our practice in treating patients with liver-only, definitively unresectable CLM.

ASCO 2024 – Chicago, USA

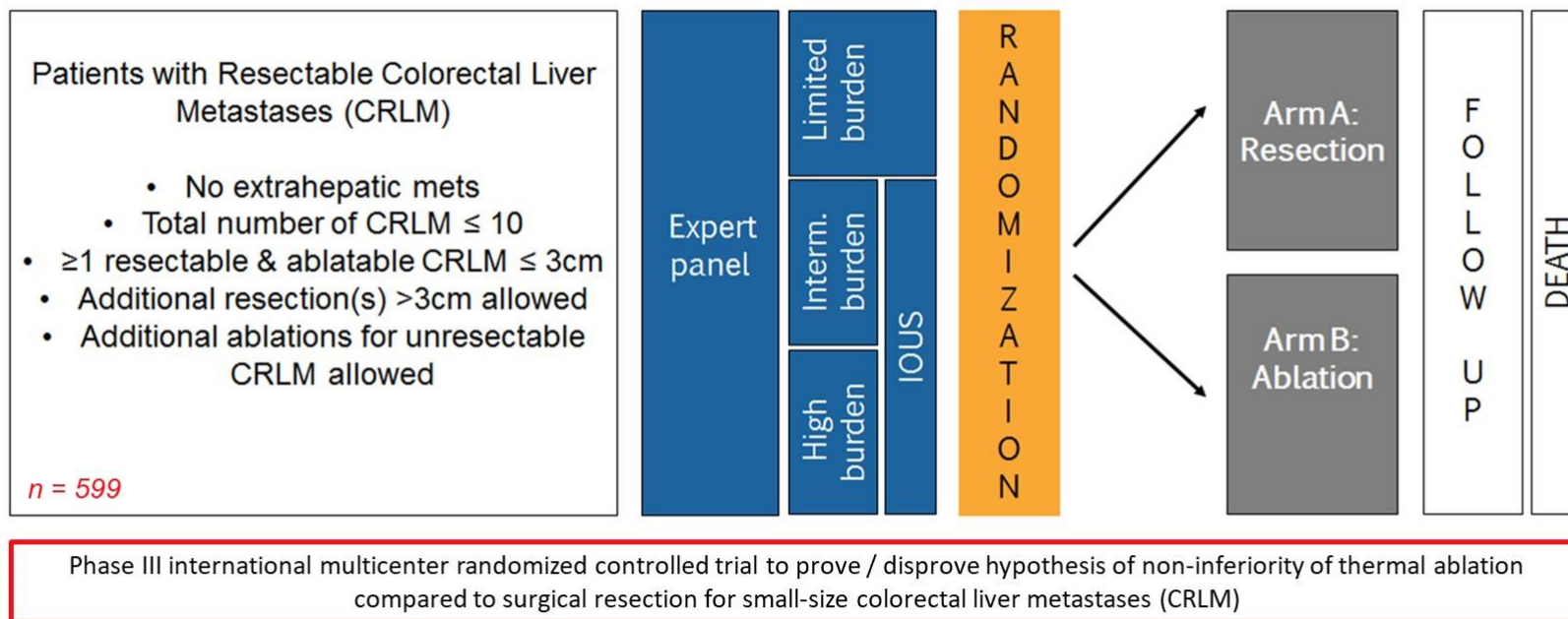
# Colorectal liver metastases: surgery versus thermal ablation: final results of the international phase 3 randomized controlled COLLISION trial

PROF. DR. MARTIJN R. MEIJERINK  
Interventional Radiologist



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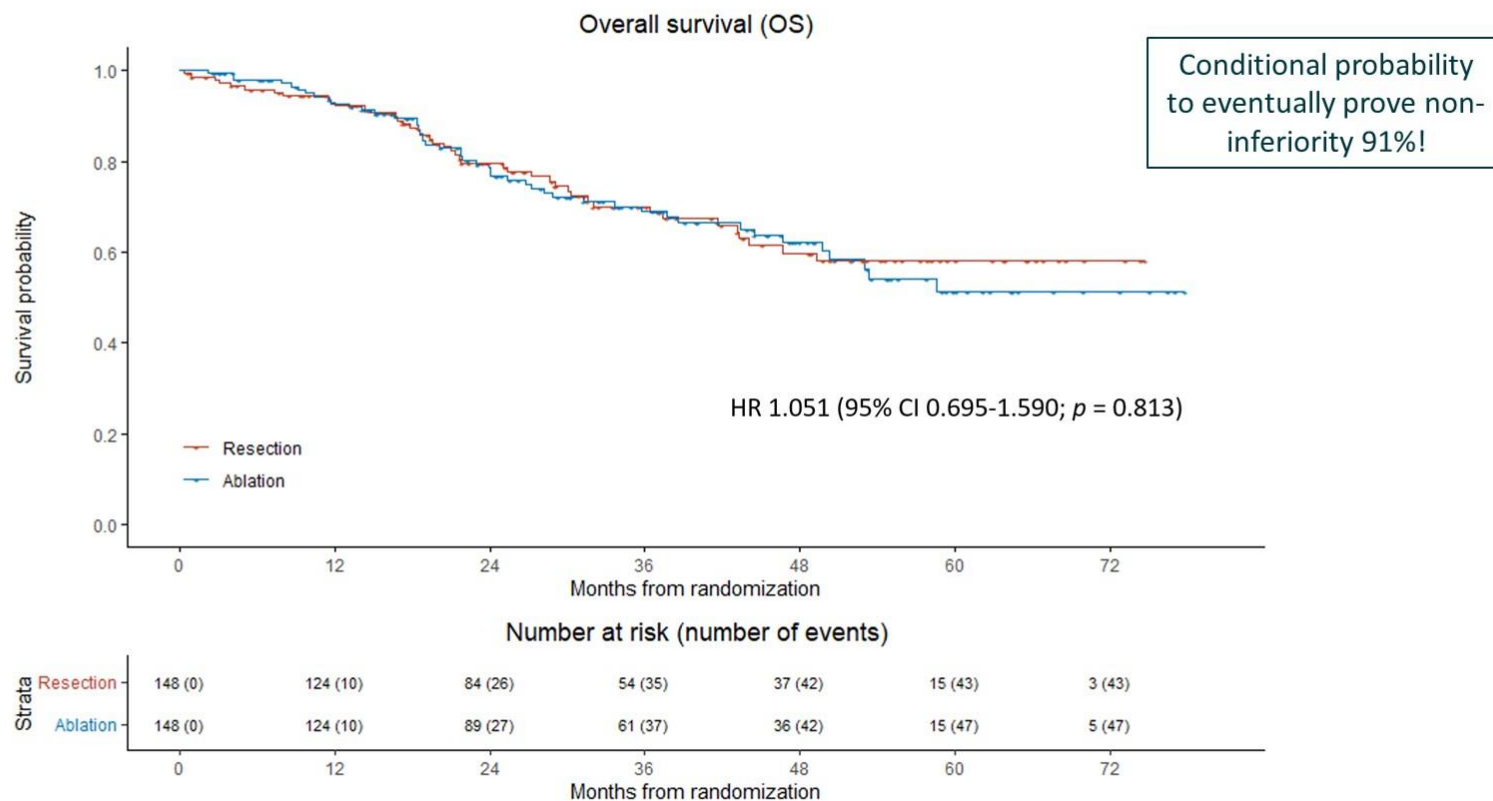




- Approach (percutaneous, laparoscopic or open) according to local expertise
- If limited disease burden (max 3 CRLM  $\leq 3\text{cm}$ ) consider percutaneous / laparoscopic approach
- If intermediate or high disease burden randomize after eligibility check (after IOUS) during OR (single-blind)

# RESULTS

## OVERALL SURVIVAL – PRIMARY ENDPOINT

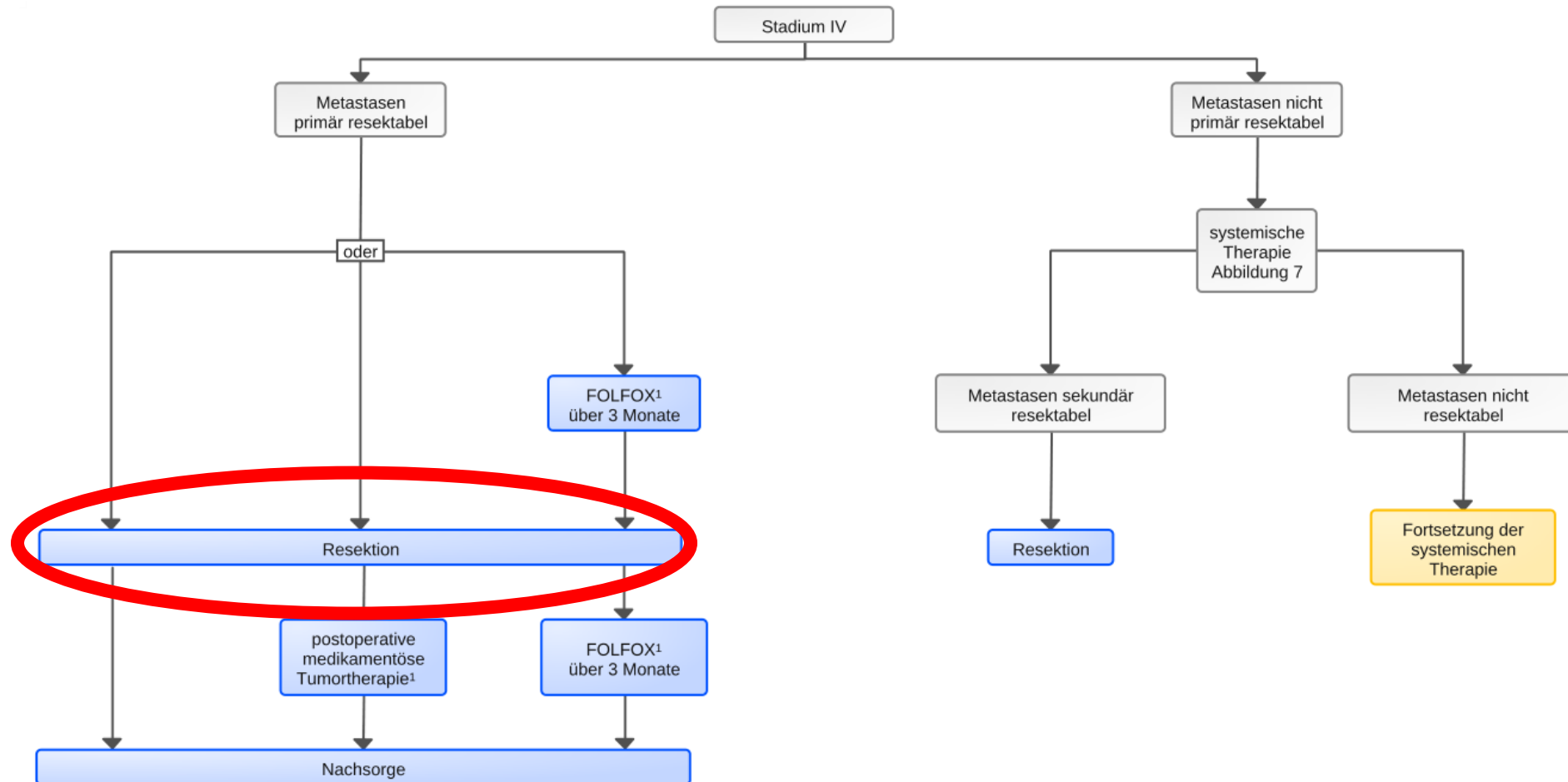


# SUMMARY



- **COLLISION stopped at halftime based on predefined stopping rules for**
  - Showing benefit of the experimental arm (ablation) over standard-of-care (resection)
- **For patients with small-size colorectal liver metastases, thermal ablation compared to standard-of-care surgical resection**
  - Substantially reduced morbidity and mortality
    - treatment related mortality 2.1% (resection) → 0.0% (ablation)
    - all-cause 90-day mortality 2.1% (resection) → 0.7% (ablation)
    - AEs rate 56% (resection) → 19% (ablation) and SAE rate 20% (resection) → 7% (ablation)
  - Was at least as good as surgical resection in locally controlling CRLM
    - no difference in *per-patient* local control: HR 0.131 (95% CI 0.016-1.064; p = 0.057)
    - superior *per-tumor* local control: HR 0.092 (95% CI 0.011-0.735; p = 0.024)
  - Showed no difference in local & distant tumor progression-free survival
  - Did not compromise overall survival (OS)

## Therapiestruktur im Stadium IV

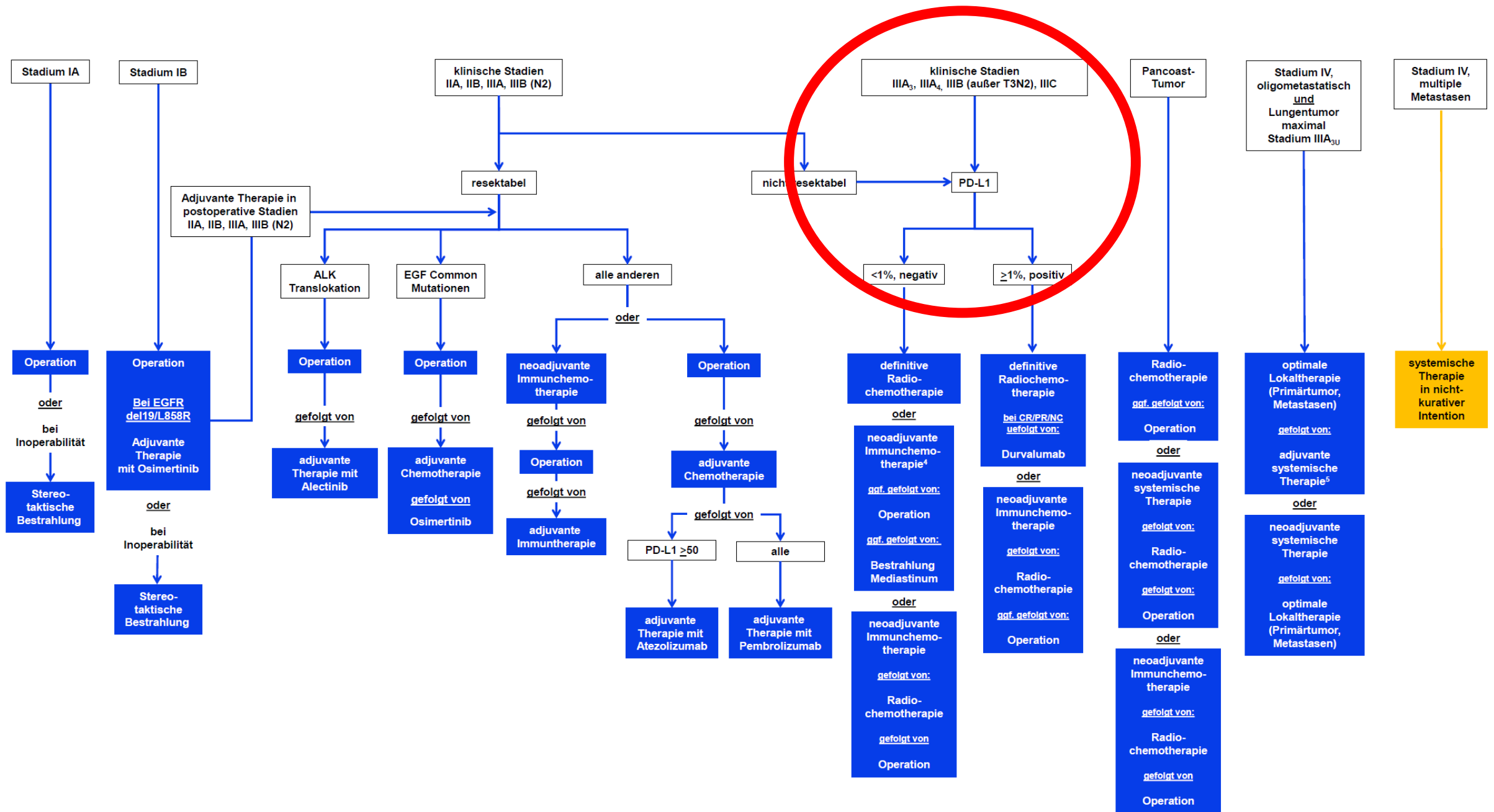


# Osimertinib after definitive chemoradiotherapy in patients with unresectable stage III epidermal growth factor receptor-mutated (EGFRm) NSCLC: primary results of the Phase 3 LAURA study

Suresh S. Ramalingam,<sup>1</sup> Terufumi Kato, Xiaorong Dong, Myung-Ju Ahn, Le-Van Quang, Nopadol Soparattanapaisarn, Takako Inoue, Chih-Liang Wang, Meijuan Huang, James Chih-Hsin Yang, Manuel Cobo, Mustafa Özgüroğlu, Ignacio Casarini, Dang-Van Khiem, Virote Sriuranpong, Eduardo Cronemberger, Xiangning Huang, Toon van der Gonde, Dana Ghiorghiu, Shun Lu

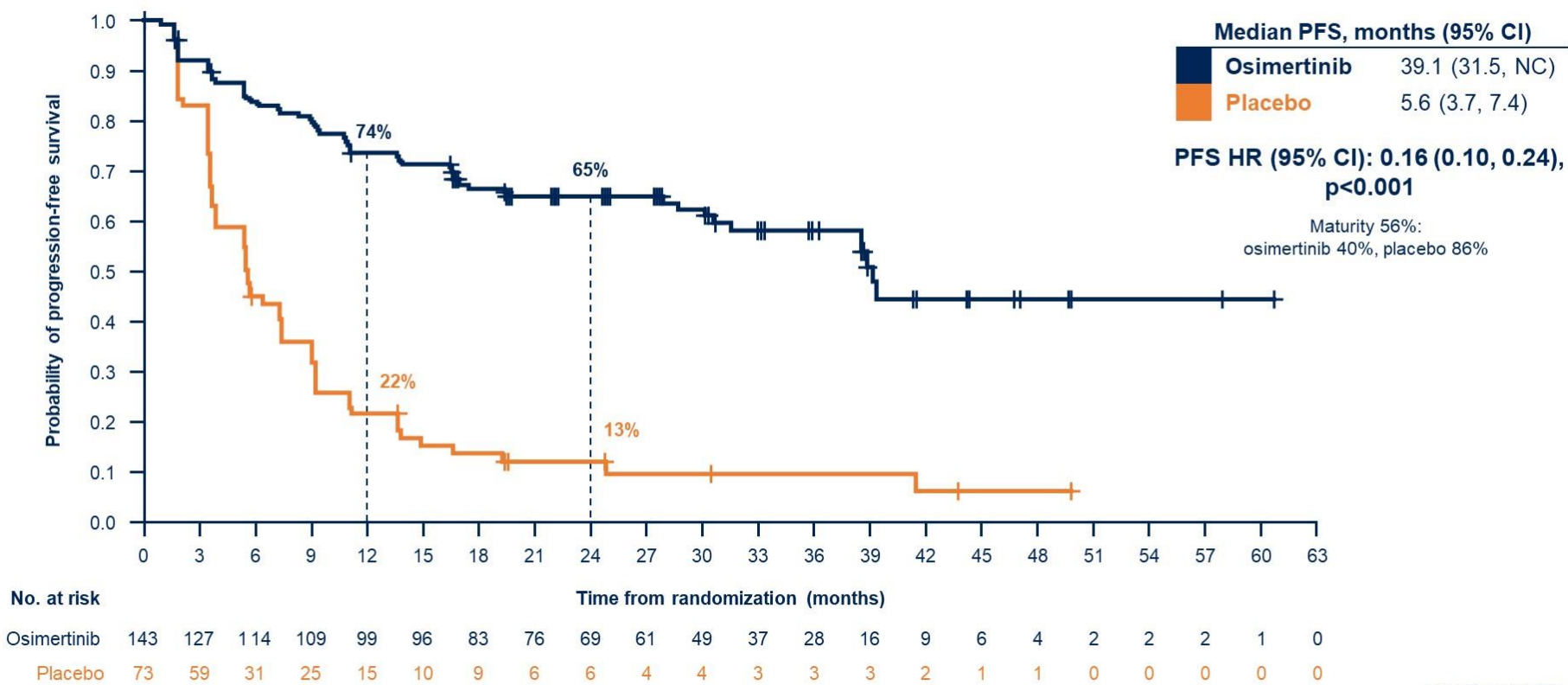
<sup>1</sup>Emory University School of Medicine, Winship Cancer Institute, Atlanta, GA, USA







# Progression-free survival by BICR



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Data cut-off: January 5, 2024.  
BICR, blinded independent central review; CI, confidence interval; HR, hazard ratio; NC, not calculable;  
PFS, progression-free survival

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The NEW ENGLAND  
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ORIGINAL ARTICLE

## Osimertinib after Chemoradiotherapy in Stage III *EGFR*-Mutated NSCLC

Shun Lu, M.D., Terufumi Kato, M.D., Xiaorong Dong, M.D., Ph.D.,  
Myung-Ju Ahn, M.D., Le-Van Quang, M.D., Nopadol Soparattanapaisarn, M.D.,  
Takako Inoue, M.D., Chih-Liang Wang, M.D., Meijuan Huang, M.D.,  
James Chih-Hsin Yang, M.D., Ph.D., Manuel Cobo, M.D.,  
Mustafa Özgüroğlu, M.D., Ignacio Casarini, M.D., Dang-Van Khiem, M.D.,  
Virote Sriuranpong, M.D., Ph.D., Eduardo Cronemberger, M.D.,  
Toshiaki Takahashi, M.D., Ph.D., Yotsawaj Runglodvatana, M.D.,  
Ming Chen, M.D., Ph.D., Xiangning Huang, Ph.D., Ellie Grainger, M.Sc.,  
Dana Ghiorghiu, M.D., Ph.D., Toon van der Gronde, Pharm.D., Ph.D.,  
and Suresh S. Ramalingam, M.D., for the LAURA Trial Investigators\*



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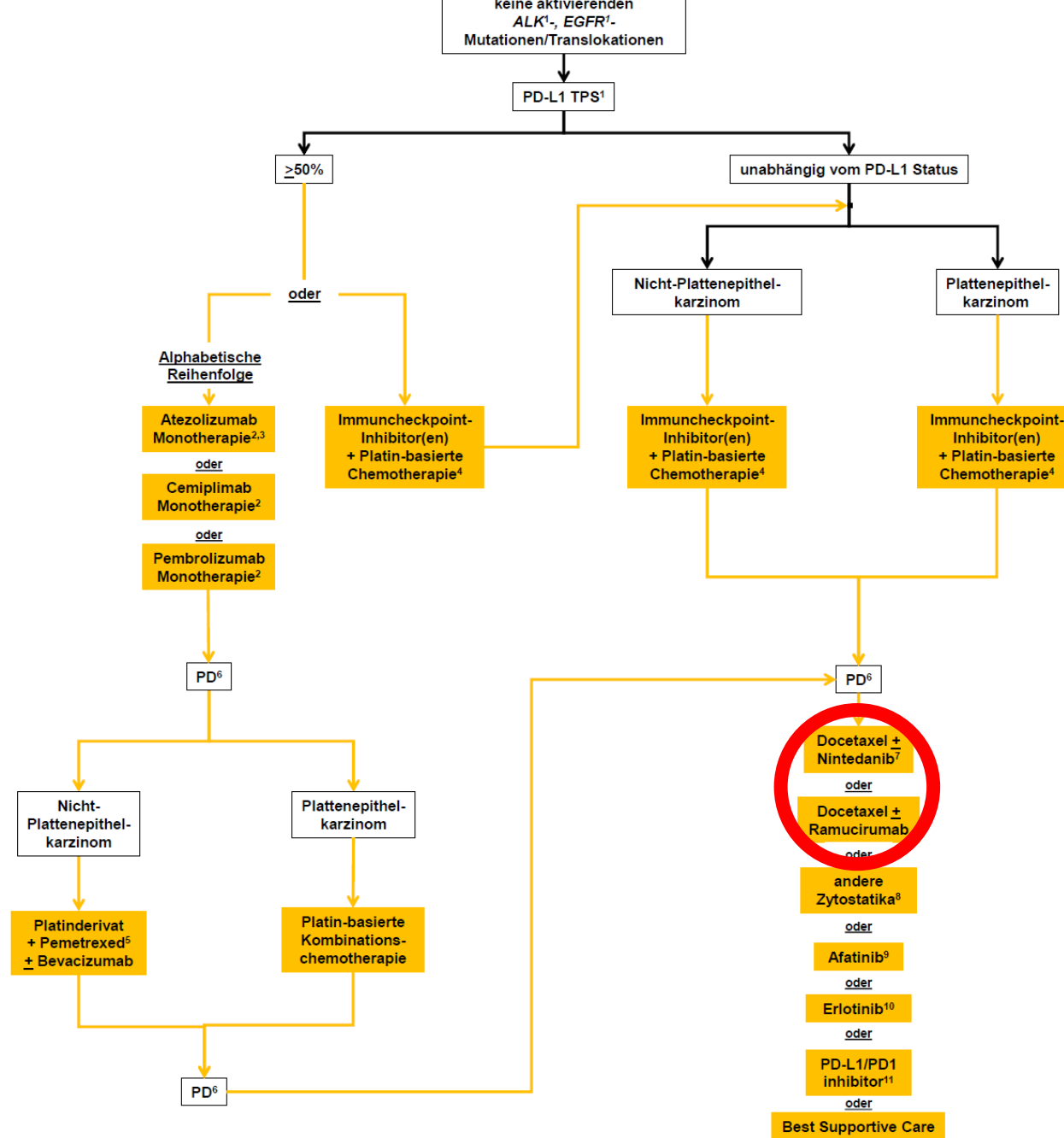
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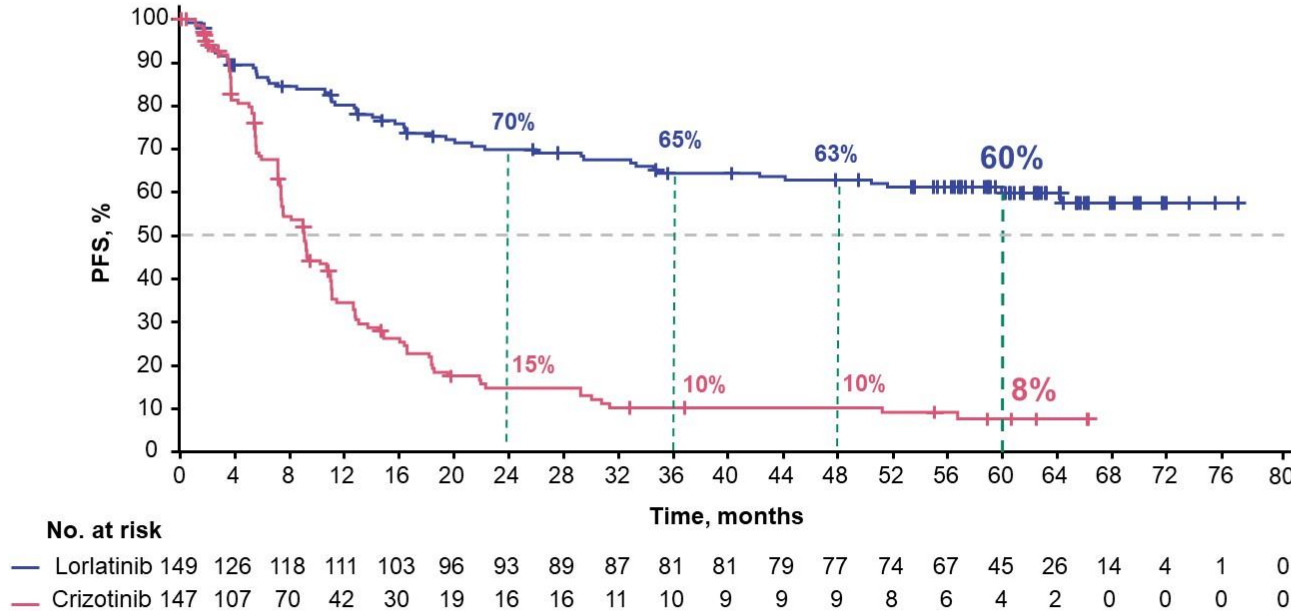
# Lorlatinib vs Crizotinib in Treatment-Naive Patients With Advanced *ALK*+ Non-Small Cell Lung Cancer: 5-Year Progression-Free Survival and Safety From the CROWN Study

Benjamin J. Solomon,<sup>1</sup> Geoffrey Liu,<sup>2</sup> Enriqueta Felip,<sup>3</sup> Tony S. K. Mok,<sup>4</sup> Ross A. Soo,<sup>5</sup> Julien Mazieres,<sup>6</sup> Alice T. Shaw,<sup>7</sup> Filippo de Marinis,<sup>8</sup> Yasushi Goto,<sup>9</sup> Yi-Long Wu,<sup>10</sup> Dong-Wan Kim,<sup>11</sup> Jean-François Martini,<sup>12</sup> Rossella Messina,<sup>13</sup> Jolanda Paolini,<sup>13</sup> Anna Polli,<sup>13</sup> Despina Thomaidou,<sup>14</sup> Francesca Toffalorio,<sup>13</sup> Todd M. Bauer<sup>15</sup>

<sup>1</sup>Peter MacCallum Cancer Centre, Melbourne, VIC, Australia; <sup>2</sup>Princess Margaret Cancer Centre, Toronto, ON, Canada; <sup>3</sup>Vall d'Hebron University Hospital and Vall d'Hebron Institute of Oncology, Barcelona, Spain; <sup>4</sup>State Key Laboratory of Translational Oncology, Chinese University of Hong Kong, Hong Kong; <sup>5</sup>National University Cancer Institute, Singapore; <sup>6</sup>Toulouse University Hospital and Centre de Recherche Cancérologie Toulouse CRCT, INSERM, France; <sup>7</sup>Massachusetts General Hospital Cancer Center, Boston, MA, USA; <sup>8</sup>European Institute of Oncology, IRCCS, Milan, Italy; <sup>9</sup>National Cancer Center Hospital, Tokyo, Japan; <sup>10</sup>Guangdong Lung Cancer Institute, Guangdong Provincial People's Hospital and Guangdong Academy of Medical Sciences, Guangdong, China; <sup>11</sup>Seoul National University College of Medicine and Seoul National University Hospital, Seoul, South Korea; <sup>12</sup>Pfizer, La Jolla, CA, USA; <sup>13</sup>Pfizer, Milan, Italy; <sup>14</sup>Pfizer, Athens, Greece; <sup>15</sup>Greco-Hainsworth Centers for Research/Tennessee Oncology, Nashville, TN, USA

Benjamin J. Solomon, MBBS, PhD  
Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

# At 60.2 Months of Median Follow-Up, Median PFS by Investigator Was Still Not Reached With Lorlatinib



	Lorlatinib (n=149)	Crizotinib (n=147)
Events, n	55	115
PFS, median (95% CI), months	NR (64.3-NR)	9.1 (7.4-10.9)
<b>HR (95% CI)</b>	<b>0.19 (0.13-0.27)</b>	

At the time of this analysis, the required number of OS events for a protocol-specified second interim analysis **has not been reached**. OS follow up is ongoing

HR, hazard ratio; NR, not reached; OS, overall survival; PFS, progression-free survival.



# KRYSTAL-12: phase 3 study of adagrasib versus docetaxel in patients with previously treated locally advanced or metastatic non-small cell lung cancer (NSCLC) harboring a *KRAS*<sup>G12C</sup> mutation

Tony S. K. Mok,<sup>1</sup> Wenxiu Yao,<sup>2</sup> Michaël Duruisseaux,<sup>3-5</sup> Ludovic Doucet,<sup>6</sup> Aitor Azkárte Martínez,<sup>7</sup> Vanesa Gregorc,<sup>8</sup> Oscar Juan-Vidal,<sup>9</sup> Shun Lu,<sup>10</sup> Charlotte De Bondt,<sup>11</sup> Filippo de Marinis,<sup>12</sup> Helena Linardou,<sup>13</sup> Young-Chul Kim,<sup>14</sup> Robert Jotte,<sup>15</sup> Enriqueta Felip,<sup>16</sup> Giuseppe Lo Russo,<sup>17</sup> Martin Reck,<sup>18</sup> Mary F. Michenzie,<sup>19</sup> Wenjing Yang,<sup>19</sup> Julie N. Meade,<sup>19a</sup> Fabrice Barlesi<sup>20</sup>

<sup>1</sup>Chinese University of Hong Kong, Hong Kong Special Administrative Region, China; <sup>2</sup>Sichuan Cancer Hospital & Institute, Chengdu, China; <sup>3</sup>Louis Pradel Hospital, Hospices Civils de Lyon Cancer Institute, Lyon, France; <sup>4</sup>Cancer Research Center of Lyon, UMR INSERM 1052, CNRS 5286, Lyon, France; <sup>5</sup>Université Claude Bernard Lyon 1, Université de Lyon, Lyon, France; <sup>6</sup>Institut de Cancérologie de l'Ouest, Nantes, France; <sup>7</sup>Hospital Universitario Son Espases, Mallorca, Spain; <sup>8</sup>Candiolo Cancer Institute, FPO-IRCCS, Candiolo, Italy; <sup>9</sup>Hospital Universitari i Politècnic La Fe, Valencia, Spain; <sup>10</sup>Shanghai Chest Hospital, Shanghai Jiao Tong University, Shanghai, China; <sup>11</sup>Antwerp University Hospital, University of Antwerp, Antwerp, Belgium; <sup>12</sup>Istituto Europeo di Oncologia, IRCCS, Milan, Italy; <sup>13</sup>Fourth Oncology Department & Comprehensive Clinical Trials Center, Metropolitan Hospital, Athens, Greece; <sup>14</sup>Chonnam National University Medical School and CNU Hwasun Hospital, Hwasun-Gun, Republic of Korea; <sup>15</sup>Rocky Mountain Cancer Center, US Oncology Research, Denver, CO, USA; <sup>16</sup>Vall d'Hebron Institute of Oncology, Vall d'Hebron Barcelona Hospital Campus, Universitat Autònoma de Barcelona, Barcelona, Spain; <sup>17</sup>Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy; <sup>18</sup>Airway Research Center North, German Center for Lung Research, LungenClinic, Grosshansdorf, Germany; <sup>19</sup>Mirati Therapeutics, a Bristol Myers Squibb company, San Diego, CA, USA; <sup>20</sup>Gustave Roussy & Paris Saclay University, Villejuif, France

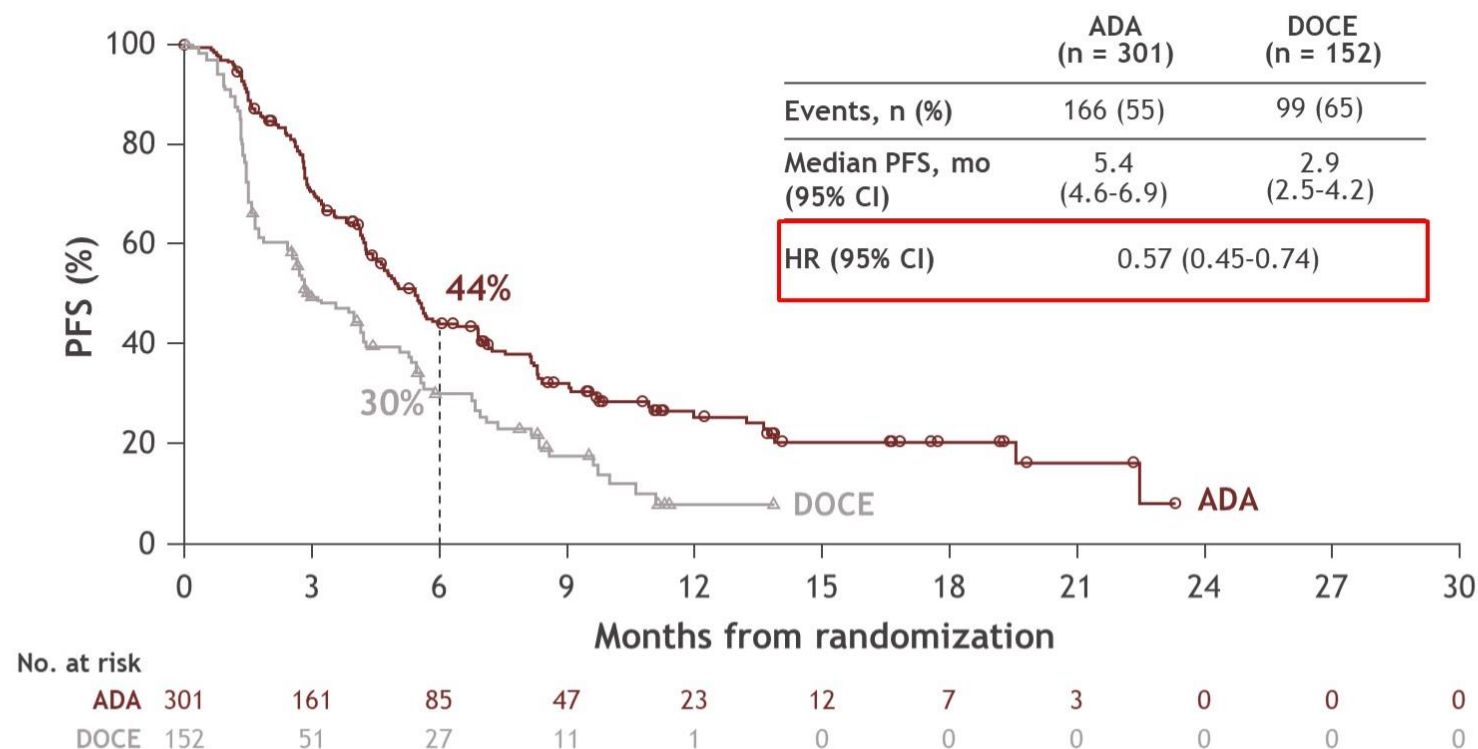
<sup>a</sup>Affiliation at the time of study

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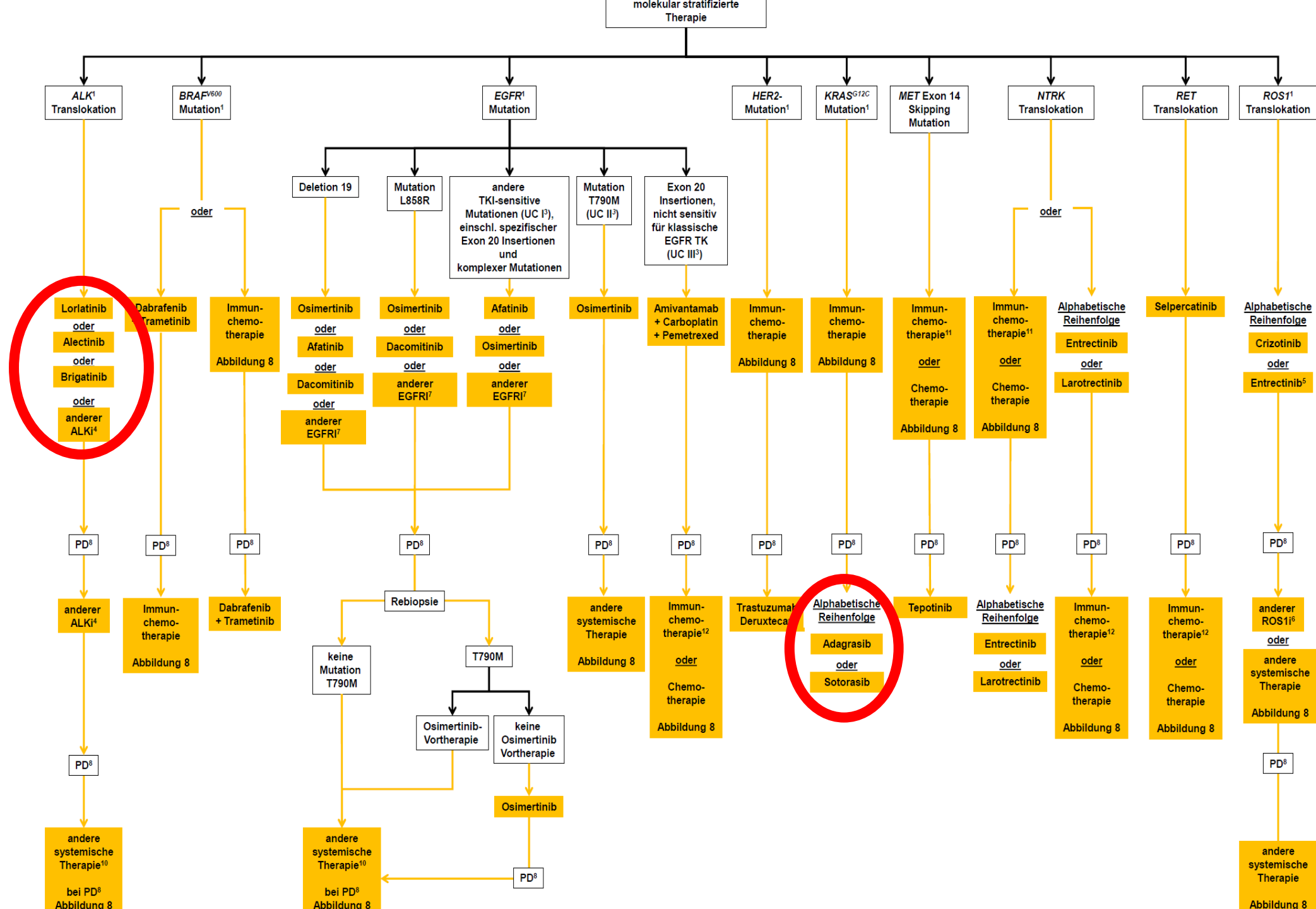
Abstract number LBA8509



# PFS<sup>a</sup> per investigator assessment



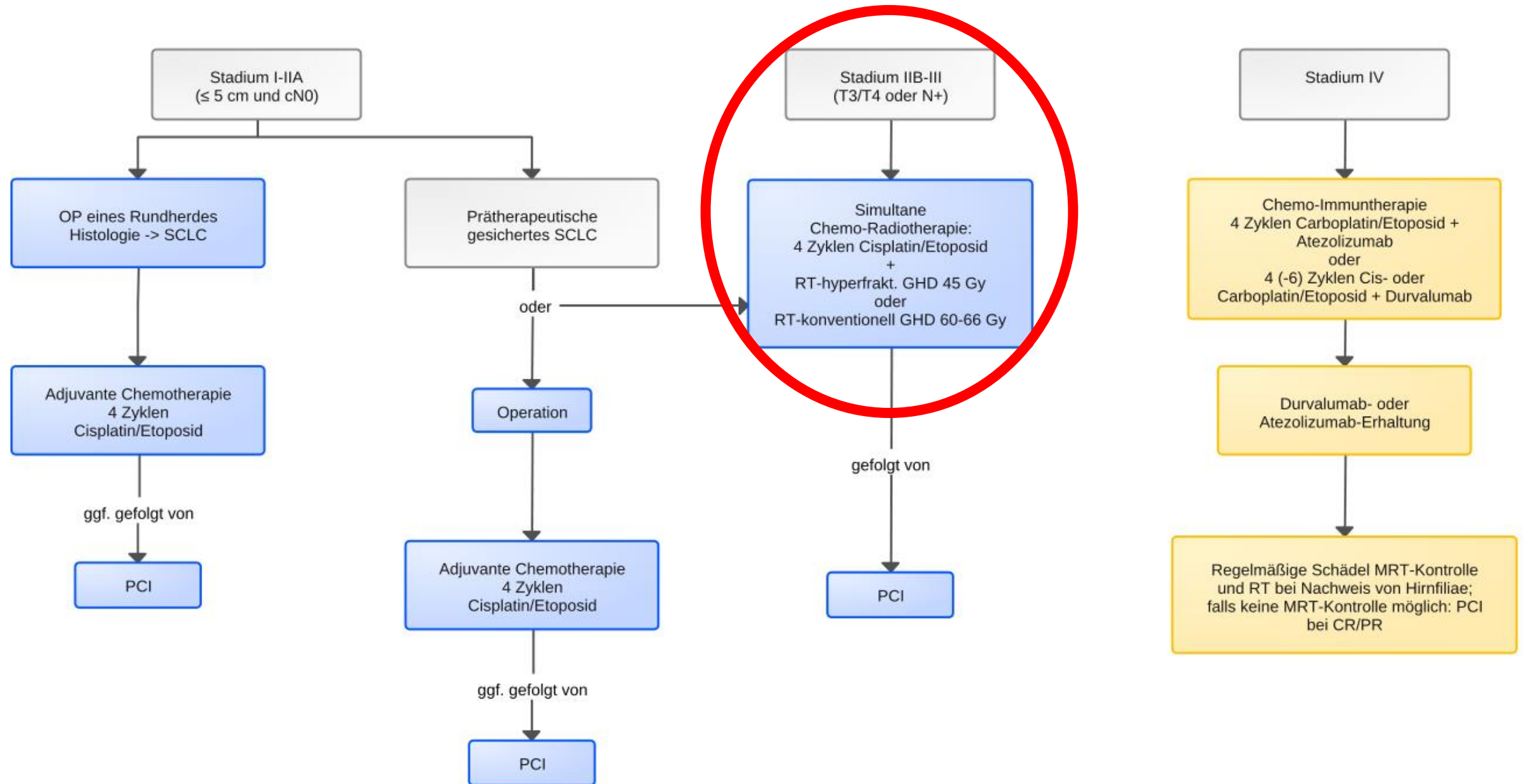
<sup>a</sup>Time from randomization to the date of disease progression or death due to any cause, whichever occurs first. For patients who started a subsequent anticancer therapy prior to disease progression or death, PFS was censored at the date of the last tumor assessment prior to the start of the new therapy.



# ADRIATIC: durvalumab as consolidation treatment for patients with limited-stage small-cell lung cancer (LS-SCLC)

David R. Spigel, Ying Cheng, Byoung Chul Cho, Konstantin Laktionov, Jian Fang, Yuanbin Chen, Yoshitaka Zenke, Ki Hyeong Lee, Qiming Wang, Alejandro Navarro, Reyes Bernabe, Eva Buchmeier, John Wen-Cheng Chang, Isamu Okamoto, Sema Sezgin Goksu, Andrzej Badzio, Bethany Gill, Hema Gowda, Haiyi Jiang, Suresh Senan

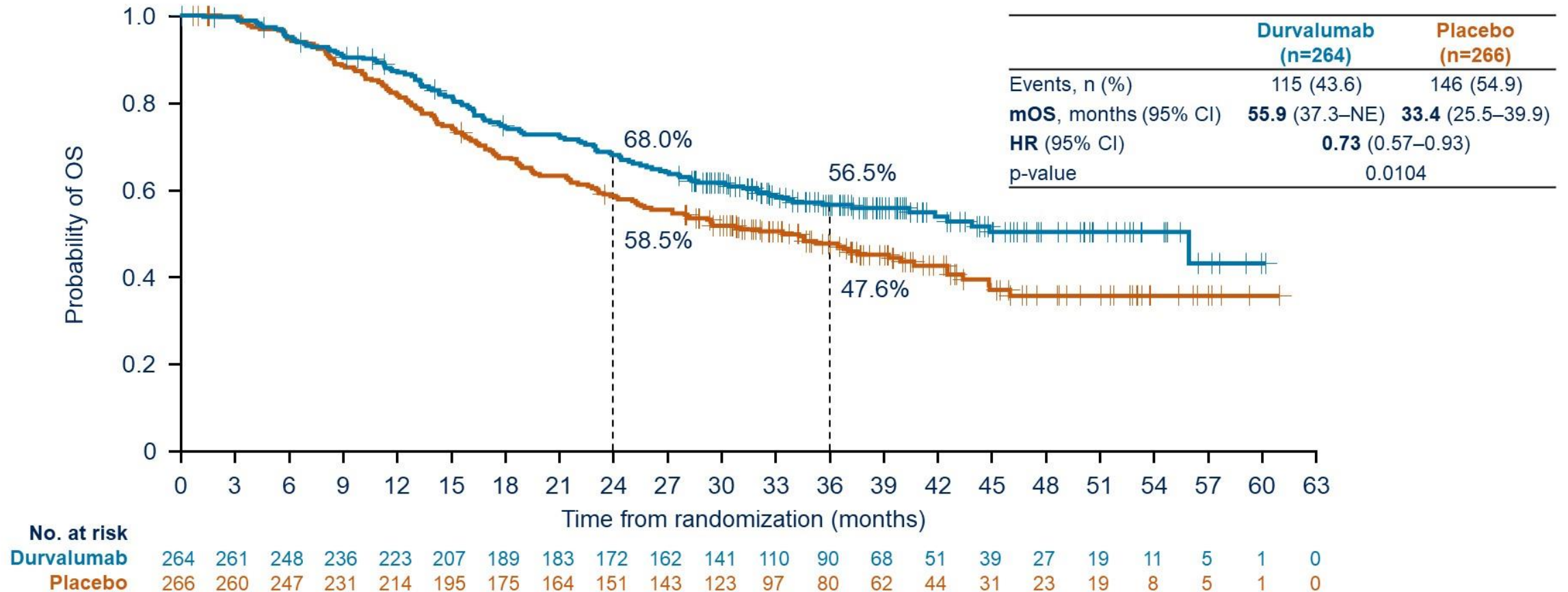
# Therapiestruktur für das kleinzellige Lungenkarzinom (SCLC)





# Overall survival (dual primary endpoint)

- Median duration of follow up in censored patients: 37.2 months (range 0.1–60.9)



OS was analyzed using a stratified log-rank test adjusted for receipt of PCI (yes vs no). The significance level for testing OS at this interim analysis was 0.01679 (2-sided) at the overall 4.5% level, allowing for strong alpha control across interim and final analysis timepoints.

# Comparative Effectiveness Trial of Early Palliative Care Delivered via Telehealth versus In Person among Patients with Advanced Lung Cancer: The REACH PC Trial

Joseph A. Greer PhD & Jennifer S. Temel MD on behalf of:

Chardria Trotter MPH MBA, Vicki A. Jackson MD MPH, Simone Rinaldi APN-BC, Mihir Kamdar MD, Areej El-Jawahri MD, Nora Horick MS, Kedie Pinto MS, Dustin Rabideau PhD, Josephine Feliciano MD, Isaac Chua MD MPH, Konstantinos Leventakos MD, Stacy Fischer MD, Toby C. Campbell MD, Michael W. Rabow MD, Finly Zachariah MD, Laura C. Hanson MD, Sara F. Martin MD, Maria Silveira MD, and the REACH PC Investigators



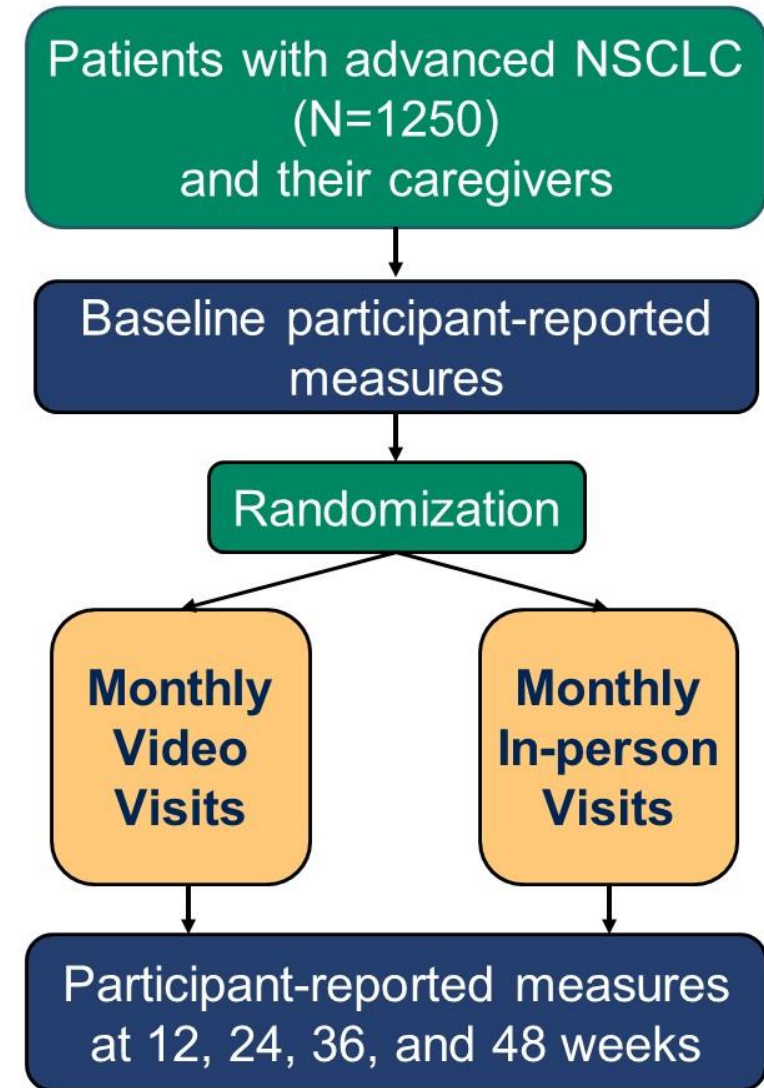
# Study Aims and Design

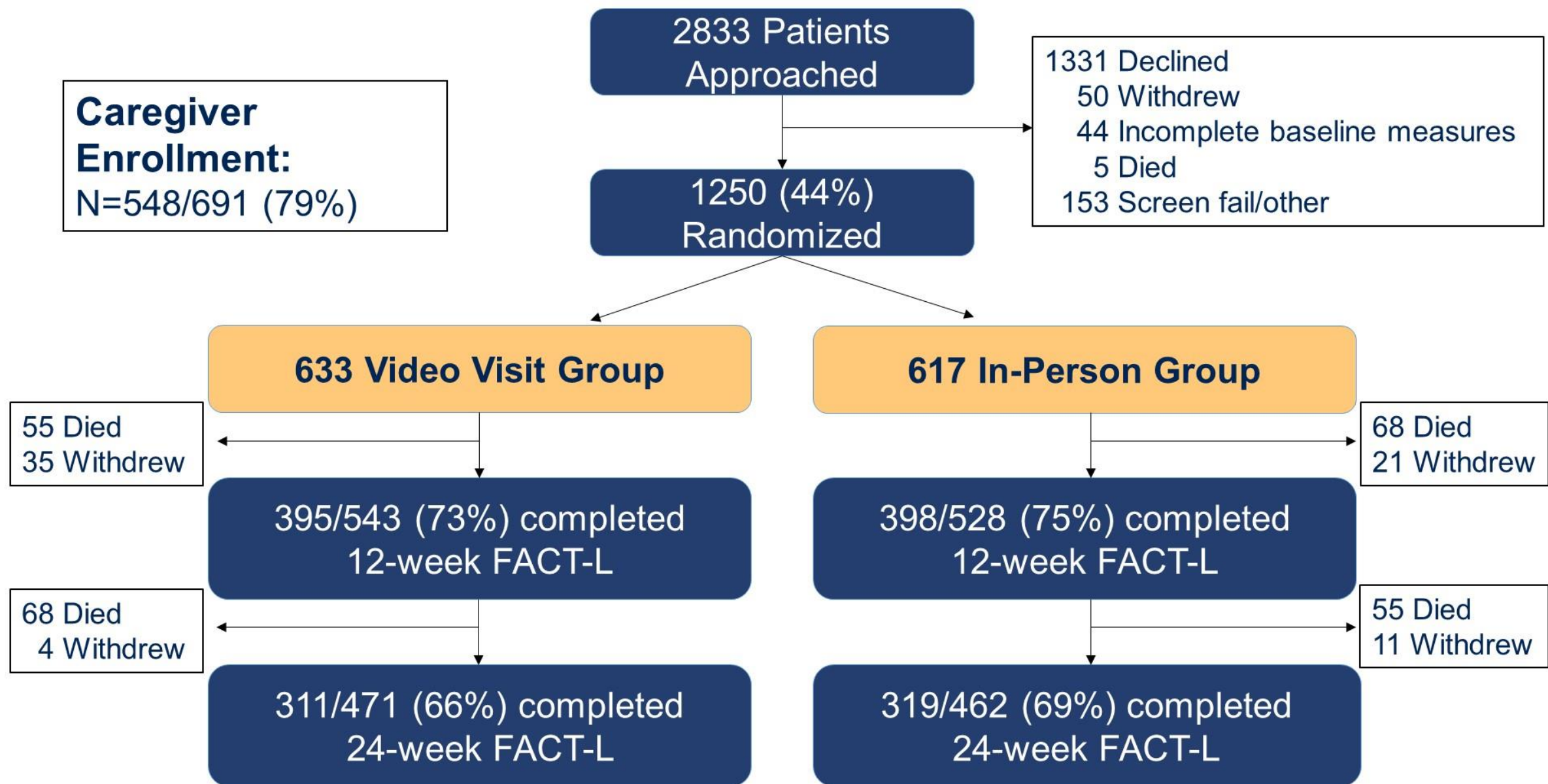
## Primary Aim:

- To evaluate the equivalence of the effect of delivering early palliative care using video versus in-person visits on patient-reported quality of life

## Secondary and Exploratory Aims:

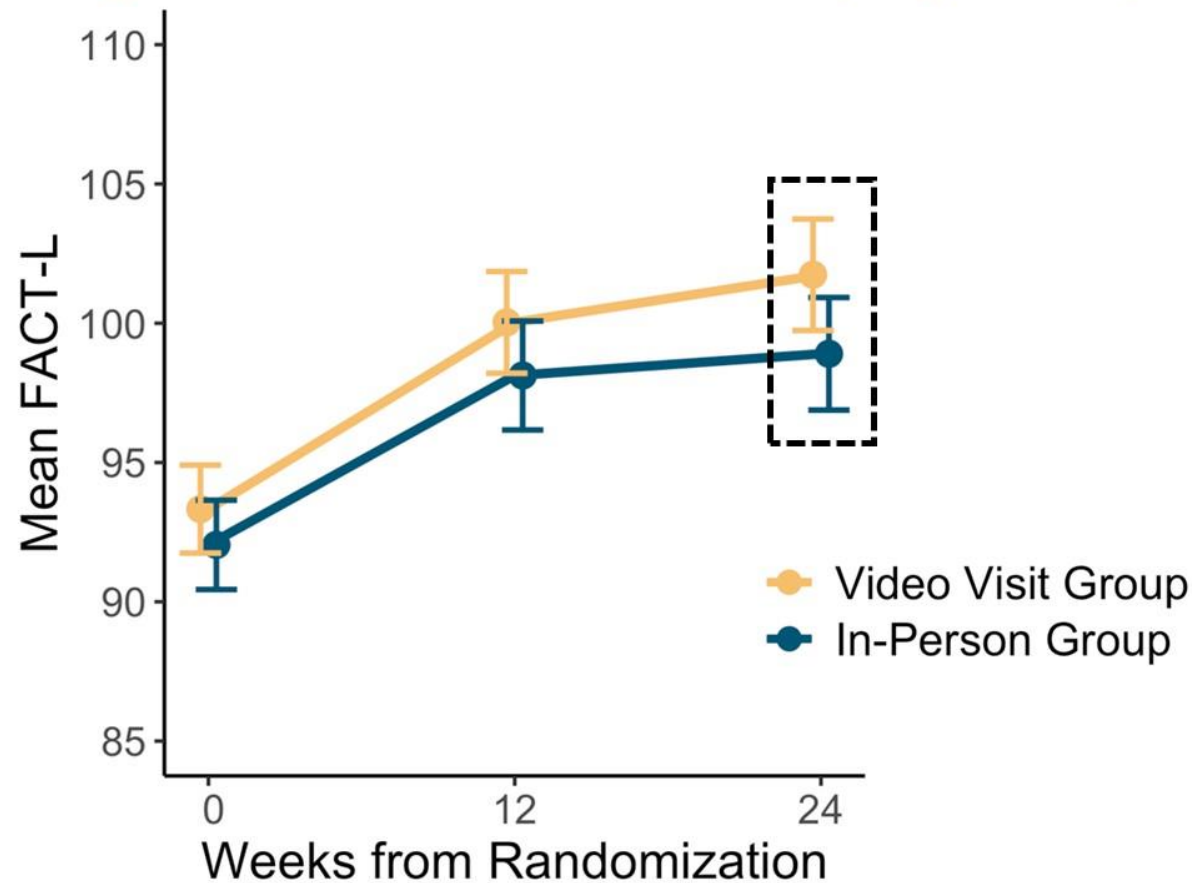
- Satisfaction with care
- Caregiver attendance at study visits
- Mood symptoms





# Primary Outcome: Patient Quality of Life (QOL)

Higher scores indicate better QOL (range: 0-136)



## Adjusted Mean FACT-L at 24 Weeks:

- Video Visit Group: **99.7**
- In-Person Group: **97.7**

Difference (90% CI): **2.0 (0.1, 3.9)**  
**p=0.04 for equivalence**



# Main Study Findings from the REACH PC Trial

- Palliative care led to equivalent benefits for patient-reported quality of life whether delivered via video or in-person visits among adults with advanced lung cancer.
- Findings underscore the potential to increase access to evidence-based early palliative care through telehealth delivery.





ORIGINAL ARTICLE

# Neoadjuvant–Adjuvant or Adjuvant-Only Pembrolizumab in Advanced Melanoma

S.P. Patel, M. Othus, Y. Chen, G.P. Wright, Jr., K.J. Yost, J.R. Hyngstrom, S. Hu-Lieskovan, C.D. Lao, L.A. Fecher, T.-G. Truong, J.L. Eisenstein, S. Chandra, J.A. Sosman, K.L. Kendra, R.C. Wu, C.E. Devoe, G.B. Deutsch, A. Hegde, M. Khalil, A. Mangla, A.M. Reese, M.I. Ross, A.S. Poklepovic, G.Q. Phan, A.A. Onitilo, D.G. Yasar, B.C. Powers, G.C. Doolittle, G.K. In, N. Kokot, G.T. Gibney, M.B. Atkins, M. Shaheen, J.A. Warneke, A. Ikeguchi, J.E. Najera, B. Chmielowski, J.G. Crompton, J.D. Floyd, E. Hsueh, K.A. Margolin, W.A. Chow, K.F. Grossmann, E. Dietrich, V.G. Prieto, M.C. Lowe, E.I. Buchbinder, J.M. Kirkwood, L. Korde, J. Moon, E. Sharon, V.K. Sondak, and A. Ribas



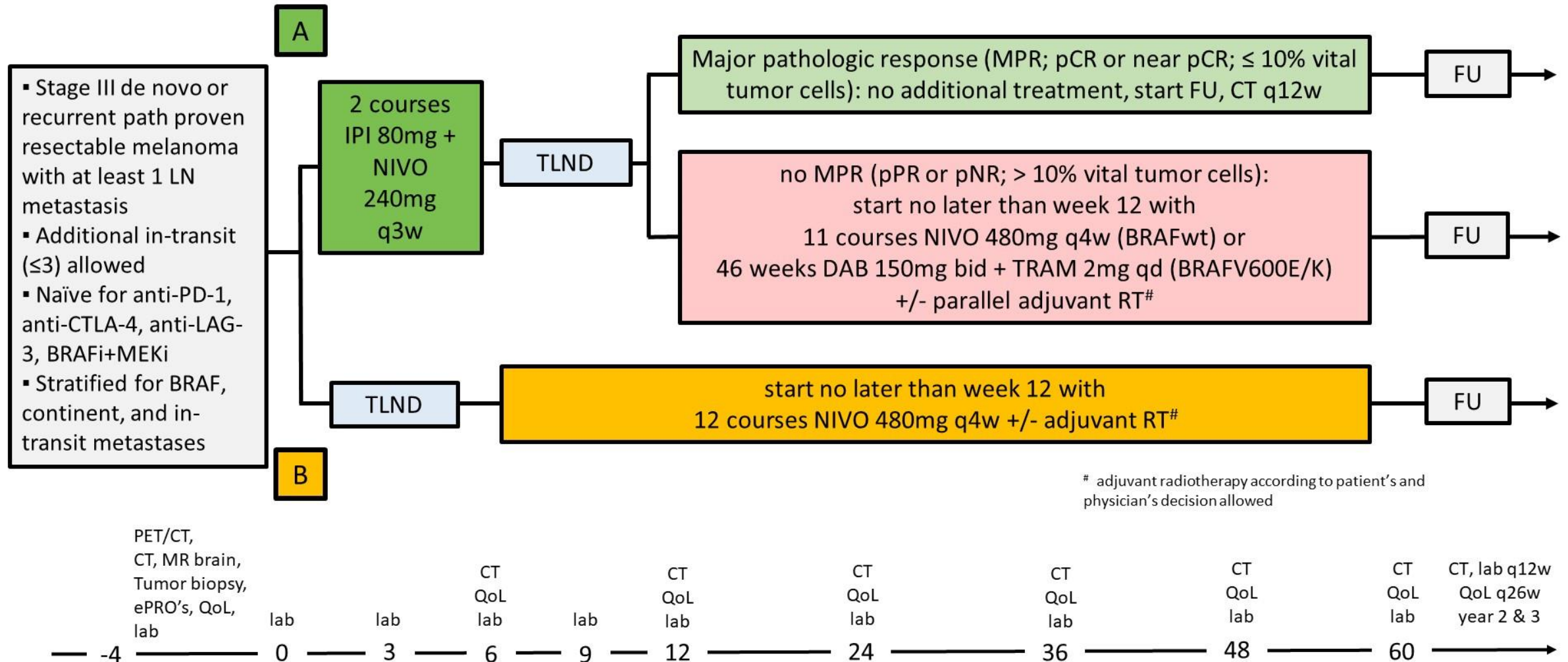
# Neoadjuvant Nivolumab Plus Ipilimumab Versus Adjuvant Nivolumab in Macroscopic, Resectable Stage III Melanoma: The Phase 3 NADINA Trial

**Christian U. Blank**, M.W. Lucas, R.A. Scolyer, B.A. van de Wiel, A.M. Menzies, M. Lopez-Yurda, A.C.J. van Akkooi, W.J. van Houdt, R.P.M. Saw, A. Torres-Acosta, S.N. Lo, G.A.P. Hospers, M.S. Carlino, J.W.B. de Groot, E. Kapiteijn, K.P.M. Suijkerbuijk, P. Rutkowski, S. Sandhu, A.A.M. van der Veldt, G.V. Long

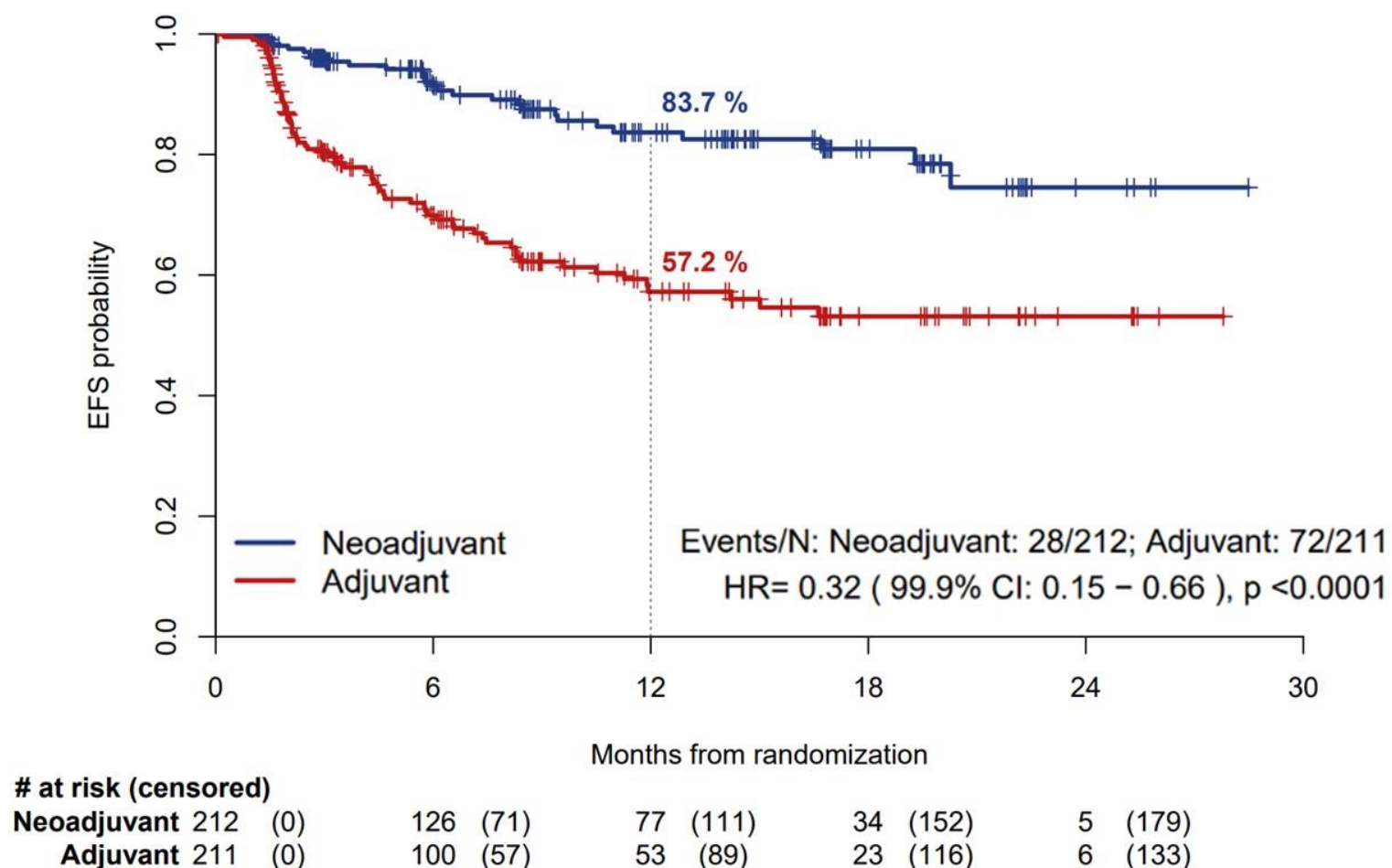


lay abstract

# NADINA - Trial Design



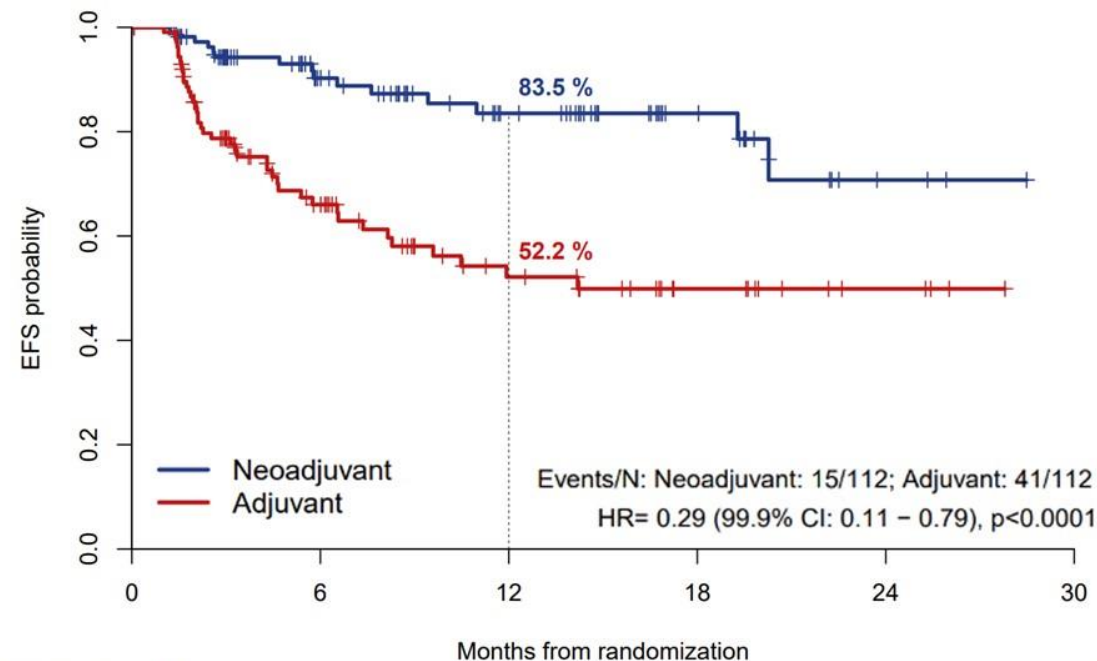
# NADINA – Primary Endpoint: Event-Free Survival (EFS)





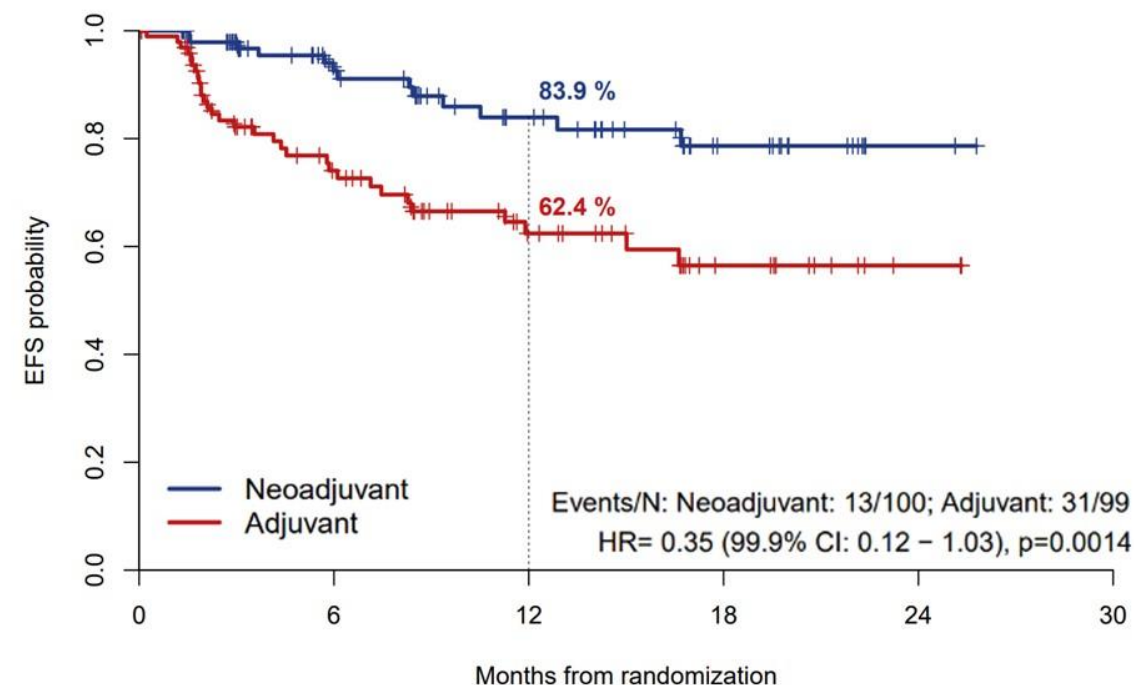
# NADINA – EFS According to BRAF Mutational Status

## BRAF<sup>V600E/K</sup> mutation



# at risk (censored)		Months from randomization				
Neoadjuvant	112 (0)	63 (40)	38 (61)	18 (81)	3 (94)	
Adjuvant	112 (0)	48 (32)	25 (47)	11 (60)	4 (67)	

## BRAF wildtype



# at risk (censored)		Months from randomization				
Neoadjuvant	100 (0)	63 (31)	39 (50)	16 (71)	2 (85)	
Adjuvant	99 (0)	52 (25)	28 (42)	12 (56)	2 (66)	

# NADINA – Main Findings

- NADINA shows a highly statistically significant **event-free survival (EFS) benefit for neoadjuvant combination of ipilimumab + nivolumab** as compared to standard of care adjuvant nivolumab in patients with macroscopic stage III melanoma
- **All patient subgroups benefit** from neoadjuvant ipilimumab + nivolumab (inclusive patients harbouring BRAF<sup>V600E/K</sup> mutation positive and negative tumors)



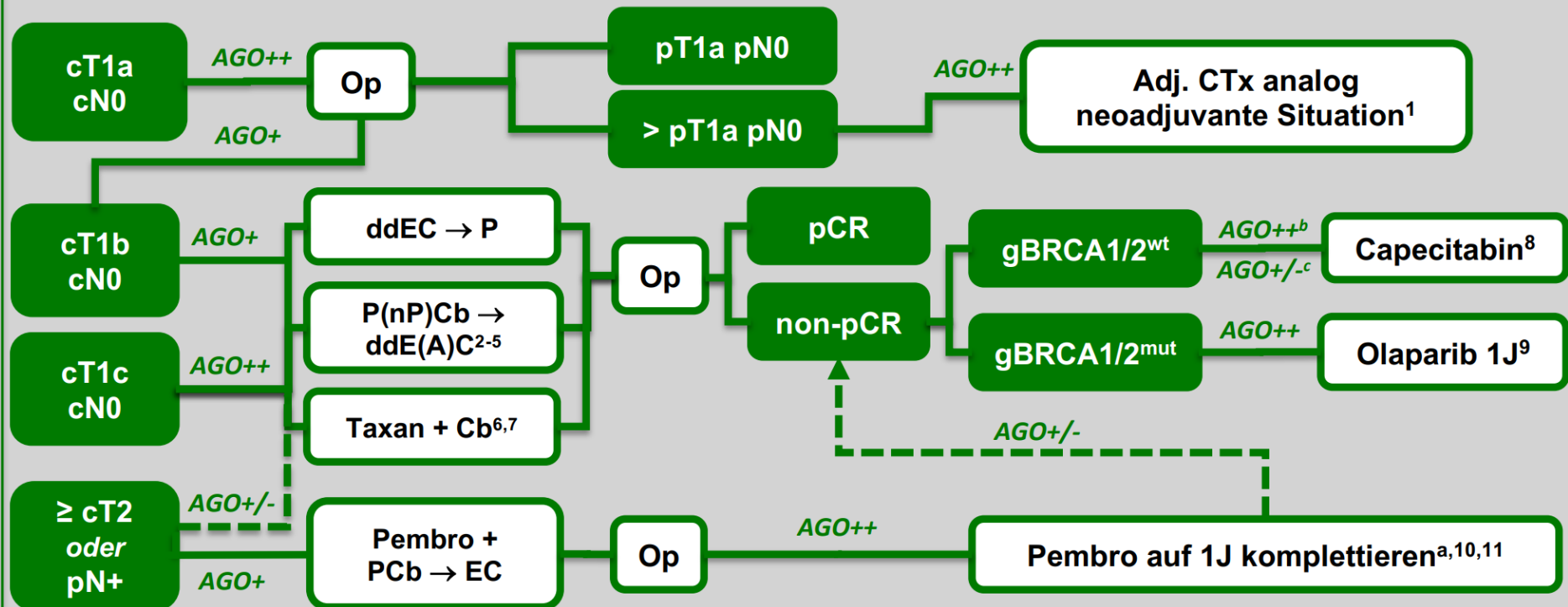
# A-BRAVE Trial: a phase III randomised trial with Avelumab in early triple negative breast cancer with residual disease after neoadjuvant chemotherapy or at high risk after primary surgery and adjuvant chemotherapy

PierFranco Conte, Maria Vittoria Dieci, Giancarlo Bisagni, Peter Schmid, Vittoria Fotia, Federico Piacentini, Michelino de Laurentiis, Adolfo Favaretto, Stefano Tamberi, Giulia Bianchi, Claudio Zamagni, Saverio Cinieri, Domenico Corsi, Lucia Del Mastro, Antonella Ferro, Alessandra Gennari, Marta Mion, Antonino Musolino, Gian Luca De Salvo, Valentina Guarneri  
on behalf of A-BRAVE study team

*Medical Oncology 2, Istituto Oncologico Veneto IRCCS  
DiSCOG-University of Padova, Italy*



# Therapie beim frühen triple-negativen Mammakarzinom



A, Doxorubicin; C, Cyclophosphamid; Cb, Carboplatin; CTx, Chemotherapie; dd, dosisdicht (alle 2 Wochen); E, Epirubicin; J, Jahr; mut, mutiert; nP, nab-Paclitaxel; Op, Operation; Pembro, Pembrolizumab; P, Paclitaxel; wt, wild type; <sup>a</sup> sofern Pembrolizumab neoadjuvant begonnen wurde; <sup>b</sup> nach A/T-haltiger Chemotherapie; <sup>c</sup> nach Chemotherapie mit Platin und/oder Pembrolizumab.

# A-BRAVE Trial - Study Design

Investigator-driven study, sponsored by University of Padova.  
Drug supply and Grant support by Merck KGaA.



## High Risk TNBC patients who completed locoregional and systemic treatment with curative intent

Key eligibility criteria:

- Age  $\geq 18$  years
- ECOG PS 0-1
- TNBC (ER & PgR  $<10\%$ , HER2 0-1+ or 2+ FISH-)<sup>^</sup>
- Anthracycline and taxane (neo)-adjuvant ChemoRx
- Tissue samples for central PD-L1 assessment
- Randomization  $<10$  weeks from last chemo or surgery

- **Stratum A (Adjuvant):** pT2N1, pT3-4 N0-3, pN2-3 anyT<sup>#</sup>
- **Stratum B (Post-neoadjuvant):** residual invasive carcinoma in the breast and/or axillary lymph nodes<sup>§\*</sup>

R 1:1  
N=477

**Avelumab**  
10mg/kg, iv, q 2 weeks for 52 weeks

**Observation**

In case of ER 1-9%, adjuvant HT allowed at discretion of treating physicians.  
Whenever indicated, radiotherapy allowed concomitantly with avelumab.

<sup>^</sup>for patients in the neoadjuvant stratum, TN status required in the preoperative and in the post-surgical specimen

<sup>#</sup> trial initially limited to pN $\geq 2$ ; protocol amendment in 10/2017 to include patients with pT2N1 and pT3-4 N0-3 disease stage

<sup>§</sup> excluding ypT1micN0, ypT1micN0i+, ypT0N0i+

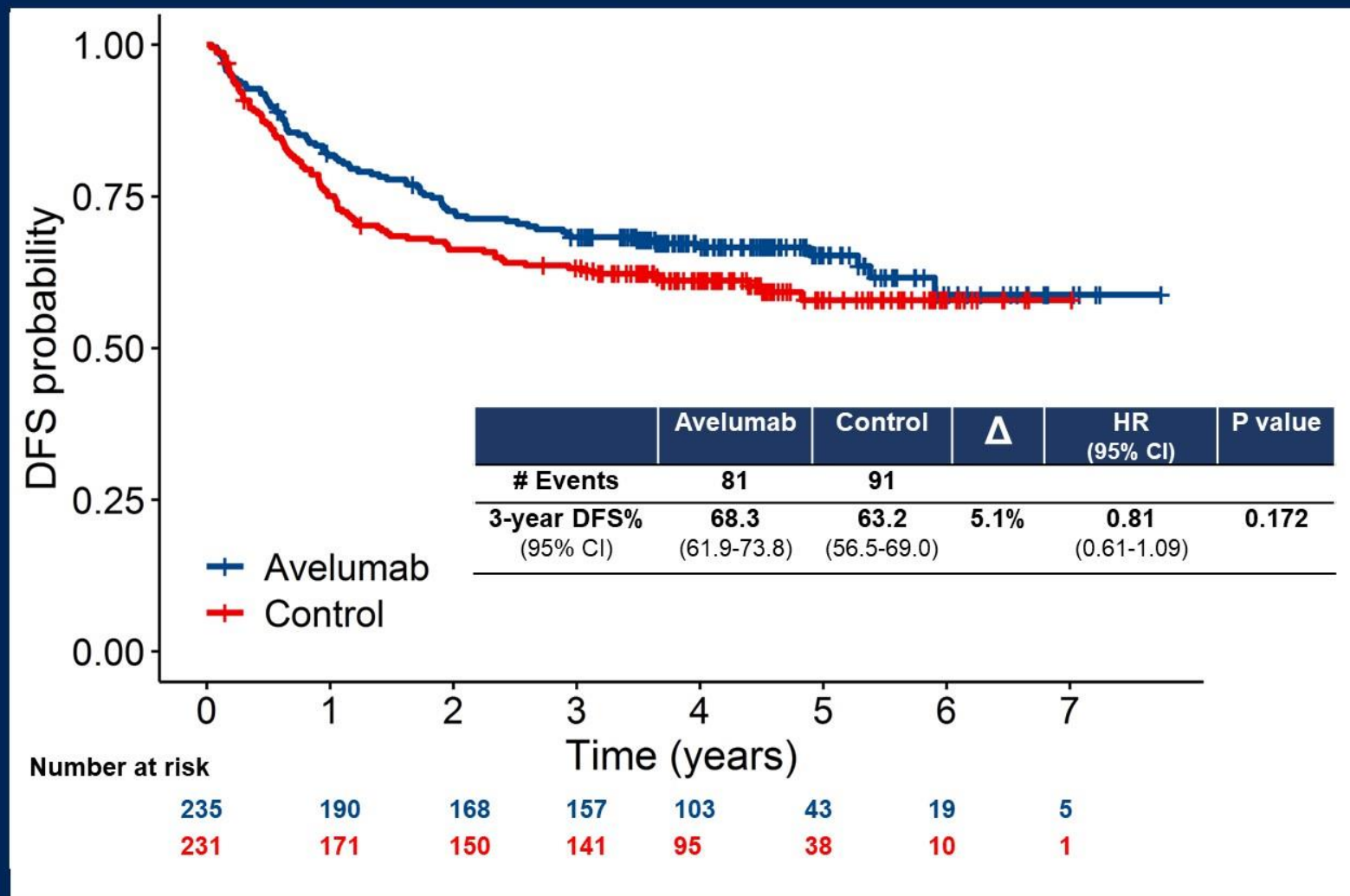
<sup>\*</sup> **After amendment on 06/2018, patients in stratum B were allowed to receive additional post-operative chemotherapy and were randomized at completion of treatment.**  
Randomization balanced for Stratum A and Stratum B.

EUDRACT 2016-000189-45; NCT 02926196

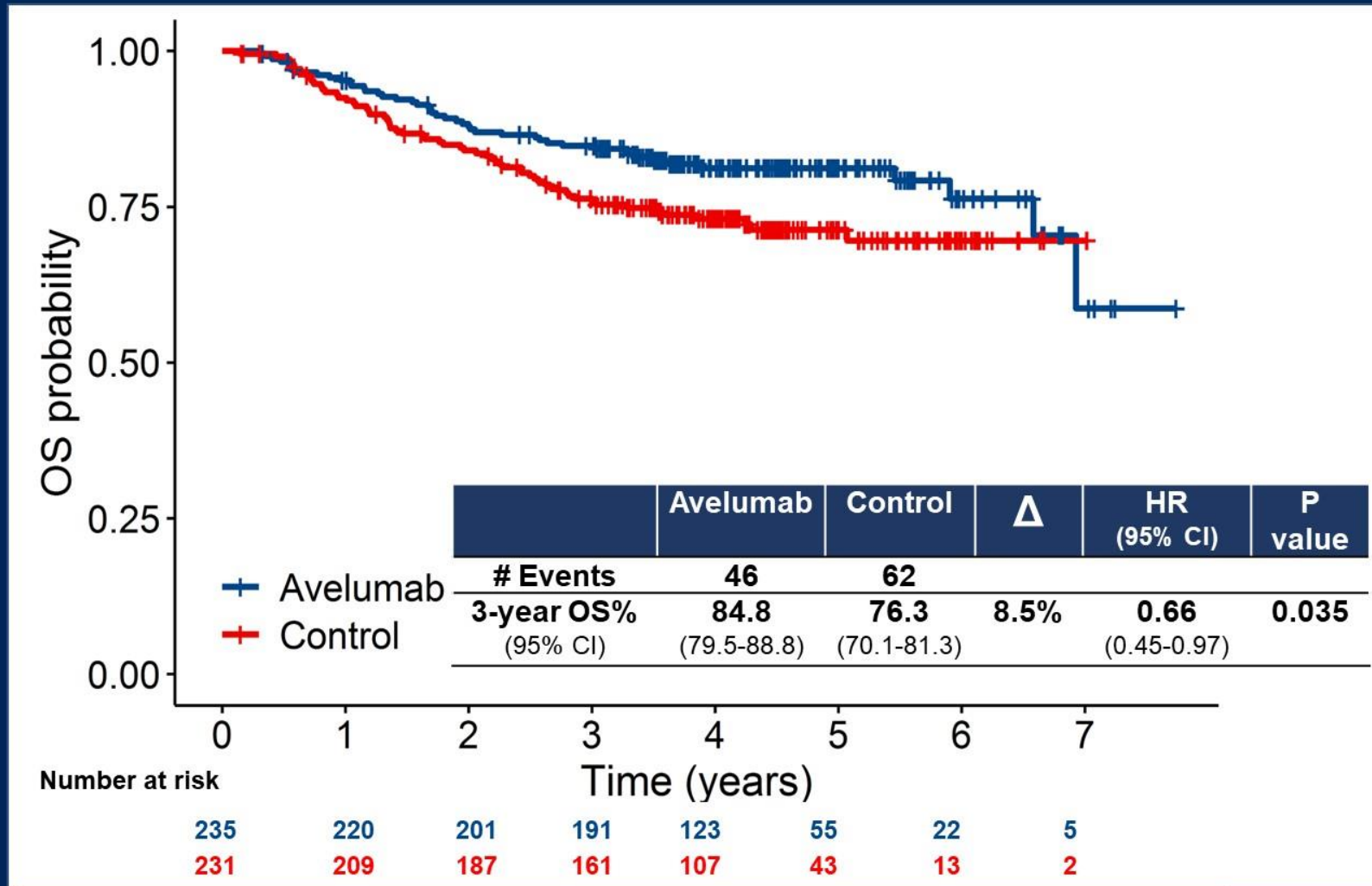


# A-BRAVE Trial - Disease-Free Survival, ITT (co-primary end point)

median FUp: 52.1 months (95% CI: 49.8- 53.8)



# A-BRAVE Trial - Overall Survival, ITT (secondary endpoint)

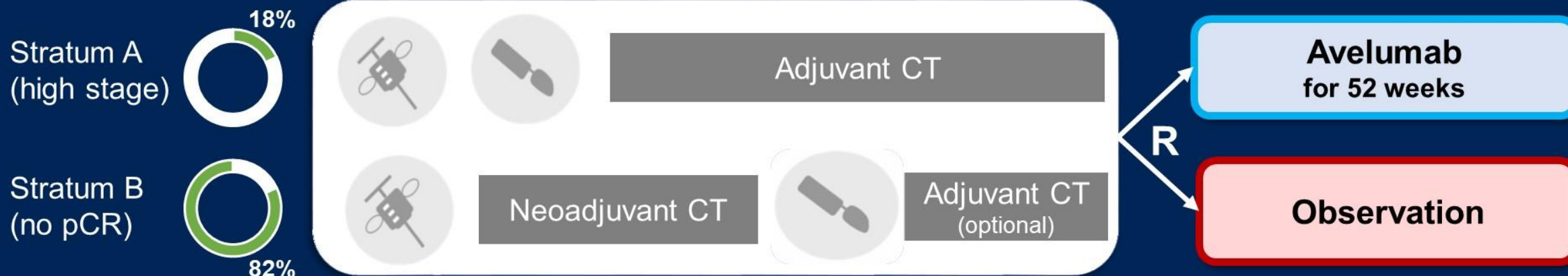




# A-BRAVE Trial - Key findings

2

Adjuvant trial in TNBC at high risk of relapse; n=466



- **Primary endpoint DFS: *not met***
- **Secondary endpoint OS: *significant improvement with Avelumab***
- **Exploratory endpoint DDFS: *significant improvement with Avelumab***
- **Safety of Avelumab: no new safety signal; rare G  $\geq 3$  irAEs**

# Trastuzumab deruxtecan vs physician's choice of chemotherapy in patients with hormone receptor–positive, human epidermal growth factor receptor 2 (HER2)–low or HER2-ultralow metastatic breast cancer with prior endocrine therapy: primary results from DESTINY-Breast06

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**Giuseppe Curigliano**

European Institute of Oncology, IRCCS, Milan, Italy;

Department of Oncology and Hematology-Oncology, University of Milan, Italy

Sunday, June 2, 2024

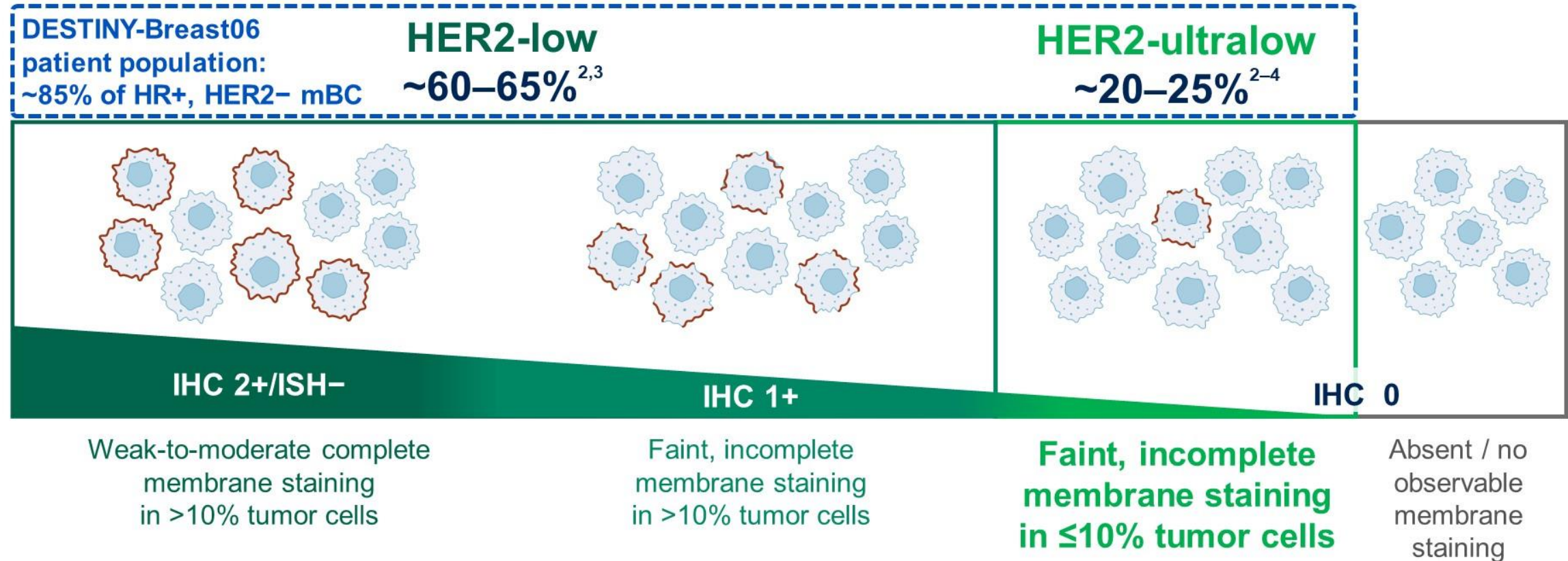
**Additional authors:** Xichun Hu, Rebecca Dent, Kan Yonemori, Carlos H Barrios, Joyce A O'Shaughnessy, Hans Wildiers, Qingyuan Zhang, Seock-Ah Im, Cristina Saura, Laura Biganzoli, Joohyuk Sohn, Christelle Lévy, William Jacot, Natasha Begbie, Jun Ke, Gargi Patel, Aditya Bardia

**On behalf of the DESTINY-Breast06 investigators**



# Targeting 'low' and 'ultralow' HER2-expressing tumors in mBC

HER2 IHC categories within HR+, HER2-negative (HER2-) mBC (per ASCO/CAP<sup>1</sup>)



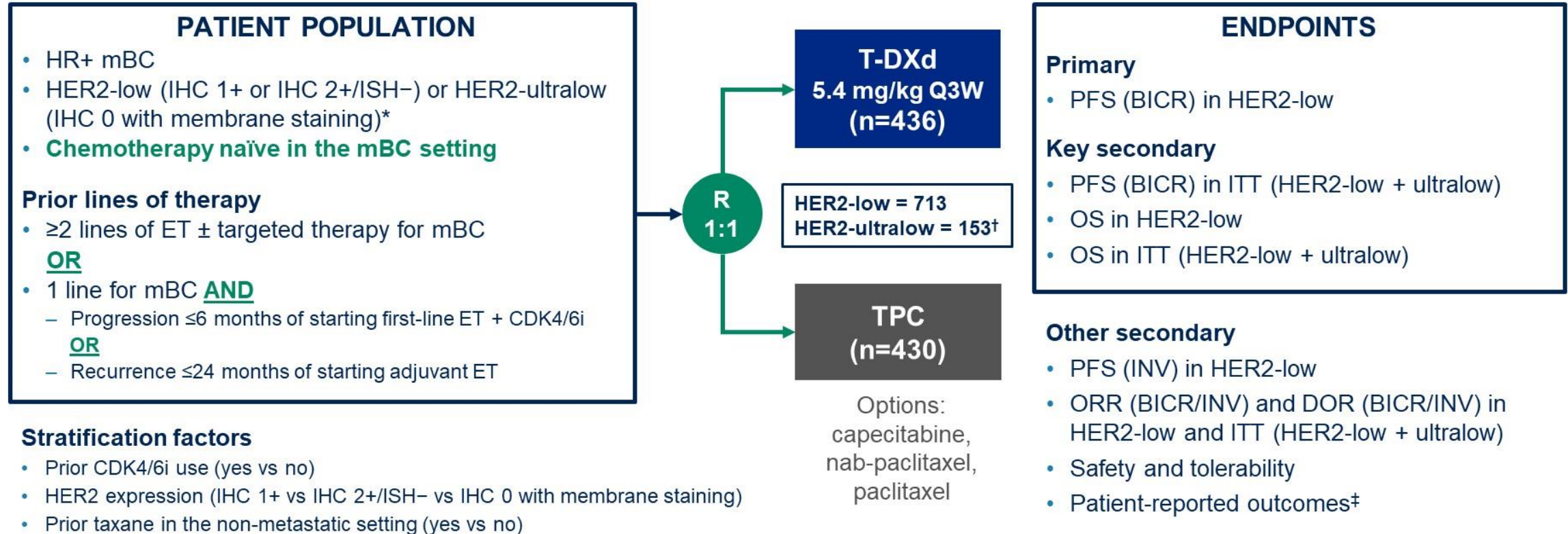
ASCO/CAP, American Society of Clinical Oncology / College of American Pathologists; HER2, human epidermal growth factor receptor 2; HR+, hormone receptor-positive; IHC, immunohistochemistry; ISH, in situ hybridization; mBC, metastatic breast cancer; T-DXd, trastuzumab deruxtecan

Images adapted from Venetis K, et al. *Front Mol Biosci*. 2022;9:834651. CC BY 4.0 license available from: <https://creativecommons.org/licenses/by/4.0/>

1. Wolff AC, et al. *J Clin Oncol*. 2023;41:3867–3872; 2. Denkert C, et al. *Lancet Oncol*. 2021;22:1151–1161; 3. Chen Z, et al. *Breast Cancer Res Treat*. 2023;202:313–323; 4. Mehta S, et al. *J Clin Oncol*. 2024;42(Suppl. 16):Abstract e13156

# Study design

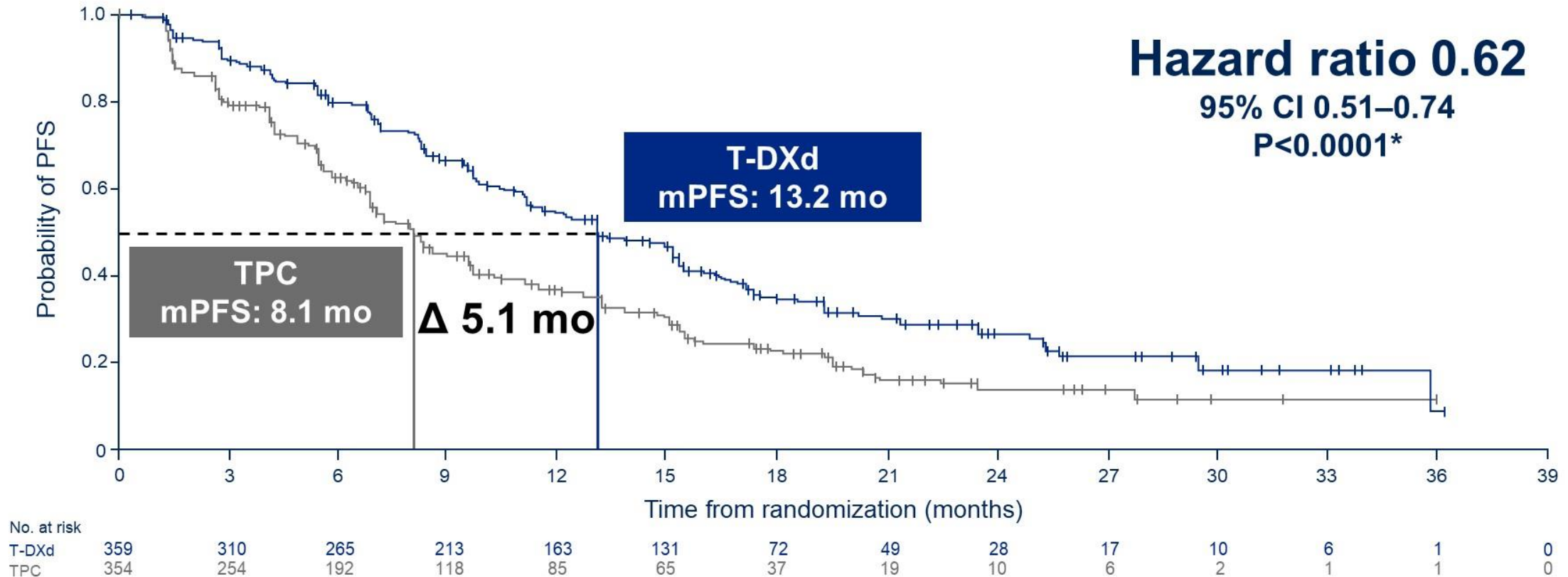
## DESTINY-Breast06: a Phase 3, randomized, multicenter, open-label study (NCT04494425)



\*Study enrollment was based on central HER2 testing. HER2 status was determined based on the most recent evaluable HER2 IHC sample prior to randomization. HER2-ultralow was defined as faint, partial membrane staining in ≤10% of tumor cells (also known as IHC >0<1+); †HER2-ultralow status as determined per IRT data (note: efficacy analyses in the HER2-ultralow subgroup were based on n=152 as determined per central laboratory testing data); ‡to be presented separately BICR, blinded independent central review; CDK4/6i, cyclin-dependent kinase 4/6 inhibitor; DOR, duration of response; ET, endocrine therapy; HER2, human epidermal growth factor receptor 2; HR+, hormone receptor-positive; IHC, immunohistochemistry; INV, investigator assessed; IRT, interactive response technology; ISH, in situ hybridization; ITT, intent-to-treat; mBC, metastatic breast cancer; ORR, objective response rate; OS, overall survival; PD, progressive disease; PFS, progression-free survival; Q3W, every 3 weeks; R, randomization; T-DXd, trastuzumab deruxtecan; TPC, chemotherapy treatment of physician's choice NCT04494425. Updated. April 12, 2024. Available from: <https://clinicaltrials.gov/study/NCT04494425> (Accessed May 13, 2024)



# PFS (BICR) in HER2-low: primary endpoint



**T-DXd demonstrated a statistically significant and clinically meaningful improvement in PFS compared with standard-of-care chemotherapy in HER2-low**

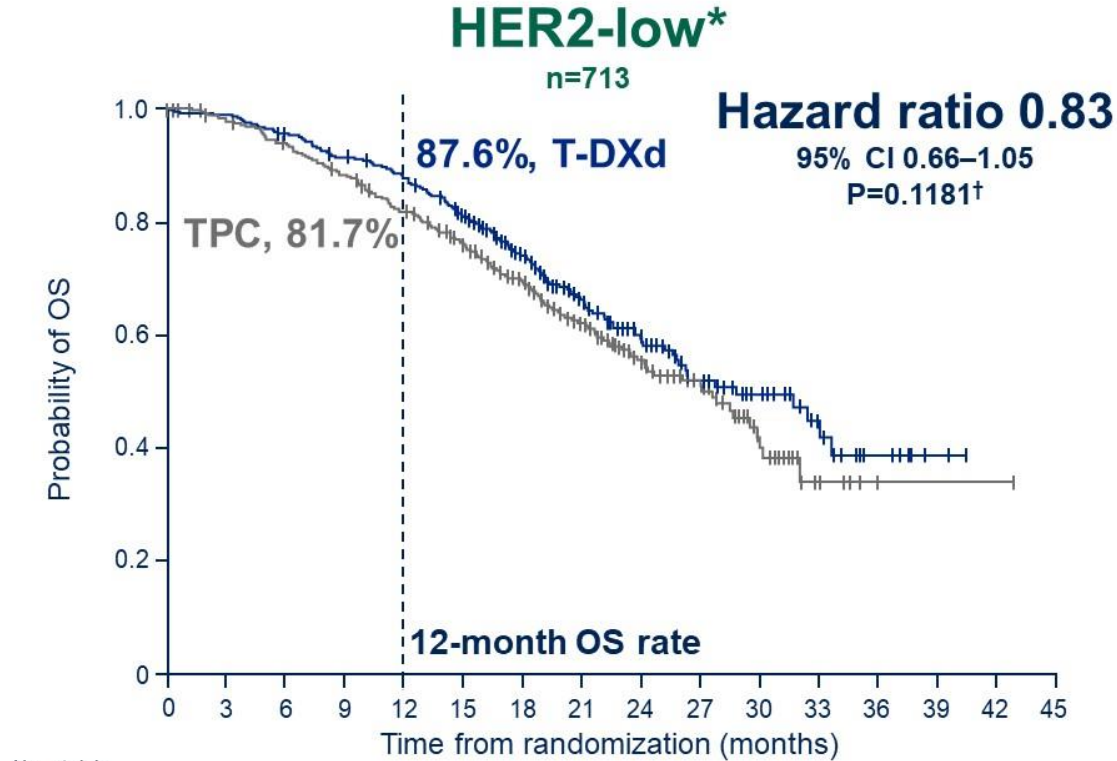
\*P-value of <0.05 required for statistical significance

BICR, blinded independent central review; CI, confidence interval; HER2, human epidermal growth factor receptor 2; mo, months; (m)PFS, (median) progression-free survival; T-DXd, trastuzumab deruxtecan;

TPC, chemotherapy treatment of physician's choice

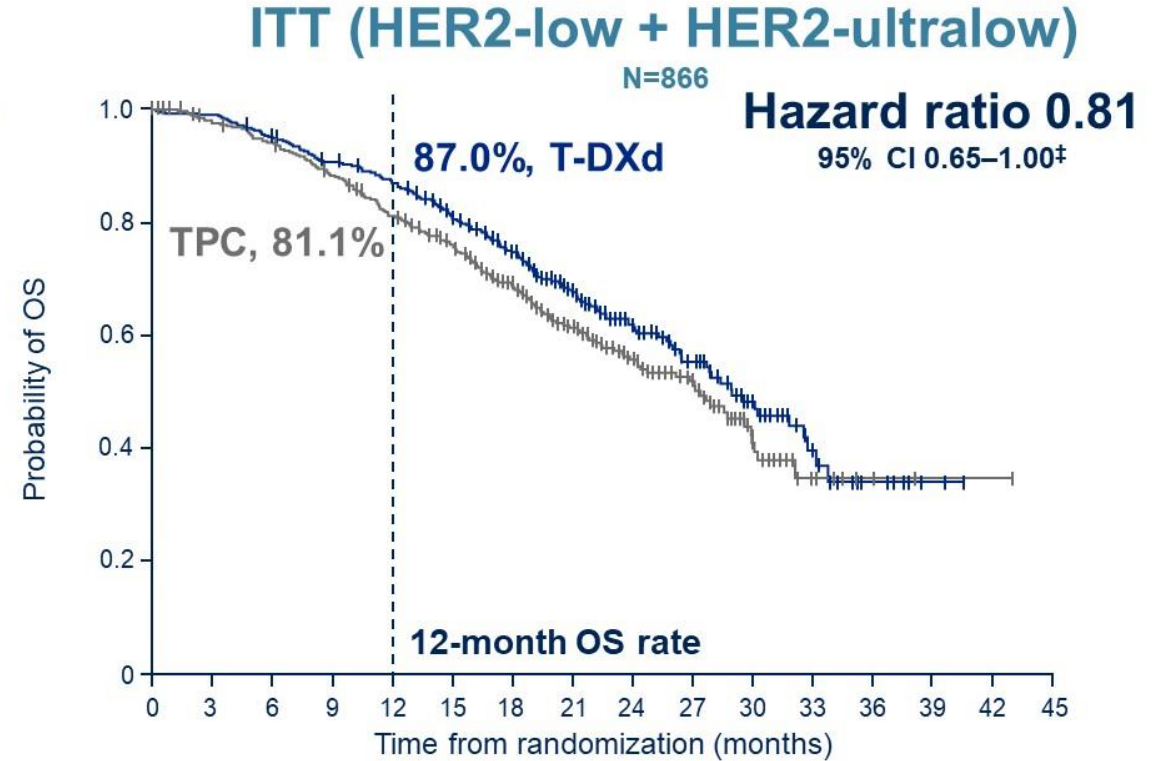


# OS in HER2-low and ITT: key secondary endpoints (~40% maturity)



No. at risk	359	354	341	324	309	279	198	140	96	53	32	16	7	2	0	0
T-DXd	359	354	341	324	309	279	198	140	96	53	32	16	7	2	0	0
TPC	354	333	319	298	273	247	185	126	86	53	23	6	2	1	1	0

**20.1% of patients in the TPC group received T-DXd post treatment discontinuation (HER2-low)**



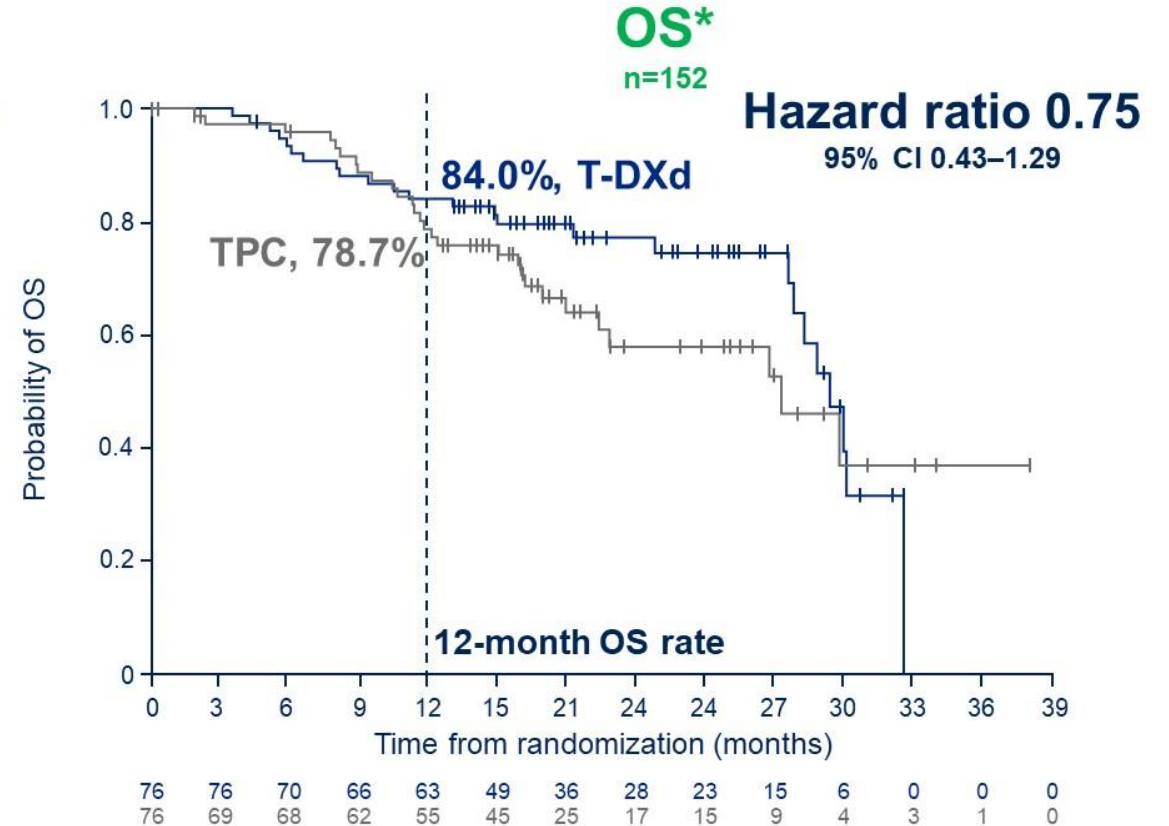
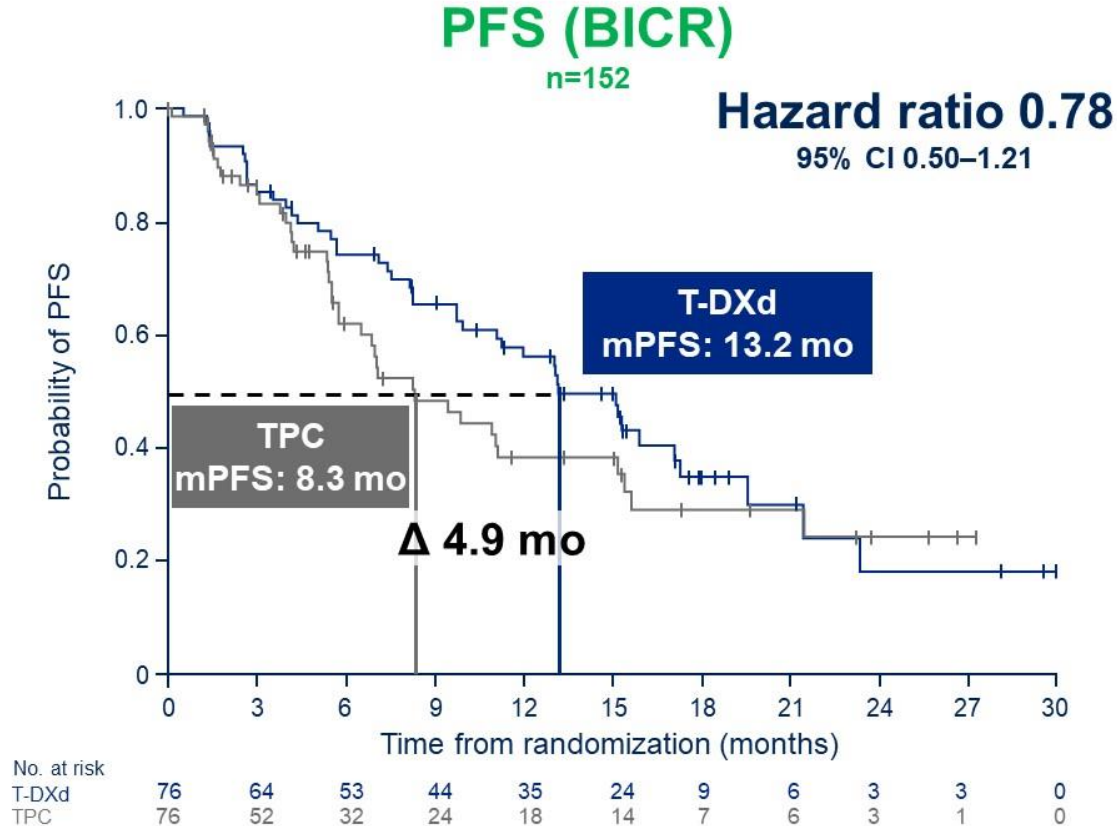
436	431	412	391	373	329	235	169	120	69	39	16	7	2	0	0
430	402	387	360	328	292	210	143	101	62	27	9	3	1	1	0

**17.9% of patients in the TPC group received T-DXd post treatment discontinuation (ITT)**

\*39.6% maturity (of total N for population) at this first interim analysis; median duration of follow up was 18.6 months (HER2-low); †P-value of <0.0046 required for statistical significance; ‡no test of significance was performed in line with the multiple testing procedure; median duration of follow up was 18.2 months (ITT)

CI, confidence interval; HER2, human epidermal growth factor receptor 2; ITT, intent-to-treat; OS, overall survival; T-DXd, trastuzumab deruxtecan; TPC, chemotherapy treatment of physician's choice

# PFS and OS in HER2-ultralow: prespecified exploratory analyses



**PFS improvement with T-DXd vs TPC in HER2-ultralow was consistent with results in HER2-low**

\*34.9% maturity (of total N for population) at this first interim analysis; median duration of follow up was 16.8 months

BICR, blinded independent central review; CI, confidence interval; HER2, human epidermal growth factor receptor 2; OS, overall survival; mo, months; (m)PFS, (median) progression-free survival; T-DXd, trastuzumab deruxtecan; TPC, chemotherapy treatment of physician's choice



# ABSTRACT LBA5002: A randomized, double-blind, placebo-controlled trial of metformin in reducing progression among men on expectant management for low-risk prostate cancer: The MAST (Metformin Active Surveillance Trial) study.

Neil E. Fleshner, Rui Miguel Bernardino, Katherine Lajkosz, Fred Saad, Jonathan Izawa, Darrel Drachenberg, Jeff W. Saranchuk, Simon Tanguay, Ricardo A. Rendon, Michael Leveridge, Bobby Shayegan, Adrian Fairey, Jessica Grace Cockburn, Doron Berlin, Robert James Hamilton, Tiiu Sildva, Rodney H. Breau, Patrick O. Richard, Laurence Klotz, Anthony M. Joshua

Prof. Anthony Joshua BSc(Med) MBBS PhD FRACP  
Princess Margaret Cancer Centre, Toronto, Canada  
Kinghorn Cancer Centre, St Vincents Hospital, Sydney, Australia



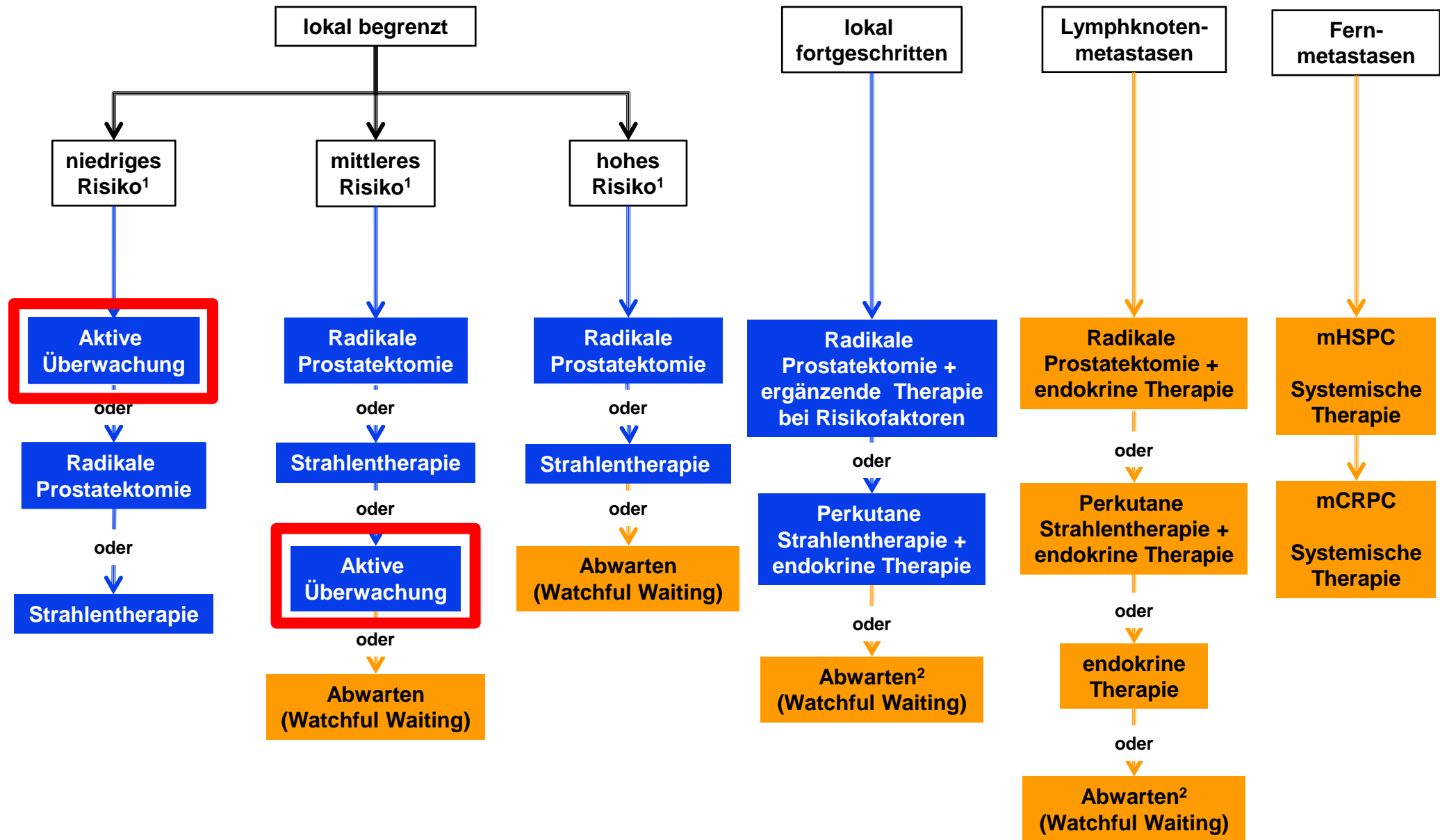
Anthony.Joshua@svha.org.au



@AnthonyMJoshua



@FleshnerNeil





# BACKGROUND: Rationale



## BIOLOGICAL

Importance of insulin, mTOR signaling<sup>1</sup>

Overcomes NKX3.1 loss<sup>2</sup>

Improved immune micro-environment<sup>3</sup>



## EPIDEMIOLOGICAL

Reduction of PCa mortality in diabetic men<sup>4</sup>

Associated with less BCR<sup>5</sup>

Improved OS in SEER<sup>6</sup>



## CLINICAL

Reduction of Ki67 in neoadjuvant trial<sup>7</sup>

Improved OS with Abiraterone<sup>8</sup>

Reduces progression and improves OS in HSPC<sup>9</sup>

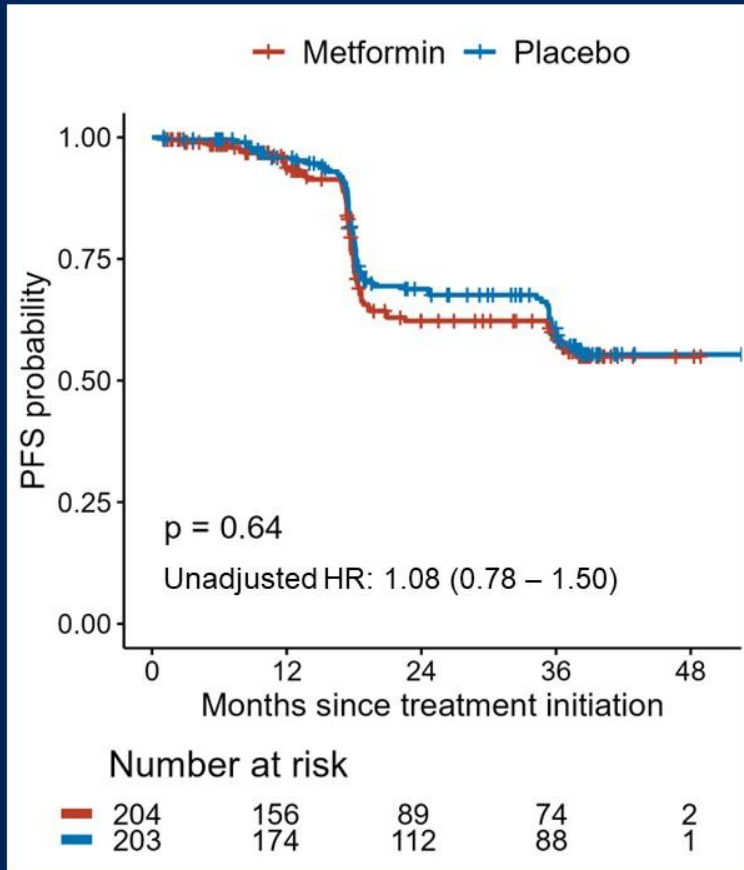
1 White-Al Habeeb et al., 2016. 2 Papachristodoulou et al., 2024. 3 Liu et al., 2018. 4 Margel et al., 2013. 5 Zannella et al., 2013. 6 Scarton et al., 2022. Joshua et al., 2014. 8 Wilson et al., 2022. 9 Alghandour et al., 2021. 7

# Baseline Demographics

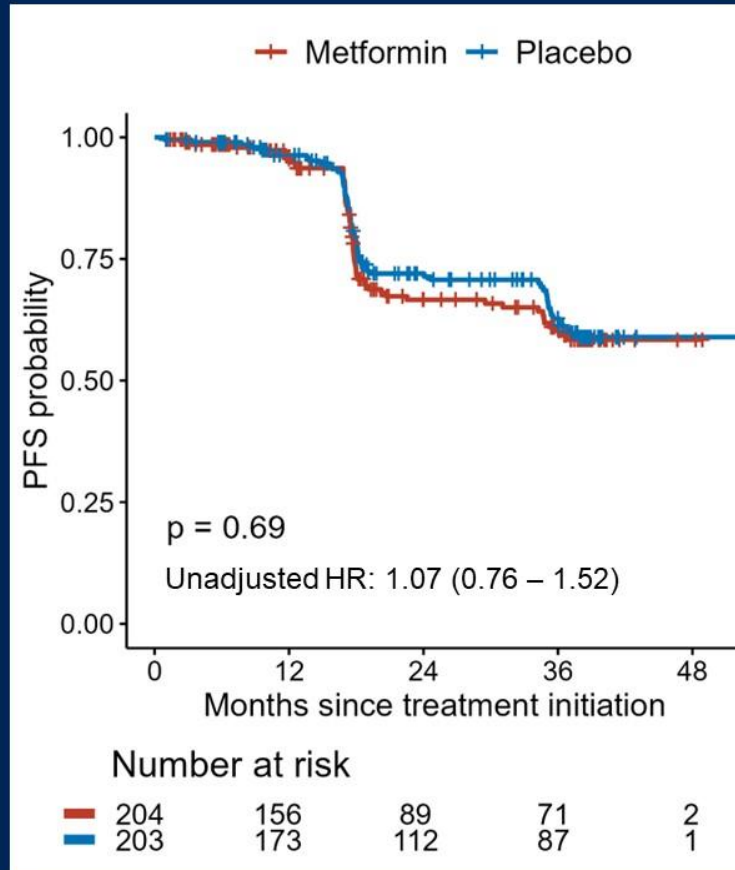
	Metformin (n=204)	Placebo (n=203)
<b>Age</b>		
Median (range)	62 (41 – 76)	63 (45 – 76)
<b>Clinical Stage</b>		
T1c (%)	189 (93.6)	185 (93.9)
T2a (%)	13 (6.4)	12 (6.1)
<b>BMI</b>		
Median (range)	27.4 (19.0 – 55.6)	27.7 (18.1 – 45.8)
<b>PSA</b>		
Median (range)	5.6 (0.8 – 31.4)	6.0 (0.4 – 16.1)
<b>Positive Cores</b>		
Median (range)	1 (0 – 7)	1 (0 – 6)
<b>Tumour Volume</b>		
Median (range)	43 (0 – 634)	44 (5.7 – 174)

# Progression Free Survival

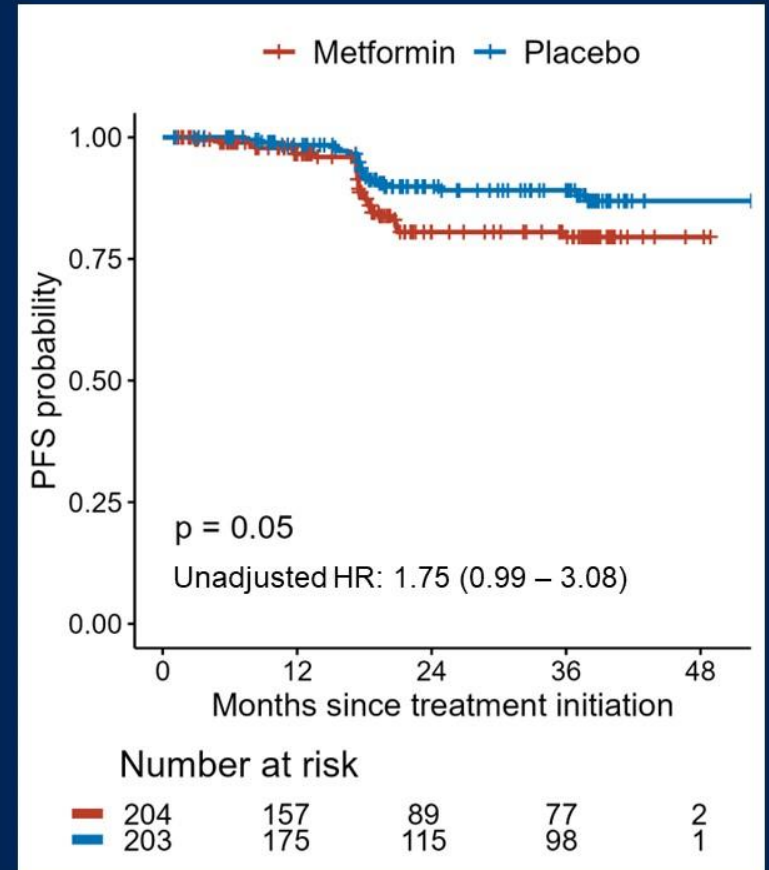
Therapeutic + Pathologic Progression



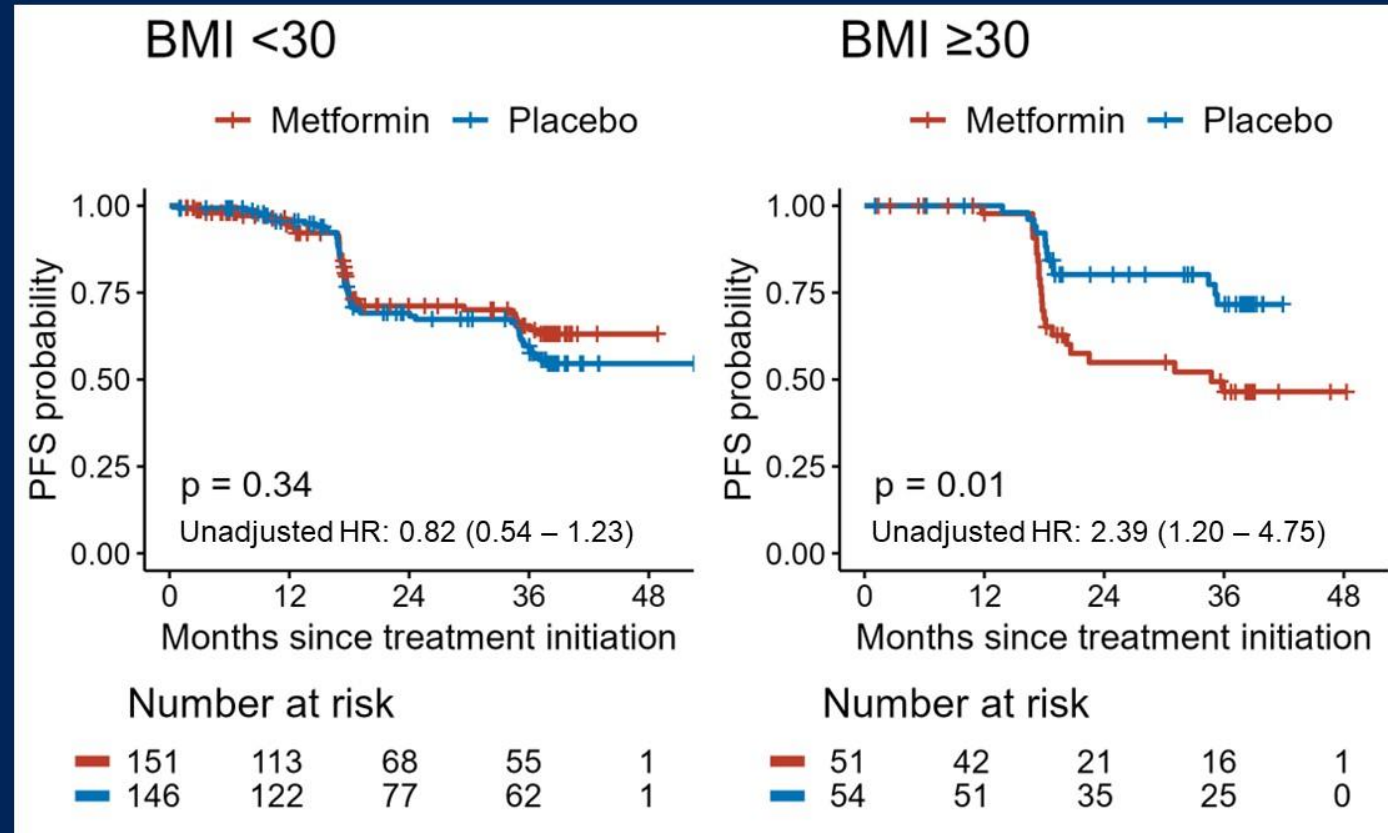
Pathologic Progression



Therapeutic Progression



# BMI and Metformin with Pathologic Progression



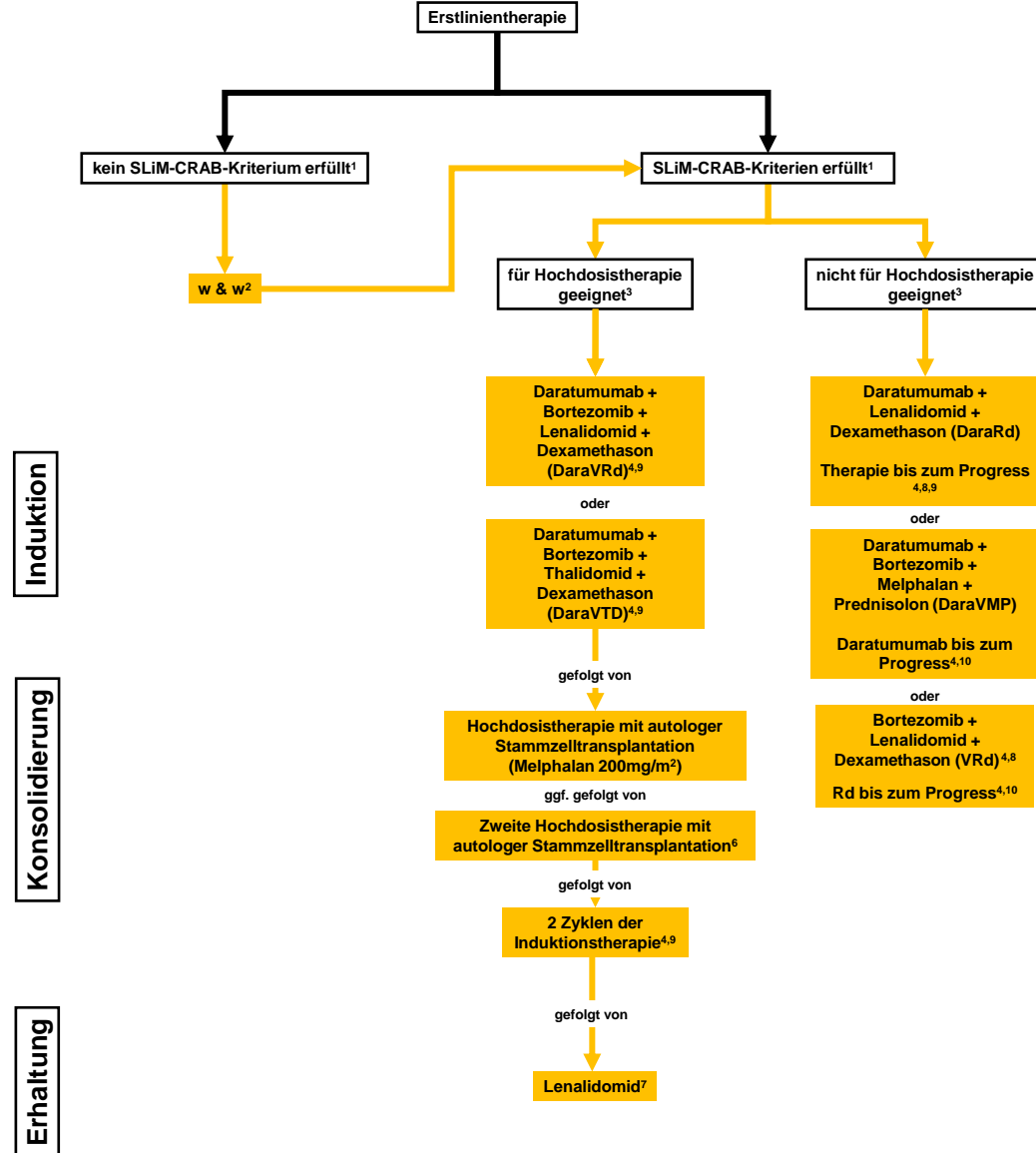
Test for Interaction  
Unadjusted  $p=0.012$   
Adjusted  $p=0.032$



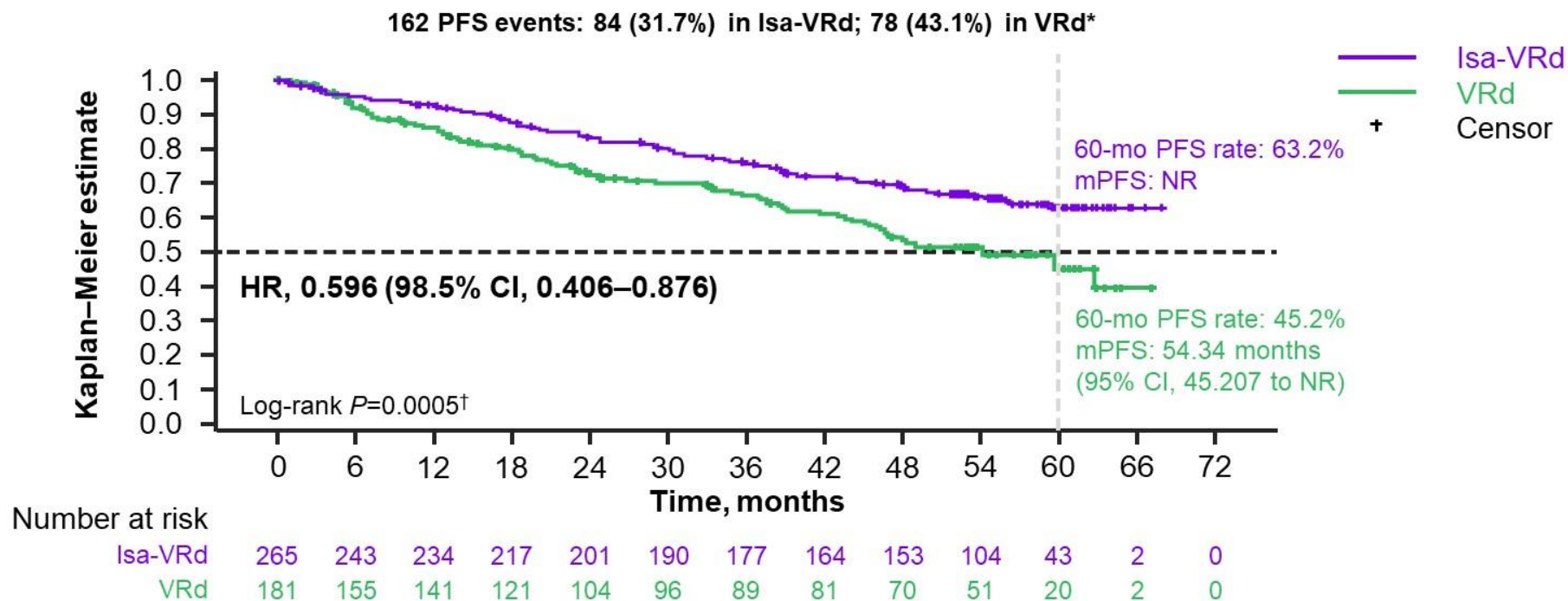
# Phase 3 Study Results of Isatuximab, Bortezomib, Lenalidomide, and Dexamethasone (Isa-VRd) Versus VRd for Transplant-Ineligible Patients With Newly Diagnosed Multiple Myeloma (IMROZ)

Thierry Facon,<sup>1</sup> Meletios-Athanasios Dimopoulos,<sup>2</sup> Xavier Leleu,<sup>3</sup> Meral Beksac,<sup>4,5</sup> Ludek Pour,<sup>6</sup> Roman Hajek,<sup>7</sup> Zhuogang Liu,<sup>8</sup> Jiri Minarik,<sup>9</sup> Philippe Moreau,<sup>10</sup> Joanna Romejko-Jarosinska,<sup>11</sup> Ivan Spicka,<sup>12</sup> Vladimir Vorobyev,<sup>13</sup> Michele Cavo,<sup>14</sup> Hartmut Goldschmidt,<sup>15</sup> Thomas Martin,<sup>16</sup> Salomon Manier,<sup>17</sup> Marie-France Brégeault,<sup>18</sup> Sandrine Macé,<sup>18</sup> Christelle Berthou,<sup>18</sup> Robert Z. Orlowski<sup>19</sup>

<sup>1</sup>Department of Haematology, University of Lille, and French Academy of Medicine, Paris, France; <sup>2</sup>Department of Clinical Therapeutics, National and Kapodistrian University of Athens, Greece; <sup>3</sup>Service d'Hématologie et Thérapie Cellulaire, CHU and CIC Inserm 1402, Poitiers Cedex, France; <sup>4</sup>Department of Hematology, Ankara University, Ankara, Turkey; <sup>5</sup>Istinye University Ankara Liv Hospital, Ankara, Turkey; <sup>6</sup>Department of Internal Medicine, Hematology and Oncology, University Hospital Bmo, Bmo, Czech Republic; <sup>7</sup>Department of Hemato-Oncology, University Hospital Ostrava and Faculty of Medicine, University of Ostrava, Ostrava, Czech Republic; <sup>8</sup>Shengjing Hospital of China Medical University (Huaxiang Br), Shenyang, China; <sup>9</sup>Department of Hemato-Oncology, University Hospital Olomouc and Faculty of Medicine and Dentistry, Palacky University Olomouc, Olomouc, Czech Republic; <sup>10</sup>Department of Hematology, University Hospital Hôtel-Dieu, Nantes, France; <sup>11</sup>Department of Lymphoid Malignancies, Marie Skłodowska-Curie National Research Institute of Oncology, Warszawa, Poland; <sup>12</sup>Charles University and General Hospital in Prague, Prague, Czech Republic; <sup>13</sup>SP Botkin Moscow City Clinical Hospital, Moscow, Russia; <sup>14</sup>IRCCS Azienda Ospedaliero-Universitaria di Bologna, Istituto di Ematologia "Seràgnoli," Università di Bologna, Bologna, Italy; <sup>15</sup>Department of Internal Medicine V, University of Heidelberg, Heidelberg, Germany; <sup>16</sup>Department of Hematology, University of California at San Francisco, San Francisco, California, USA; <sup>17</sup>Department of Hematology, University Hospital Center of Lille, Lille, France; <sup>18</sup>Sanofi, R&D, Vitry-sur-Seine, France; <sup>19</sup>Department of Lymphoma and Myeloma, The University of Texas MD Anderson Cancer Center, Houston, Texas, USA.



# Primary endpoint met: Interim PFS analysis–IRC assessment in ITT population



**At a median follow-up of 5 years (59.7 months), Isa-VRd followed by Isa-Rd led to a statistically significant reduction in the risk of progression or death by 40.4%**

\*Cutoff date for PFS analysis: September 26, 2023 (median follow-up, ~5 years). †Nominal one-sided  $P$  value. NR, not reached.





ORIGINAL ARTICLE

## Isatuximab, Bortezomib, Lenalidomide, and Dexamethasone for Multiple Myeloma

T. Facon, M.-A. Dimopoulos, X.P. Leleu, M. Beksac, L. Pour, R. Hájek, Z. Liu,  
J. Minarik, P. Moreau, J. Romejko-Jarosinska, I. Spicka, V.I. Vorobyev, B. Besemer,  
T. Ishida, W. Janowski, S. Kalayoglu-Besisik, G. Parmar, P. Robak, E. Zamagni,  
H. Goldschmidt, T.G. Martin, S. Manier, M. Mohty, C. Oprea, M.-F. Brégeault,  
S. Macé, C. Berthou, D. Bregman, Z. Klippel, and R.Z. Orlowski,  
for the IMROZ Study Group\*

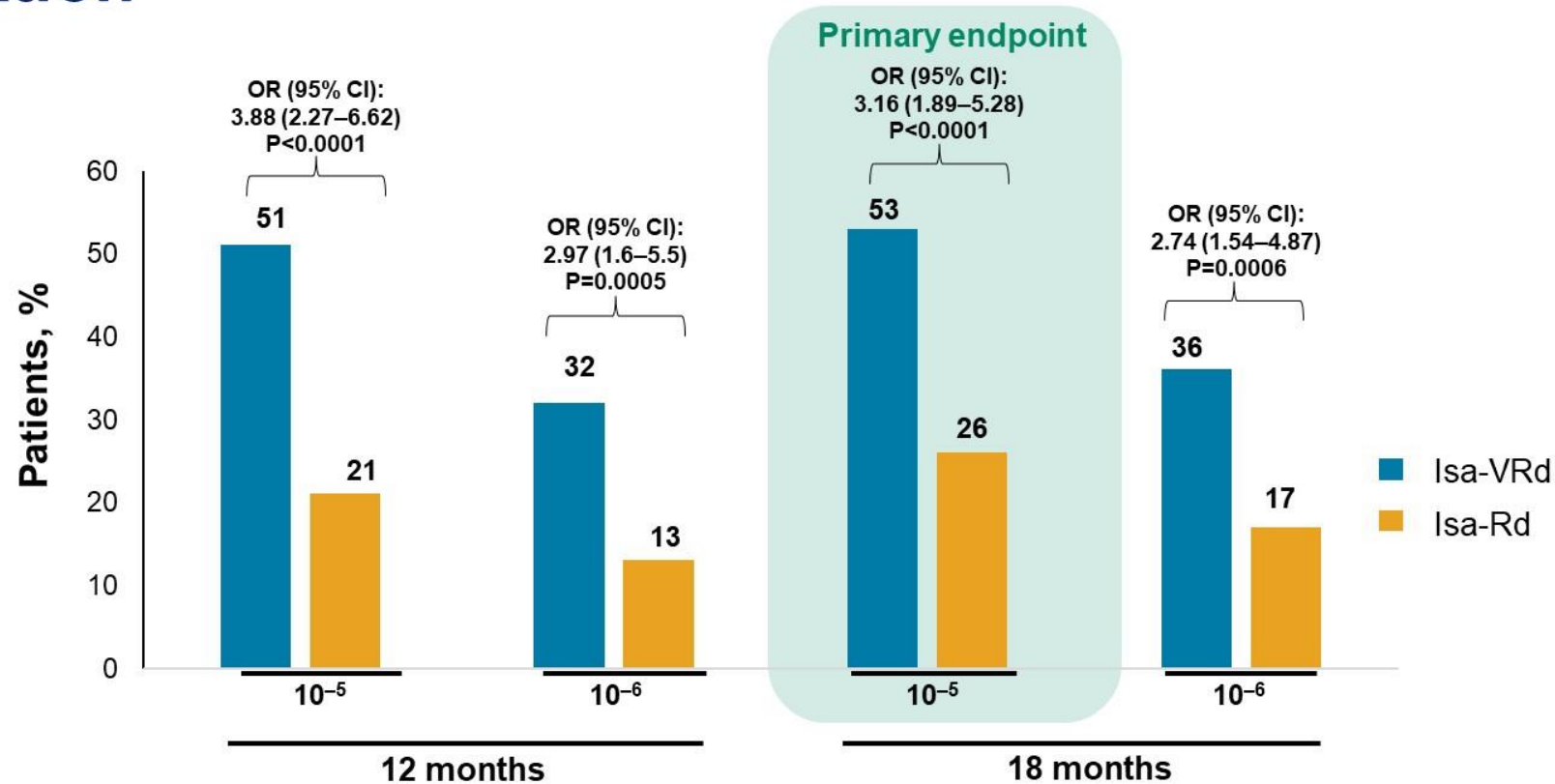




# Isatuximab plus lenalidomide and dexamethasone with weekly bortezomib versus isatuximab plus lenalidomide and dexamethasone in newly diagnosed transplant ineligible Multiple Myeloma. The BENEFIT (IFM 2020-05) study

Xavier Leleu<sup>1</sup> and Cyrille Hulin<sup>2</sup>, Lambert Jerome<sup>3</sup>, Arthur Bobin<sup>1</sup>, Aurore Perrot<sup>4</sup>, Lionel Karlin<sup>5</sup>, Roussel Murielle<sup>6</sup>, Lydia Montes<sup>7</sup>, Brieuc Cherel<sup>8</sup>, Thomas Chalopin<sup>9</sup>, Borhane Slama<sup>10</sup>, Marie-Lorraine Chretien<sup>11</sup>, Kamel Laribi<sup>12</sup>, Claire Dingremont<sup>13</sup>, Christophe Roul<sup>14</sup>, Clara Mariette<sup>15</sup>, Sophie Rigau<sup>16</sup>, Claire Calmettes<sup>17</sup>, Mamoun Dib<sup>18</sup>, Mourad Tiab<sup>19</sup>, Laure Vincent<sup>20</sup>, Jacques Delaunay<sup>21</sup>, Alberto Santagostino<sup>22</sup>, Margaret Macro<sup>23</sup>, Emmanuelle Bourgeois<sup>24</sup>, Frederique Orsini-Piocelle<sup>25</sup>, Julie Gay<sup>26</sup>, Benoit Bareau<sup>27</sup>, Noemie Bigot<sup>3</sup>, François Vergez<sup>28</sup>, Pierre Lebreton<sup>29</sup>, Reza Tabrizi<sup>30</sup>, Agathe Waultier-Rascalou<sup>31</sup>, Laurent Frenzel<sup>32</sup>, Ronan Le Calloch<sup>33</sup>, Emilie Chalayer<sup>34</sup>, Thorsten Braun<sup>35</sup>, Florence Lachenal<sup>36</sup>, Selim Corm<sup>37</sup>, Celine Kennel<sup>38</sup>, Rakiba Belkhir<sup>39</sup>, Jean-Sebastien Bladé<sup>40</sup>, Bertrand Joly<sup>41</sup>, Valentine Richez-Olivier<sup>42</sup>, Helene Demarquette<sup>43</sup>, Daniela Robu-Cretu<sup>44</sup>, Laurent Garderet<sup>45</sup>, Muriel Newinger-Porte<sup>46</sup>, Amine Kasmi<sup>47</sup>, Bruno Royer<sup>48</sup>, Olivier Decaux<sup>49</sup>, Bertrand Arnulf<sup>48</sup>, Karim Belhadj<sup>50</sup>, Cyrille Touzeau<sup>51</sup>, Mohamad Mohty<sup>52</sup>, Salomon Manier<sup>53</sup>, Philippe Moreau<sup>51</sup>, Hervé Avet-Loiseau<sup>28</sup>, Jill Corre<sup>28</sup>, Thierry Facon<sup>53</sup>

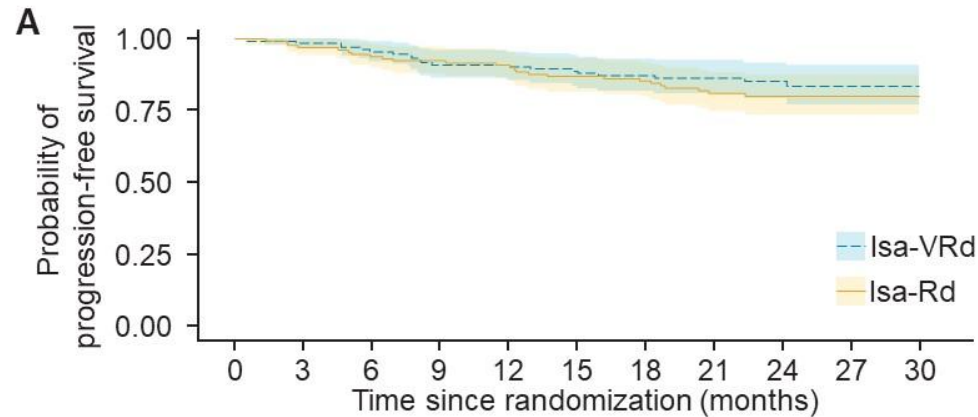
# Primary endpoint: MRD-\* rate at 18 months – ITT population



Isa-VRd resulted in deep response rates, with a significant improvement in the MRD at 12 and 18 months, and at  $10^{-5}$  and  $10^{-6}$  in the ITT population

\*MRD was assessed on the basis of IMWG recommendations.<sup>1</sup>  
CI, confidence interval; Isa, isatuximab; ITT, intent-to-treat; MRD-, minimal residual disease negativity; NGS, next generation sequencing; OR, odd ratio; R, lenalidomide; V, bortezomib.  
1. Kumar S, et al. *Lancet Oncol* 2016;17:e328–e346.

# Survival analysis-IRC assessment in ITT population

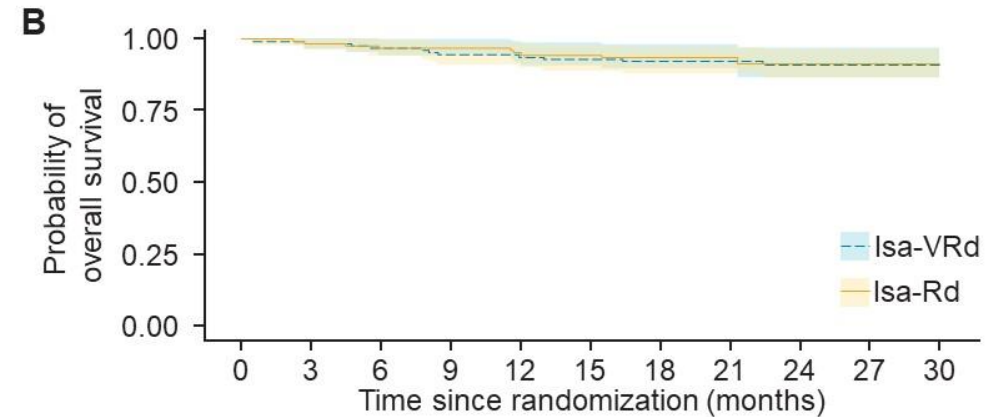


Isa-VRd	135	131	127	121	119	117	114	87	56	11	0
Isa-Rd	135	128	123	121	117	112	108	83	52	14	0

## Estimated 24 months PFS

85.2% (95%CI 79.2–91.7) for Isa-VRd

80.0% (95% CI 73.3–87.4) for Isa-Rd



Isa-VRd	135	131	129	124	122	118	115	88	56	11	0
Isa-Rd	135	130	125	123	118	115	112	88	53	14	0

## Estimated 24 months OS

91.1% (95%CI 86.1–96.4) for Isa-VRd

91.5% (95%CI 86.5–96.8) for Isa-Rd

**At a median follow-up of 23.5 months, survival is still immature**

d, dexamethasone; Isa, isatuximab; IRC, independent review committee; ITT, intent-to-treat; CI, confidence interval; OS, overall survival; PFS, progression-free survival; R, lenalidomide; V, bortezomib.



ORIGINAL ARTICLE

Belantamab Mafodotin, Bortezomib, and Dexamethasone for Multiple Myeloma

V. Hungria, P. Robak, M. Hus, V. Zherebtsova, C. Ward, P.J. Ho, A.C. Ribas de Almeida, R. Hajek, K. Kim, S. Grosicki, H. Sia, A. Bryant, M. Pitombeira de Lacerda, G. Aparecida Martinez, A.M. Sureda Balari, I. Sandhu, C. Cerchione, P. Ganly, M. Dimopoulos, C. Fu, M. Garg, A.-O. Abdallah, A. Oriol, M.E. Gatt, M. Cavo, R. Rifkin, T. Fujisaki, M. Mielnik, N. Pirooz, A. McKeown, S. McNamara, X. Zhou, M. Nichols, E. Lewis, R. Rogers, H. Baig, L. Eccersley, S. Roy-Ghanta, J. Opalinska, and M.-V. Mateos, for the DREAMM-7 Investigators\*

ABSTRACT

BACKGROUND

Belantamab mafodotin had single-agent activity in patients with relapsed or refractory multiple myeloma, a finding that supports further evaluation of the agent in combination with standard-care therapies.

METHODS

In this phase 3, open-label, randomized trial, we evaluated belantamab mafodotin, bortezomib, and dexamethasone (Evd), as compared with daratumumab, bortezomib, and dexamethasone (Dvd), in patients who had progression of multiple myeloma after at least one line of therapy. The primary end point was progression-free survival. Key secondary end points were overall survival, response duration, and minimal residual disease (MRD)–negative status.

RESULTS

In total, 494 patients were randomly assigned to receive Evd (243 patients) or Dvd (251 patients). At a median follow-up of 28.2 months (range, 0.1 to 40.0), median progression-free survival was 36.6 months (95% confidence interval [CI], 28.4 to not reached) in the Bvd group and 13.4 months (95% CI, 11.1 to 17.5) in the Dvd group (hazard ratio for disease progression or death, 0.41; 95% CI, 0.31 to 0.53; P<0.001). Overall survival at 18 months was 84% in the Bvd group and 73% in the Dvd group. An analysis of the restricted mean response duration favored Bvd over Dvd (P<0.001). A complete response or better plus MRD-negative status occurred in 25% of the patients in the Bvd group and 10% of those in the Dvd group. Grade 3 or higher adverse events occurred in 95% of the patients in the Bvd group and 78% of those in the Dvd group. Ocular events were more common in the Bvd group than in the Dvd group (79% vs. 29%); such events were managed with dose modifications, and events of worsening visual acuity mostly resolved.

CONCLUSIONS

As compared with Dvd therapy, Bvd therapy conferred a significant benefit with respect to progression-free survival among patients who had relapsed or refractory multiple myeloma after at least one line of therapy. Most patients had grade 3 or higher adverse events. (Funded by GSK; DREAMM-7 ClinicalTrials.gov number, NCT04246047; EudraCT number, 2018-003993-29.)

The authors' full names, academic degrees, and affiliations are listed in the Appendix. Dr. Mateos can be contacted at mvmateos@usal.es or at Hospital Universitario de Salamanca, Paseo San Vicente, 58-182, 37007 Salamanca, Spain.

\*A list of the DREAMM-7 Investigators is provided in the Supplementary Appendix, available at NEJM.org.

This article was published on June 1, 2024, at NEJM.org.

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ORIGINAL ARTICLE

Belantamab Mafodotin, Pomalidomide, and Dexamethasone in Multiple Myeloma

Meletios Athanasios Dimopoulos, M.D., Meral Beksac, M.D., Ludek Pour, M.D., Sosana Delimpasi, M.D., Vladimir Vorobyev, M.D., Hang Quach, M.D., Ivan Spicka, C.Sc., Jakub Radocha, M.D., Ph.D., Pawel Robak, M.D., Ph.D., Kihyun Kim, M.D., Michele Cavo, M.D., Kazuhito Suzuki, M.D., Ph.D., Kristin Morris, Pharm.D., Farrah Pompilus, Ph.D., Amy Phillips-Jones, M.Sc., Xiaou L. Zhou, M.D., Ph.D., Giulia Fulci, Ph.D., Neal Sule, M.B., B.S., M.D., Brandon E. Kremer, M.D., Ph.D., Joanna Opalinska, M.D., Ph.D., Maria-Victoria Mateos, M.D., Ph.D., and Suzanne Trudel, M.D., for the DREAMM-8 Investigators\*

ABSTRACT

BACKGROUND

Triplet or quadruplet therapies incorporating proteasome inhibitors, immunomodulators, and anti-CD38 antibodies have led to prolonged survival among patients with newly diagnosed multiple myeloma; however, most patients have a relapse. Front-line lenalidomide therapy has increased the number of patients with lenalidomide-refractory disease at the time of the first relapse.

METHODS

In this phase 3, randomized, open-label trial, we evaluated belantamab mafodotin, pomalidomide, and dexamethasone (Bpd), as compared with pomalidomide, bortezomib, and dexamethasone (Pvd), in lenalidomide-exposed patients who had relapsed or refractory myeloma after at least one line of therapy. The primary end point was progression-free survival. Disease response and safety were also assessed.

RESULTS

A total of 302 patients underwent randomization; 155 were assigned to the Bpd group, and 147 to the Pvd group. At a median follow-up of 21.8 months (range, <0.1 to 39.2), the 12-month estimated progression-free survival with Bpd was 71% (95% confidence interval [CI], 63 to 78), as compared with 51% (95% CI, 42 to 60) with Pvd (hazard ratio for disease progression or death, 0.52; 95% CI, 0.37 to 0.73; P<0.001). Data on overall survival were immature. The percentage of patients with a response to treatment (partial response or better) was 77% (95% CI, 70 to 84) in the Bpd group and 72% (95% CI, 64 to 79) in the Pvd group; 40% (95% CI, 32 to 48) and 16% (95% CI, 11 to 23), respectively, had a complete response or better. Grade 3 or higher adverse events occurred in 94% of the patients in the Bpd group and 76% of those in the Pvd group. Ocular events occurred in 89% of the patients who received Bpd (grade 3 or 4 in 43%) and 30% of those who received Pvd (grade 3 or 4 in 2%); ocular events in the Bpd group were managed with belantamab mafodotin dose modification. Ocular events led to treatment discontinuation in 9% of the patients in the Bpd group and in no patients in the Pvd group.

CONCLUSIONS

Among lenalidomide-exposed patients with relapsed or refractory myeloma, Bpd conferred a significantly greater benefit than Pvd with respect to progression-free survival, as well as deeper, more durable responses. Ocular events were common but were controllable by belantamab mafodotin dose modification. (Funded by GSK; DREAMM-8 ClinicalTrials.gov number, NCT04484623; EudraCT number, 2018-00434-21.)

The authors' affiliations are listed in the Appendix. Dr. Dimopoulos can be contacted at mdimop@med.uoa.gr or at 80 Vasilisis Sofias, 11528, Athens, Greece.

\*A list of the DREAMM-8 Investigators is provided in the Supplementary Appendix, available at NEJM.org.

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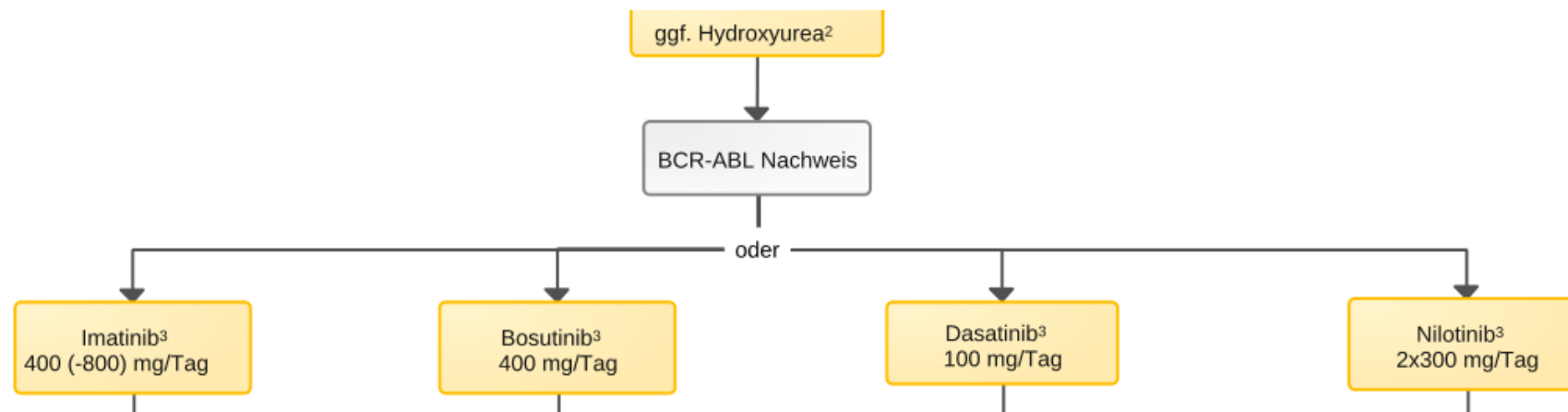
# ASC4FIRST, a Pivotal Phase 3 Study of Asciminib vs Investigator-Selected Tyrosine Kinase Inhibitors In Newly Diagnosed Patients with Chronic Myeloid Leukemia: Primary Results

**Timothy P. Hughes**, Andreas Hochhaus, Naoto Takahashi, Ghayas C. Issa, Richard A. Larson, Felice Bombaci, Jianxiang Wang, Dong-Wook Kim, Dennis Dong Hwan Kim, Jiri Mayer, Yeow-Tee Goh, Philipp Le Coutre, David J. Andorsky, Shruti Kapoor, Tracey McCulloch, Kamel Malek, Lillian Yau, Sophie Ifrah, Jorge E. Cortes

This study is sponsored by Novartis Pharmaceuticals Corporation. For more information, please refer to <https://www.clinicaltrials.gov/study/NCT04971226>.

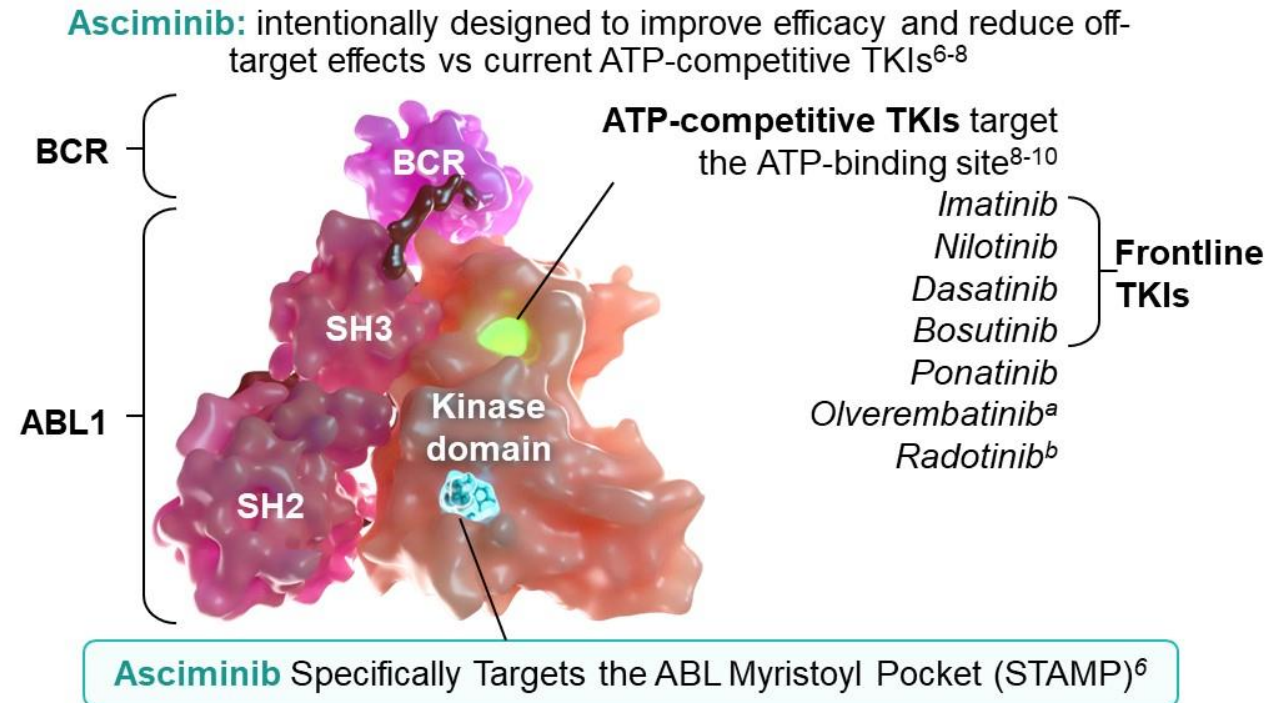
Oral presentation at: 2024 ASCO Annual Meeting; May 31-June 4, 2024; Chicago, Illinois, and virtual.

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# Long-term therapeutic strategies for CML require treatments optimizing safety, tolerability, and efficacy

- Many newly diagnosed patients do not achieve optimal response with standard TKI therapy<sup>1-3</sup>
- Long-term use of 2G TKIs is associated with AEs, such as pleural effusion, GI events, and CV events.<sup>4</sup> Persistent AEs negatively affect patient adherence<sup>5</sup>



We report primary results from the phase 3 randomized ASC4FIRST trial of **asciminib vs investigator-selected (IS) TKIs** in patients with newly diagnosed CML-CP

AE, adverse event; ATP, adenosine triphosphate; CV, cardiovascular; GI, gastrointestinal; IS-TKI, investigator-selected TKI; SH, Src homology.

<sup>a</sup> Approved in China.

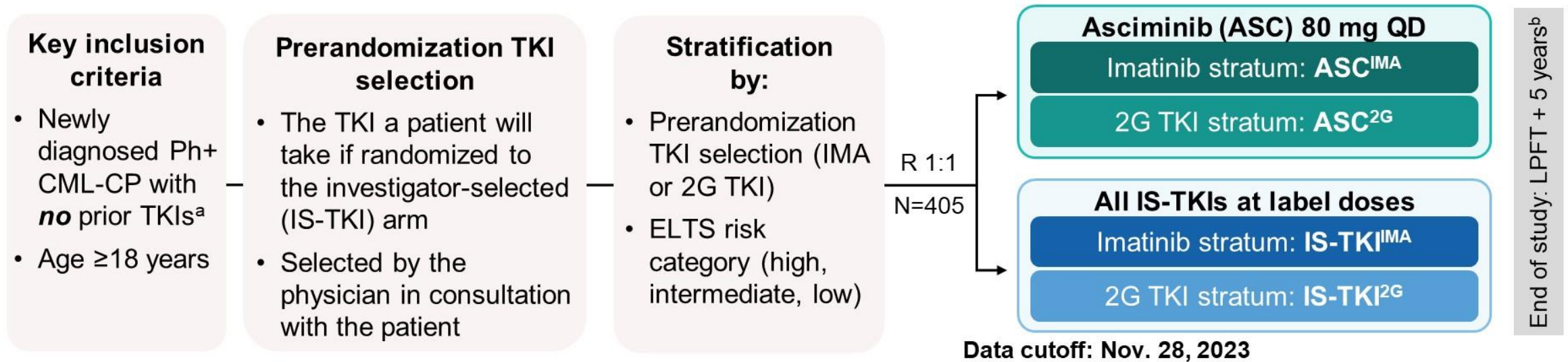
<sup>b</sup> Approved in South Korea.

Figure credit: Mauro MJ, et al. Presented at the 63rd American Society of Hematology Annual Meeting. Abstract 310. Reprinted with permission by the author.



# ASC4FIRST, a head-to-head study comparing asciminib vs all standard-of-care TKIs in newly diagnosed patients with CML

NCT04971226



**Primary endpoints:**

- MMR at week 48 for asciminib vs all investigator-selected TKIs
- MMR at week 48 for asciminib vs investigator-selected TKI within the imatinib stratum

ASC, asciminib; ELTS, EUTOS long-term survival score; EUTOS, European Treatment and Outcome Study; IMA, imatinib; LPFT, last person first treatment; Ph, Philadelphia chromosome; QD, once daily; R, randomized.

<sup>a</sup> Either imatinib, bosutinib, dasatinib, or nilotinib is allowed for up to 2 weeks prior to randomization. Treatment with other TKIs prior to randomization was not permitted.

<sup>b</sup> Patients will remain on study for 5 years after the last patient first dose, unless they have discontinued early due to treatment failure, disease progression, pregnancy, intolerance, or investigator or patient decision.

Oral presentation at: 2024 ASCO Annual Meeting; May 31-June 4, 2024; Chicago, Illinois, and virtual.



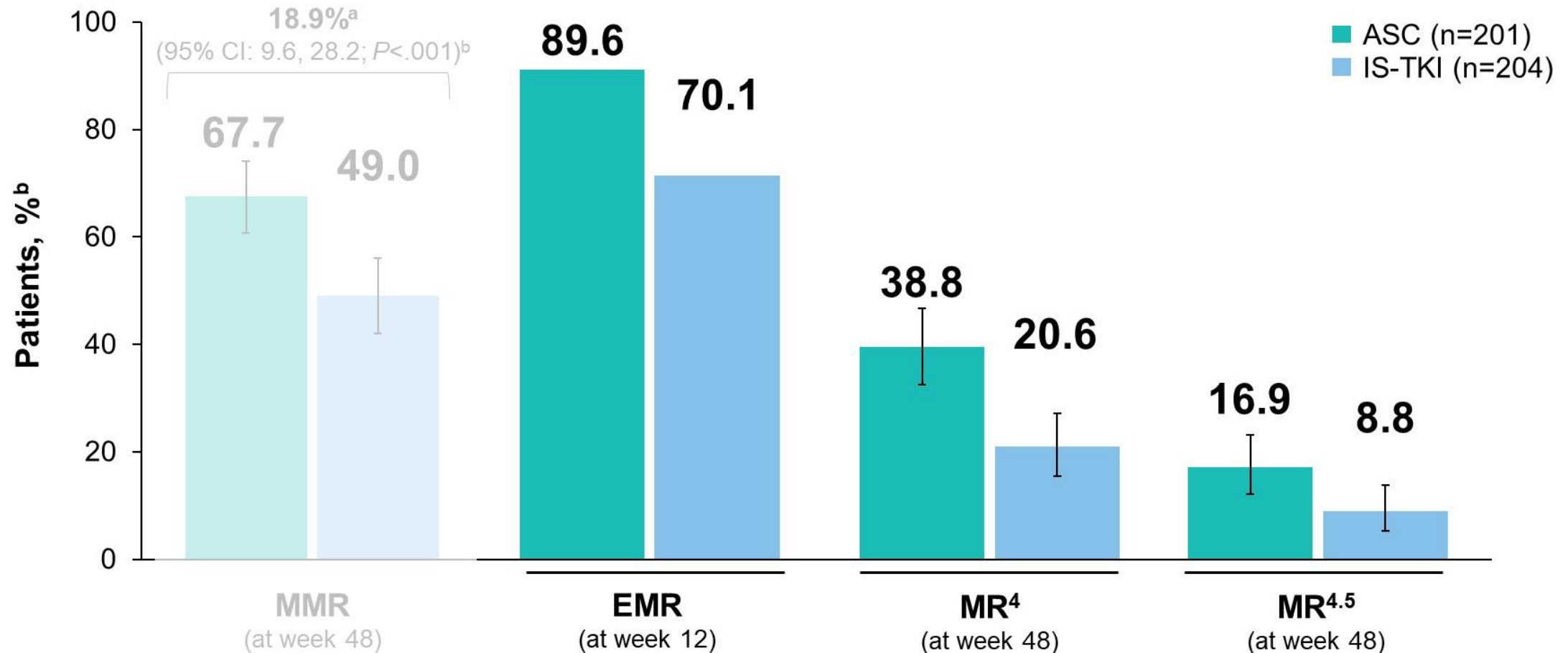
# Baseline characteristics were well balanced between asciminib and all IS-TKIs

Variable	Asciminib			IS-TKI		
	All asciminib (n=201)	Imatinib stratum (n=101)	2G TKI stratum (n=100)	All IS-TKI (n=204)	Imatinib stratum (n=102)	2G TKI stratum (n=102)
<b>Median age (range), years</b>	52.0 (18.0-79.0)	56.0 (21.0-79.0)	43.0 (18.0-76.0)	50.5 (19.0-86.0)	54.5 (20.0-86.0)	43.0 (19.0-83.0)
<b>Age group, %</b>						
18 to <65 years	77.1	68.3	86.0	76.0	68.6	83.3
65 to <75 years	17.9	23.8	12.0	16.7	21.6	11.8
≥75 years	5.0	7.9	2.0	7.4	9.8	4.9
<b>Male, %</b>	65.2	61.4	69.0	61.3	63.7	58.8
<b>Framingham CV risk score, %<sup>a</sup></b>						
Low risk (<10%)	54.2	40.6	68.0	54.9	39.2	70.6
Intermediate risk (10%-20%)	15.9	20.8	11.0	21.6	28.4	14.7
High risk (≥20%)	29.9	38.6	21.0	23.5	32.4	14.7
<b>ELTS, %<sup>b</sup></b>						
Low	60.7	61.4	60.0	61.3	62.7	59.8
Intermediate	27.9	29.7	26.0	27.9	29.4	26.5
High	11.4	8.9	14.0	10.8	7.8	13.7

<sup>a</sup> Framingham estimated 10-year cardiovascular disease risk categories.

<sup>b</sup> Based on randomization data.

# A higher proportion of patients achieved early and deep molecular responses with asciminib vs all IS-TKIs



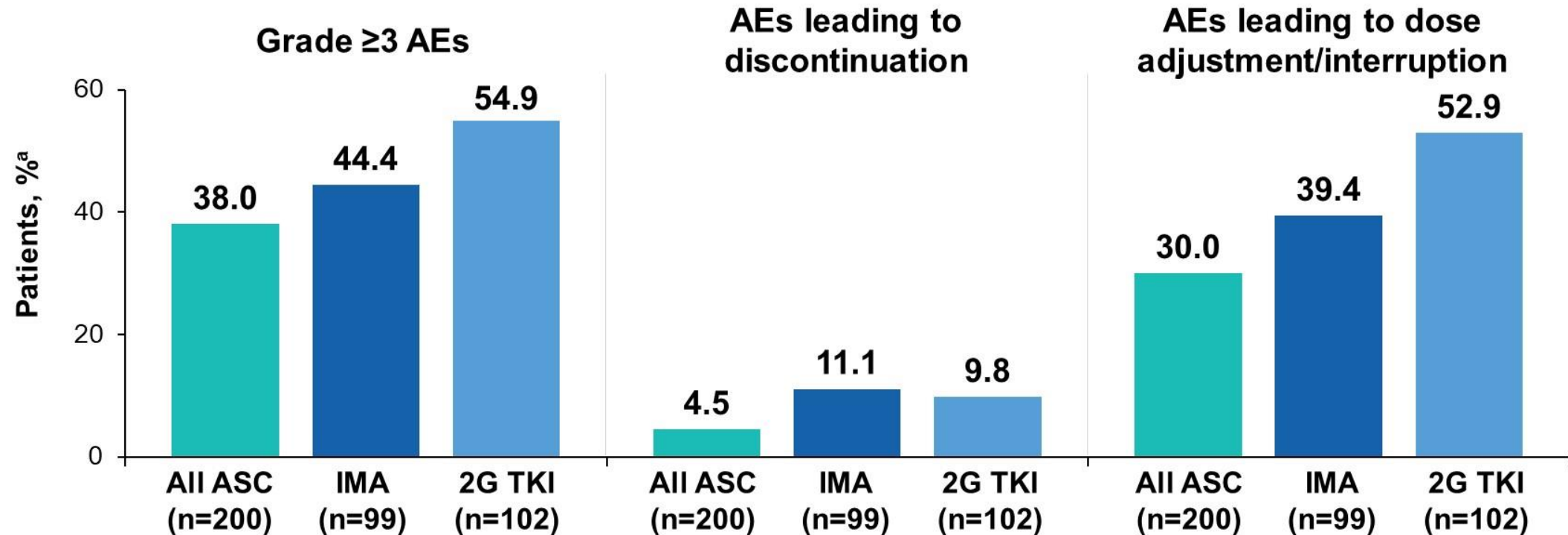
IRT, interactive response technology.

Error bars represent 95% CIs.

<sup>a</sup> The common treatment difference and its 95% CI are estimated using the Mantel-Haenszel method after stratifying for (a) pre-randomization selected TKI, and (b) baseline ELTS risk groups (both IRT data).

<sup>b</sup> Adjusted 1-sided p-value calculated based on the graphical gatekeeping procedure. The null hypothesis is rejected if the adjusted p-value is  $\leq 0.025$ .

# Asciminib demonstrated favorable safety and tolerability vs IMA and 2G TKIs



- The median dose intensity was 80.0 mg/day with ASC, 400.0 mg/day with IMA, 595.1 mg/day with NIL, 98.9 mg/day with DAS, and 341.8 mg/day with BOS
- The most common AEs leading to treatment discontinuation were increased lipase with ASC (1.5%), diarrhea and lymphopenia with IMA (2.0% each), and pleural effusion with 2G TKIs (2.0%)

BOS, bosutinib; DAS, dasatinib; NIL, nilotinib.

<sup>a</sup> Safety analyses consisted of patients who received ≥1 dose of study drug. Patients were analyzed according to the study treatment received. A patient with multiple severity grades for an AE is only counted under the maximum grade.



The NEW ENGLAND  
JOURNAL of MEDICINE

ORIGINAL ARTICLE

## Asciminib in Newly Diagnosed Chronic Myeloid Leukemia

A. Hochhaus, J. Wang, D.-W. Kim, D.D.H. Kim, J. Mayer, Y.-T. Goh, P. le Coutre,  
N. Takahashi, I. Kim, G. Etienne, D. Andorsky, G.C. Issa, R.A. Larson, F. Bombaci,  
S. Kapoor, T. McCulloch, K. Malek, L. Yau, S. Ifrah, M. Hoch, J.E. Cortes,  
and T.P. Hughes, for the ASC4FIRST Investigators\*





- **Kolorektales Karzinom**
- **Lungenkarzinom**
- **Mammakarzinom**
- **Melanom**
- **Ösophaguskarzinom**
- **Palliativmedizin**
- **Prostatakarzinom**
- **Chronische Myeloische Leukämie**
- **Multiples Myelom**

**Vielen Dank für die Aufmerksamkeit!**

