Summer Oncology Nursing Series

A Complimentary NCPD-Accredited Virtual Curriculum

Breast Cancer: Session 2

Thursday, July 29, 2021
5:00 PM – 6:00 PM ET

Faculty

Kathy D Miller, MD
Kelly Leonard, MSN, FNP-BC

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Faculty

Kathy D Miller, MD
Ballvé-Lantero Professor
Division of Hematology/Oncology
Associate Director for Clinical Research
The Indiana University Melvin and Bren Simon Cancer Center
Indianapolis, Indiana

Kelly Leonard, MSN, FNP-BC
Family Nurse Practitioner
Dana-Farber Cancer Institute
Boston, Massachusetts

Moderator

Neil Love, MD
Research To Practice
Miami, Florida

RTP RESEARCH TO PRACTICE

Commercial Support

This activity is supported by educational grants from Lilly, Novartis and Seagen Inc.

Dr Love — Disclosures

Dr Love is president and CEO of Research To Practice. Research To Practice receives funds in the form of educational grants to develop CME activities from the following companies: AbbVie Inc, Adaptive Biotechnologies Corporation, ADC Therapeutics, Agios Pharmaceuticals Inc, Alexion Pharmaceuticals, Amgen Inc, Array BioPharma Inc, a subsidiary of Pfizer Inc, Astellas, AstraZeneca Pharmaceuticals LP, Aveo Pharmaceuticals, Bayer HealthCare Pharmaceuticals, BeiGene Ltd, Blueprint Medicines, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Coherus BioSciences, Daiichi Sankyo Inc, Eisai Inc, Epizyme Inc, Exact Sciences Inc, Exelixis Inc, Five Prime Therapeutics Inc, Foundation Medicine, Genentech, a member of the Roche Group, Gilead Sciences Inc, GlaxoSmithKline, Grail Inc, Halozyme Inc, Helsinn Healthcare SA, ImmunoGen Inc, Incyte Corporation, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Karyopharm Therapeutics, Kite, A Gilead Company, Lilly, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, Merck, Novartis, Novocure Inc, Oncopeptides, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sanofi Genzyme, Seagen Inc, Sumitomo Dainippon Pharma Oncology Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro, A GSK Company, TG Therapeutics Inc, Turning Point Therapeutics Inc and Verastem Inc.

RTP
RESEARCH
TO PRACTICE

Research To Practice CME Planning Committee Members, Staff and Reviewers

Planners, scientific staff and independent reviewers for Research To Practice have no relevant conflicts of interest to disclose.

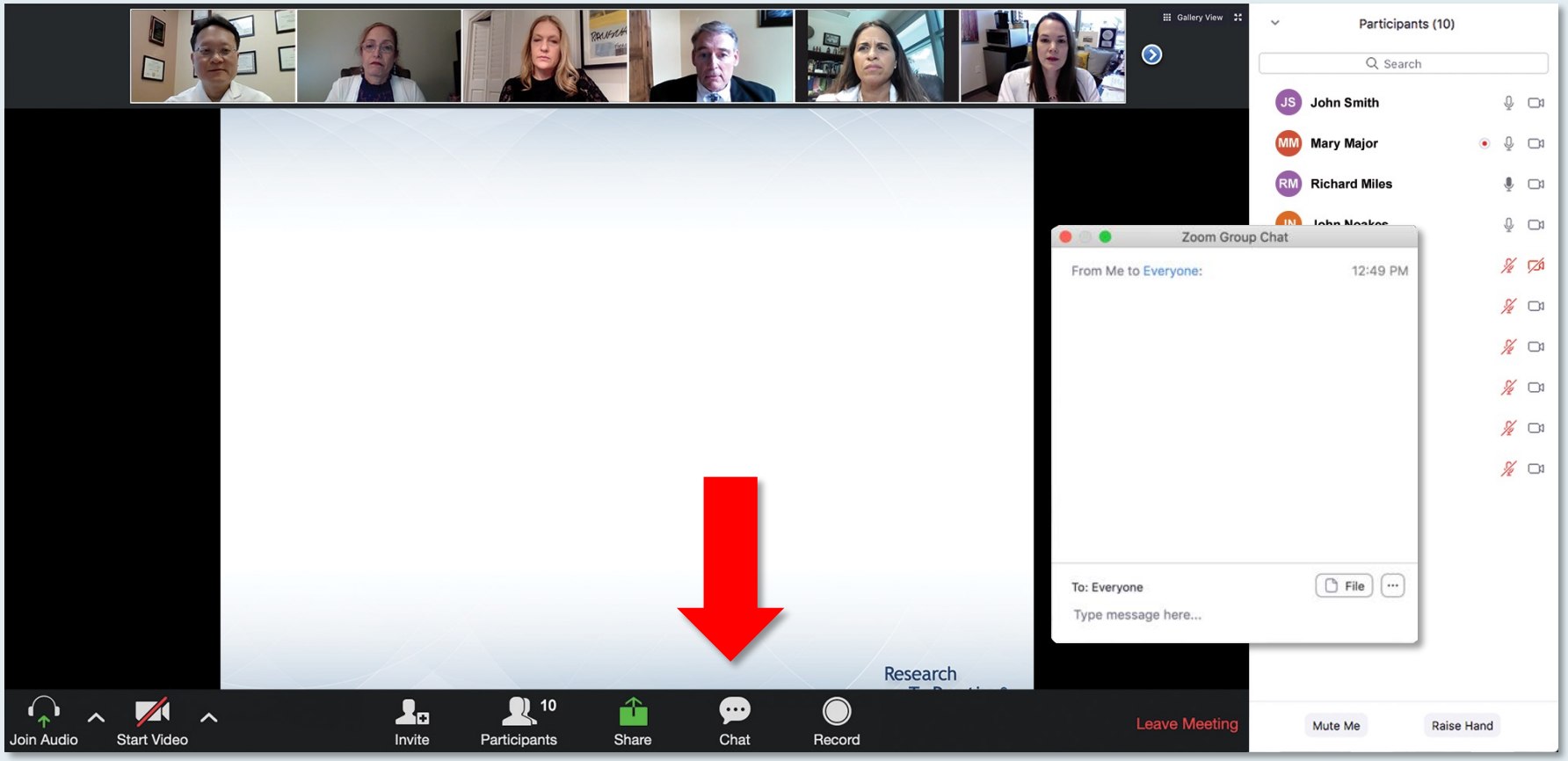
Dr Miller — Disclosures

Consulting Agreements	AbbVie Inc, Athenex
Contracted Research	Astex Pharmaceuticals, BBI Solutions, CytomX Therapeutics, Pfizer Inc
Data and Safety Monitoring Board/Committee	AstraZeneca Pharmaceuticals LP, Merck, Roche Laboratories Inc

Ms Leonard — Disclosures

No relevant conflicts of interest to disclose.

We Encourage Clinicians in Practice to Submit Questions

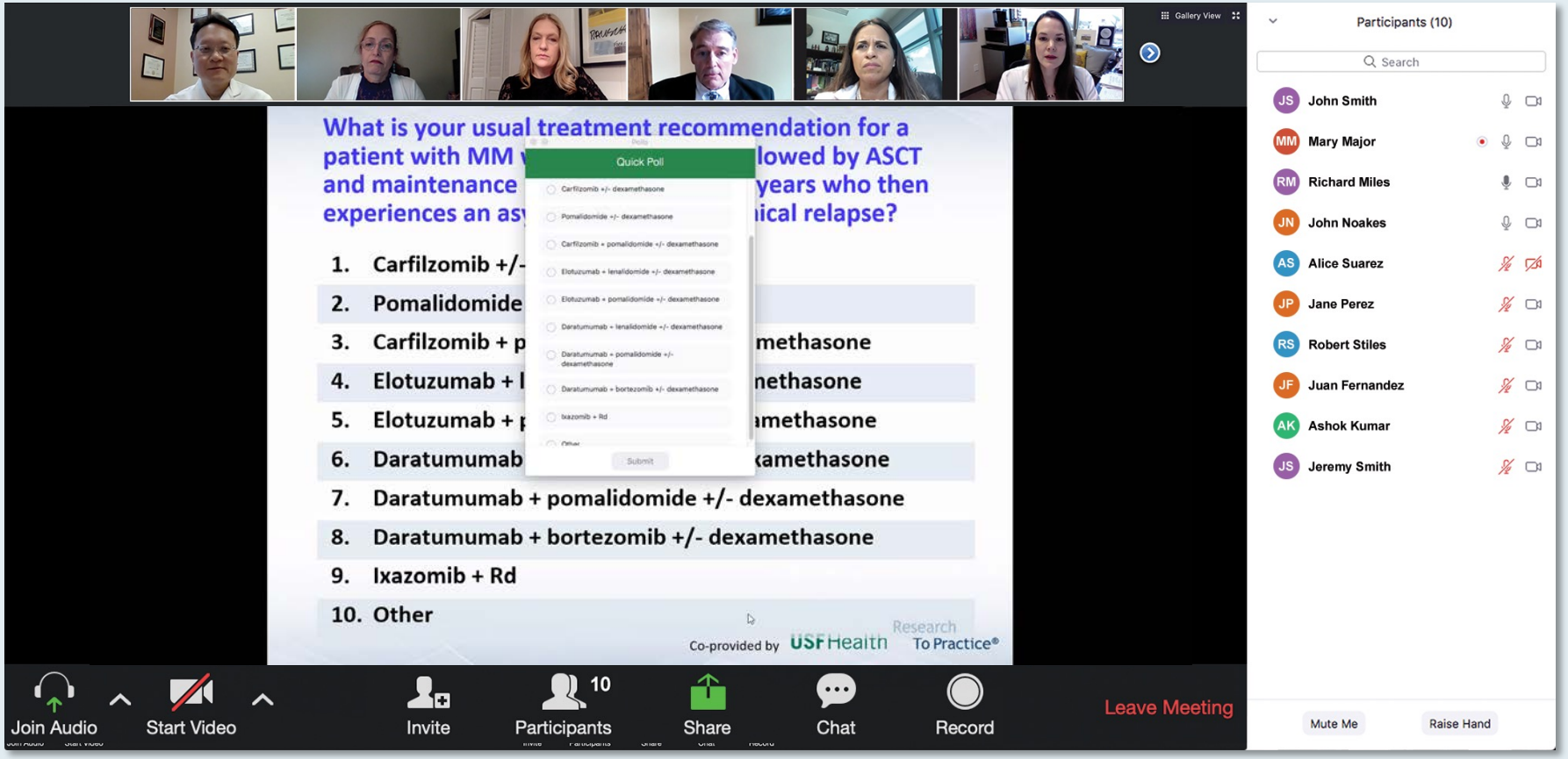


Feel free to submit questions now before the program begins and throughout the program.

RTP RESEARCH TO PRACTICE

Familiarizing Yourself with the Zoom Interface

How to answer poll questions

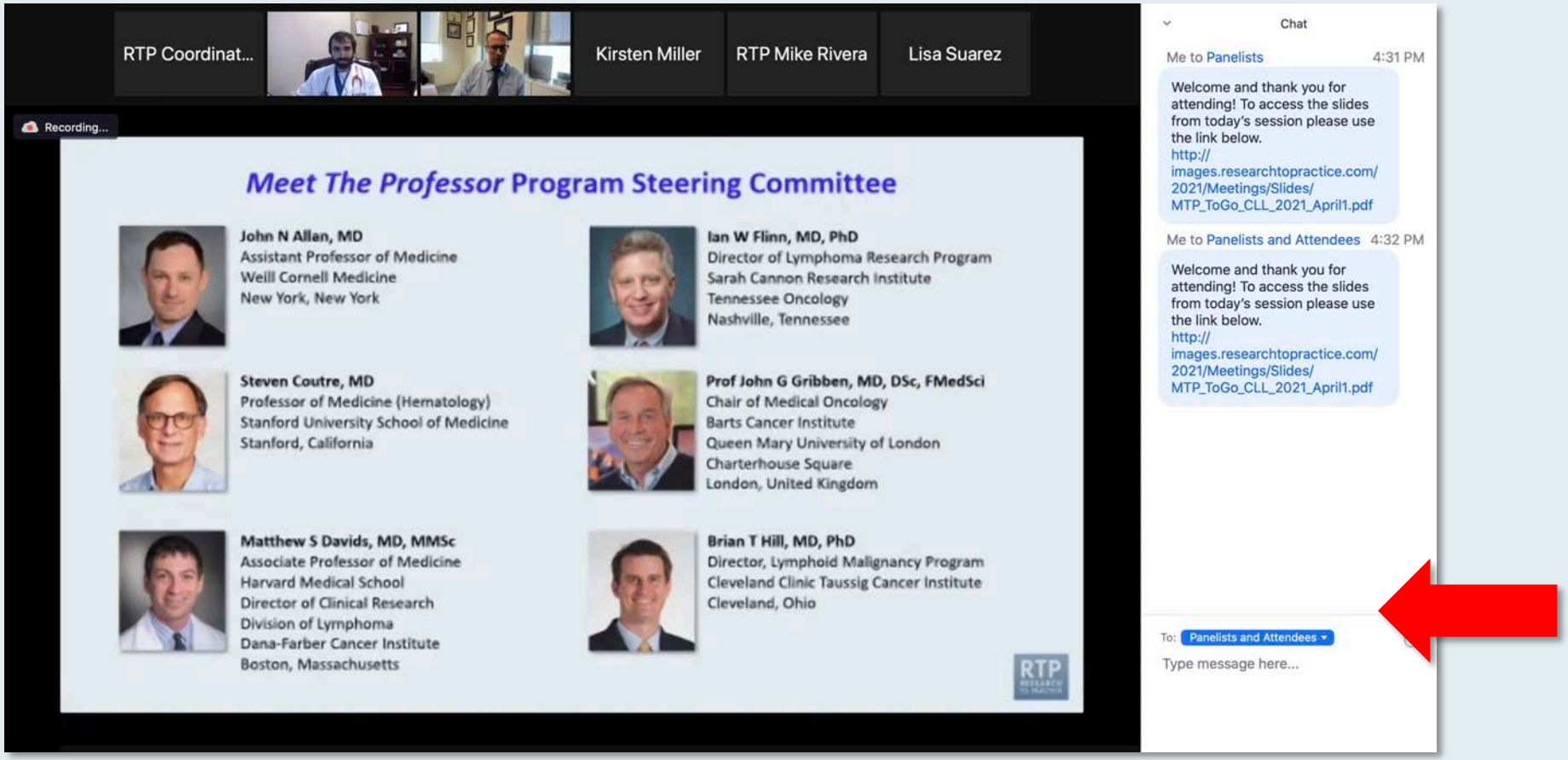


When a poll question pops up, click your answer choice from the available options.

RTP RESEARCH TO PRACTICE

Familiarizing Yourself with the Zoom Interface

Expand chat submission box

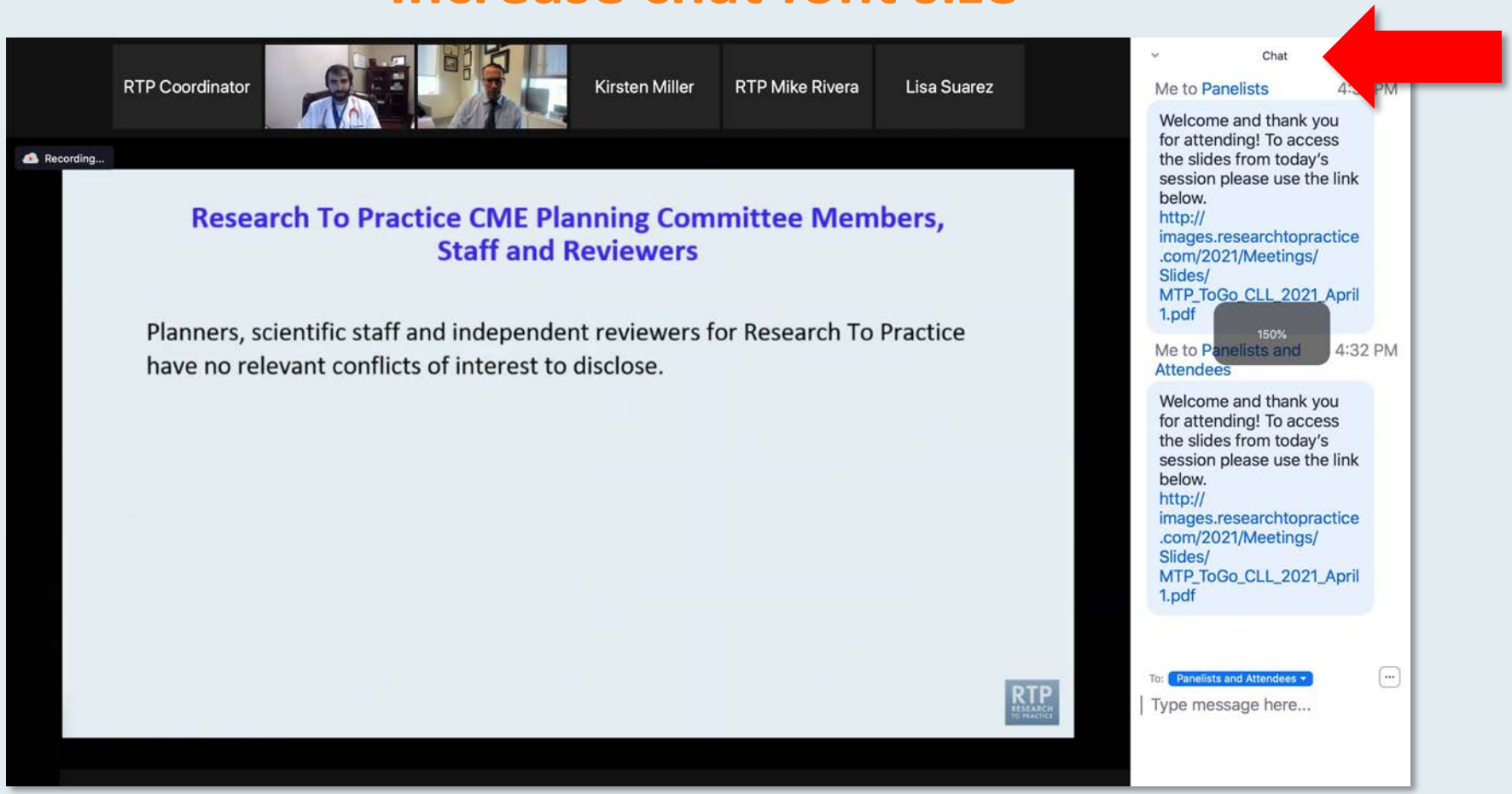


Drag the white line above the submission box up to create more space for your message.

RTP RESEARCH TO PRACTICE

Familiarizing Yourself with the Zoom Interface

Increase chat font size



Press Command (for Mac) or Control (for PC) and the + symbol.
You may do this as many times as you need for readability.

ONCOLOGY TODAY

WITH DR NEIL LOVE

Key Presentations on Breast Cancer from the 2021 ASCO Annual Meeting

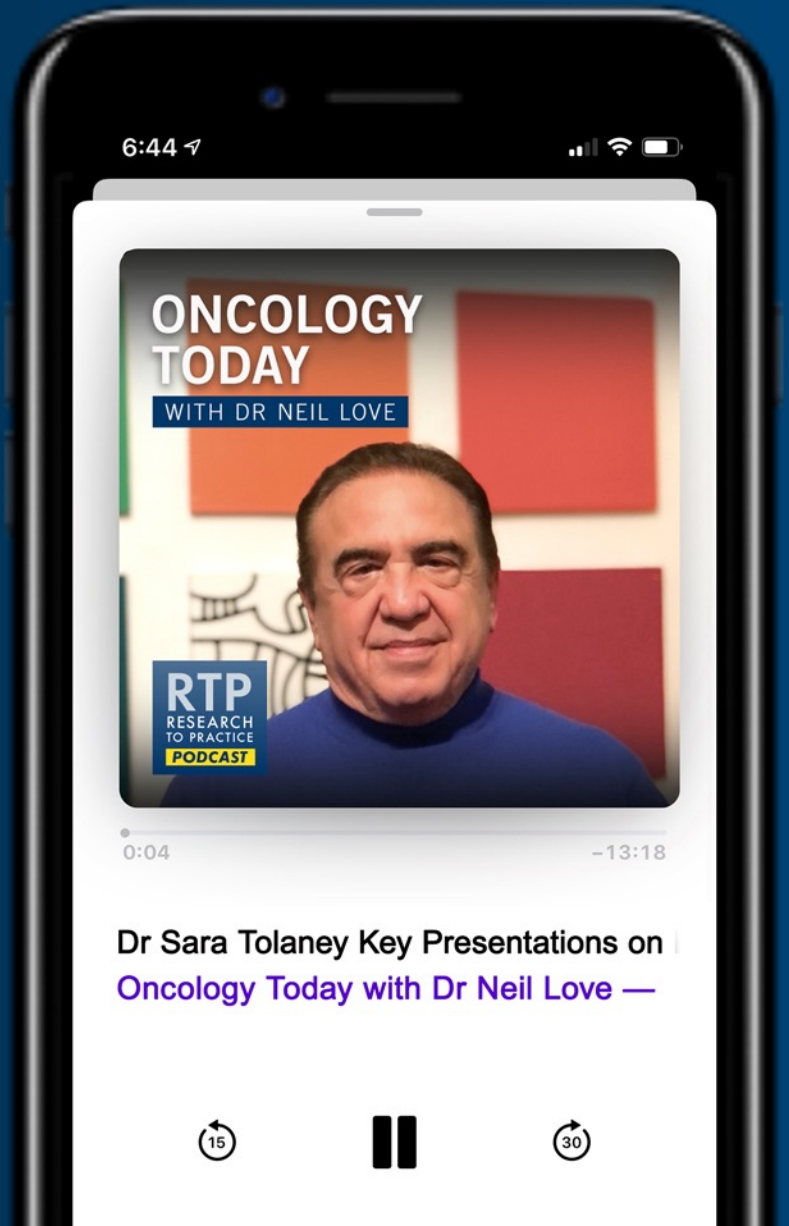
DR SARA TOLANEY

DANA-FARBER CANCER INSTITUTE

Listen on Apple Podcasts

Spotify

Listen on Google Podcasts



4 Exciting CME/MOC Events You Do Not Want to Miss

A Live Webinar Series Held in Conjunction with the 2021 ASCO Annual Meeting

Mantle Cell, Diffuse Large B-Cell and Hodgkin Lymphoma
Monday, August 2
5:00 PM – 6:00 PM ET

Hepatocellular Carcinoma and Pancreatic Cancer
Wednesday, August 4
5:00 PM – 6:30 PM ET

Colorectal and Gastroesophageal Cancers
Tuesday, August 3
5:00 PM – 6:30 PM ET

Head and Neck Cancer
Wednesday, August 11
5:00 PM – 6:00 PM ET

RTP
RESEARCH TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Mantle Cell, Diffuse Large B-Cell and Hodgkin Lymphoma

Monday, August 2, 2021
5:00 PM – 6:00 PM ET

Faculty

Stephen M Ansell, MD, PhD
Craig Moskowitz, MD
Laurie H Sehn, MD, MPH

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Colorectal and Gastroesophageal Cancers

Tuesday, August 3, 2021
5:00 PM – 6:30 PM ET

Faculty

Chloe E Atreya, MD, PhD
Dustin Deming, MD
Eric Van Cutsem, MD, PhD
Zev Wainberg, MD, MSc

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Hepatocellular Carcinoma and Pancreatic Cancer

Wednesday, August 4, 2021
5:00 PM – 6:30 PM ET

Faculty

Tanios Bekaii-Saab, MD
Kim A Reiss Binder, MD
Eileen M O'Reilly, MD
Philip A Philip, MD, PhD, FRCP

Moderator

Neil Love, MD

RTP
RESEARCH TO PRACTICE

Summer Oncology Nursing Series

A Complimentary NCPD-Accredited Virtual Curriculum

Chronic Lymphocytic Leukemia

Thursday, August 5, 2021
5:00 PM – 6:00 PM ET

Faculty

John M Pagel, MD, PhD
Lesley Camille Ballance, MSN, FNP-BC

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Three Exciting Educational Events Held in Conjunction with the 2021 Pan Pacific Lymphoma Conference

A Physician and Nurse Education Series in Partnership with the University of Nebraska Medical Center

Expert Second Opinion — Acute Myeloid Leukemia and Myelodysplastic Syndromes

Monday, August 9, 2021
7:00 PM – 8:30 PM ET

Faculty
Krishna Gundabolu, MD
Richard M Stone, MD
Eunice S Wang, MD

Moderator
Harry Paul Erba, MD, PhD

Beyond the Guidelines — Chronic Lymphocytic Leukemia

Tuesday, August 10, 2021
7:00 PM – 9:00 PM ET

Faculty
Alexey V Danilov, MD, PhD
Susan O'Brien, MD
Sonali M Smith, MD
Julie M Vose, MD, MBA

Moderator
Matthew S Davids, MD, MMSc

Cases from the Community — Multiple Myeloma

Thursday, August 12, 2021
7:00 PM – 8:30 PM ET

Faculty
Muhamed Baljevic, MD
Joseph Mikhael, MD
Nina Shah, MD

Moderator
Robert Z Orlowski, MD, PhD

RTP
RESEARCH TO PRACTICE

Meet The Professor

Optimizing the Selection and Sequencing of Therapy for Patients with HER2-Positive Breast Cancer

Tuesday, August 10, 2021
12:00 PM – 1:00 PM ET

Faculty

Karen A Gelmon, MD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Summer Oncology Nursing Series

A Complimentary NCPD-Accredited Virtual Curriculum

Prostate Cancer

Thursday, August 12, 2021
5:00 PM – 6:00 PM ET

Faculty

A Oliver Sartor, MD
Ronald Stein, JD, MSN, NP-C, AOCNP

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Thank you for joining us!

NCPD credit information will be emailed to each participant shortly.

Summer Oncology Nursing Series

A Complimentary NCPD-Accredited Virtual Curriculum

Breast Cancer: Session 2

Thursday, July 29, 2021
5:00 PM – 6:00 PM ET

Faculty

Kathy D Miller, MD
Kelly Leonard, MSN, FNP-BC

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Faculty

Kathy D Miller, MD
Ballvé-Lantero Professor
Division of Hematology/Oncology
Associate Director for Clinical Research
The Indiana University Melvin and Bren Simon Cancer Center
Indianapolis, Indiana

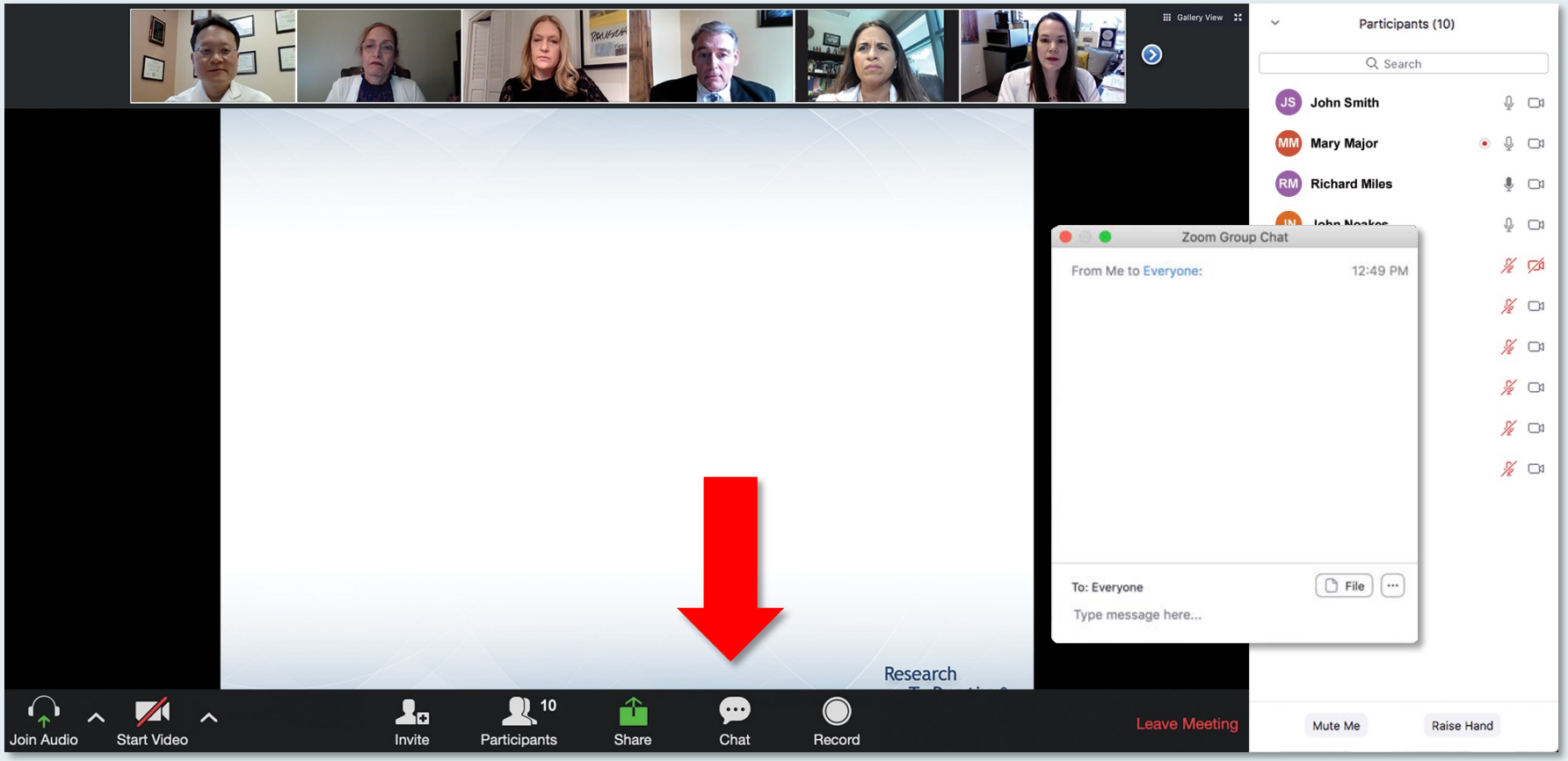
Kelly Leonard, MSN, FNP-BC
Family Nurse Practitioner
Dana-Farber Cancer Institute
Boston, Massachusetts

Moderator

Neil Love, MD
Research To Practice
Miami, Florida

RTP RESEARCH TO PRACTICE

We Encourage Clinicians in Practice to Submit Questions

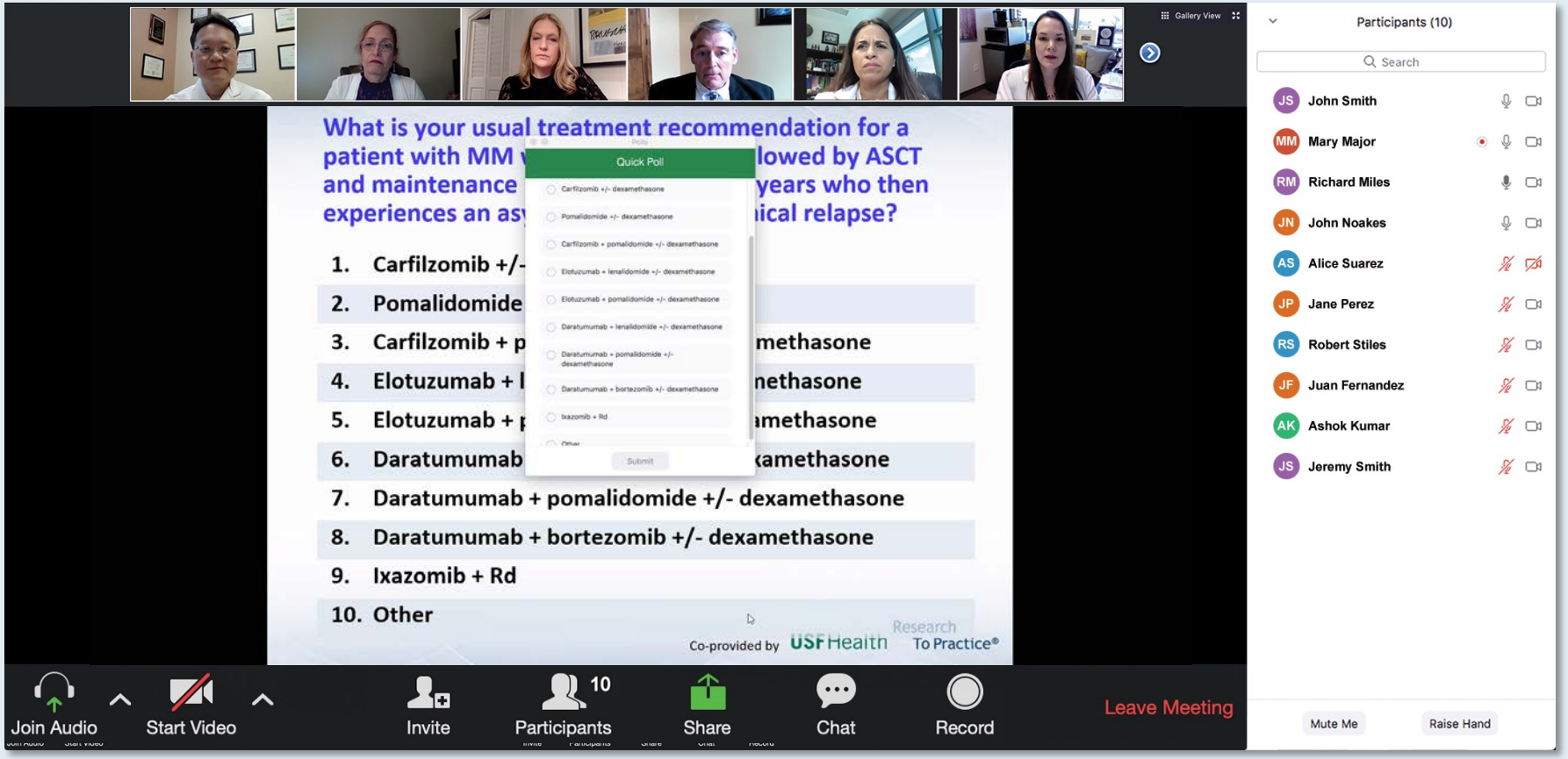


Feel free to submit questions now before the program begins and throughout the program.

RTP RESEARCH TO PRACTICE

Familiarizing Yourself with the Zoom Interface

How to answer poll questions



When a poll question pops up, click your answer choice from the available options.

RTP RESEARCH TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Mantle Cell, Diffuse Large B-Cell and Hodgkin Lymphoma

Monday, August 2, 2021
5:00 PM – 6:00 PM ET

Faculty

Stephen M Ansell, MD, PhD
Craig Moskowitz, MD
Laurie H Sehn, MD, MPH

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Colorectal and Gastroesophageal Cancers

Tuesday, August 3, 2021
5:00 PM – 6:30 PM ET

Faculty

Chloe E Atreya, MD, PhD
Dustin Deming, MD
Eric Van Cutsem, MD, PhD
Zev Wainberg, MD, MSc

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Hepatocellular Carcinoma and Pancreatic Cancer

Wednesday, August 4, 2021
5:00 PM – 6:30 PM ET

Faculty

Tanios Bekaii-Saab, MD
Kim A Reiss Binder, MD
Eileen M O'Reilly, MD
Philip A Philip, MD, PhD, FRCP

Moderator

Neil Love, MD

RTP
RESEARCH TO PRACTICE

Summer Oncology Nursing Series

A Complimentary NCPD-Accredited Virtual Curriculum

Chronic Lymphocytic Leukemia

Thursday, August 5, 2021
5:00 PM – 6:00 PM ET

Faculty

John M Pagel, MD, PhD
Lesley Camille Ballance, MSN, FNP-BC

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Three Exciting Educational Events Held in Conjunction with the 2021 Pan Pacific Lymphoma Conference

A Physician and Nurse Education Series in Partnership with the University of Nebraska Medical Center

Expert Second Opinion — Acute Myeloid Leukemia and Myelodysplastic Syndromes

Monday, August 9, 2021
7:00 PM – 8:30 PM ET

Faculty
Krishna Gundabolu, MD
Richard M Stone, MD
Eunice S Wang, MD

Moderator
Harry Paul Erba, MD, PhD

Beyond the Guidelines — Chronic Lymphocytic Leukemia

Tuesday, August 10, 2021
7:00 PM – 9:00 PM ET

Faculty
Alexey V Danilov, MD, PhD
Susan O'Brien, MD
Sonali M Smith, MD
Julie M Vose, MD, MBA

Moderator
Matthew S Davids, MD, MMSc

Cases from the Community — Multiple Myeloma

Thursday, August 12, 2021
7:00 PM – 8:30 PM ET

Faculty
Muhamed Baljevic, MD
Joseph Mikhael, MD
Nina Shah, MD

Moderator
Robert Z Orlowski, MD, PhD

RTP
RESEARCH TO PRACTICE

Meet The Professor

Optimizing the Selection and Sequencing of Therapy for Patients with HER2-Positive Breast Cancer

Tuesday, August 10, 2021
12:00 PM – 1:00 PM ET

Faculty

Karen A Gelmon, MD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Summer Oncology Nursing Series

A Complimentary NCPD-Accredited Virtual Curriculum

Prostate Cancer

Thursday, August 12, 2021
5:00 PM – 6:00 PM ET

Faculty

A Oliver Sartor, MD
Ronald Stein, JD, MSN, NP-C, AOCNP

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Oncology Grand Rounds Nursing Webinar Series

April 2021

Monday	Tuesday	Wednesday	Thursday	Friday
19	20 Breast Ca 8:30 AM Lung Ca 5:00 PM	21 AML 12:00 PM CRC and GE Ca 4:45 PM	22 Prostate Ca 8:30 AM Lymphomas 5:00 PM	23
26	27 Multiple Myeloma 8:30 AM GYN 5:00 PM	28 Bladder Ca 12:00 PM	29 CLL 8:30 AM CAR-T 5:00 PM	30

RTP RESEARCH TO PRACTICE

13th Annual Oncology Grand Rounds

A Complimentary NCPD Live Webinar Series
Held During the 46th Annual ONS Congress

Breast Cancer

Tuesday, April 20, 2021
8:30 AM – 10:00 AM ET

Medical Oncologists

Carey K Anders, MD
Kathy D Miller, MD
Sara M Tolaney, MD, MPH

Oncology Nurse Practitioners

Gretchen Santos Fulgencio, MSN, FNP-BC
Allie Hershey, MSN, RN, ANP-BC, AOCNP
Kelly Leonard, MSN, FNP-BC

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE


Kelly Leonard, MSN, FNP-BC

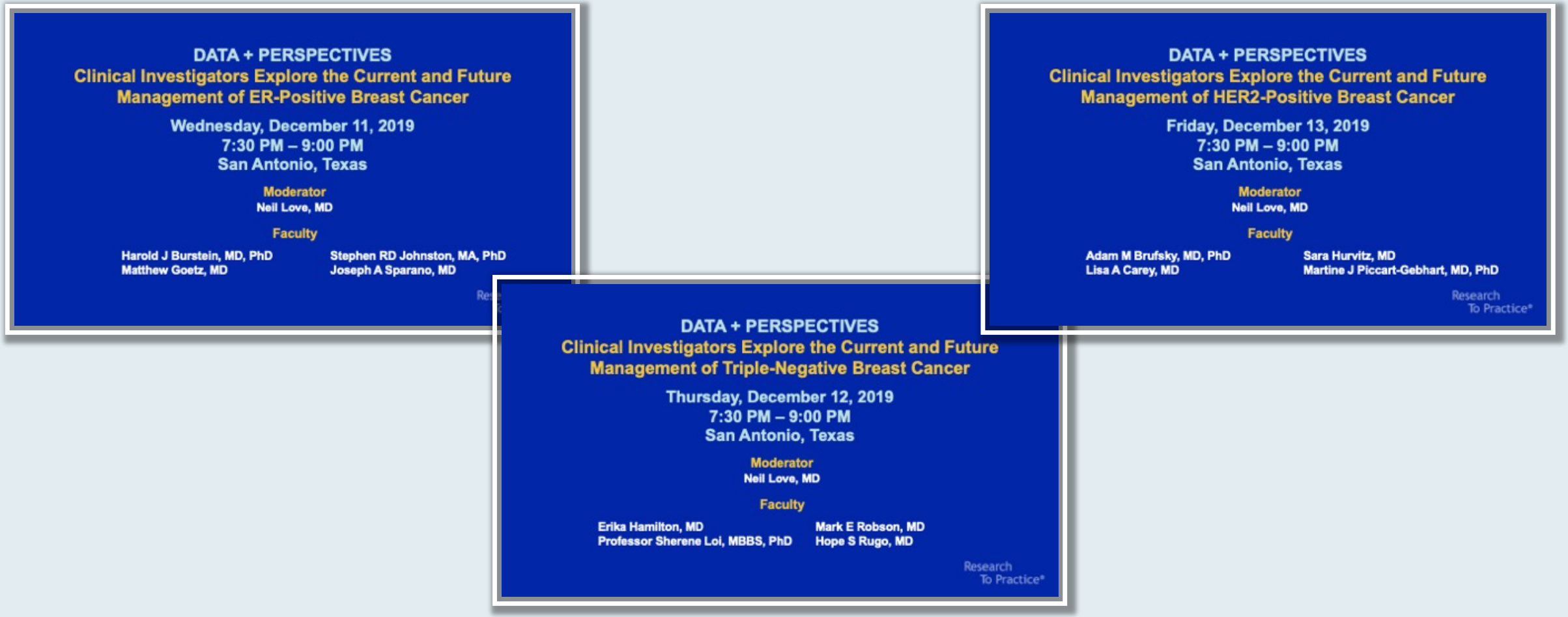

Gretchen Santos Fulgencio, MSN, FNP-BC


Allie Hershey, MSN, RN, ANP-BC, AOCNP

How was it different to take care of this patient versus another patient in the same oncologic setting? What unique biopsychosocial factors (eg, attitude, comorbidities, social support) were considered in the overall management of this case?

RTP
RESEARCH
TO PRACTICE

Research To Practice's 2019 San Antonio Breast Cancer Symposia



Agenda

Introduction: The Practice-Changing Summer of 2021

Case 1: A 61-year-old woman with ER-positive, HER2-negative localized breast cancer

Case 2: A 53-year-old woman with ER-positive, HER2-negative metastatic breast cancer and a PIK3CA tumor mutation

Case 3: A 33-year-old woman with HER2-positive, ER/PR-positive, node-positive localized breast cancer

Case 4: A 64-year-old woman with ER-positive, HER2-positive metastatic breast cancer and brain metastases

Agenda

Introduction: The Practice-Changing Summer of 2021

Case 1: A 61-year-old woman with ER-positive, HER2-negative localized breast cancer

Case 2: A 53-year-old woman with ER-positive, HER2-negative metastatic breast cancer and a PIK3CA tumor mutation

Case 3: A 33-year-old woman with HER2-positive, ER/PR-positive, node-positive localized breast cancer

Case 4: A 64-year-old woman with ER-positive, HER2-positive metastatic breast cancer and brain metastases

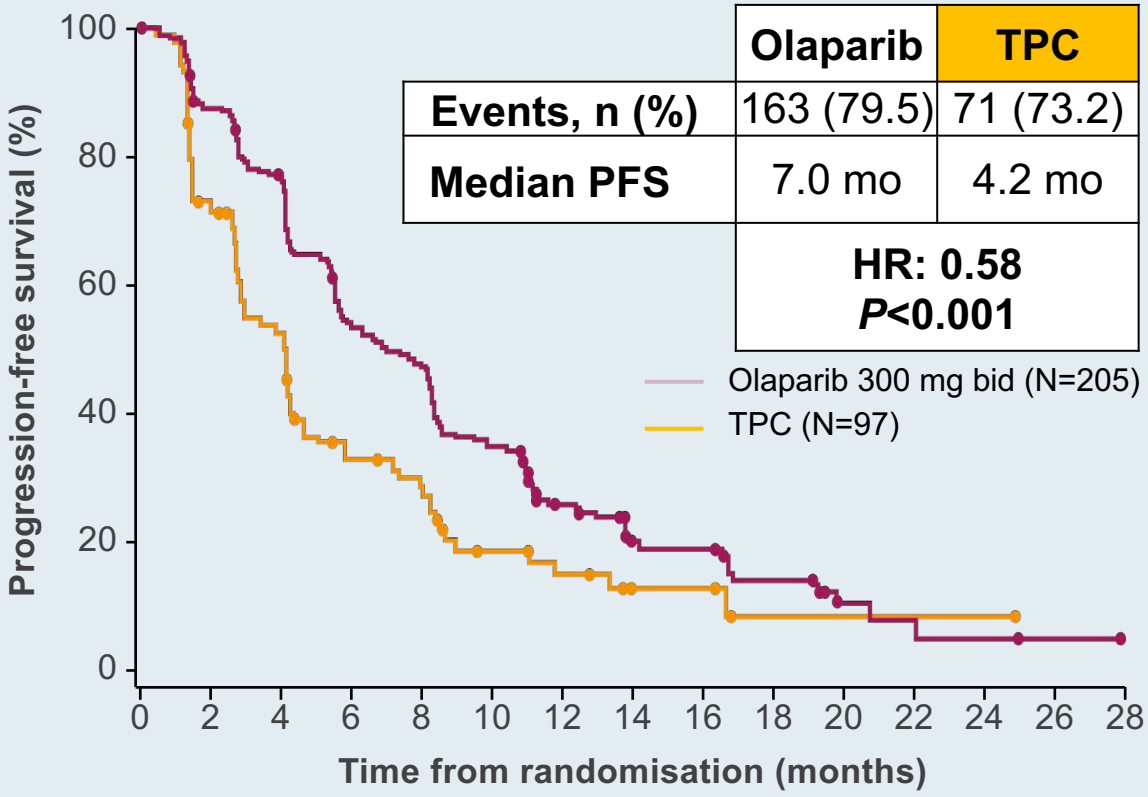
The PARP inhibitors olaparib and talazoparib are FDA approved for patients with metastatic breast cancer and a germline BRCA mutation…

1. As maintenance therapy after platinum chemotherapy
2. As monotherapy
3. Both a and b
4. I’m not sure

RTP
RESEARCH
TO PRACTICE

Phase III Trials of PARP Inhibitors in gBRCA HER2-Negative Metastatic Breast Cancer

OlympiAD: Olaparib PFS[1,2]

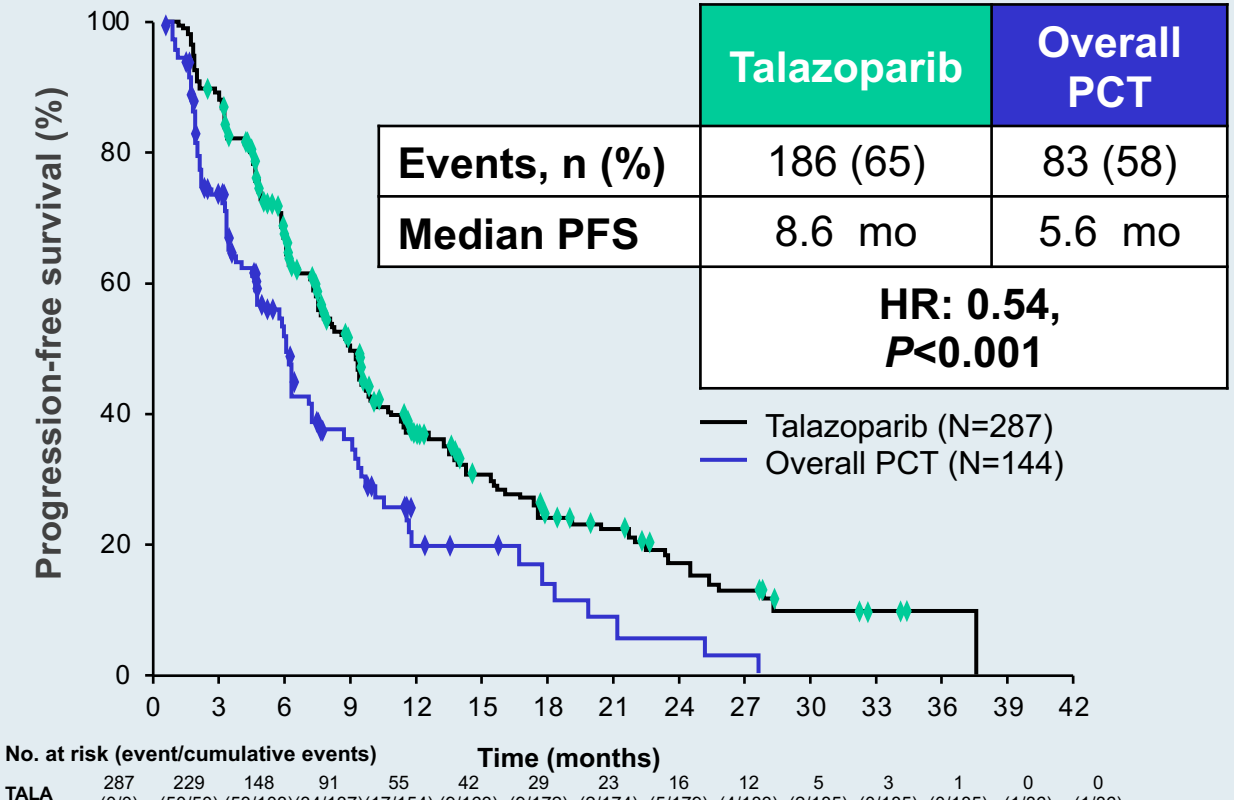


	Olaparib	TPC
Events, n (%)	163 (79.5)	71 (73.2)
Median PFS	7.0 mo	4.2 mo
	HR: 0.58 *P*<0.001	

Number at risk

Olaparib	205	201	177	159	154	129	107	100	94	73	69	61	40	36	23	21	21	11	11	11	4	3	3	2	2	1	1	1	0
TPC	97	88	83	46	44	29	25	24	21	13	11	11	8	7	4	4	4	1	1	1	1	1	1	1	1	0	0	0	0

EMBRACA: Talazoparib PFS[3]



	Talazoparib	Overall PCT
Events, n (%)	186 (65)	83 (58)
Median PFS	8.6 mo	5.6 mo
	HR: 0.54, *P*<0.001	

No. at risk (event/cumulative events)

TALA	287 (0/0)	229 (50/50)	148 (53/103)	91 (34/137)	55 (17/154)	42 (9/163)	29 (9/172)	23 (2/174)	16 (5/179)	12 (4/183)	5 (2/185)	3 (0/185)	1 (0/185)	0 (1/86)	0 (1/86)
PCT	144 (0/0)	68 (41/41)	34 (20/61)	22 (8/69)	9 (7/76)	8 (0/76)	4 (3/79)	2 (2/81)	2 (0/81)	1 (1/82)	0 (1/83)	0 (0/83)	0 (0/83)	0 (0/83)	0 (0/83)

1. Robson M, et al. *N Engl J Med* 2017;377:523-33; 2. Olaparib 150mg Film-Coated Tablets, SmPC. 2019;
3. Litton JK, et al. *N Engl J Med* 2018;379:753-63 (supplementary appendix)

RTP RESEARCH TO PRACTICE

The NEW ENGLAND JOURNAL of MEDICINE

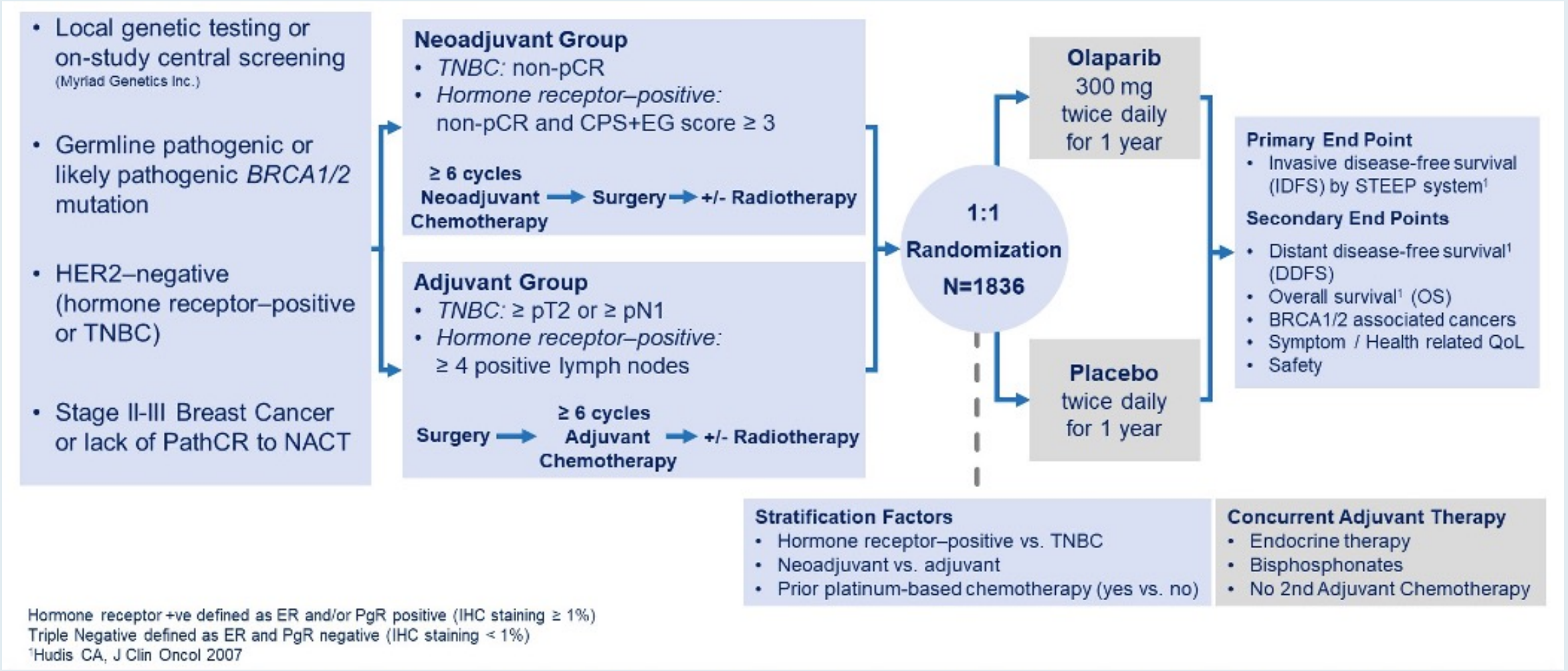
ORIGINAL ARTICLE

Adjuvant Olaparib for Patients with *BRCA1*- or *BRCA2*-Mutated Breast Cancer

A.N.J. Tutt, J.E. Garber, B. Kaufman, G. Viale, D. Fumagalli, P. Rastogi, R.D. Gelber, E. de Azambuja, A. Fielding, J. Balmaña, S.M. Domchek, K.A. Gelmon, S.J. Hollingsworth, L.A. Korde, B. Linderholm, H. Bandos, E. Senkus, J.M. Suga, Z. Shao, A.W. Pippas, Z. Nowecki, T. Huzarski, P.A. Ganz, P.C. Lucas, N. Baker, S. Loibl, R. McConnell, M. Piccart, R. Schmutzler, G.G. Steger, J.P. Costantino, A. Arahmani, N. Wolmark, E. McFadden, V. Karantza, S.R. Lakhani, G. Yothers, C. Campbell, and C.E. Geyer, Jr., for the OlympiA Clinical Trial Steering Committee and Investigators*

***N Engl J Med* 2021;384(25):2394-405.**

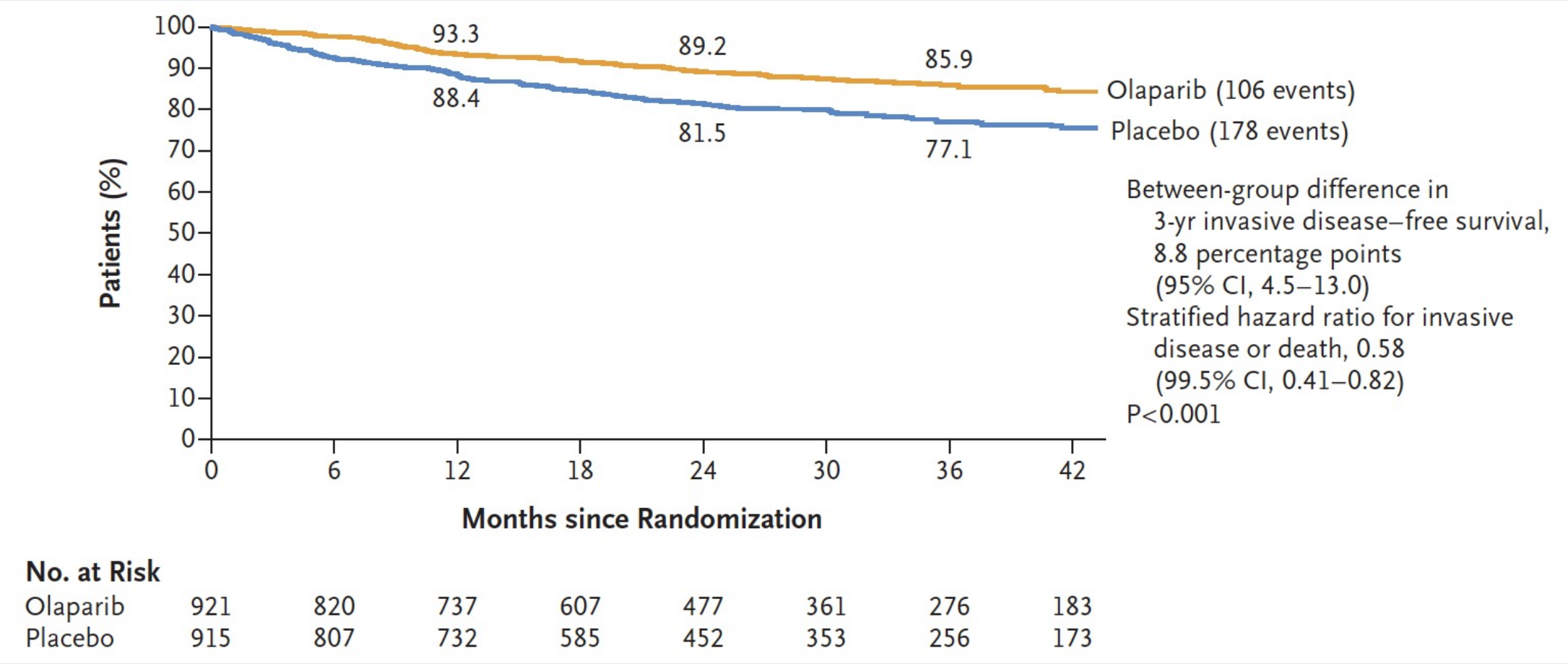
OlympiA: Trial Design



Hormone receptor +ve defined as ER and/or PgR positive (IHC staining ≥ 1%)
Triple Negative defined as ER and PgR negative (IHC staining < 1%)
[1]Hudis CA, J Clin Oncol 2007

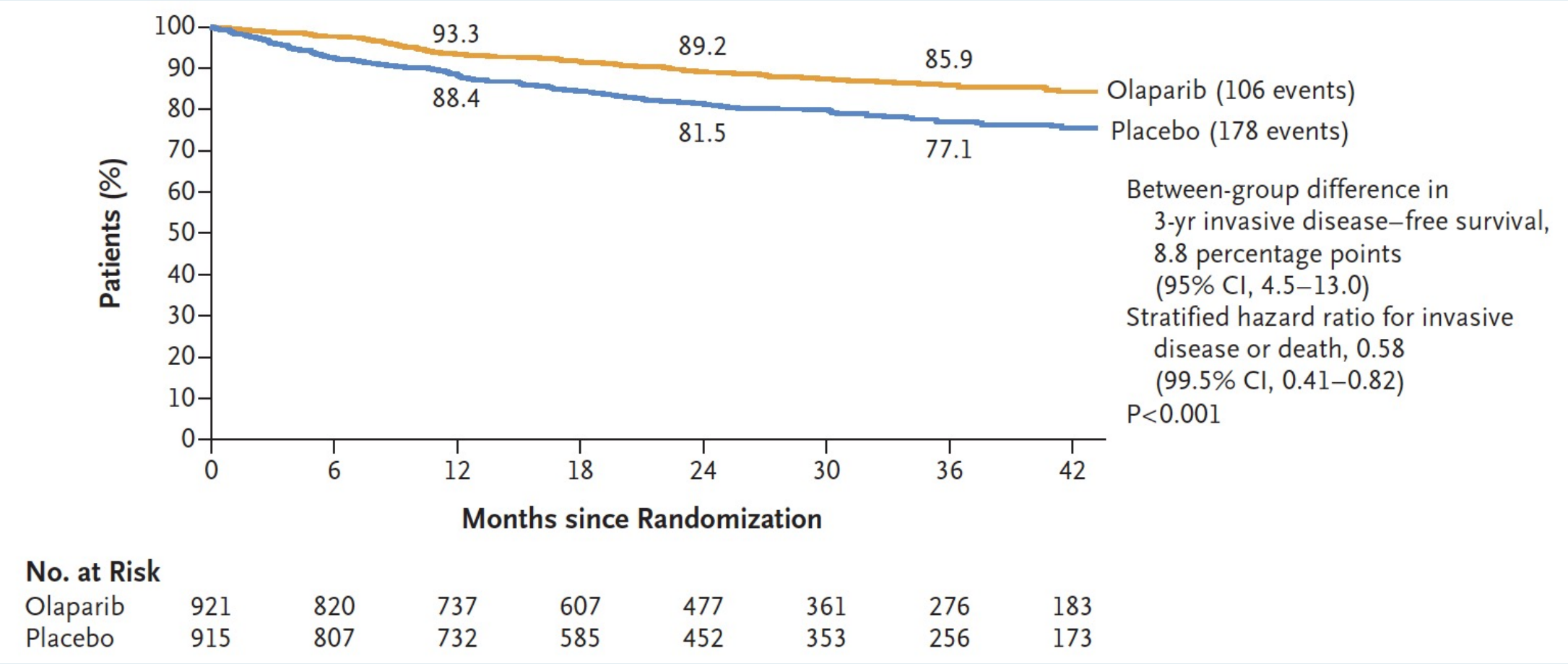
Tutt ANJ et al. ASCO 2021;Abstract LBA1.

OlympiA: Invasive Disease-Free Survival



Tutt ANJ et al. *N Engl J Med* 2021;384(25):2394-405.

OlympiA: Overall Survival



No. at Risk

Olaparib	921	820	737	607	477	361	276	183
Placebo	915	807	732	585	452	353	256	173

Tutt ANJ et al. *N Engl J Med* 2021;384(25):2394-405.

2021 ASCO ANNUAL MEETING

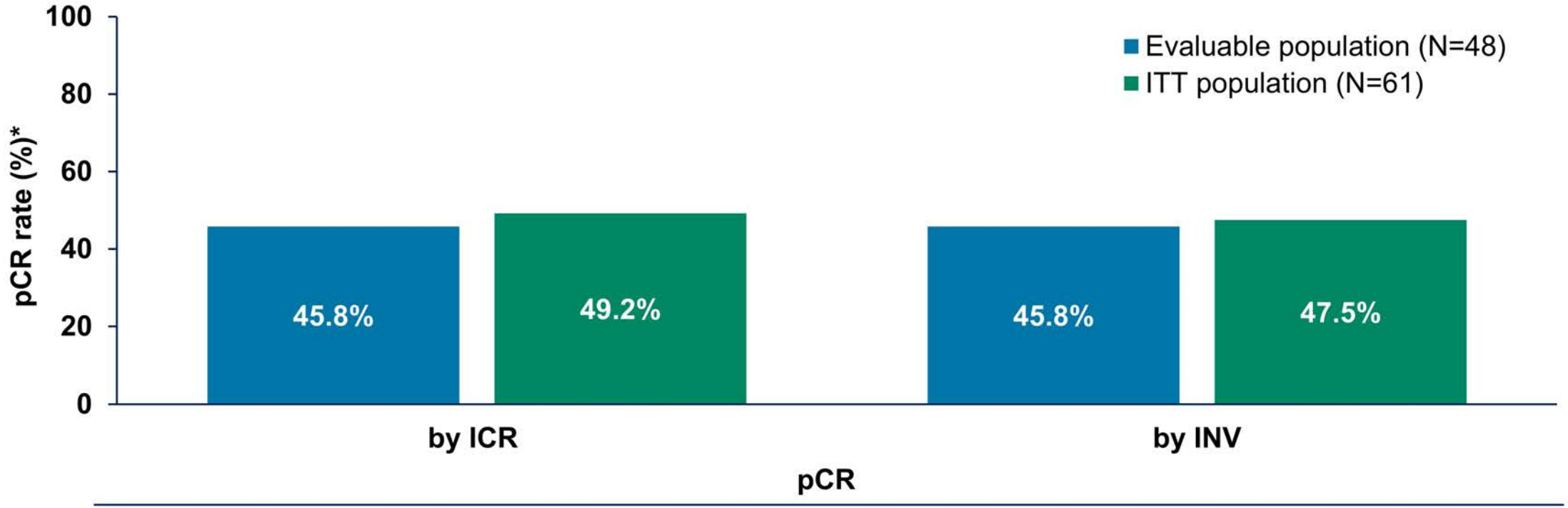
NEOADJUVANT TALAZOPARIB IN PATIENTS WITH GERMLINE *BRCA1/2* MUTATION-POSITIVE, EARLY HER2-NEGATIVE BREAST CANCER: RESULTS OF A PHASE 2 STUDY

Jennifer K. Litton,[1] J. Thaddeus Beck,[2] Jason M. Jones,[3] Jay Andersen,[4] Joanne L. Blum,[5] Lida A. Mina,[6] Raymond Brig,[7] Michael Danso,[8] Yuan Yuan,[9] Antonello Abbattista,[10] Kay Noonan,[11] Jayeta Chakrabarti,[12] Akos Czibere,[13] William F. Symmans,[1] Melinda L. Telli[14]

[1]The University of Texas MD Anderson Cancer Center, Houston, TX, USA; [2]Highlands Oncology Group, Fayetteville, AR, USA; [3]Avera Cancer Institute, Sioux Falls, SD, USA; [4]Compass Oncology, West Cancer Center, Tigard, OR, USA; [5]Texas Oncology-Baylor Charles A. Sammons Cancer Center, US Oncology Network, Dallas, TX, USA; [6]Banner MD Anderson Cancer Center, Gilbert, AZ, USA; [7]Brig Center for Cancer Care and Survivorship, Knoxville, TN, USA; [8]Virginia Oncology Associates, Norfolk, VA, USA; [9]City of Hope Comprehensive Cancer Center and Beckman Research Institute, Duarte, CA, USA; [10]Pfizer Oncology, Milan, Italy; [11]Pfizer Inc., Groton, CT, USA; [12]Pfizer, Walton Oaks, Surrey, UK; [13]Pfizer Inc., Cambridge, MA, USA; [14]Stanford University School of Medicine, Stanford, CA, USA

June 6, 2021

Pathologic Complete Response



95% CI†	(32.0–60.6)	(36.7–61.6)	(32.0–60.6)	(35.0–60.1)
80% CI†	(36.4–55.2)	(41.0–57.4)		
Posterior probability that true pCR rate exceeds 45%	0.55	0.75		

*The denominator is N, the number of patients in the evaluable/ITT analysis set as per ICR/INV.
†The exact CI was calculated using the Blaker's method.

Courtesy of Melinda Telli, MD

The anti-PD-L1 antibody atezolizumab is currently FDA approved in combination with *nab* paclitaxel as first-line treatment for…

1. All patients with metastatic breast cancer
2. Metastatic triple-negative breast cancer
3. Metastatic PD-L1-positive triple-negative breast cancer
4. I'm not sure

FDA Approval for High-Risk Early-Stage TNBC of Pembrolizumab Combined with Chemotherapy as Neoadjuvant Treatment, Then Continued as Single-Agent Adjuvant Treatment After Surgery

Press Release – July 27, 2021

The US Food and Drug Administration has approved pembrolizumab for the treatment of high-risk early-stage TNBC in combination with chemotherapy as neoadjuvant treatment and then continued as single-agent adjuvant treatment after surgery, based on the Phase III KEYNOTE-522 trial. KEYNOTE-522 demonstrated that pembrolizumab in combination with chemotherapy before surgery and continued as a single agent after surgery significantly prolonged event-free survival in comparison to the same neoadjuvant chemotherapy regimens alone for patients with previously untreated Stage II or Stage III TNBC.

Additionally, the FDA converted the accelerated approval of pembrolizumab in combination with chemotherapy for patients with locally recurrent unresectable or metastatic TNBC whose tumors express PD-L1 (CPS ≥10) to a full approval based on confirmatory data from KEYNOTE-522. This approval was originally granted in November 2020 based on results from the Phase III KEYNOTE-355 trial.

https://www.merck.com/news/fda-approves-keytruda-pembrolizumab-for-treatment-of-patients-with-high-risk-early-stage-triple-negative-breast-cancer-in-combination-with-chemotherapy-as-neoadjuvant-treatment-then-continued/

ESMO VIRTUAL PLENARY

KEYNOTE-522: Phase 3 Study of Neoadjuvant Pembrolizumab + Chemotherapy versus Placebo + Chemotherapy, Followed by Adjuvant Pembrolizumab versus Placebo for Early-Stage Triple-Negative Breast Cancer

Peter Schmid[1], Javier Cortes[2], Rebecca Dent[3], Lajos Pusztai[4], Heather McArthur[5], Sherko Kümmel[6], Jonas Bergh[7], Carsten Denkert[8], Yeon Hee Park[9], Rina Hui[10], Nadia Harbeck[11], Masato Takahashi[12], Michael Untch[13], Peter A. Fasching[14], Fatima Cardoso[15], Yu Ding[16], Konstantinos Tryfonidis[17], Gursel Aktan[17], Vassiliki Karantza[17], Joyce O'Shaughnessy[18]

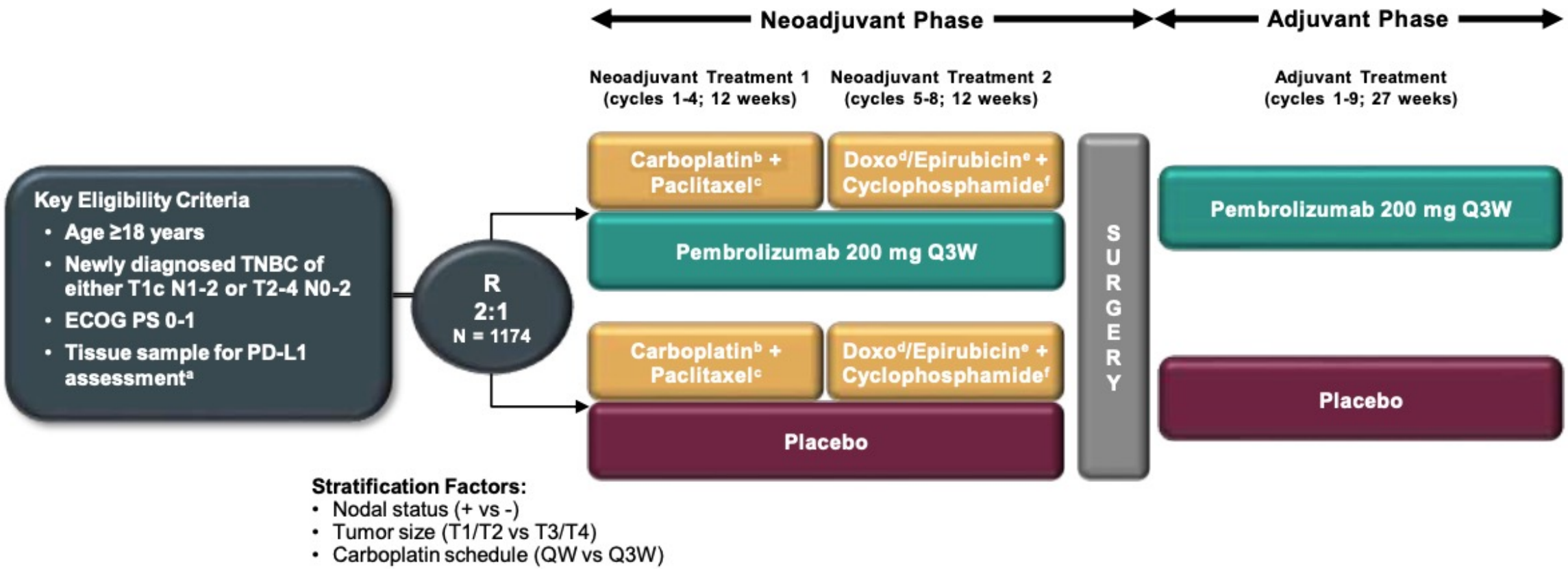
1. Centre for Experimental Cancer Medicine, Barts Cancer Institute, Queen Mary University London, London, UK; 2. International Breast Cancer Center, Quirón Group, Madrid and Barcelona, Spain and Vall d'Hebron Institute of Oncology, Barcelona, Spain; 3. National Cancer Center Singapore, Duke–National University of Singapore Medical School, Singapore; 4. Yale School of Medicine, Yale Cancer Center, New Haven, CT, USA; 5. Breast Oncology, Cedars-Sinai Medical Center, Los Angeles, CA, USA; 6. Breast Unit, Kliniken Essen-Mitte, Essen, Germany; 7. Department of Oncology-Pathology, Karolinska Institutet and Breast Cancer Centre, Cancer theme, Karolinska University Hospital, Solna, Sweden; 8. Institute of Pathology, Philipps-University Marburg and University Hospital Marburg (UKGM), Marburg, Germany; 9. Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Republic of Korea; 10. Westmead Breast Cancer Institute, Westmead Hospital and the University of Sydney, Sydney, NSW, Australia; 11. Breast Center, LMU University Hospital, Munich, Germany; 12. Department of Breast Surgery, Hokkaido Cancer Center, Sapporo, Japan; 13. Breast Cancer Center, Helios Klinikum Berlin-Buch, Berlin, Germany; 14. University Hospital Erlangen, Comprehensive Cancer Center Erlangen-EMN, Erlangen, Germany; 15. Breast Unit, Champalimaud Clinical Center/Champalimaud Foundation, Lisbon, Portugal; 16. Biostatistics, Merck & Co., Inc., Kenilworth, NJ, USA; 17. Merck Research Laboratories, Merck & Co., Inc., Kenilworth, NJ, USA; 18. Baylor University Medical Center, Texas Oncology, US Oncology, Dallas, TX, USA

ESMO

Schmid P et al. ESMO 2021;Abstract VP7.

RTP RESEARCH TO PRACTICE

KEYNOTE-522 Study Design (NCT03036488)

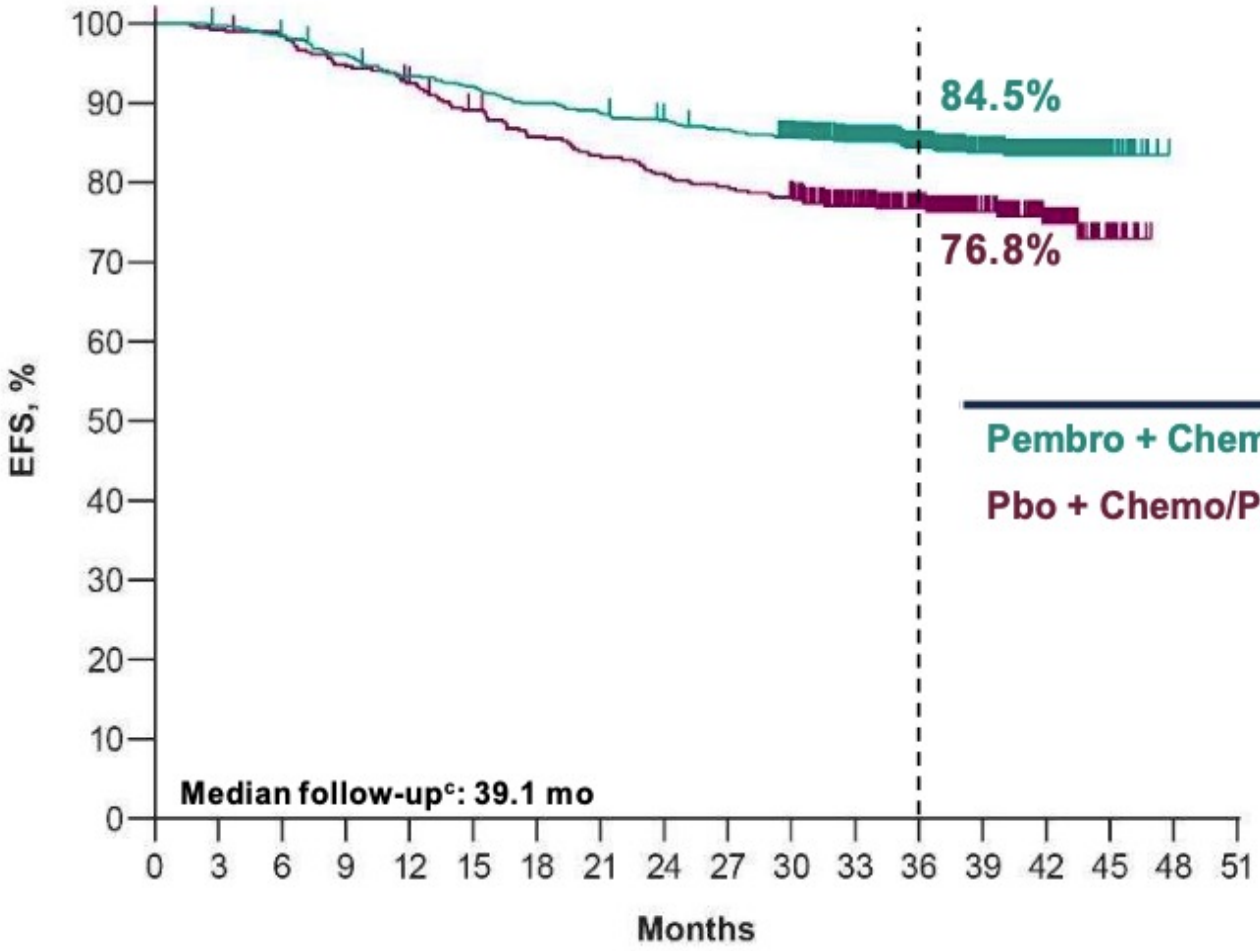


Neoadjuvant phase: starts from the first neoadjuvant treatment and ends after definitive surgery (post treatment included)

Adjuvant phase: starts from the first adjuvant treatment and includes radiation therapy as indicated (post treatment included)

Schmid P et al. ESMO 2021;Abstract VP7.

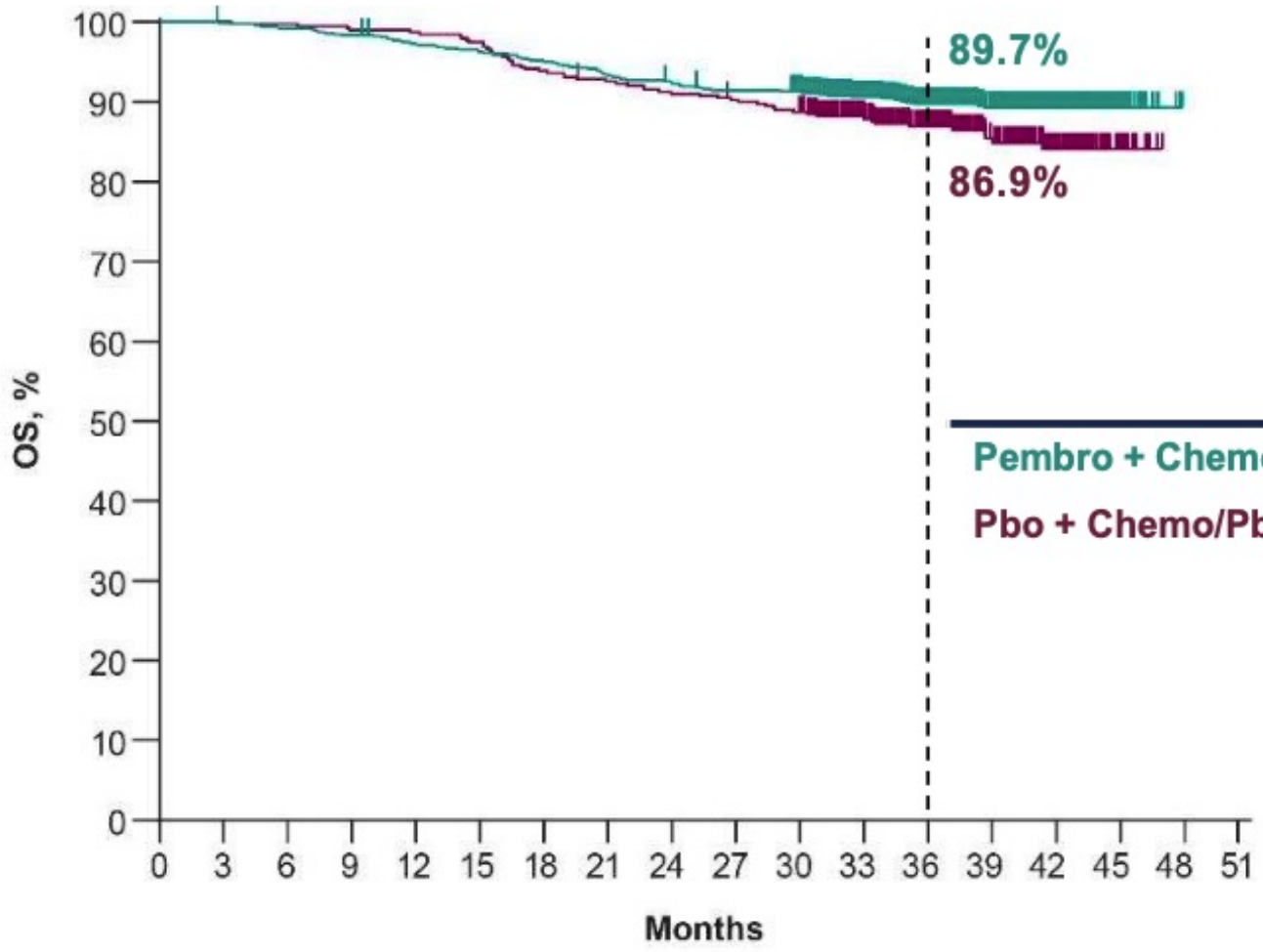
Statistically Significant and Clinically Meaningful EFS at IA4



	Events	HR (95% CI)	*P*-value
Pembro + Chemo/Pembro	15.7%	0.63[a] (0.48-0.82)	0.00031[b]
Pbo + Chemo/Pbo	23.8%		

Schmid P et al. ESMO 2021;Abstract VP7.

Overall Survival



	Events	HR (95% CI)	*P*-value
Pembro + Chemo/Pembro	10.2%	0.72[a] (0.51-1.02)	0.03214[b]
Pbo + Chemo/Pbo	14.1%		

Schmid P et al. ESMO 2021;Abstract VP7.

Phase III KEYNOTE-355 Trial Met Its Primary Endpoint of Overall Survival in Patients with Metastatic TNBC Whose Tumors Expressed PD-L1 (CPS ≥10)

Press Release – July 27, 2021

"Positive overall survival (OS) results were announced from the Phase 3 KEYNOTE-355 trial evaluating pembrolizumab in combination with chemotherapy for the treatment of patients with metastatic triple-negative breast cancer (mTNBC). Findings from the final analysis show first-line treatment with pembrolizumab in combination with chemotherapy (*nab*-paclitaxel, paclitaxel or gemcitabine/carboplatin) demonstrated a statistically significant and clinically meaningful improvement in OS compared with chemotherapy alone in patients with mTNBC whose tumors expressed PD-L1 (Combined Positive Score [CPS] ≥10). No new safety signals were identified. These OS results will be presented at an upcoming medical meeting and submitted to regulatory authorities."

https://www.merck.com/news/merck-announces-phase-3-keynote-355-trial-met-primary-endpoint-of-overall-survival-os-in-patients-with-metastatic-triple-negative-breast-cancer-whose-tumors-expressed-pd-l1-cps-%e2%89%a510/

RTP RESEARCH TO PRACTICE

Sacituzumab Govitecan Is Granted Regular Approval by the FDA for TNBC

Press Release – April 7, 2021

"The Food and Drug Administration granted regular approval to sacituzumab govitecan for patients with unresectable locally advanced or metastatic triple-negative breast cancer (mTNBC) who have received two or more prior systemic therapies, at least one of them for metastatic disease.

In April 2020, sacituzumab govitecan received accelerated approval for patients with mTNBC who have received at least two prior therapies for metastatic disease. The following trial was the confirmatory trial for the accelerated approval.

Efficacy and safety were evaluated in a multicenter, open-label, randomized trial (ASCENT; NCT02574455) conducted in 529 patients with unresectable locally advanced or mTNBC who had relapsed after at least two prior chemotherapies, one of which could be in the neoadjuvant or adjuvant setting, if progression occurred within 12 months. Patients were randomized (1:1) to receive sacituzumab govitecan, 10 mg/kg as an intravenous infusion, on days 1 and 8 of a 21-day (n=267) cycle or physician's choice of single agent chemotherapy (n=262)."

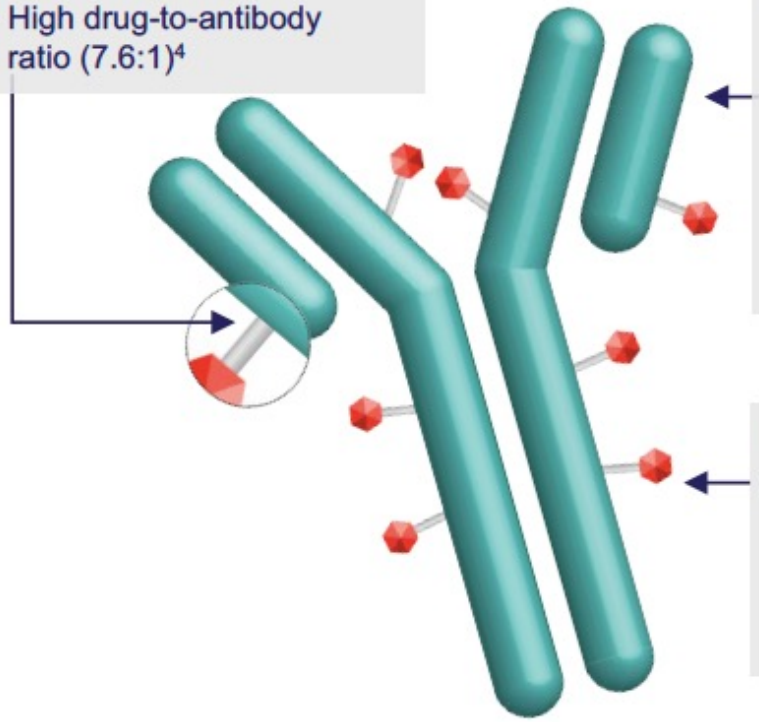
https://www.fda.gov/drugs/resources-information-approved-drugs/fda-grants-regular-approval-sacituzumab-govitecan-triple-negative-breast-cancer

RTP RESEARCH TO PRACTICE

Sacituzumab Govitecan (SG) Is a First-in-Class Trop-2–Directed ADC

- SG is distinct from other ADCs[1-4]
  - Antibody highly specific for Trop-2
  - High drug-to-antibody ratio (7.6:1)
  - Internalization and enzymatic cleavage by tumor cell not required for SN-38 liberation from antibody
  - Hydrolysis of the linker also releases SN-38 extracellularly in the tumor microenvironment (bystander effect)
- Granted FDA accelerated approval for mTNBC[5]
- Landmark ASCENT study demonstrated a significant survival improvement of SG over chemotherapy, with a tolerable safety profile in pretreated mTNBC[6]
  - Median PFS of 5.6 vs 1.7 months (HR 0.41, *P*<0.0001)
  - Median OS of 12.1 vs 6.7 months (HR 0.48, *P*<0.0001)

Linker for SN-38
- Hydrolyzable linker for payload release
- High drug-to-antibody ratio (7.6:1)[4]



Humanized anti–Trop-2 antibody
- Directed toward Trop-2, an epithelial antigen expressed on many solid cancers

SN-38 payload
- SN-38 more potent than parent compound, irinotecan

ADC, antibody-drug conjugate; FDA, US Food and Drug Administration; OS, overall survival; PFS, progression-free survival; TNBC, triple-negative breast cancer; Trop-2, trophoblast cell surface antigen 2.

1. Goldenberg DM, et al. *Expert Opin Biol Ther.* 2020;20:871-885. 2. Nagayama A, et al. *Ther Adv Med Oncol.* 2020;12:1758835920915980. 3. Cardillo TM, et al. *Bioconjugate Chem.* 2015;26:919-931. 4. Goldenberg DM, et al. *Oncotarget.* 2015;6:22496-224512. 5. Press Release. https://www.fda.gov/drugs/drug-approvals-and-databases/fda-grants-accelerated-approval-sacituzumab-govitecan-hziy-metastatic-triple-negative-breast-cancer. Accessed August 26, 2020. 6. Bardia A, et al. ESMO 2020. Abstract LBA17.

Hurvitz SA et al. SABCS 2020;Abstract GS3-06.

N Engl J Med 2021;384:1529-41.

The NEW ENGLAND JOURNAL of MEDICINE

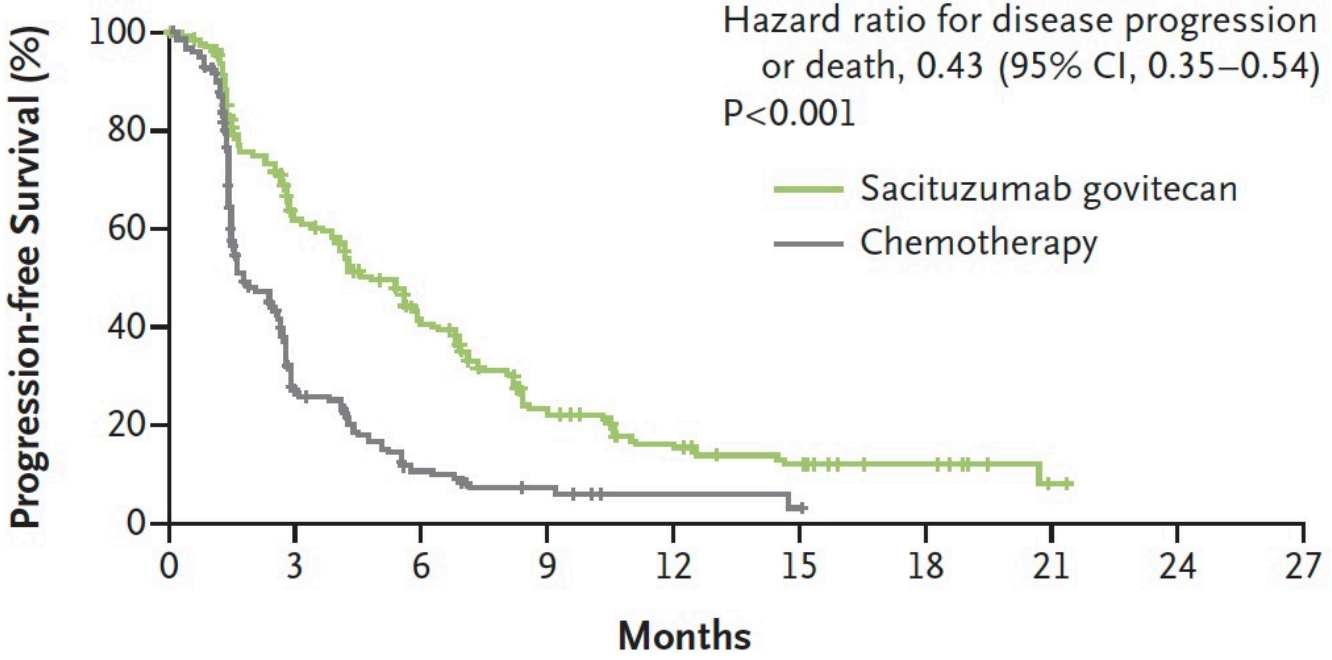
ORIGINAL ARTICLE

Sacituzumab Govitecan in Metastatic Triple-Negative Breast Cancer

A. Bardia, S.A. Hurvitz, S.M. Tolaney, D. Loirat, K. Punie, M. Oliveira, A. Brufsky, S.D. Sardesai, K. Kalinsky, A.B. Zelnak, R. Weaver, T. Traina, F. Dalenc, P. Aftimos, F. Lynce, S. Diab, J. Cortés, J. O'Shaughnessy, V. Diéras, C. Ferrario, P. Schmid, L.A. Carey, L. Gianni, M.J. Piccart, S. Loibl, D.M. Goldenberg, Q. Hong, M.S. Olivo, L.M. Itri, and H.S. Rugo, for the ASCENT Clinical Trial Investigators*

ASCENT: Progression-Free Survival (Overall Population)

	No. of Patients	No. of Events	Median Progression-free Survival *mo (95% CI)*
Sacituzumab Govitecan	267	190	4.8 (4.1–5.8)
Chemotherapy	262	171	1.7 (1.5–2.5)



Bardia A et al. *N Engl J Med* 2021;384:1529-41.

RTP RESEARCH TO PRACTICE

Agenda

Introduction: The Practice-Changing Summer of 2021

Case 1: A 61-year-old woman with ER-positive, HER2-negative localized breast cancer

Case 2: A 53-year-old woman with ER-positive, HER2-negative metastatic breast cancer and a PIK3CA tumor mutation

Case 3: A 33-year-old woman with HER2-positive, ER/PR-positive, node-positive localized breast cancer

Case 4: A 64-year-old woman with ER-positive, HER2-positive metastatic breast cancer and brain metastases

RTP RESEARCH TO PRACTICE

Case Presentation – Ms Leonard: A 61-year-old woman with ER-positive, HER2-negative localized breast cancer

- Single grandmother and homemaker who found a large 7-cm mass on self examination
- Neoadjuvant ddAC-T
- T3N3 at surgery (17 positive lymph nodes)
- Adjuvant letrozole and zoledronic acid

How was it different to take care of this patient versus another patient in the same oncologic setting? What unique biopsychosocial factors (eg, attitude, comorbidities, social support) were considered in the overall management of this case?

RTP
RESEARCH
TO PRACTICE

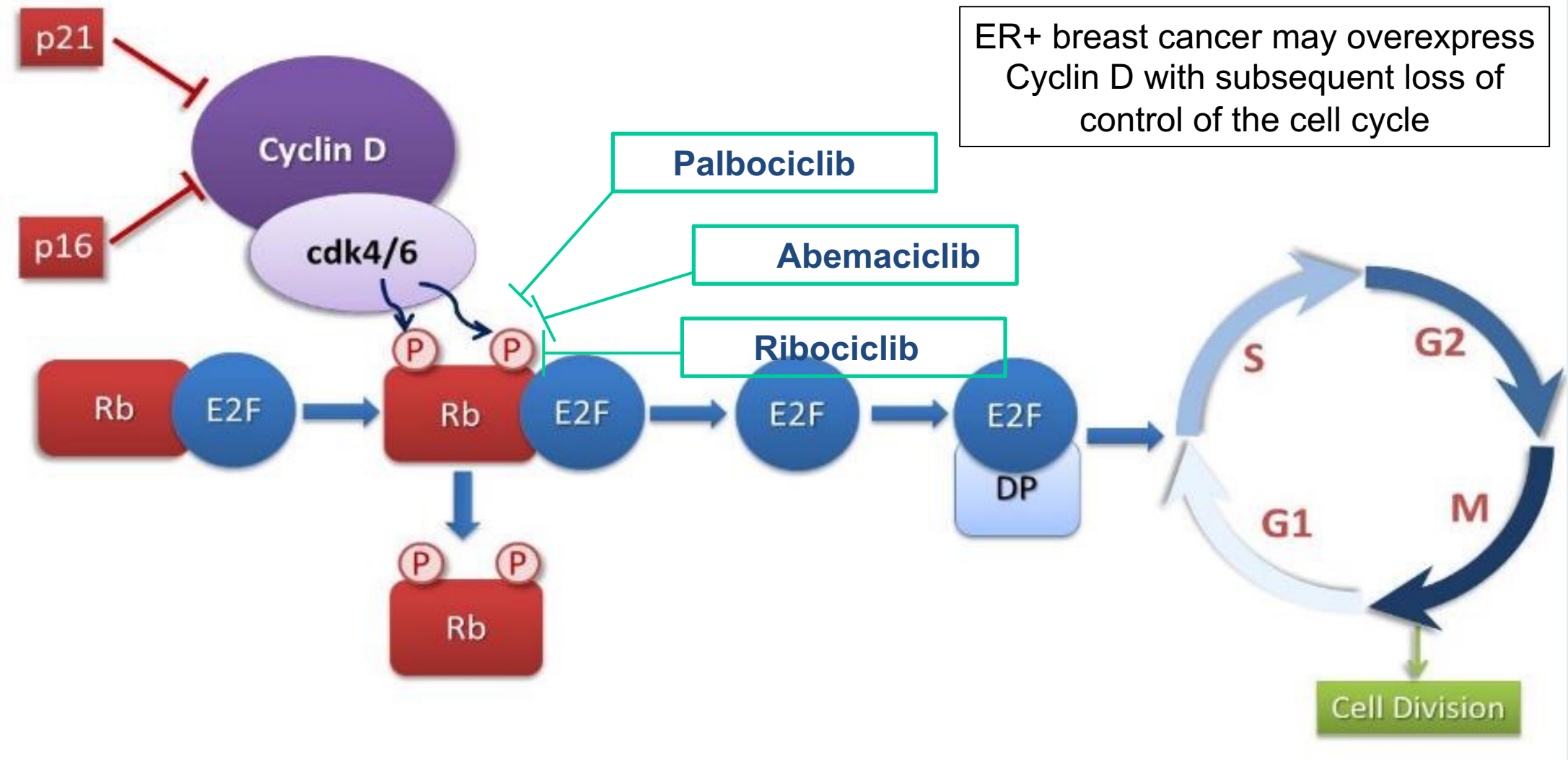
What effect was observed in the Phase III trial of adjuvant abemaciclib?

1. Fewer recurrences
2. Fewer deaths
3. Both
4. I’m not sure

Which of the following toxicities is more common with palbociclib and ribociclib than with abemaciclib?

1. Gastrointestinal toxicity
2. Neutropenia
3. Anemia
4. Peripheral neuropathy
5. I’m not sure

CDK4/6 Regulates Cell Cycle Progression



Adapted from Finn et al, 2016.

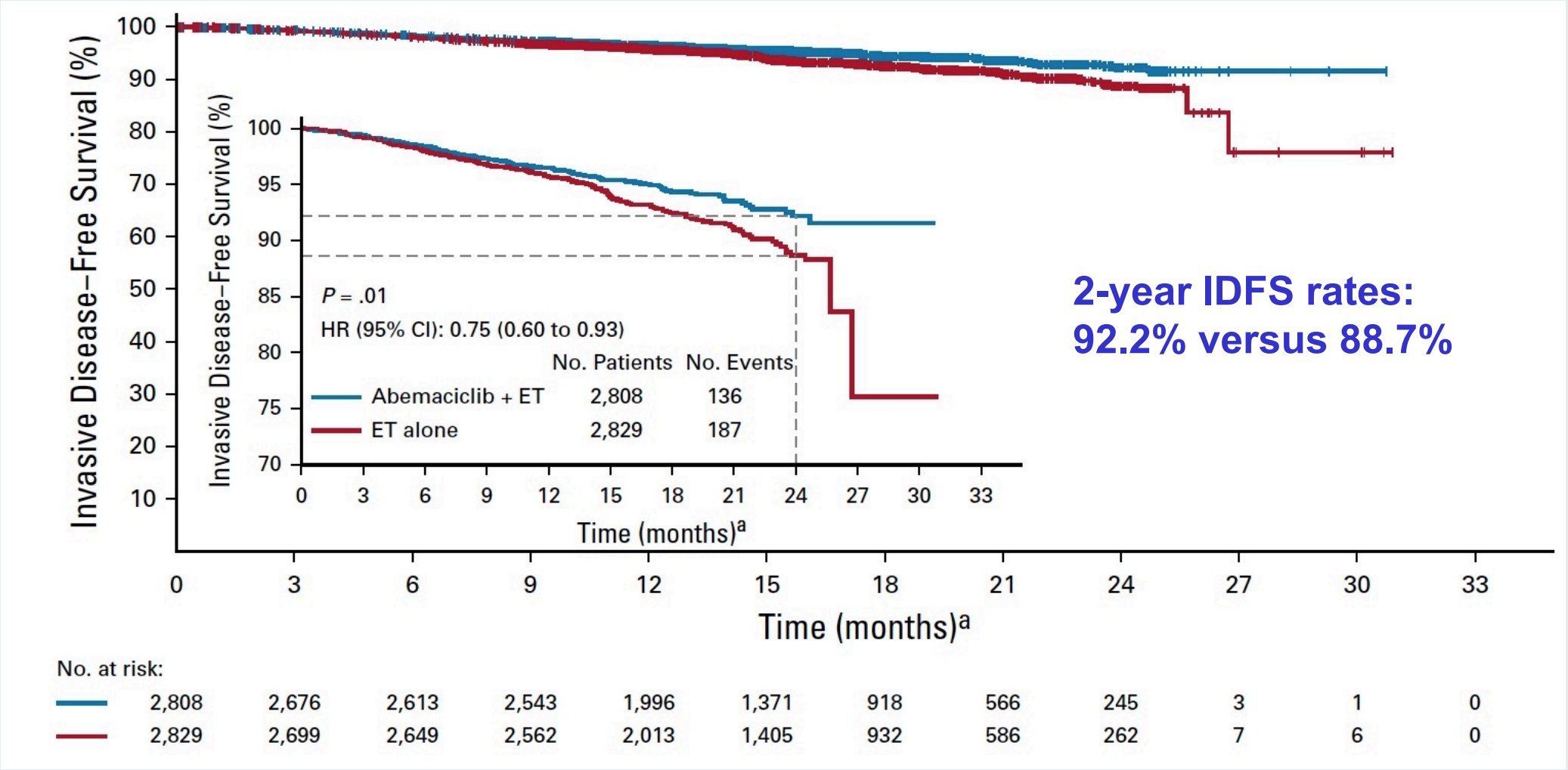
J Clin Oncol 2020;38(34):3987-98.

rapid communications

Abemaciclib Combined With Endocrine Therapy for the Adjuvant Treatment of HR+, HER2−, Node-Positive, High-Risk, Early Breast Cancer (monarchE)

Stephen R. D. Johnston, MD, PhD[1]; Nadia Harbeck, MD, PhD[2]; Roberto Hegg, MD, PhD[3]; Masakazu Toi, MD, PhD[4]; Miguel Martin, MD, PhD[5]; Zhi Min Shao, MD[6]; Qing Yuan Zhang, MD, PhD[7]; Jorge Luis Martinez Rodriguez, MD[8]; Mario Campone, MD, PhD[9]; Erika Hamilton, MD[10]; Joohyuk Sohn, MD, PhD[11]; Valentina Guarneri, MD, PhD[12]; Morihito Okada, MD, PhD[13]; Frances Boyle, MD, MBBS, PhD[14]; Patrick Neven, MD, PhD[15]; Javier Cortés, MD, PhD[16]; Jens Huober, MD[17]; Andrew Wardley, MD, MBChB[18]; Sara M. Tolaney, MD, MPH[19]; Irfan Cicin, MD[20]; Ian C. Smith, MD[21,22]; Martin Frenzel, PhD[22]; Desirée Headley, MSc[22]; Ran Wei, PhD[22]; Belen San Antonio, PhD[22]; Maarten Hulstijn, PhD[22]; Joanne Cox, MD[22]; Joyce O'Shaughnessy, MD[23]; and Priya Rastogi, MD[24]; on behalf of the monarchE Committee Members and Investigators

monarchE: Invasive Disease-Free Survival (IDFS)
(Zoomed in to better show separation of curves)



Johnston SRD et al. *J Clin Oncol* 2020;38(34):3987-98.

Articles

Lancet Oncol 2021;22:212-22

Palbociclib with adjuvant endocrine therapy in early breast cancer (PALLAS): interim analysis of a multicentre, open-label, randomised, phase 3 study

Erica L Mayer, Amylou C Dueck, Miguel Martin, Gabor Rubovszky, Harold J Burstein, Meritxell Bellet-Ezquerra, Kathy D Miller, Nicholas Zdenkowski, Eric P Winer, Georg Pfeiler, Matthew Goetz, Manuel Ruiz-Borrego, Daniel Anderson, Zbigniew Nowecki, Sibylle Loibl, Stacy Moulder, Alistair Ring, Florian Fitzal, Tiffany Traina, Arlene Chan, Hope S Rugo, Julie Lemieux, Fernando Henao, Alan Lyss, Silvia Antolin Novoa, Antonio C Wolff, Marcus Vetter, Daniel Egle, Patrick G Morris, Eleftherios P Mamounas, Miguel J Gil-Gil, Aleix Prat, Hannes Fohler, Otto Metzger Filho, Magdalena Schwarz, Carter DuFrane, Debora Fumagalli, Kathy Puyana Theall, Dongrui Ray Lu, Cynthia Huang Bartlett, Maria Koehler, Christian Fesl, Angela DeMichele, Michael Gnant**

Randomized Trials of Endocrine Therapy with and without CDK4/6 Inhibition

Line	Trial	Schema	PFS HR compared to endocrine alone	OS HR compared to endocrine alone
First line	PALOMA-1	Letrozole ± palbociclib	0.49	0.897
	PALOMA-2	Letrozole ± palbociclib	0.58	NR
	MONALEESA-2	Letrozole ± ribociclib	0.56	0.75
	MONALEESA-3	Fulvestrant ± ribociclib	0.55	0.72
	MONALEESA-7 (premenopausal)	Goserelin + AI or tamoxifen ± ribociclib	0.55	0.71
	MONARCH 3	Letrozole or anastrozole, ± abemaciclib	0.54	NR
Second line	PALOMA-3	Fulvestrant ± palbociclib	0.46	0.75
	MONARCH 2	Fulvestrant ± abemaciclib	0.55	0.757

Courtesy of Dr Harold Burstein; Updated with MONALEESA-3 and MONALEESA-7

Common Side Effects and Dosing of CDK4/6 Inhibitors

	Palbociclib		Abemaciclib		Ribociclib	
Dosing	125 mg qd 3 wk on, 1 wk off		200 mg BID continuously		600 mg qd 3 wk on, 1 wk off	
Common adverse events	**All grades**	**Grade 3/4**	**All grades**	**Grade 3/4**	**All grades**	**Grade 3/4**
Neutropenia Thrombocytopenia	95% 76%	54% 19%	88% 42%	27% 2%	46% 37%	29% 10%
Diarrhea Nausea Vomiting	16% 23% 5%	0 0 0	90% 65% 35%	20% 5% 2%	22% 46% 25%	3% 2% 0

Barroso-Sousa R et al. *Breast Care* 2016;11:167-73.

Agenda

Introduction: The Practice-Changing Summer of 2021

Case 1: A 61-year-old woman with ER-positive, HER2-negative localized breast cancer

Case 2: A 53-year-old woman with ER-positive, HER2-negative metastatic breast cancer and a PIK3CA tumor mutation

Case 3: A 33-year-old woman with HER2-positive, ER/PR-positive, node-positive localized breast cancer

Case 4: A 64-year-old woman with ER-positive, HER2-positive metastatic breast cancer and brain metastases

RTP RESEARCH TO PRACTICE

Case Presentation – Ms Leonard: A 53-year-old woman with ER-positive, HER2-negative metastatic breast cancer and a PIK3CA tumor mutation

- Married mother of 2 teenage children whose disease has progressed on CDK4/6 inhibitors, everolimus and multiple chemotherapies
- Disease progression on multiple lines of therapeutic regimens that included
  - Abemaciclib/fulvestrant
  - Palbociclib
  - Eribulin
  - Everolimus/exemestane
- Treated with alpelisib with fulvestrant
- Management of hyperglycemia associated with alpelisib

How was it different to take care of this patient versus another patient in the same oncologic setting? What unique biopsychosocial factors (eg, attitude, comorbidities, social support) were considered in the overall management of this case?

RTP
RESEARCH
TO PRACTICE

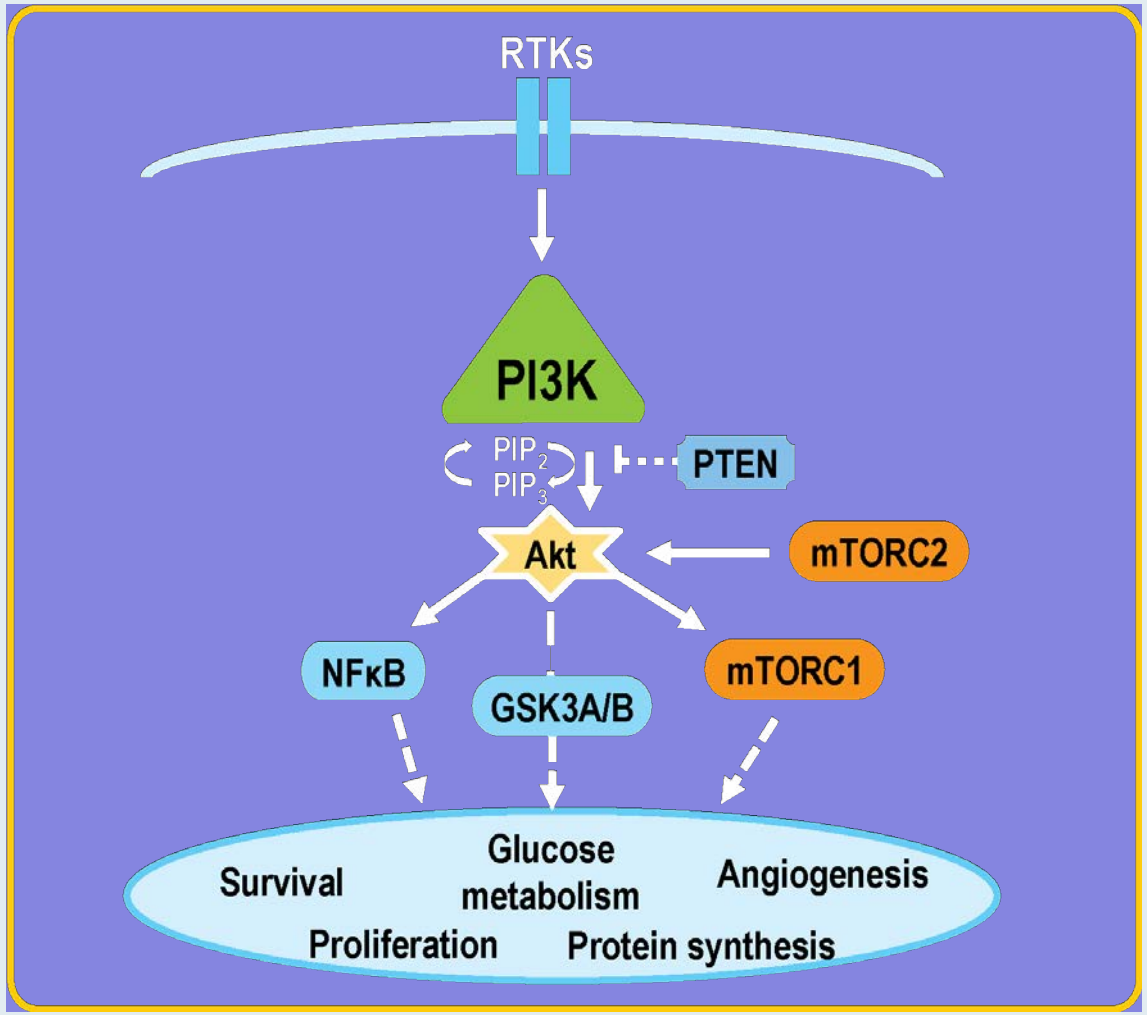
The PI3 kinase inhibitor alpelisib is used for patients with metastatic ER-positive, HER2-negative breast cancer with a…

1. PIK3CA germline mutation
2. PIK3CA somatic mutation
3. PIK3CA amplification
4. All of the above
5. I’m not sure

Which of the following strategies is effective in the management of rash associated with alpelisib?

1. Administration of antihistamines
2. Hold or dose adjustment of alpelisib
3. Application of topical corticosteroid cream
4. All of the above
5. I’m not sure

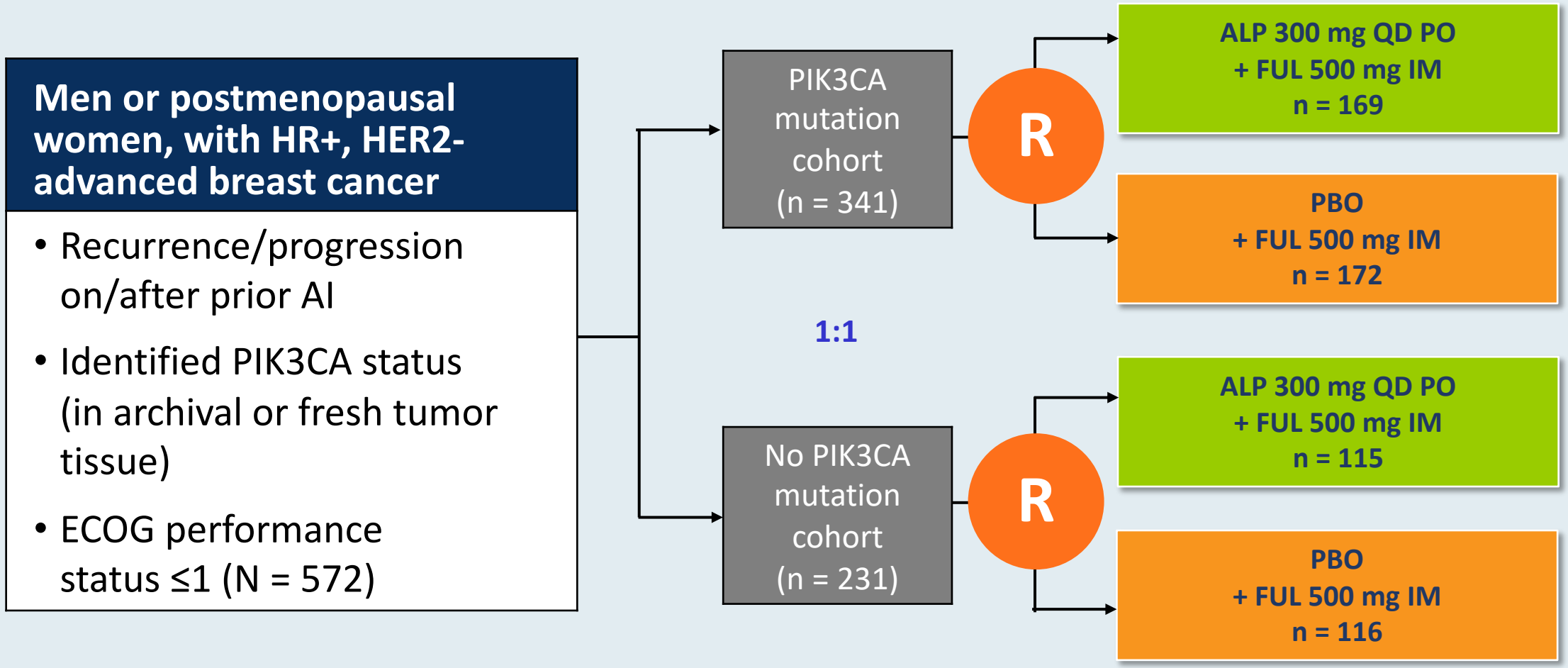
PI3K Inhibitors: Mechanism of Action



- PI3K is involved in the activation of Akt.
- Hyperactivation of the PI3K pathway is implicated in malignant transformation, cancer progression and endocrine therapy resistance.
- PIK3CA encodes the alpha isoform of the PI3K catalytic subunit.
- Around 40% of patients with HR+, HER- BC present with an activating PIK3CA tumor mutation.
- Alpelisib is a specific inhibitor of the PI3K alpha isoform.

André F et al. ESMO 2018;Abstract LBA3_PR.

SOLAR-1 Phase III Study Design



Primary endpoint: Locally assessed PFS in PIK3CA mutation cohort

André F et al. ESMO 2018;Abstract LBA3_PR.

ESMO GOOD SCIENCE BETTER MEDICINE BEST PRACTICE

ANNALS OF ONCOLOGY driving innovation in oncology

ORIGINAL ARTICLE

Alpelisib plus fulvestrant for *PIK3CA*-mutated, hormone receptor-positive, human epidermal growth factor receptor-2—negative advanced breast cancer: final overall survival results from SOLAR-1

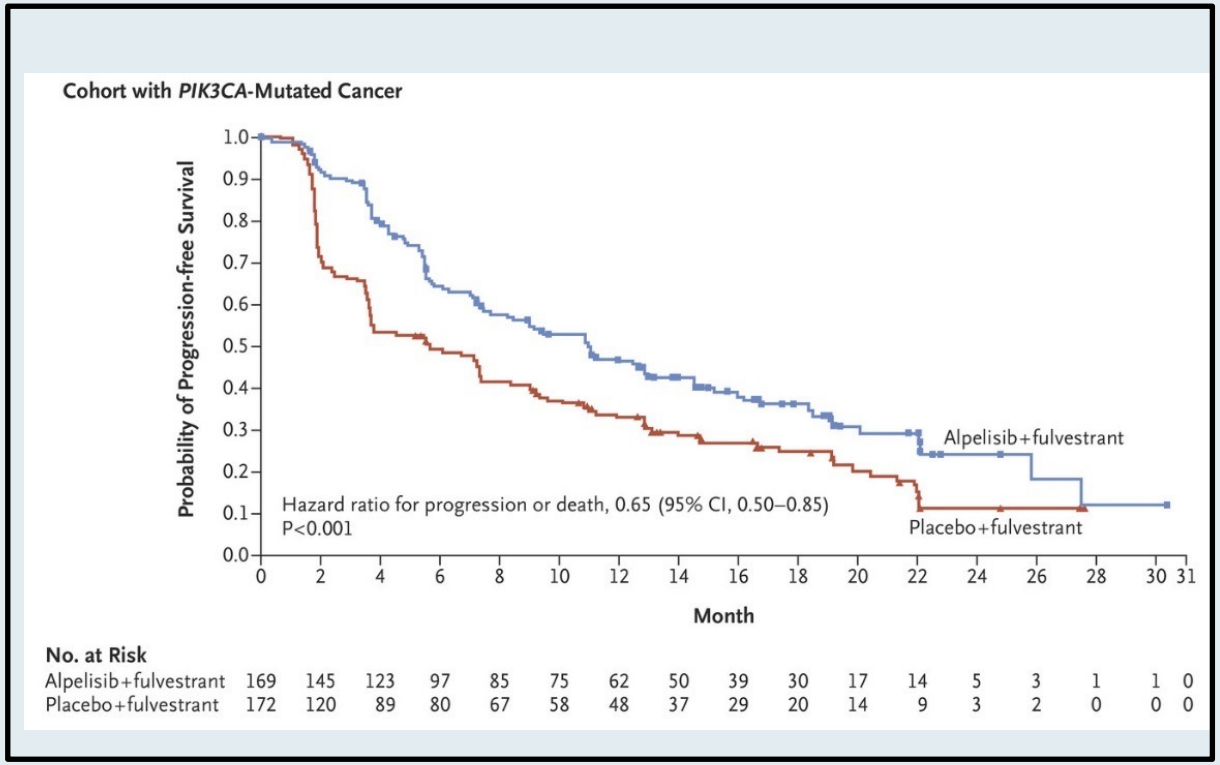
F. André[1*], E. M. Ciruelos[2], D. Juric[3], S. Loibl[4], M. Campone[5], I. A. Mayer[6], G. Rubovszky[7], T. Yamashita[8], B. Kaufman[9], Y.-S. Lu[10], K. Inoue[11], Z. Pápai[12], M. Takahashi[13], F. Ghaznawi[14], D. Mills[15], M. Kaper[14], M. Miller[14], P. F. Conte[16], H. Iwata[17] & H. S. Rugo[18]

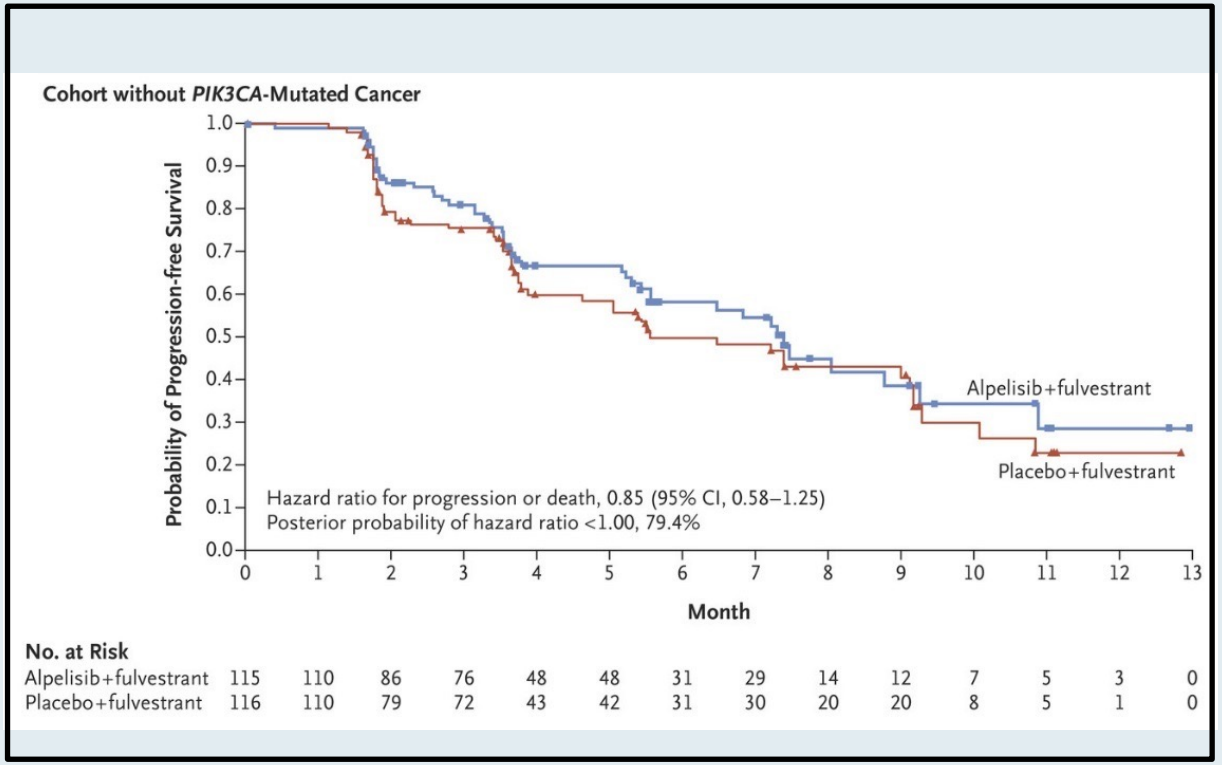
[1]Department of Medical Oncology, Institut Gustave Roussy, Villejuif and Paris Saclay University, Orsay, France; [2]Medical Oncology, Hospital Universitario 12 de Octubre, Madrid, Spain; [3]Department of Medicine, Massachusetts General Hospital Cancer Center, Boston, USA; [4]Department of Medicine and Research, German Breast Group, GBG Forschungs GmbH, Neu-Isenburg, Germany; [5]Medical Oncology, Institut de Cancerologie de l'Ouest, Saint-Herblain, Nantes Cedex, France; [6]Hematology/Oncology, Vanderbilt University, Nashville, USA; [7]Department of Medical Oncology and Clinical Pharmacology, National Institute of Oncology, Budapest, Hungary; [8]Department of Breast and Endocrine Surgery, Kanagawa Cancer Center, Yokohama, Japan; [9]Medical Oncology, Tel Aviv University, Sheba Medical Centre, Tel Hashomer, Israel; [10]Medical Oncology, National Taiwan University Hospital, Taipei, Taiwan; [11]Breast Surgery, Saitama Cancer Center, Saitama, Japan; [12]Medical Oncology, Hungarian Defence Forces Medical Centre, Budapest, Hungary; [13]Breast Surgery, NHO Hokkaido Cancer Center, Sapporo, Japan; [14]Novartis Pharmaceuticals Corporation, East Hanover, USA; [15]Novartis Pharma AG, Basel, Switzerland; [16]Medical Oncology, Universita di Padova and Oncologia Medica 2, Istituto Oncologico Veneto IRCCS, Padua, Italy; [17]Breast Oncology, Aichi Cancer Center Hospital, Aichi, Japan; [18]Breast Department, UCSF Helen Diller Family Comprehensive Cancer Center, San Francisco, USA

Available online 25 November 2020

***Ann Oncol* 2021;32(2):208-17.**

SOLAR-1: PFS Outcomes by PIK3CA Mutation Status

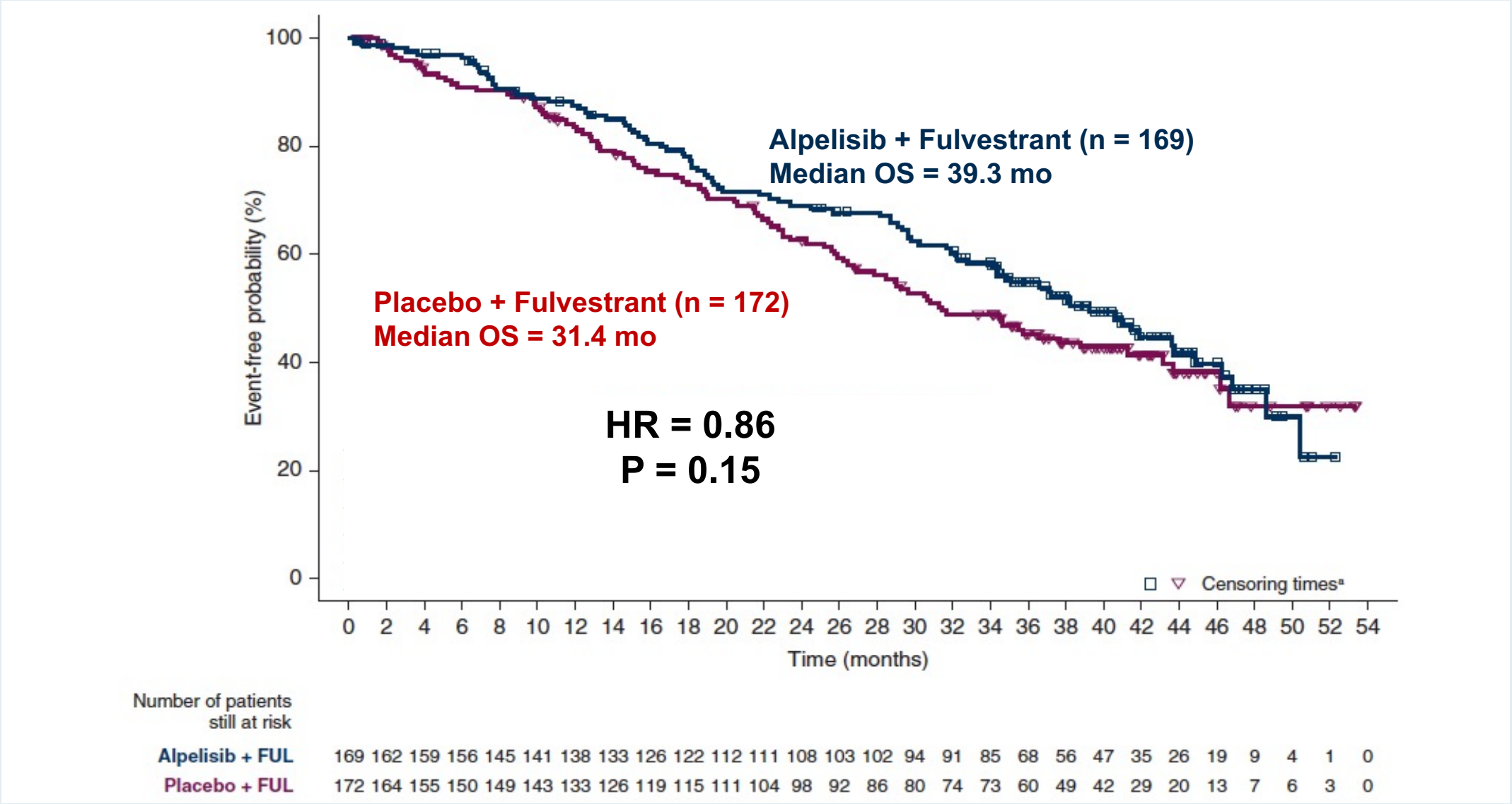




André F et al. *N Engl J Med* 2019;380:1929-40.

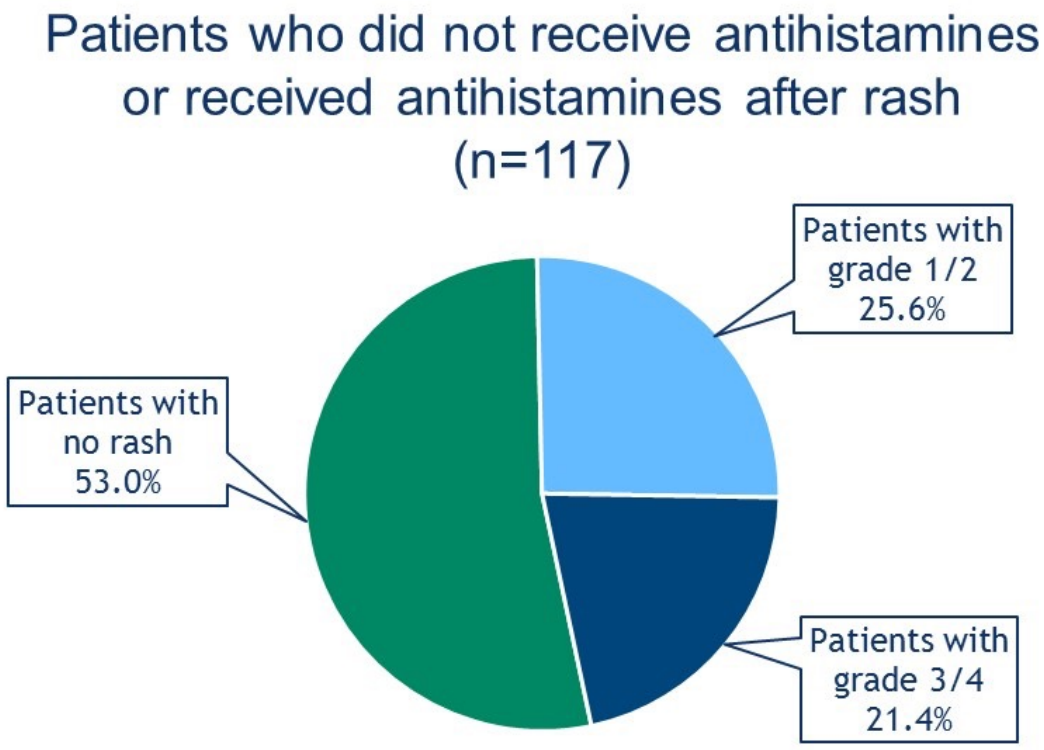
RTP RESEARCH TO PRACTICE

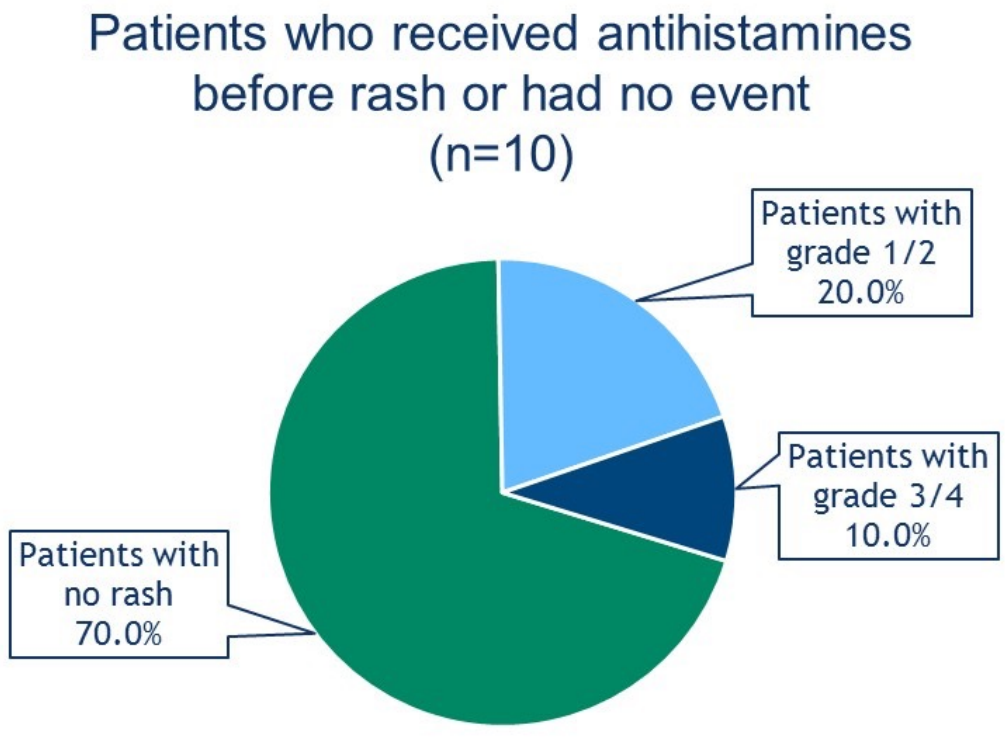
SOLAR-1: OS in Patients with Advanced BC with a PIK3CA Mutation



André F et al. *Ann Oncol* 2021;32(2):208-17.

BYLieve: Incidence of Rash with and without Prophylactic Antihistamines





Rugo HS et al. ASCO 2020;Abstract 1006.

RTP RESEARCH TO PRACTICE

Agenda

Introduction: The Practice-Changing Summer of 2021

Case 1: A 61-year-old woman with ER-positive, HER2-negative localized breast cancer

Case 2: A 53-year-old woman with ER-positive, HER2-negative metastatic breast cancer and a PIK3CA tumor mutation

Case 3: A 33-year-old woman with HER2-positive, ER/PR-positive, node-positive localized breast cancer

Case 4: A 64-year-old woman with ER-positive, HER2-positive metastatic breast cancer and brain metastases

RTP RESEARCH TO PRACTICE

Case Presentation – Ms Leonard: A 33-year-old woman with HER2-positive, ER/PR-positive, node-positive localized breast cancer

- Veterinary technician with residual disease after treatment with neoadjuvant TCHP and surgery
- Currently treated with T-DM1 and tolerating treatment well
- Fertility preservation

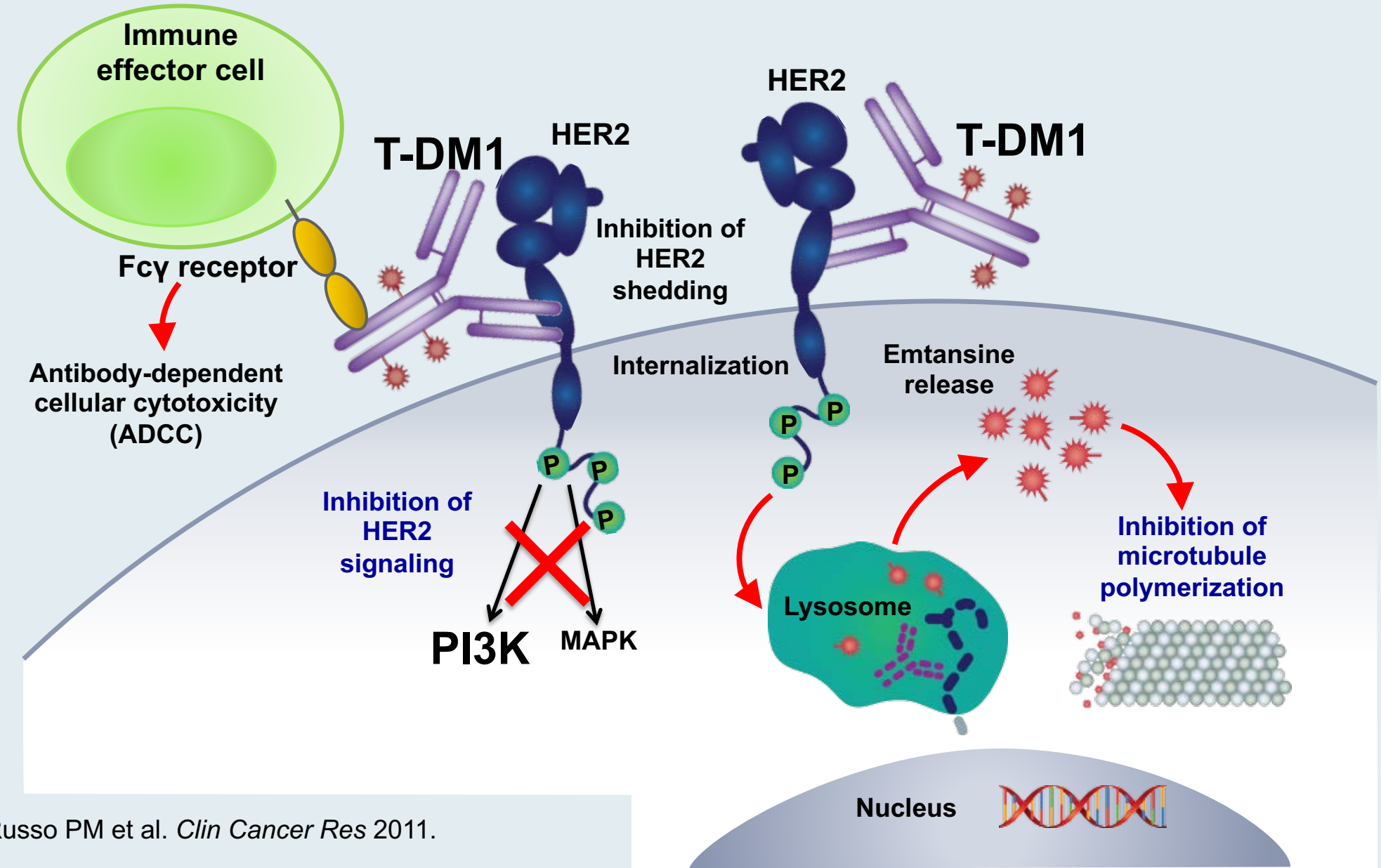
How was it different to take care of this patient versus another patient in the same oncologic setting? What unique biopsychosocial factors (eg, attitude, comorbidities, social support) were considered in the overall management of this case?

RTP
RESEARCH
TO PRACTICE

A patient with a HER2-positive IDC responds to neoadjuvant chemotherapy and trastuzumab/pertuzumab, but at surgery residual disease is detected. In general, the most common next treatment is…

1. Trastuzumab
2. Trastuzumab/pertuzumab
3. T-DM1
4. Any of the above
5. I’m not sure

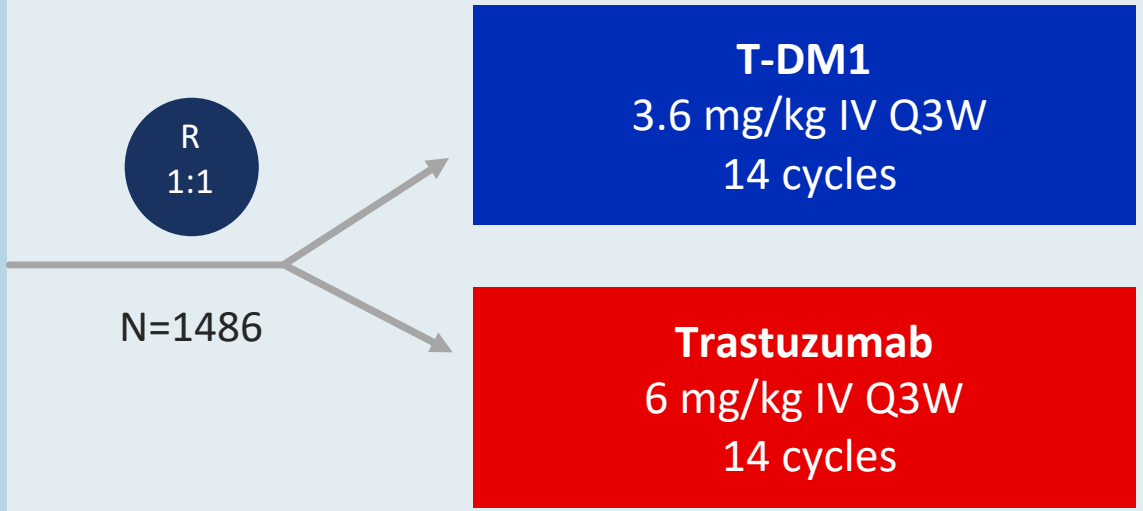
Trastuzumab Emtansine (T-DM1): Mechanisms of Action



Adapted from LoRusso PM et al. *Clin Cancer Res* 2011.

KATHERINE Study Design

- cT1-4/N0-3/M0 at presentation (cT1a-b/N0 excluded)
- Centrally confirmed HER2-positive breast cancer
- Neoadjuvant therapy must have consisted of
  - Minimum of 6 cycles of chemotherapy
    - Minimum of 9 weeks of taxane
    - Anthracyclines and alkylating agents allowed
    - All chemotherapy prior to surgery
  - Minimum of 9 weeks of trastuzumab
    - Second HER2-targeted agent allowed
- Residual invasive tumor in breast or axillary nodes
- Randomization within 12 weeks of surgery



Radiation and endocrine therapy per protocol and local guidelines

Stratification factors:

- Clinical presentation: Inoperable (stage cT4 or cN2–3) vs operable (stages cT1-3N0-1)
- Hormone receptor: ER or PR positive vs ER negative and PR negative/unknown
- Preoperative therapy: Trastuzumab vs trastuzumab plus other HER2-targeted therapy
- Pathological nodal status after neoadjuvant therapy: Positive vs negative/not done

Geyer CE et al. SABCS® 2018;Abstract GS1-10.

KATHERINE: Invasive Disease-Free Survival (IDFS) Outcomes

IDFS	T-DM1 (n = 743)	Trastuzumab (n = 743)
IDFS events	12.2%	22.2%
3-year IDFS	88.3%	77.0%
	HR = 0.50; $p < 0.0001$	
Distant recurrence		
3-year event-free rate	89.7%	83.0%
	HR = 0.60	

Von Minckwitz G, et al. *N Engl J Med* 2019;380:617-28.

original reports

Adjuvant Trastuzumab Emtansine Versus Paclitaxel in Combination With Trastuzumab for Stage I HER2-Positive Breast Cancer (ATEMPT): A Randomized Clinical Trial

Sara M. Tolaney, MD, MPH[1,2]; Nabihah Tayob, PhD[1]; Chau Dang, MD[3]; Denise A. Yardley, MD[4]; Steven J. Isakoff, MD, PhD[5]; Vicente Valero, MD[6]; Meredith Faggen, MD[1]; Therese Mulvey, MD[5]; Ron Bose, MD, PhD[7]; Jiani Hu, MSc[1]; Douglas Weckstein, MD[1]; Antonio C. Wolff, MD[8]; Katherine Reeder-Hayes, MD, MBA, MSc[9]; Hope S. Rugo, MD[10]; Bhuvaneswari Ramaswamy, MD[11]; Dan Zuckerman, MD[12]; Lowell Hart, MD[13]; Vijayakrishna K. Gadi, MD, PhD[14]; Michael Constantine, MD[1]; Kit Cheng, MD[15]; Frederick Briccetti, MD[1]; Bryan Schneider, MD[16]; Audrey Merrill Garrett, MD[17]; Kelly Marcom, MD[18]; Kathy Albain, MD[19]; Patricia DeFusco, MD[20]; Nadine Tung, MD[2,21]; Blair Ardman, MD[22]; Rita Nanda, MD[23]; Rachel C. Jankowitz, MD[24]; Mothaffar Rimawi, MD[25]; Vandana Abramson, MD[26]; Paula R. Pohlmann, MD, PhD, MSc[27]; Catherine Van Poznak, MD[28]; Andres Forero-Torres, MD[29]; Minetta Liu, MD[30]; Kathryn Ruddy, MD[30]; Yue Zheng, MSc[1]; Shoshana M. Rosenberg, ScD, MPH[1,2]; Richard D. Gelber, PhD[1,2]; Lorenzo Trippa, PhD[1,2]; William Barry, PhD[1]; Michelle DeMeo, BS[1]; Harold Burstein, MD, PhD[1,2]; Ann Partridge, MD, MPH[1,2]; Eric P. Winer, MD[1,2]; and Ian Krop, MD, PhD[1,2]

J Clin Oncol 2021;[Online ahead of print]

ATEMPT: Invasive Disease-Free Survival (iDFS) and Recurrence-Free Interval (RFI)

Outcome	T-DM1 (n = 383)	TH (n = 114)
Three-year iDFS	97.8%	93.4%
Three-year RFI	99.2%	94.3%

Tolaney SM et al. *J Clin Oncol* 2021;[Online ahead of print].

Agenda

Introduction: The Practice-Changing Summer of 2021

Case 1: A 61-year-old woman with ER-positive, HER2-negative localized breast cancer

Case 2: A 53-year-old woman with ER-positive, HER2-negative metastatic breast cancer and a PIK3CA tumor mutation

Case 3: A 33-year-old woman with HER2-positive, ER/PR-positive, node-positive localized breast cancer

Case 4: A 64-year-old woman with ER-positive, HER2-positive metastatic breast cancer and brain metastases

Case Presentation – Ms Leonard: A 64-year-old woman with ER-positive, HER2-positive metastatic breast cancer and brain metastases

- Progression of metastatic disease on multiple HER2-targeted therapies, including
  - Neratinib/capecitabine
  - Tucatinib
- Patient education on typical toxicities associated with capecitabine and tucatinib
- Impact of CNS involvement on patient's quality of life

How was it different to take care of this patient versus another patient in the same oncologic setting? What unique biopsychosocial factors (eg, attitude, comorbidities, social support) were considered in the overall management of this case?

RTP
RESEARCH
TO PRACTICE

A Phase III trial evaluating the addition of tucatinib to trastuzumab/capecitabine for metastatic HER2-positive breast cancer resulted in an improvement in overall survival for all patients, including those with brain metastases.

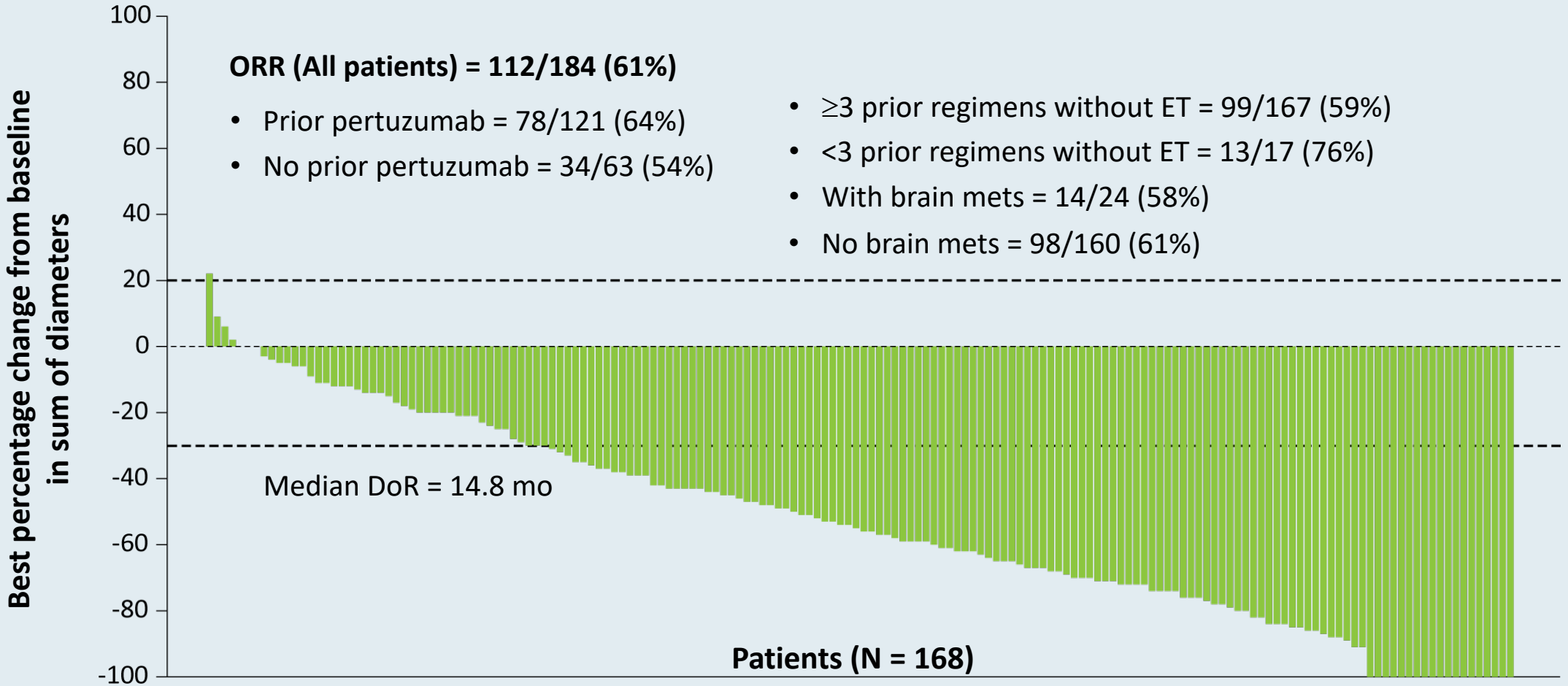
1. Agree
2. Disagree
3. I'm not sure

RTP
RESEARCH
TO PRACTICE

Trastuzumab deruxtecan carries a black box warning for…

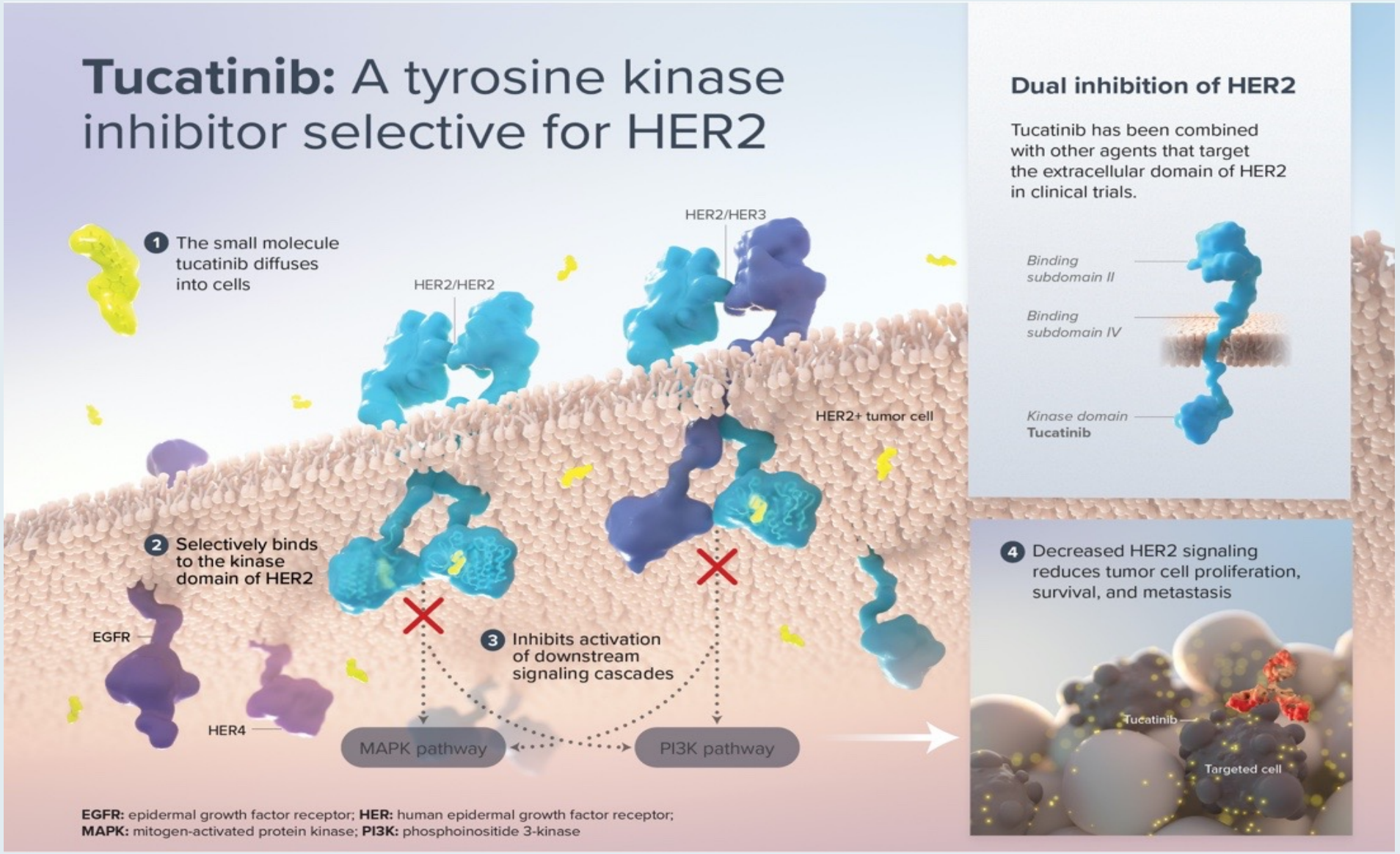
1. QT interval prolongation
2. Interstitial lung disease
3. Cardiovascular events
4. I’m not sure

DESTINY-Breast01: Response According to Tumor Size and Subgroup Analyses



Modi S et al. *N Engl J Med* 2020;382(7):610-21.

Tucatinib Mechanism of Action



www.seagen.com/science/pipeline/tucatinib

RTP RESEARCH TO PRACTICE

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 FEBRUARY 13, 2020 VOL. 382 NO. 7

Tucatinib, Trastuzumab, and Capecitabine for HER2-Positive Metastatic Breast Cancer

R.K. Murthy, S. Loi, A. Okines, E. Paplomata, E. Hamilton, S.A. Hurvitz, N.U. Lin, V. Borges, V. Abramson, C. Anders, P.L. Bedard, M. Oliveira, E. Jakobsen, T. Bachelot, S.S. Shachar, V. Müller, S. Braga, F.P. Duhoux, R. Greil, D. Cameron, L.A. Carey, G. Curigliano, K. Gelmon, G. Hortobagyi, I. Krop, S. Loibl, M. Pegram, D. Slamon, M.C. Palanca-Wessels, L. Walker, W. Feng, and E.P. Winer

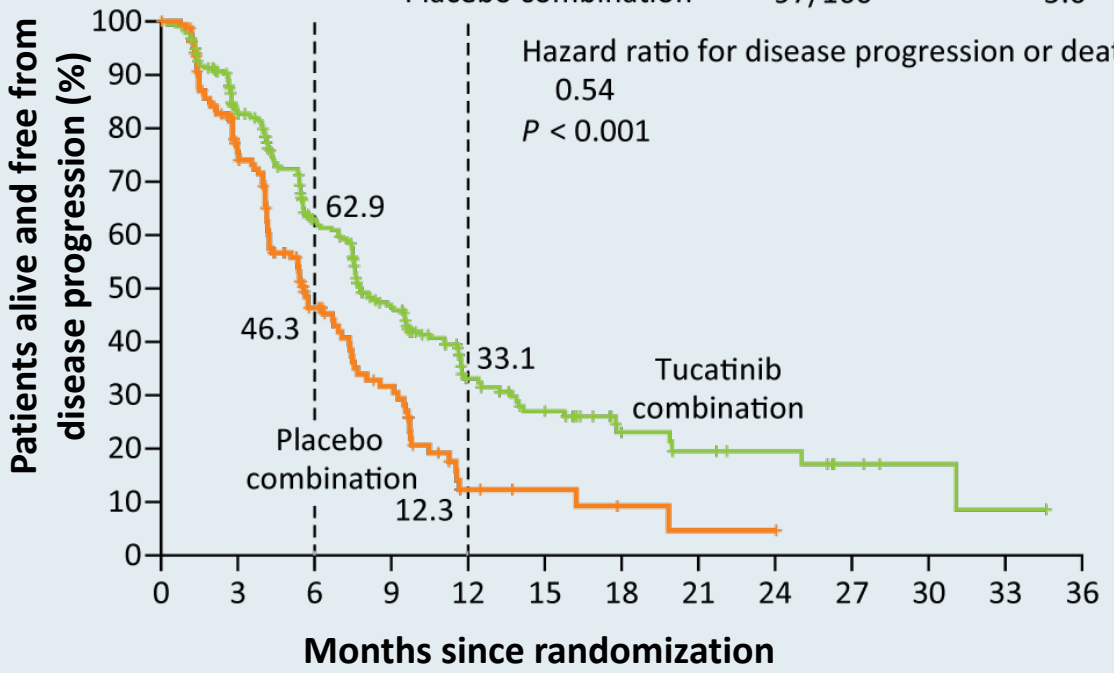
HER2CLIMB: Survival Outcomes

Among the patients with brain metastases:

- Median PFS = 7.6 mo (tucatinib) vs 5.4 mo (placebo)
  - HR = 0.48; $p < 0.001$
- 1-year PFS = 24.9% (tucatinib) vs 0% (placebo)

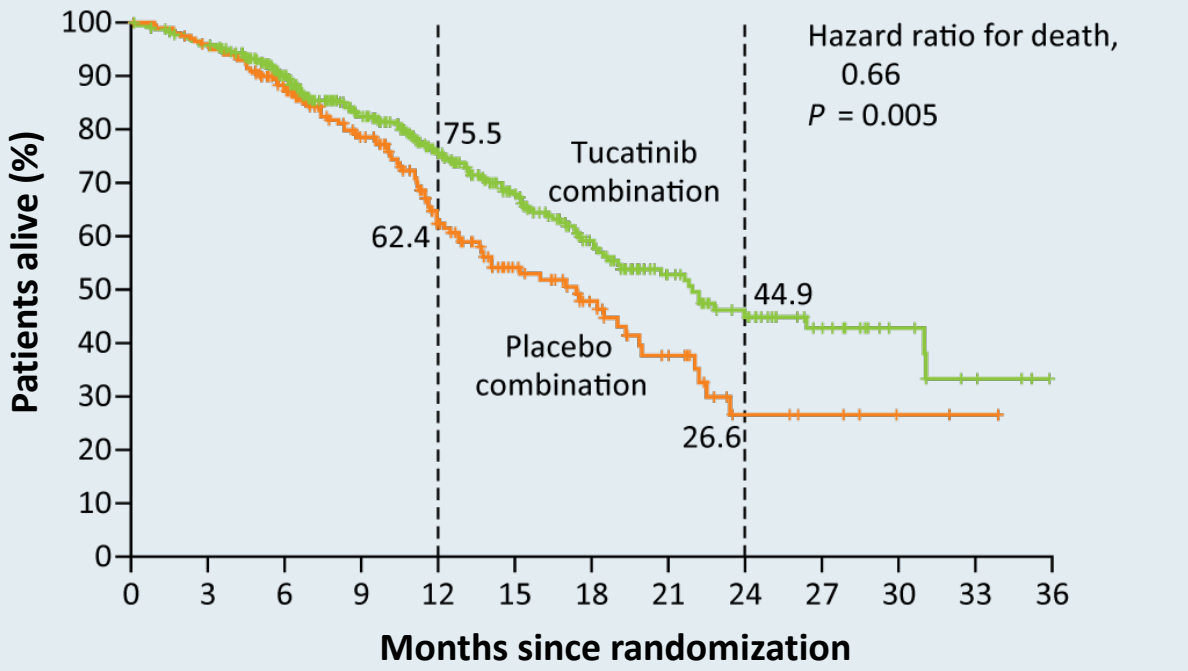
PFS

	No. of events/ No. of patients	Median duration *mo*
Tucatinib combination	178/320	7.8
Placebo combination	97/160	5.6



OS

	No. of deaths/ No. of patients	Median duration *mo*
Tucatinib combination	130/410	21.9
Placebo combination	85/202	17.4



Murthy R et al. San Antonio Breast Cancer Symposium 2019;Abstract GS1-01;
Murthy RK et al. *N Engl J Med* 2020;382(7):597-609.

RTP RESEARCH TO PRACTICE

rapid communications

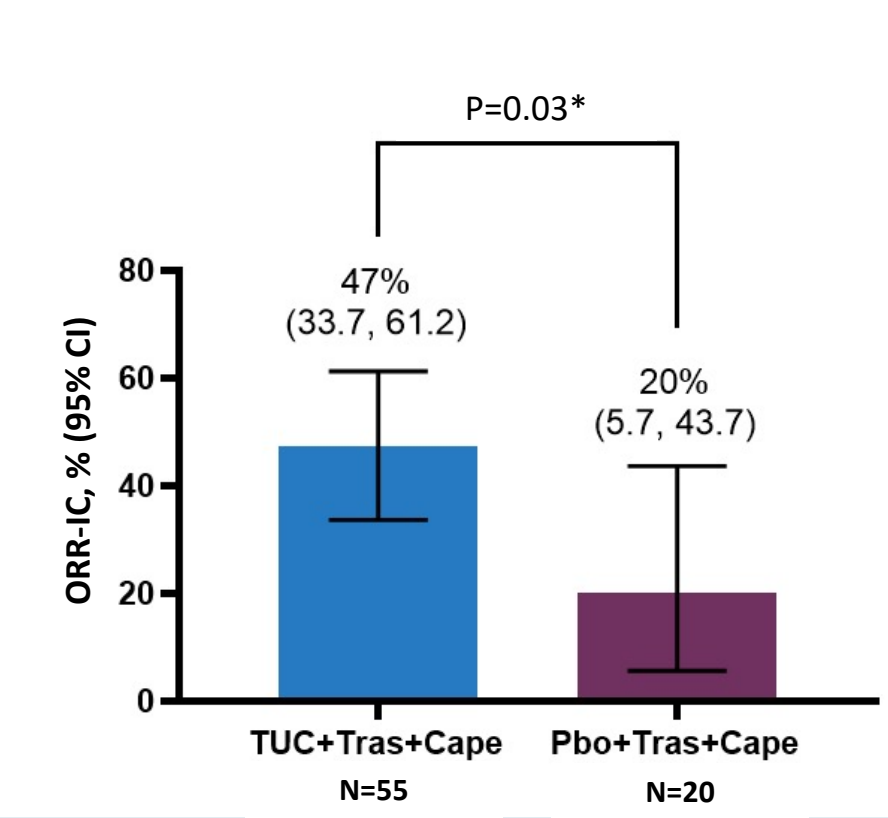
Intracranial Efficacy and Survival With Tucatinib Plus Trastuzumab and Capecitabine for Previously Treated HER2-Positive Breast Cancer With Brain Metastases in the HER2CLIMB Trial

Nancy U. Lin, MD[1]; Virginia Borges, MMSc, MD[2]; Carey Anders, MD[3]; Rashmi K. Murthy, MD, MBE[4]; Elisavet Paplomata, MD[5]; Erika Hamilton, MD[6]; Sara Hurvitz, MD[7]; Sherene Loi, MD, PhD[8]; Alicia Okines, MBChB, MD[9]; Vandana Abramson, MD[10]; Philippe L. Bedard, MD[11]; Mafalda Oliveira, MD, PhD[12]; Volkmar Mueller, MD[13]; Amelia Zelnak, MD[14]; Michael P. DiGiovanna, MD, PhD[15]; Thomas Bachelot, MD[16]; A. Jo Chien, MD[17]; Ruth O'Regan, MD[5]; Andrew Wardley, MBChB, MSc, MD[18]; Alison Conlin, MD, MPH[19]; David Cameron, MD, MA[20]; Lisa Carey, MD[21]; Giuseppe Curigliano, MD, PhD[22]; Karen Gelmon, MD[23]; Sibylle Loibl, MD, PhD[24]; JoAl Mayor, PharmD[25]; Suzanne McGoldrick, MD, MPH[25]; Xuebei An, PhD[25]; and Eric P. Winer, MD[1]

J Clin Oncol 2020;38(23):2610-9.

HER2CLIMB: Intracranial Response Rate (ORR-IC) for Patients with Active Brain Metastases and Measurable Intracranial Lesions at Baseline

Confirmed Objective Response Rate (RECIST 1.1)



*Stratified Cochran-Mantel-Haenszel P value

	TUC+Tras+Cape (N=55)	Pbo+Tras+Cape (N=20)
Best Overall Intracranial Response[a], n (%)		
Complete Response (CR)	3 (5.5)	1 (5.0)
Partial Response (PR)	23 (41.8)	3 (15.0)
Stable Disease (SD)	24 (43.6)	16 (80.0)
Progressive Disease (PD)	2 (3.6)	0
Not Available[b]	3 (5.5)	0
Subjects with Objective Response of Confirmed CR or PR, n	26	4
Duration of Intracranial Response (DOR-IC)[e] (95% CI)[f], months	6.8 (5.5, 16.4)	3.0 (3.0, 10.3)

(a) Confirmed Best overall response assessed per RECIST 1.1. (b) Subjects with no post-baseline response assessments. (c) Two-sided 95% exact confidence interval, computed using the Clopper-Pearson method (1934). (d Cochran-Mantel-Haenszel test controlling for stratification factors (ECOG performance status: 0/1, and Region of world: North America/Rest of World) at randomization. (e) As estimated using Kaplan-Meier methods. (f) Calculated using the complementary log-log transformation method (Collett, 1994).

Courtesy of Carey K Anders, MD

Research

JAMA Oncology | Original Investigation

Efficacy of Margetuximab vs Trastuzumab in Patients With Pretreated ERBB2-Positive Advanced Breast Cancer

A Phase 3 Randomized Clinical Trial

Hope S. Rugo, MD; Seock-Ah Im, MD, PhD; Fatima Cardoso, MD; Javier Cortés, MD, PhD; Giuseppe Curigliano, MD, PhD; Antonino Musolino, MD, PhD, MSc; Mark D. Pegram, MD; Gail S. Wright, MD; Cristina Saura, MD, PhD; Santiago Escrivá-de-Romaní, MD; Michelino De Laurentiis, MD, PhD; Christelle Levy, MD; Ursa Brown-Glaberman, MD; Jean-Marc Ferrero, MD; Maaike de Boer, MD, PhD; Sung-Bae Kim, MD, PhD; Katarína Petráková, MD, PhD; Denise A. Yardley, MD; Orit Freedman, MD, MSc; Erik H. Jakobsen, MD; Bella Kaufman, MD; Rinat Yerushalmi, MD; Peter A. Fasching, MD; Jeffrey L. Nordstrom, PhD; Ezio Bonvini, MD; Scott Koenig, MD, PhD; Sutton Edlich, MS, PA; Shengyan Hong, PhD; Edwin P. Rock, MD, PhD; William J. Gradishar, MD; for the SOPHIA Study Group

***JAMA Oncol* 2021;[Online ahead of print].**

Consensus or Controversy? Clinical Investigator Perspectives on the Current and Future Management of Mantle Cell, Diffuse Large B-Cell and Hodgkin Lymphoma

Monday, August 2, 2021
5:00 PM – 6:00 PM ET

Faculty

Stephen M Ansell, MD, PhD
Craig Moskowitz, MD
Laurie H Sehn, MD, MPH

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Thank you for joining us!

NCPD credit information will be emailed to each participant shortly.