

Meet The Professor
**Immunotherapy and Novel Agents in
Gynecologic Cancers**

Krishnansu S Tewari, MD

Professor and Division Director
Division of Gynecologic Oncology
University of California, Irvine
Irvine, California

Commercial Support

These activities are supported by educational grants from Eisai Inc, Merck, Seagen Inc and Tesaro, A GSK Company.

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 commercial interests: AbbVie Inc, Acerta Pharma — A member of the AstraZeneca Group, Adaptive Biotechnologies Corporation, Agendia Inc, Agios Pharmaceuticals Inc, Amgen Inc, Array BioPharma Inc, a subsidiary of Pfizer Inc, Astellas, AstraZeneca Pharmaceuticals LP, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheranostics Inc, Blueprint Medicines, Boehringer Ingelheim Pharmaceuticals Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, Daiichi Sankyo Inc, Dendreon Pharmaceuticals Inc, Eisai Inc, EMD Serono Inc, Epizyme Inc, Exelixis Inc, Foundation Medicine, Genentech, a member of the Roche Group, Genmab, Genomic Health Inc, Gilead Sciences Inc, GlaxoSmithKline, Grail Inc, Guardant Health, Halozyme Inc, Helsinn Healthcare SA, ImmunoGen Inc, Incyte Corporation, Infinity Pharmaceuticals Inc, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Karyopharm Therapeutics, Kite, A Gilead Company, Lexicon Pharmaceuticals Inc, Lilly, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, Natera Inc, Novartis, Oncopeptides, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sandoz Inc, a Novartis Division, Sanofi Genzyme, Seagen Inc, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Sumitomo Dainippon Pharma Oncology Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro, A GSK Company, Teva Oncology, Tokai Pharmaceuticals Inc and Verastem Inc.

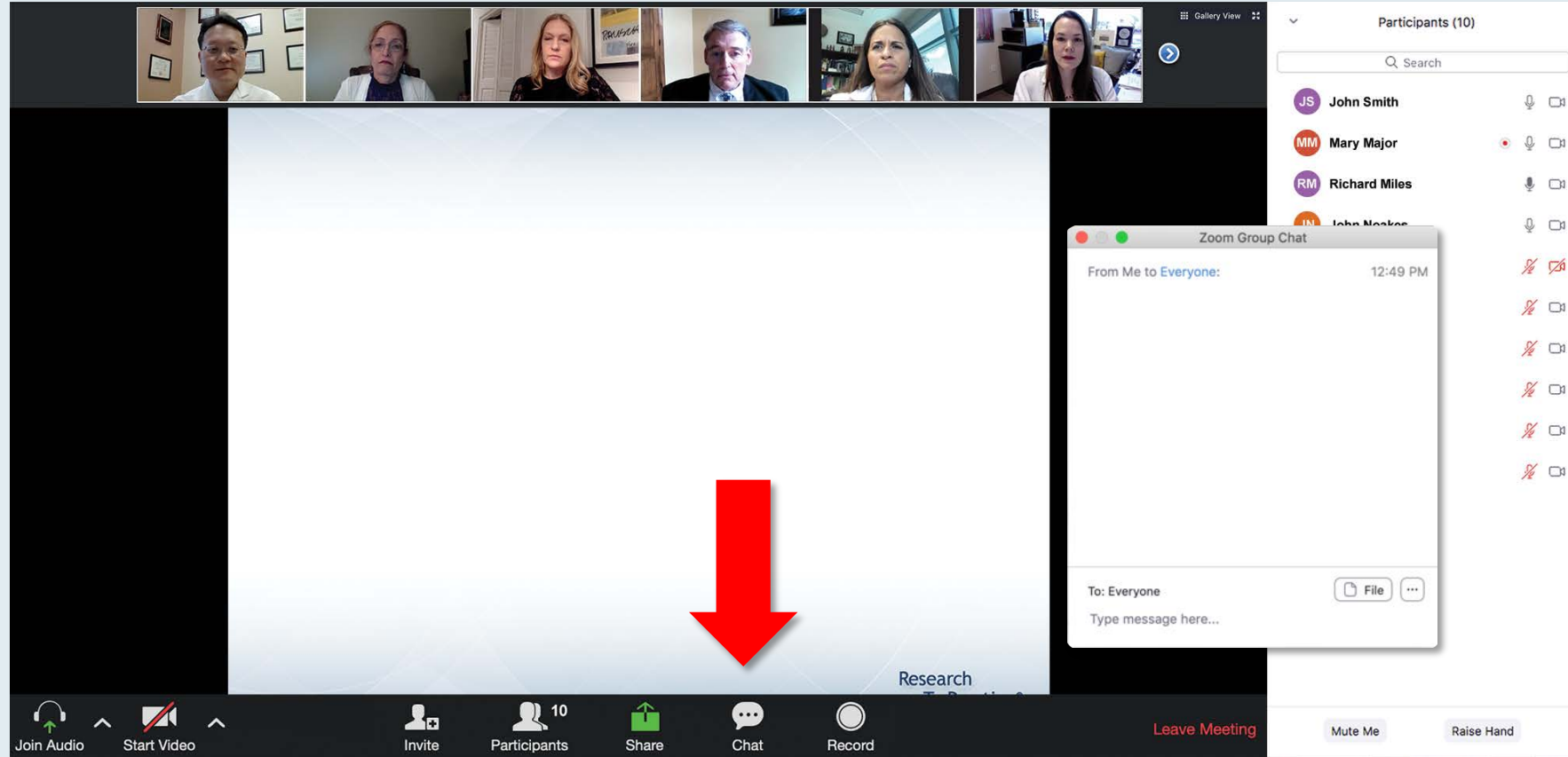
Research To Practice CME Planning Committee Members, Staff and Reviewers

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

Dr Tewari — Disclosures

Advisory Committee	AstraZeneca Pharmaceuticals LP, Clovis Oncology, Eisai Inc, Genentech, a member of the Roche Group, Tesaro, A GSK Company
Contracted Research (Institution Only)	AbbVie Inc, AstraZeneca Pharmaceuticals LP, Clovis Oncology, Genentech, a member of the Roche Group, Regeneron Pharmaceuticals Inc, Tesaro, A GSK Company
Data and Safety Monitoring Board/Committee	Iovance Biotherapeutics
Speakers Bureau	AstraZeneca Pharmaceuticals LP, Clovis Oncology, Merck, Roche Laboratories Inc, Tesaro, A GSK Company

We Encourage Clinicians in Practice to Submit Questions



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

Familiarizing Yourself with the Zoom Interface

How to answer poll questions

The screenshot shows a Zoom meeting interface. At the top, there are six video thumbnails of participants. Below them is a slide with a poll question: "What is your usual treatment recommendation for a patient with MM followed by ASCT and maintenance experiences an asymptomatic relapse?". The slide lists ten options, including combinations of Carfilzomib, Pomalidomide, Elotuzumab, Daratumumab, and Ixazomib with or without dexamethasone. A "Quick Poll" window is overlaid on the slide, showing the same options with radio buttons for selection. The Zoom control bar at the bottom includes icons for Join Audio, Start Video, Invite, Participants (10), Share, Chat, Record, and Leave Meeting. On the right side, there is a "Participants (10)" list with names and status icons (mute, video off).

Participants (10)

Search

- JS John Smith
- MM Mary Major
- RM Richard Miles
- JN John Noakes
- AS Alice Suarez
- JP Jane Perez
- RS Robert Stiles
- JF Juan Fernandez
- AK Ashok Kumar
- JS Jeremy Smith

What is your usual treatment recommendation for a patient with MM followed by ASCT and maintenance experiences an asymptomatic relapse?

Quick Poll

- Carfilzomib +/- dexamethasone
- Pomalidomide +/- dexamethasone
- Carfilzomib + pomalidomide +/- dexamethasone
- Elotuzumab + lenalidomide +/- dexamethasone
- Elotuzumab + pomalidomide +/- dexamethasone
- Daratumumab + lenalidomide +/- dexamethasone
- Daratumumab + pomalidomide +/- dexamethasone
- Daratumumab + bortezomib +/- dexamethasone
- Ixazomib + Rd
- Other

Submit

Co-provided by USF Health Research To Practice®

Join Audio Start Video Invite Participants 10 Share Chat Record Leave Meeting Mute Me Raise Hand

When a poll question pops up, click your answer choice from the available options. Results will be shown after everyone has answered.

Upcoming Webinars

**Thursday, November 19, 2020
12:00 PM – 1:00 PM ET**

Meet The Professor: Management of Multiple Myeloma

Faculty

Kenneth C Anderson, MD

Moderator

Neil Love, MD

**Friday, November 20, 2020
12:00 PM – 1:00 PM ET**

Meet The Professor: Management of Chronic Lymphocytic Leukemia

Faculty

Prof John G Gribben, MD,
DSc, FMedSci

Moderator

Neil Love, MD

Upcoming Webinars

Monday, November 23, 2020
12:00 PM – 1:00 PM ET

Meet The Professor: Management of Ovarian Cancer

Faculty

Deborah K Armstrong, MD

Moderator

Neil Love, MD

Thank you for joining us!

CME and MOC credit information will be emailed to each participant within 5 business days.

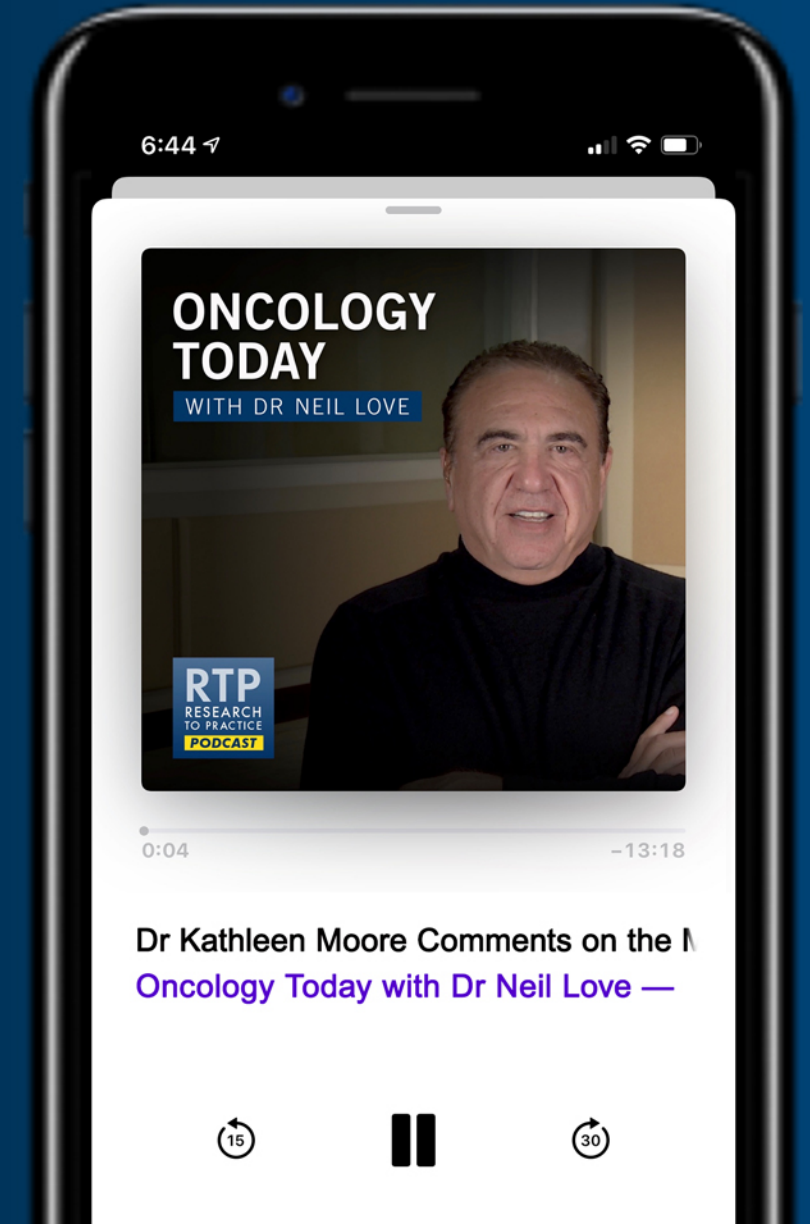
ONCOLOGY TODAY

COMMENTS ON THE MANAGEMENT OF OVARIAN CANCER DURING THE COVID-19 PANDEMIC

WITH DR NEIL LOVE



DR KATHLEEN MOORE
UNIVERSITY OF OKLAHOMA
HEALTH SCIENCES CENTER



Meet The Professor
**Immunotherapy and Novel Agents in
Gynecologic Cancers**

Krishnansu S Tewari, MD
Professor and Division Director
Division of Gynecologic Oncology
University of California, Irvine
Irvine, California

Meet The Professor Program Participating Faculty



Michael J Birrer, MD, PhD
Vice Chancellor, UAMS
Director, Winthrop P Rockefeller Cancer Institute
Director, Cancer Service Line
University of Arkansas for Medical Sciences
Little Rock, Arkansas



Ana Oaknin, MD, PhD
Head of Gynaecologic Cancer Programme
Vall d'Hebron Institute of Oncology
Hospital Universitari Vall d'Hebron
Vall d'Hebron Barcelona Hospital Campus
Barcelona, Spain



Robert L Coleman, MD
Chief Scientific Officer
US Oncology Research
Gynecologic Oncology
McKesson
The Woodlands, Texas



David M O'Malley, MD
Professor
Division Director, Gynecologic Oncology
Co-Director, Gyn Oncology Phase I Program
The Ohio State University and The James
Cancer Center
Columbus, Ohio

Meet The Professor Program Participating Faculty



Richard T Penson, MD, MRCP
Associate Professor of Medicine
Harvard Medical School
Clinical Director, Medical Gynecologic Oncology
Massachusetts General Hospital
Boston, Massachusetts



Krishnansu S Tewari, MD
Professor and Division Director
Division of Gynecologic Oncology
University of California, Irvine
Irvine, California



Matthew A Powell, MD
Professor and Chief
Division of Gynecologic Oncology
Washington University School of Medicine
St Louis, Missouri



Professor Ignace Vergote
Chairman, Department of Obstetrics and
Gynaecology
Gynaecological Oncologist
Leuven Cancer Institute
University Hospital Leuven
Leuven, Belgium



Brian M Slomovitz, MD
Professor, Department of Obstetrics
and Gynecology
Florida International University
Miami, Florida



Project Chair
Neil Love, MD
Research To Practice
Miami, Florida

We Encourage Clinicians in Practice to Submit Questions

The image shows a Zoom meeting interface. At the top, there is a gallery view of six participants. The main screen displays a presentation slide with the text: "You may submit questions using the Zoom Chat option below". A large red arrow points downwards from the text. On the right side, there is a "Participants (10)" list with names and icons for John Smith, Mary Major, Richard Miles, John Noakes, and Alice Suarez. Below the participants list, a "Zoom Group Chat" window is open, showing a message from "Me to Everyone" at 12:49 PM. The chat window has a text input field and a "File" button. At the bottom of the Zoom interface, there are icons for "Join Audio", "Start Video", "Invite", "Participants (10)", "Share", "Chat", and "Record". A "Leave Meeting" button is visible in the bottom right corner.

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

Familiarizing Yourself with the Zoom Interface

How to answer poll questions

The screenshot shows a Zoom meeting interface. At the top, there are six video thumbnails of participants. Below them is a large slide with a poll question: "What is your usual treatment recommendation for a patient with MM who has been followed by ASCT for 1-5 years who then experiences an asymptomatic relapse?". The slide lists ten treatment options, each with a radio button. A "Quick Poll" dialog box is overlaid on the slide, showing the same ten options with radio buttons. The bottom of the slide features the USF Health Research To Practice logo. The Zoom meeting controls are visible at the bottom, including "Join Audio", "Start Video", "Invite", "Participants" (10), "Share", "Chat", "Record", and "Leave Meeting". On the right side, the "Participants (10)" list is visible, showing names and icons for audio and video status.

Participants (10)

Search

JS John Smith

MM Mary Major

RM Richard Miles

JN John Noakes

AS Alice Suarez

JP Jane Perez

RS Robert Stiles

JF Juan Fernandez

AK Ashok Kumar

JS Jeremy Smith

Quick Poll

Carfilzomib +/- dexamethasone

Pomalidomide +/- dexamethasone

Carfilzomib + pomalidomide +/- dexamethasone

Elotuzumab + lenalidomide +/- dexamethasone

Elotuzumab + pomalidomide +/- dexamethasone

Daratumumab + lenalidomide +/- dexamethasone

Daratumumab + pomalidomide +/- dexamethasone

Daratumumab + bortezomib +/- dexamethasone

Ixazomib + Rd

Other

Submit

1. Carfilzomib +/- dexamethasone

2. Pomalidomide +/- dexamethasone

3. Carfilzomib + pomalidomide +/- dexamethasone

4. Elotuzumab + lenalidomide +/- dexamethasone

5. Elotuzumab + pomalidomide +/- dexamethasone

6. Daratumumab + lenalidomide +/- dexamethasone

7. Daratumumab + pomalidomide +/- dexamethasone

8. Daratumumab + bortezomib +/- dexamethasone

9. Ixazomib + Rd

10. Other

Co-provided by USF Health Research To Practice®

Join Audio

Start Video

Invite

Participants 10

Share

Chat

Record

Leave Meeting

Mute Me

Raise Hand

When a poll question pops up, click your answer choice from the available options. Results will be shown after everyone has answered.

ONCOLOGY TODAY

COMMENTS ON THE MANAGEMENT OF OVARIAN CANCER DURING THE COVID-19 PANDEMIC

WITH DR NEIL LOVE



DR KATHLEEN MOORE

UNIVERSITY OF OKLAHOMA
HEALTH SCIENCES CENTER



Meet The Professor
Management of Multiple Myeloma

Thursday, November 19, 2020
12:00 PM – 1:00 PM ET

Faculty

Kenneth C Anderson, MD

Moderator

Neil Love, MD

Meet The Professor

Management of Chronic Lymphocytic Leukemia

Friday, November 20, 2020

12:00 PM – 1:00 PM ET

Faculty

Prof John G Gribben, MD, DSc, FMedSci

Moderator

Neil Love, MD

Meet The Professor

Management of Ovarian Cancer

Monday, November 23, 2020
12:00 PM – 1:00 PM ET

Faculty

Deborah K Armstrong, MD

Moderator

Neil Love, MD

Meet The Professor
**Immunotherapy and Novel Agents in
Gynecologic Cancers**

Krishnansu S Tewari, MD
Professor and Division Director
Division of Gynecologic Oncology
University of California, Irvine
Irvine, California



Allan Freedman, MD

Physician with Suburban Hematology-Oncology Associates
Snellville, Georgia



Neil Morganstein, MD

Hematology Oncology
Atlantic Health System
Summit, New Jersey



Brian M Slomovitz, MD

Professor, Department of Obstetrics and Gynecology
Florida International University
Miami, Florida

Meet The Professor with Dr Tewari

MODULE 1: Cases and Questions from Drs Freedman, Morganstein and Slomovitz

- Dr Slomovitz: A 34-year-old woman with cervical cancer
 - Part 1: Robotic radical hysterectomy
 - Part 2: GOG-240 regimen at disease progression
 - Part 3: Management of second disease progression
- Dr Freedman: A 75-year-old woman with endometrial cancer and metastatic recurrence in the scalp
- Dr Morganstein: A 64-year-old woman with metastatic endometrial cancer and MLH1 and PMS2 somatic mutations

MODULE 2: Gynecologic Oncology Journal Club with Dr Tewari

MODULE 3: Beyond the Guidelines – Clinical Investigator Approaches to Common Clinical Scenarios

MODULE 4: Key Recent Data Sets

Case Presentation – Dr Slomovitz: A 34-year-old woman with cervical cancer – 1. Robotic radical hysterectomy



Dr Brian Slomovitz

- A 34 year-old woman who has not had a pap smear in 10 years presented to her gynecologist for abnormal bleeding
- A 2-cm cervical mass is found
 - Biopsy: invasive squamous cell carcinoma, +LVSI
- Patient underwent a robotic radical hysterectomy and staging
- Pathology revealed a 3-cm, LVSI+, deeply invasive squamous cell cancer
- Patient refused post-operative radiotherapy

Question

- Should robotic radical hysterectomies still be done based on the data published in the *New England Journal of Medicine* (Ramirez et al. 2018)?

Case Presentation – Dr Slomovitz: A 34-year-old woman with cervical cancer – 2. GOG-240 regimen at disease progression



Dr Brian Slomovitz

- A 34 year-old woman with a 3-cm cervical mass (deeply invasive squamous cell carcinoma, +LVSI) undergoes robotic radical hysterectomy
- Patient refused post-operative radiotherapy
- **Patient presents to ER 6 months later with right flank pain, ARF**
 - CT scan shows pelvic and para-aortic disease with right hydronephrosis
 - PET scan and CT-guided biopsy confirms disease
- **Cisplatin/paclitaxel/bevacizumab x 6 cycles → CR**
- **PET scan 3 months after treatment shows lung metastases**
- **NGS performed on biopsy: PD-L1 CPS>1**

Question

- Could the robotic procedure have increased her risk of recurrence? What treatment would you offer this patient at this point?

Case Presentation – Dr Slomovitz: A 34-year-old woman with cervical cancer – 3. Management of second disease progression



Dr Brian Slomovitz

- A 34 year-old woman with a 3-cm cervical mass (deeply invasive squamous cell carcinoma, +LVSI) undergoes robotic radical hysterectomy
- Patient refused post-operative radiotherapy
- Disease recurrence 6 months later
- Cisplatin/paclitaxel/bevacizumab x 6 cycles → CR
- PET scan 3 months after treatment shows lung metastases
- NGS performed on biopsy: PD-L1 CPS>1
- **Considering pembrolizumab or enrollment in clinical trial**

Question

- Should I consider chemotherapy at this point for her? Is pembrolizumab the best treatment option I can offer to her? Are there any newer agents, such as TIL therapy or tisotumab vedotin, that could make a difference for her?

Case Presentation – Dr Freedman: A 75-year-old woman with endometrial cancer and metastatic recurrence in the scalp



Dr Allan Freedman

- Fall 2018: Initial diagnosis of adenocarcinoma of endometrium
 - Pathology: Stage IB, T1bN0M0, FIGO 3
 - Mismatch repair (MMR) deficient
- Cytoreductive surgery → paclitaxel + carboplatin x 6 cycles; no XRT
- 2020: Relapse developed in calvarium → resection showing moderately differentiated adenocarcinoma
 - PAX 8 +, absent MLH1 and PMS2
 - CT scan showed multiple pulmonary nodules
- XRT to scalp → pembrolizumab for 5 cycles → progression in lungs and bone
- Megestrol alternating with tamoxifen

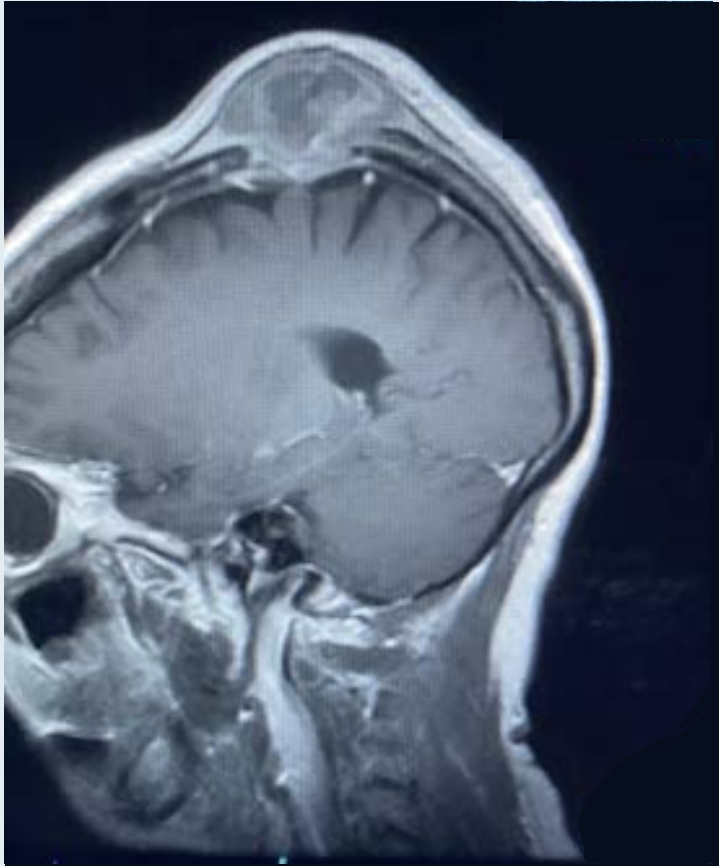
Questions

- How often do you see MMR deficient endometrial cancer?
- How common is it to observe a treatment failure with immunotherapy in a patient who is MMR deficient? Would there have been an advantage to adding another agent such as lenvatinib to the pembrolizumab in order to see if a response could be obtained?

Case Presentation – Dr Freedman: A 75-year-old woman with endometrial cancer and metastatic recurrence in the scalp



Dr Allan Freedman



Case Presentation – Dr Morganstein: A 64-year-old woman with metastatic endometrial cancer and MLH1 and PMS2 somatic mutations



Dr Neil Morganstein

- Presented with significant vaginal bleeding and pain and initial workup reveals a large endometrial mass and a single bone metastasis
- Upfront surgery due to vaginal bleeding and discomfort
- Biopsy: Loss of MHL1, PMS2, BRAF wildtype
 - MLH1 methylated status, suggesting sporadic (somatic) mutation and microsatellite instability (MSI)
- Offered chemotherapy or immunotherapy as treatment options – patient chose chemotherapy due to its defined duration

Questions

- What duration would you administer immunotherapy in the first-line setting?
- How should one interpret MSI results? Is there any difference in the efficacy of immunotherapy in patients with germline versus somatic mutations?

Meet The Professor with Dr Tewari

MODULE 1: Cases and Questions from Drs Freedman, Morganstein and Slomovitz

MODULE 2: Gynecologic Oncology Journal Club with Dr Tewari

- Philip John DiSaia, MD
- Robotic surgery for gynecologic cancers
- Evidence-based treatment paradigms for the management of cervical carcinoma
- GOG-240: Circulating tumor cells in advanced cervical cancer
- Education, screening and current challenges in the management of cervical cancer in Tanzania
- Fertility-preserving treatment for and pregnancy with gynecologic cancers
- Review of endometrial cancer in the morbidly obese
- OVAL: VB-111 combined with paclitaxel for platinum-resistant ovarian cancer
- NRG Oncology/GOG-0209: Carboplatin and paclitaxel for advanced endometrial cancer

MODULE 3: Beyond the Guidelines – Clinical Investigator Approaches to Common Clinical Scenarios

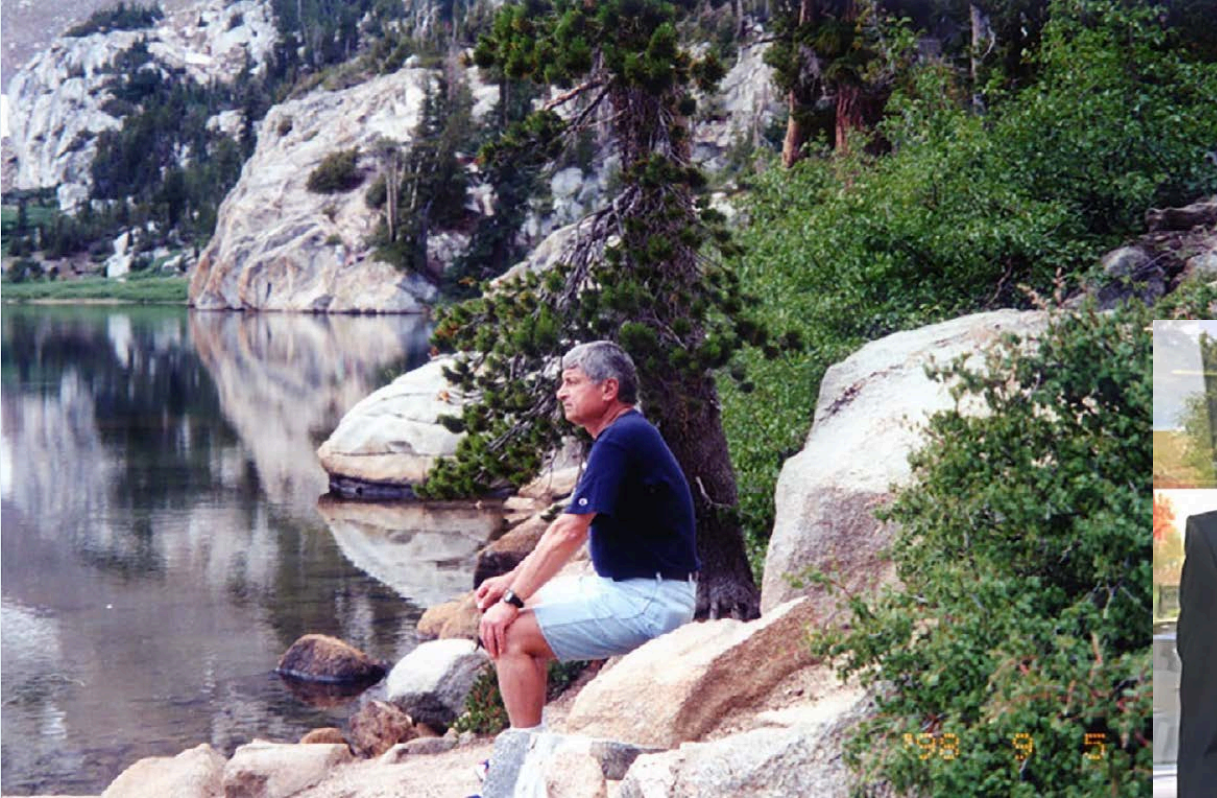
MODULE 4: Key Recent Data Sets

Philip John DiSaia, MD:
Available Light & The Origin of Storms

Krishnansu S. Tewari¹  and Bradley J. Monk²

J Obstet Gynaecol Res 2020;46(7):959-88.

Philip John DiSaia, MD (August 14, 1937 – September 27, 2018)



Philip John DiSaia, MD (August 14, 1937 – September 27, 2018)

The Orange County Register B3
Thursday, October 29, 1987



Dr. Philip DiSaia
Prominent cancer surgeon

Special post at UCI created for surgeon

He'll develop, promote
medical services

By Susan Peterson
The Register

IRVINE — The University of California has appointed Philip J. DiSaia, a prominent cancer surgeon, to promote and develop new medical services at the college's Irvine campus and its hospital in Orange.

DiSaia, 50, of North Tustin, is a member of the national board of directors of the American Cancer Society and a leading surgeon in gynecological cancers. He has been chairman of the department of obstetrics and gynecology for 10 years.

He will begin his duties Sunday.

The post of associate vice chancellor for health sciences was created for DiSaia, UCI Chancellor Jack Peltason said.

His appointment fills a need for a second administrator, in addition to Dean Edward J. Quilligan, to bring about "the next phase of development for the college of medicine," Peltason said.

As the facilities in Orange and in Irvine become more adequate for a modern medical school, the proper use ... of those facilities requires more attention," he said.

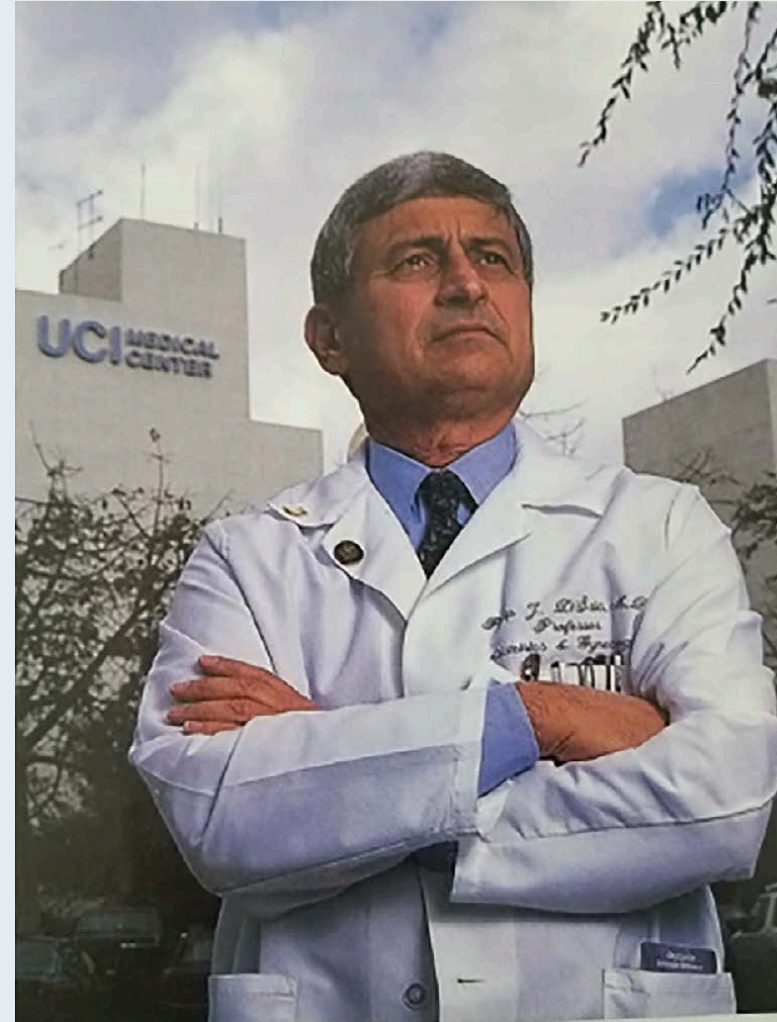
The university is building an outpatient treatment center and medical-office building at the Irvine campus, and it is expanding services at its hospital in Orange.

Quilligan said DiSaia, who was a resident under his direction at Yale University, will oversee planning, marketing and fund raising for UCI's new facilities. He is expected to be paid \$160,000 a year in the new position, based on a salary of \$72,900 plus a share in the faculty pool — a fund that provides bonuses to doctors who take state jobs.

DiSaia said he wants to create and promote new services that the university can offer to patients, a role critical in the institution's development.

"What we have to do is take this school out of its adolescence and see what we can do about bringing it into adulthood," he said.

The university began developing outpatient medical services on its Irvine campus after it lost a 15-year battle with a coalition of Ir-

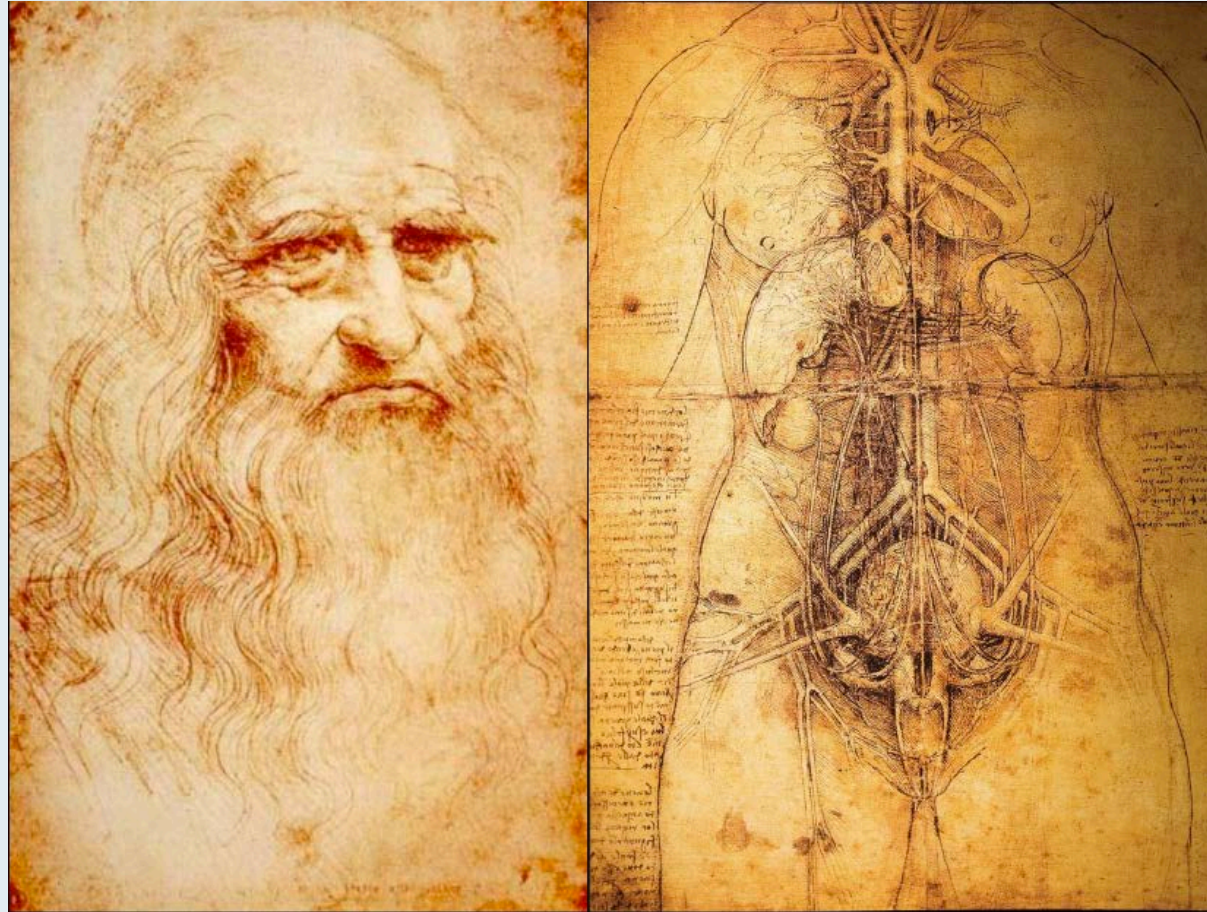


Robotic surgery for gynecologic cancers: indications, techniques and controversies

Kiran H. Clair and Krishnansu S. Tewari

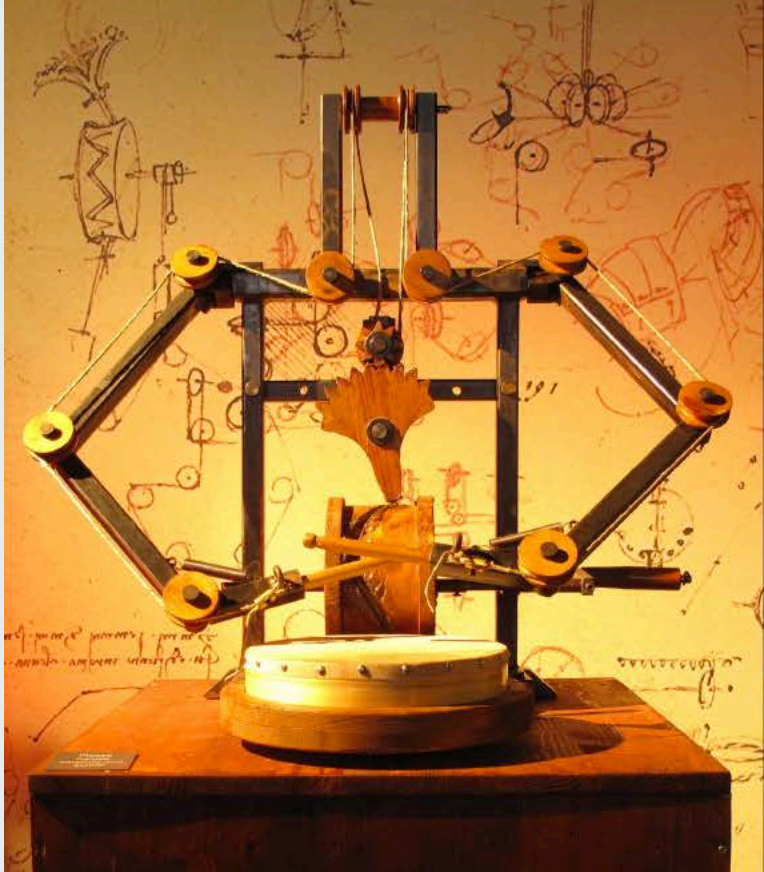
Division of Gynecologic Oncology, Department of Obstetrics and Gynecology, University of California, Irvine, Orange, California, USA

Robotic Surgery: Leonardo da Vinci

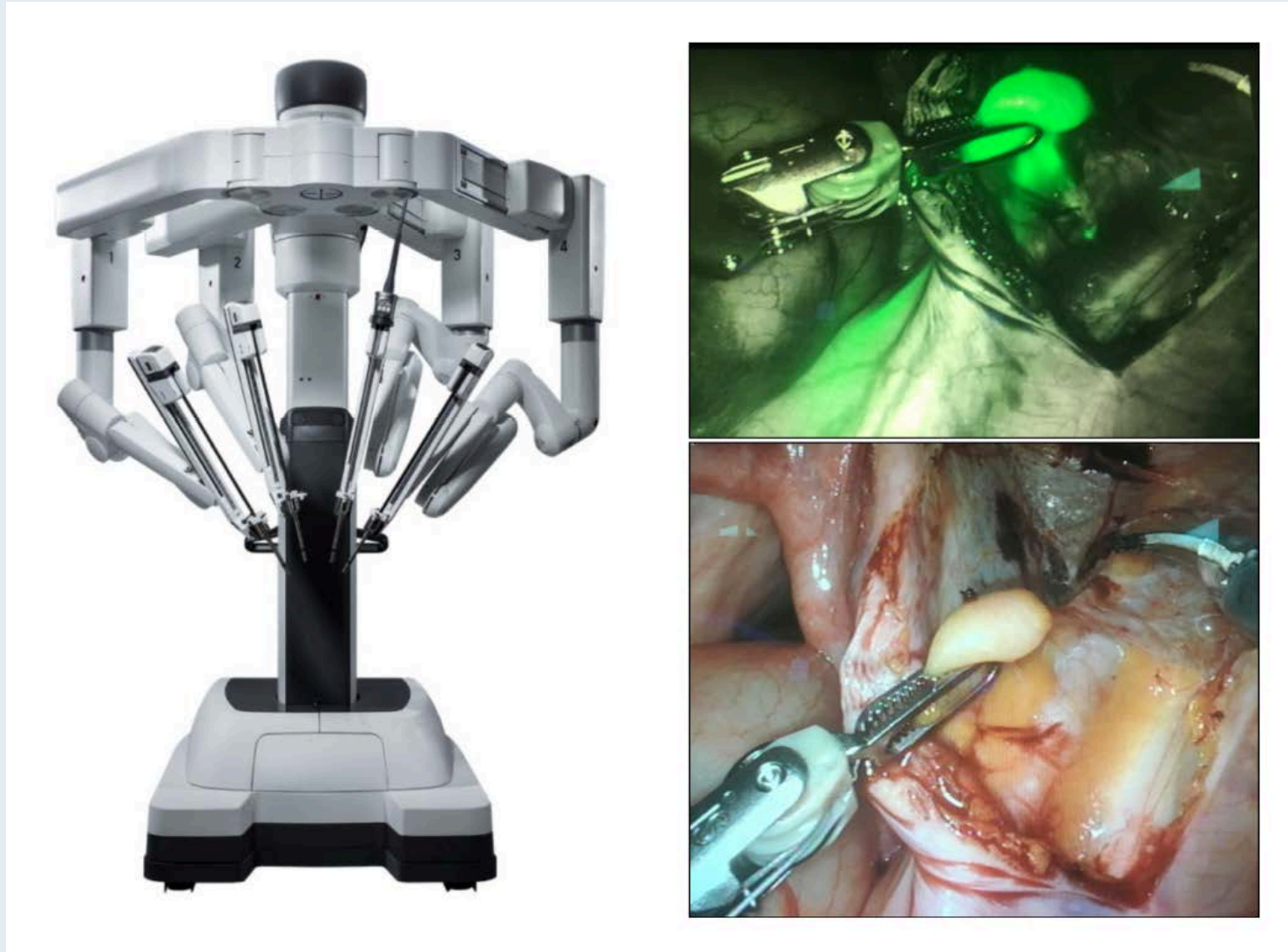


Self portrait of da Vinci and his detailed sketch of female anatomy

Construction of da Vinci's Robotic Drummer and Robotic Knight



DaVinci Surgical Robot and DaVinci Robot Firefly™ Technology



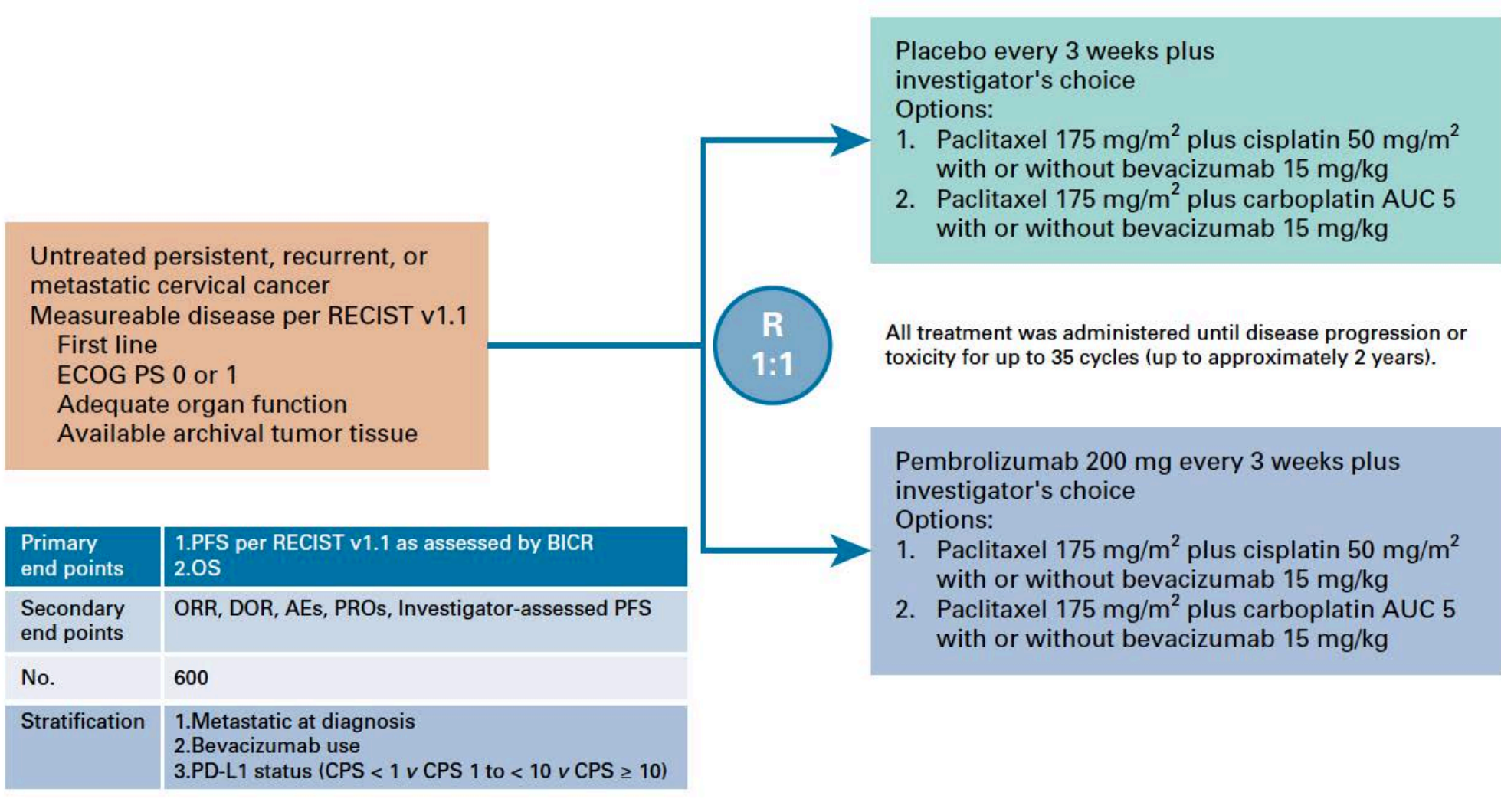
SPECIAL SERIES: ADVANCES IN THE MANAGEMENT OF GYNECOLOGIC CANCERS

Evidence-Based Treatment Paradigms for Management of Invasive Cervical Carcinoma

Krishnansu S. Tewari, MD¹ and Bradley J. Monk, MD^{2,3}

J Clin Oncol 2019;37(27):2472-89.

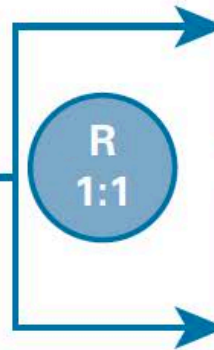
KEYNOTE-826 Trial (NCT03635567)



BEATcc Trial (NCT03556839)

Primary stage IVB, persistent, or recurrent carcinoma of the cervix. Measureable disease by RESIST v1.1. No previous systemic chemotherapy for advanced or recurrent

- First line
- ECOG PS 0 or 1



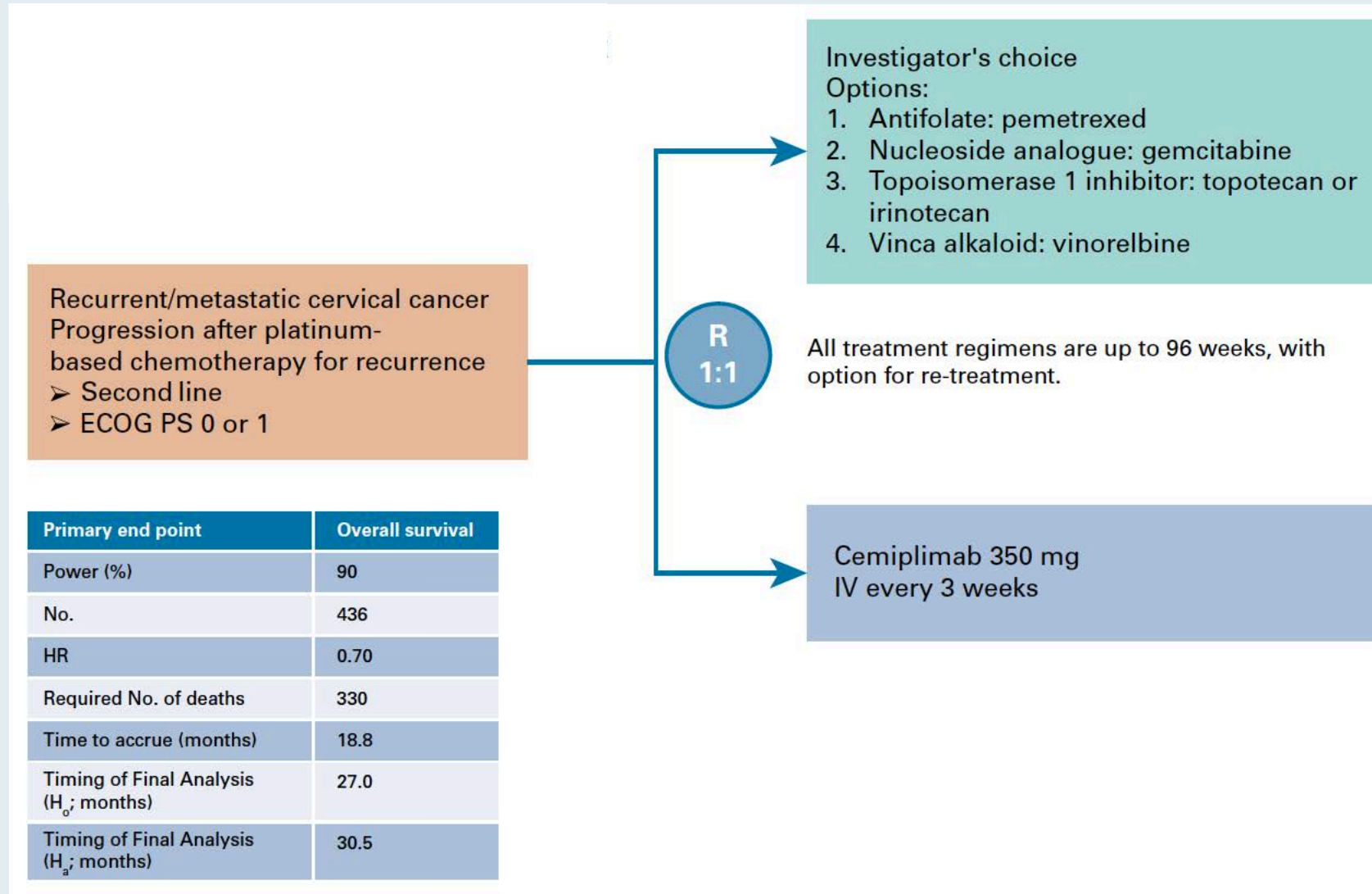
Cisplatin (or carboplatin) plus paclitaxel plus bevacizumab (GOG-0240) until disease progression, unacceptable toxicity, death, or withdrawal of consent

Cisplatin (or carboplatin) plus paclitaxel plus bevacizumab plus Atezolizumab (1,200 mg IV on day 1 and that the cycles are repeated every 3 weeks) until disease progression, unacceptable toxicity, death, or withdrawal of consent

Safety run-in cohort: 12 patients after two cycles of treatment

Primary end point	OS
Secondary end points	PFS, ORR, DOR, safety, HR-QoL
No.	404
Stratification factors	1.Prior concurrent cisplatin-based chemoradiation 2.Histology: SCCA versus adenocarcinoma (includes adenosquamous) 3.Chemotherapy backbone (cisplatin v carboplatin)

GOG-3016 (ENGOT Cx9/EMPOWER Cervical-1) Trial (NCT03257267)



Circulating Tumor Cells In Advanced Cervical Cancer: NRG Oncology—Gynecologic Oncology Group Study 240 (NCT 00803062)

Krishnansu S. Tewari¹, Michael W. Sill^{2,3,4}, Bradley J. Monk⁵, Richard T. Penson⁶, David H. Moore⁷, Heather A. Lankes^{2,3,4}, Lois M. Ramondetta⁸, Lisa M. Landrum⁹, Leslie M. Randall¹, Ana Oaknin¹⁰, Mario M. Leitao¹¹, Eric L. Eisenhauer¹², Paul DiSilvestro¹³, Linda Van Le¹⁴, Michael L. Pearl¹⁵, James J. Burke^{16,17}, Ritu Salani¹⁸, Debra L. Richardson¹⁹, Helen E. Michael²⁰, David W. Kindelberger²¹, and Michael J. Birrer⁶

Mol Cancer Ther 2020;[Online ahead of print].



ELSEVIER

Contents lists available at [ScienceDirect](#)

Gynecologic Oncology Reports

journal homepage: www.elsevier.com/locate/gynor

Review article

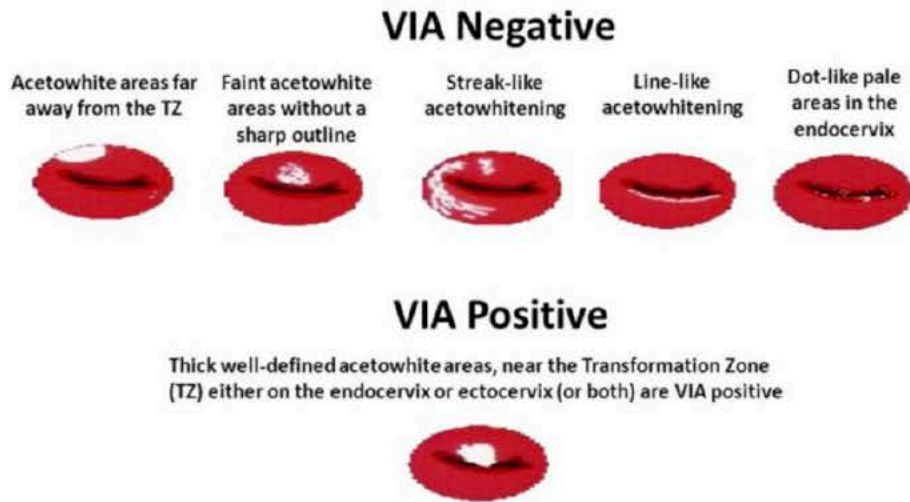
Cervical cancer in Tanzania: A systematic review of current challenges in six domains

Ava S. Runge^{a,*}, Megan E. Bernstein^a, Alexa N. Lucas^a, Krishnansu S. Tewari^b

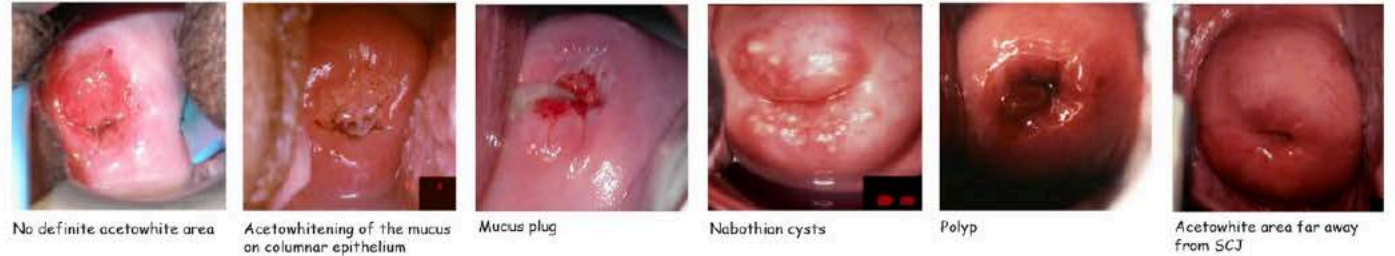
Gynecol Oncol Rep 2019;29:40-47.

Visual Inspection with Acetic Acid Charts for Healthcare Provider Training

Quick Clinical Reference Chart for Visual Inspection with Acetic Acid (VIA)



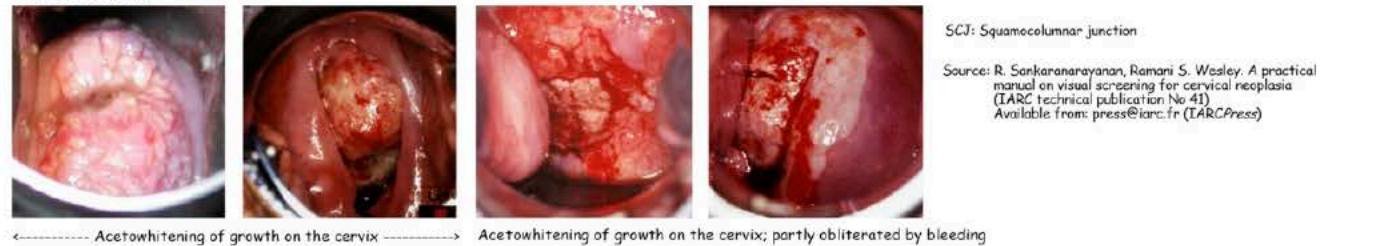
VIA NEGATIVE



VIA POSITIVE



CANCER



World Health Organization - International Agency for Research on Cancer (IARC), World Health Organization Regional Office for Africa (AFRO), International Network for Cancer Treatment and Research (INCTR) INCTR

Publication of this chart is funded by the Bill & Melinda Gates Foundation through the Alliance for Cervical Cancer Prevention (ACCP)

Cervical Cancer Screen-and-Treat in Northern Tanzania



Recipients of HPV Vaccine During Campaign Launch in Tanzania (April 2018)



REVIEW



Fertility preserving treatment for gynecologic malignancies: a review of recent literature

Katherine Coakley, Juliet Wolford, and Krishnansu S. Tewari

Curr Opin Obstet Gynecol 2020;32(1):51-56.

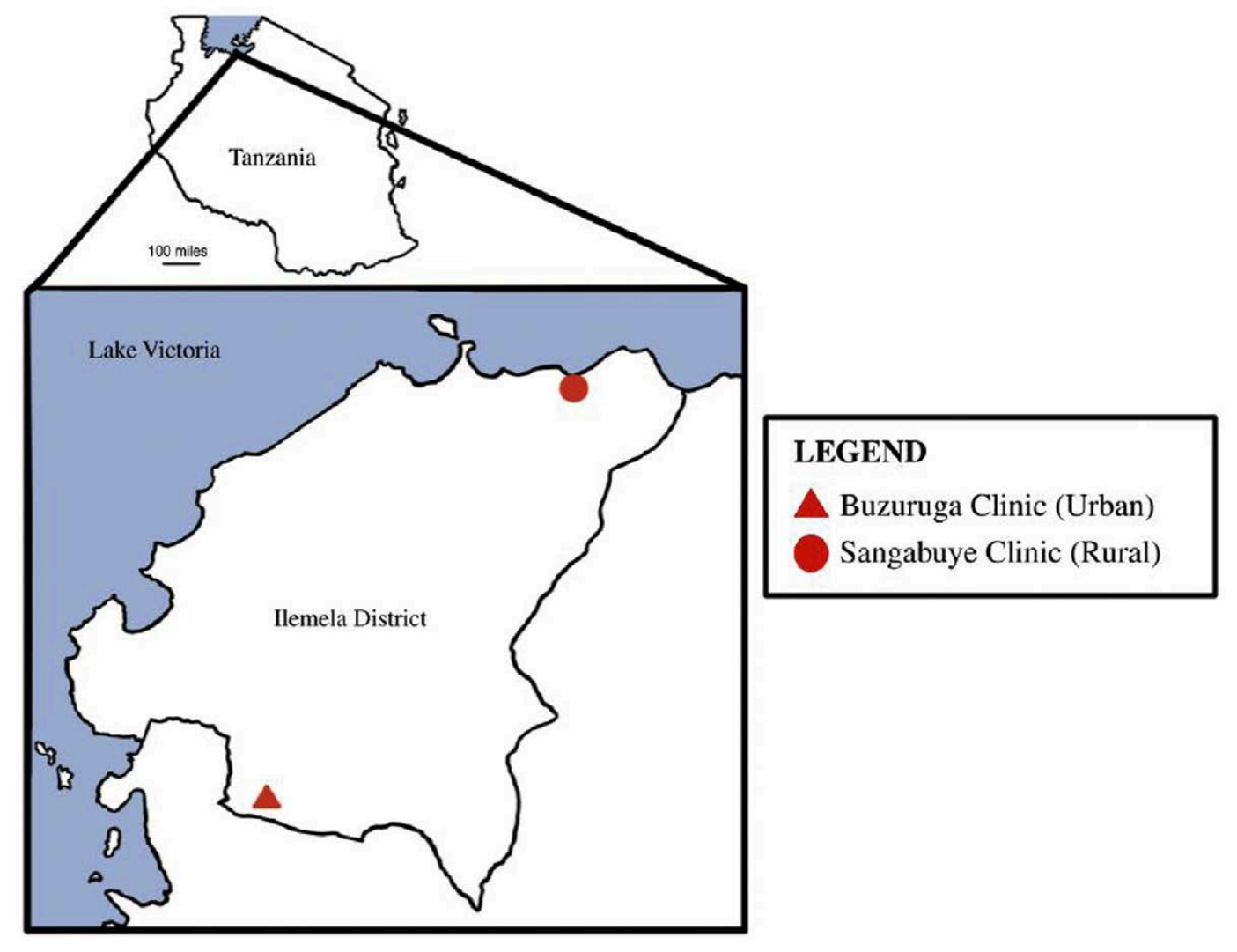
EDUCATION

Implementation of human papillomavirus video education for women participating in mass cervical cancer screening in Tanzania

Emma C. Cooper, BS; Justine A. Maher, BA, MPH; Ariana Naaseh, BA; Elizabeth W. Crawford, BA, BS; Justine O. Chinn, BS; Ava S. Runge, BS; Alexa N. Lucas, BS; Danielle C. Zezoff, BS; Kevin R. Bera, BS; Andreea I. Dinicu, BS; Kayla M. White, BS; Sujata E. Tewari, HSD; Anjali Hari, MD; Megan Bernstein, MD; Jenny Chang, PhD; Argyrios Ziogas, PhD; Diana C. Pearre, MD; Krishnansu S. Tewari, MD, FACOG, FACS, FRSM

Am J Obstet Gynecol 2020:S0002-9378(20)30739-0.

Map of Ilemela District Depicting 2 Study Sites: Urban Buzuruga and Rural Sangabuye)



Gynecologic Oncology 157 (2020) 799–809

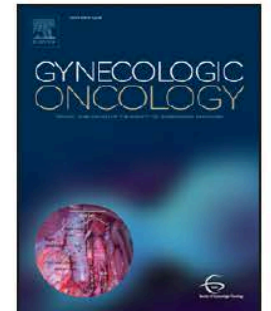


ELSEVIER

Contents lists available at ScienceDirect

Gynecologic Oncology

journal homepage: www.elsevier.com/locate/ygyno



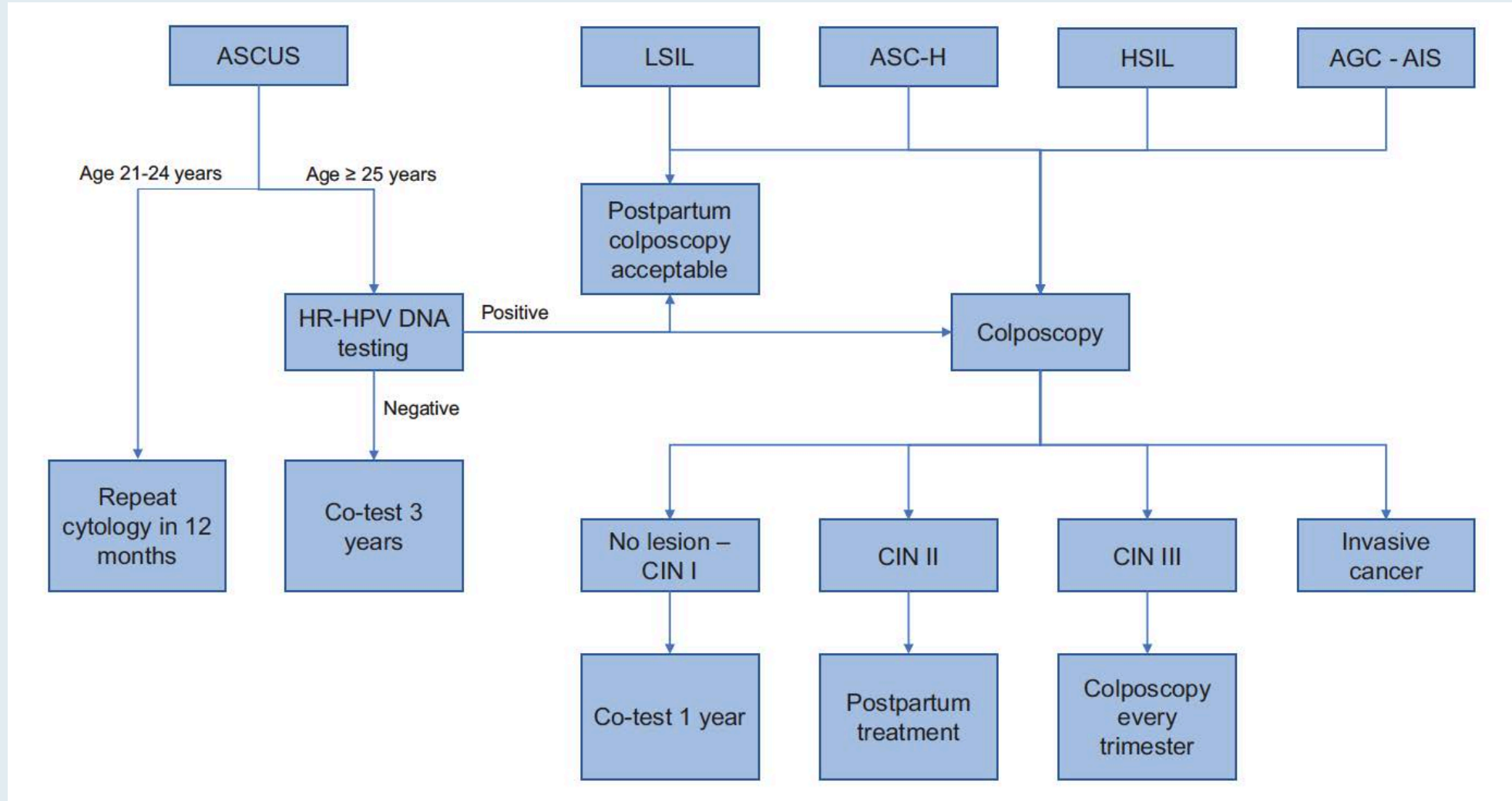
Review Article

Gynecologic cancer in pregnancy

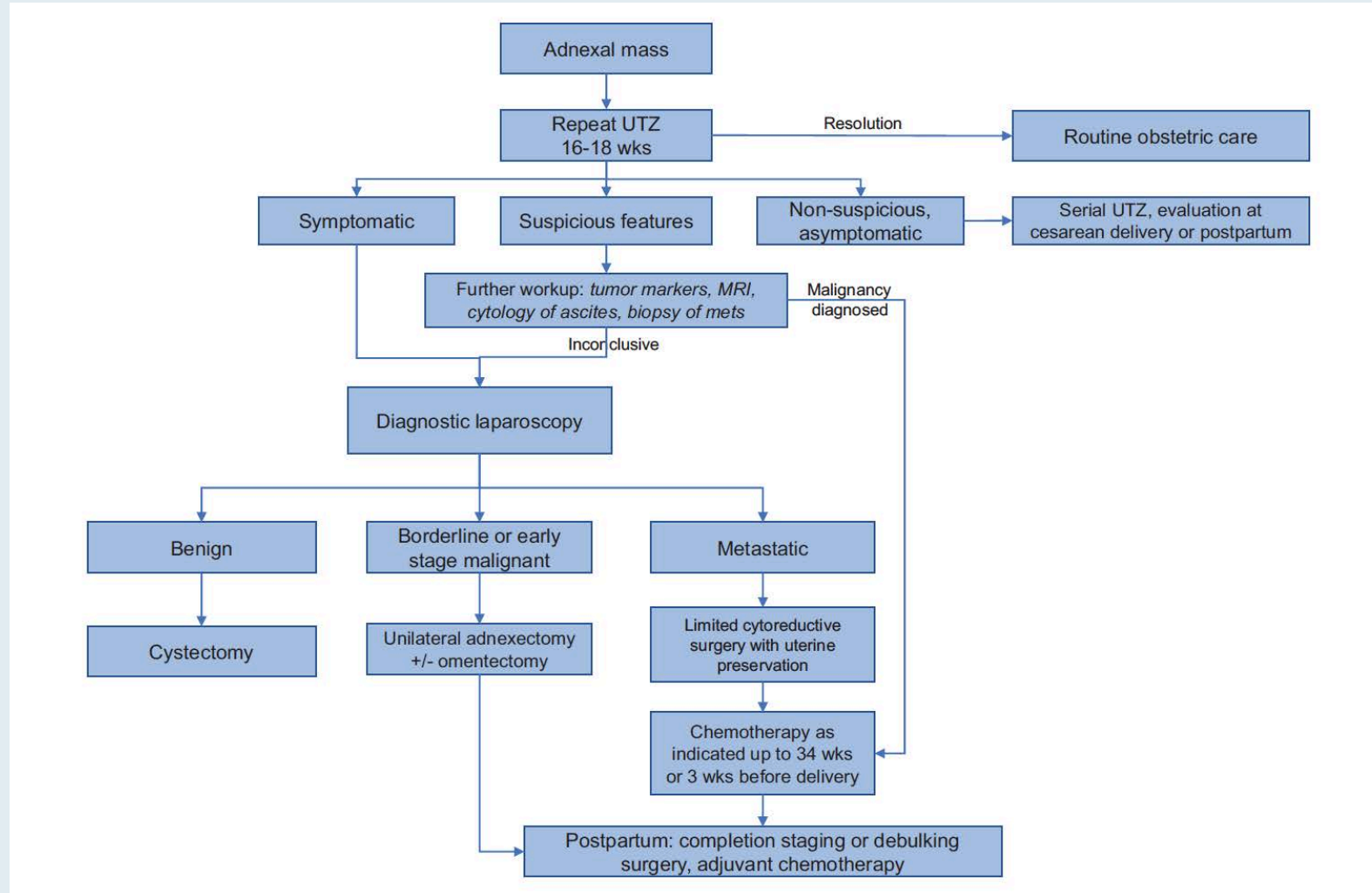
Travis-Riley K. Korenaga, Krishnansu S. Tewari, MD*

Gynecol Oncol 2020;157(3):799-809.

Algorithm for the Management of Abnormal Cervical Cytology and Cervical Dysplasia in Pregnancy



Algorithm for the Management of the Adnexal Mass and Ovarian Cancer in Pregnancy



REVIEW

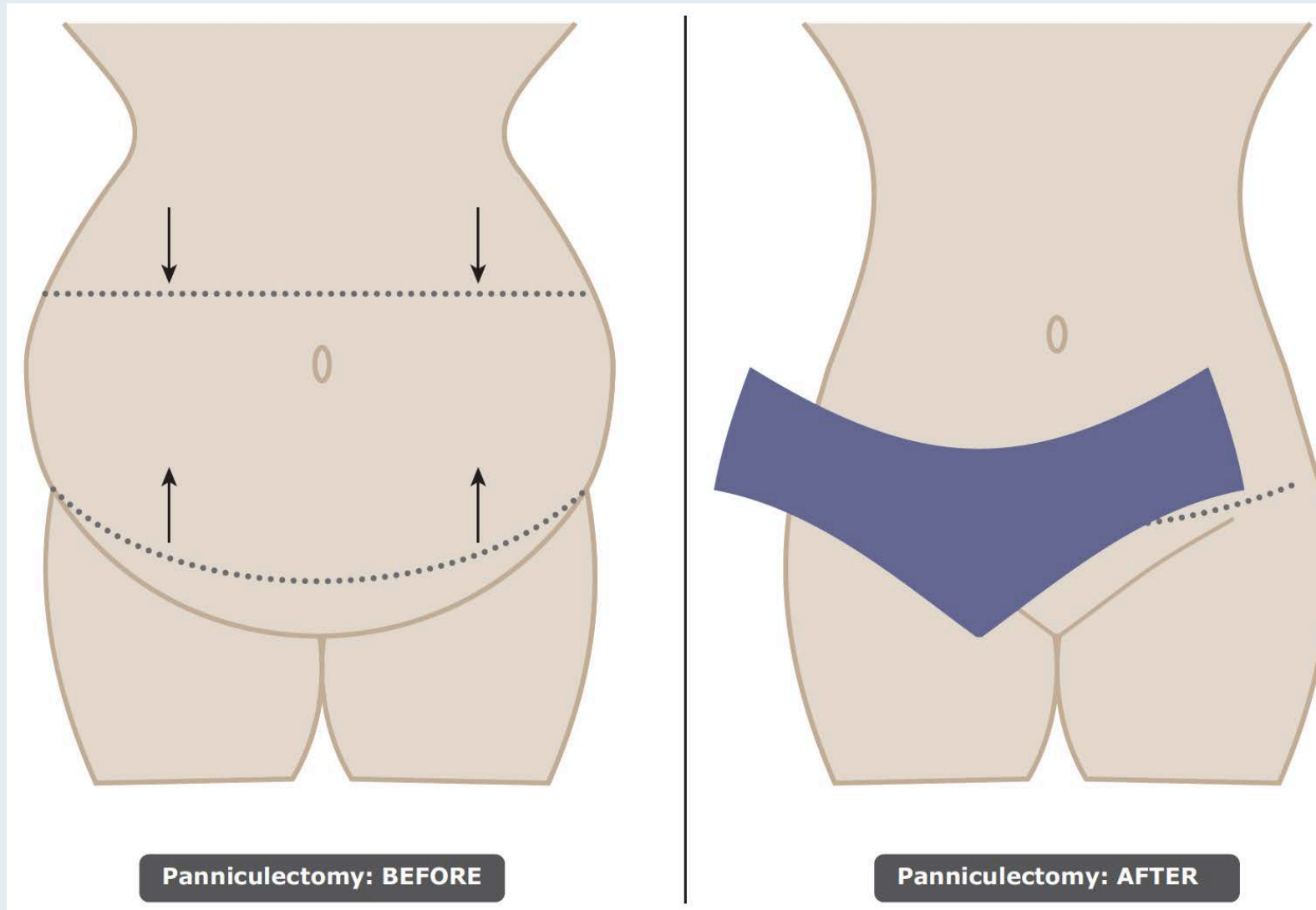


Endometrial cancer in the morbidly obese: a review

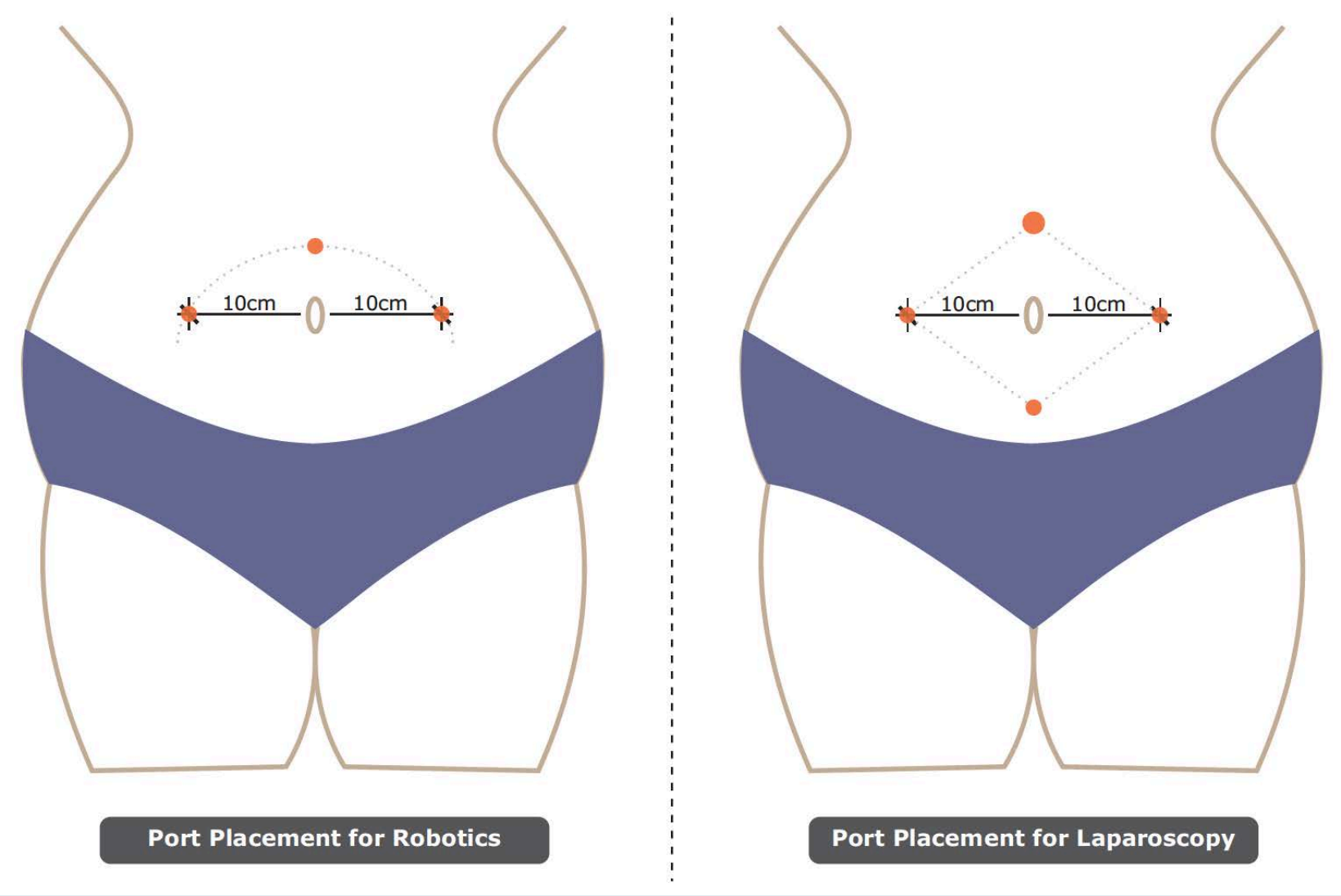
Marisa C. Liu, Austin B. Gardner, Juliet E. Wolford, and Krishnansu S. Tewari

Curr Opin Obstet Gynecol 2020;32(1):42-50.

Panniculectomy



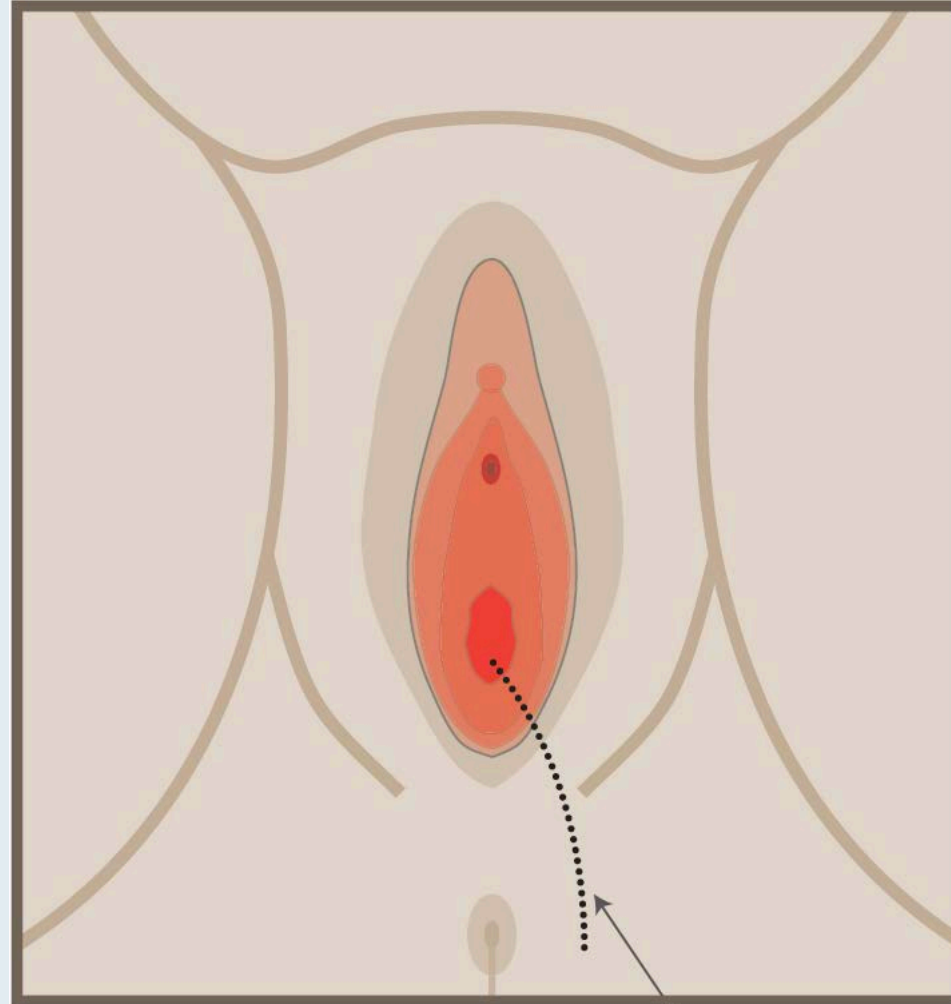
Port Placement



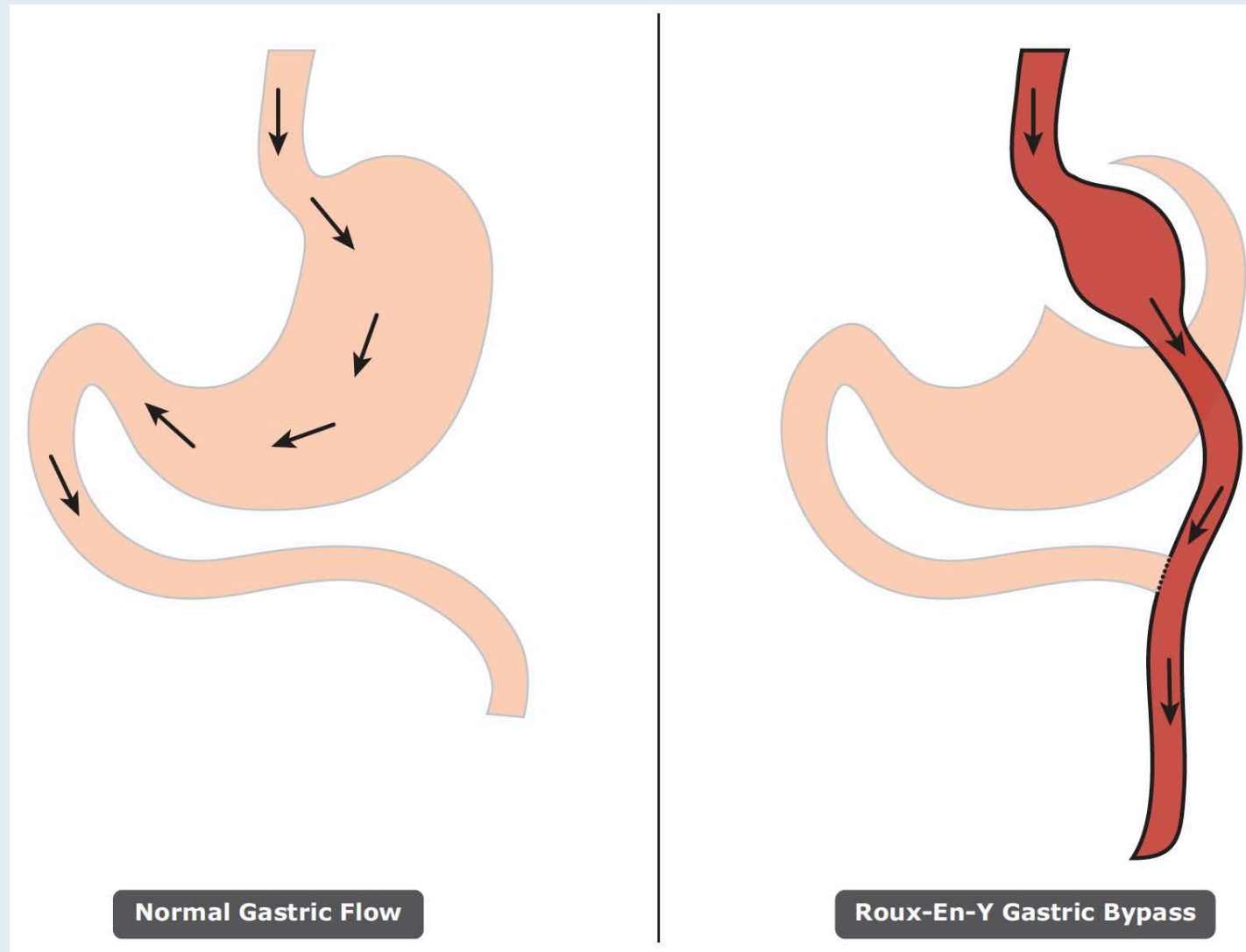
Port Placement for Robotics

Port Placement for Laparoscopy

Schuchart Incision



Roux-En-Y

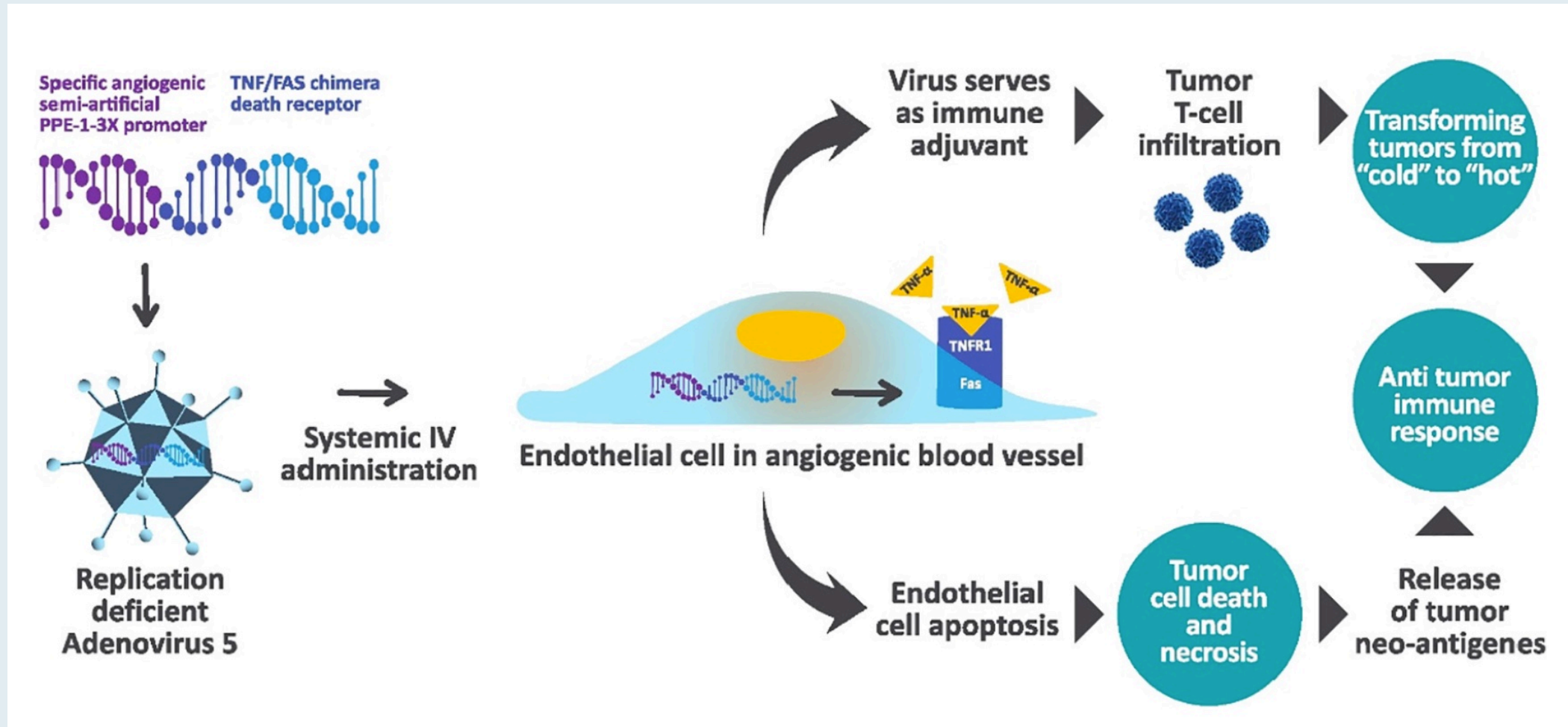


Clinical Trial in Progress: Pivotal Study of VB-111 Combined with Paclitaxel versus Paclitaxel for Treatment of Platinum-Resistant Ovarian Cancer (OVAL, VB-111-701/GOG-3018)

Arend RC et al.

ASCO 2019;Abstract TPS6097.

VB-111: Novel, Dual Mechanism for Targeting Solid Tumors



Carboplatin and Paclitaxel for Advanced Endometrial Cancer: Final Overall Survival and Adverse Event Analysis of a Phase III Trial (NRG Oncology/GOG0209)

David S. Miller, MD¹; Virginia L. Filiaci, PhD²; Robert S. Mannel, MD³; David E. Cohn, MD⁴; Takashi Matsumoto, MD⁵; Krishnansu S. Tewari, MD⁶; Paul DiSilvestro, MD⁷; Michael L. Pearl, MD⁸; Peter A. Argenta, MD⁹; Matthew A. Powell, MD¹⁰; Susan L. Zweizig, MD¹¹; David P. Warshal, MD¹²; Parviz Hanjani, MD¹³; Michael E. Carney, MD¹⁴; Helen Huang, MS²; David Cella, PhD¹⁵; Richard Zaino, MD¹⁶; and Gini F. Fleming, MD¹⁷

J Clin Oncol 2020;Sep 29;[Online ahead of print].

Meet The Professor with Dr Tewari

MODULE 1: Cases and Questions from Drs Freedman, Morganstein and Slomovitz

MODULE 2: Gynecologic Oncology Journal Club with Dr Tewari

- Philip John DiSaia, MD
- Robotic surgery for gynecologic cancers
- Evidence-based treatment paradigms for the management of cervical carcinoma
- GOG-240: Circulating tumor cells in advanced cervical cancer
- Education, screening and current challenges in the management of cervical cancer in Tanzania
- Fertility-preserving treatment for and pregnancy with gynecologic cancers
- Review of endometrial cancer in the morbidly obese
- OVAL: VB-111 combined with paclitaxel for platinum-resistant ovarian cancer
- NRG Oncology/GOG-0209: Carboplatin and paclitaxel for advanced endometrial cancer

MODULE 3: Beyond the Guidelines – Clinical Investigator Approaches to Common Clinical Scenarios

MODULE 4: Key Recent Data Sets










In general, what treatment would you recommend for a patient with microsatellite-stable metastatic endometrial cancer who experienced disease progression on carboplatin/paclitaxel?

1. Cisplatin/doxorubicin
2. Carboplatin/docetaxel
3. Lenvatinib/pembrolizumab
4. Test for PD-L1 combined positive score (CPS) and administer pembrolizumab if 1% or higher
5. Pembrolizumab
6. Other chemotherapy
7. Other










In general, what treatment would you recommend for a patient with MSI-high metastatic endometrial cancer who experienced disease progression on carboplatin/paclitaxel?

1. Cisplatin/doxorubicin
2. Carboplatin/docetaxel
3. Lenvatinib/pembrolizumab
4. Pembrolizumab
5. Other chemotherapy
6. Other










In general, what treatment would you recommend for a patient with metastatic endometrial cancer who experienced disease progression on carboplatin/paclitaxel if their disease was...

	Microsatellite stable (MSS)	MSI high (MSI-H)
 MICHAEL J BIRRER, MD, PHD	Lenvatinib/pembrolizumab	Pembrolizumab
 ROBERT L COLEMAN, MD	Lenvatinib/pembrolizumab	Pembrolizumab
 ANA OAKNIN, MD, PHD	Lenvatinib/pembrolizumab	Dostarlimab
 DAVID M O'MALLEY, MD	Lenvatinib/pembrolizumab	Pembrolizumab
 RICHARD T PENSON, MD, MRCP	Lenvatinib/pembrolizumab	Pembrolizumab
 MATTHEW A POWELL, MD	Lenvatinib/pembrolizumab	Pembrolizumab
 BRIAN M SLOMOVITZ, MD	Lenvatinib/pembrolizumab	Pembrolizumab
 KRISHNANSU S TEWARI, MD	Lenvatinib/pembrolizumab	Pembrolizumab
 PROFESSOR IGNACE VERGOTE	Lenvatinib/pembrolizumab	Pembrolizumab










For a patient with MSI-high metastatic endometrial cancer, outside of a clinical trial setting and regulatory and reimbursement issues aside, what is the earliest point at which you would introduce an anti-PD-1/PD-L1 antibody? Which regimen would you generally use?

	Earliest timing	Regimen
 MICHAEL J BIRRER, MD, PHD	Second line	Pembrolizumab
 ROBERT L COLEMAN, MD	Second line	Pembrolizumab
 ANA OAKNIN, MD, PHD	Second line	Dostarlimab
 DAVID M O'MALLEY, MD	First line	Pembrolizumab
 RICHARD T PENSON, MD, MRCP	First line	Pembrolizumab
 MATTHEW A POWELL, MD	Second line	Pembrolizumab
 BRIAN M SLOMOVITZ, MD	Second line	Pembrolizumab
 KRISHNANSU S TEWARI, MD	Second line	Pembrolizumab
 PROFESSOR IGNACE VERGOTE	First line	Pembrolizumab

In general, what would be your preferred first-line therapy for a patient with MSS metastatic cervical cancer who has received no prior systemic treatment?

 MICHAEL J BIRRER, MD, PHD	Cisplatin/paclitaxel/bevacizumab
 ROBERT L COLEMAN, MD	Cisplatin/paclitaxel/bevacizumab
 ANA OAKNIN, MD, PHD	Carboplatin/paclitaxel
 DAVID M O'MALLEY, MD	Cisplatin/paclitaxel/bevacizumab
 RICHARD T PENSON, MD, MRCP	Cisplatin/paclitaxel/bevacizumab
 MATTHEW A POWELL, MD	Cisplatin/paclitaxel/bevacizumab
 BRIAN M SLOMOVITZ, MD	Cisplatin/paclitaxel/bevacizumab
 KRISHNANSU S TEWARI, MD	Cisplatin/paclitaxel/bevacizumab
 PROFESSOR IGNACE VERGOTE	Carboplatin/paclitaxel/bevacizumab

In general, what would be your preferred first-line therapy for a patient with MSS metastatic cervical cancer who experienced relapse 12 months after receiving cisplatin-based chemoradiation therapy for Stage IIIB disease?

 <p>MICHAEL J BIRRER, MD, PHD</p>	Carboplatin/paclitaxel/bevacizumab
 <p>ROBERT L COLEMAN, MD</p>	Carboplatin/paclitaxel/bevacizumab
 <p>ANA OAKNIN, MD, PHD</p>	Cisplatin/paclitaxel/bevacizumab
 <p>DAVID M O'MALLEY, MD</p>	Carboplatin/paclitaxel/bevacizumab
 <p>RICHARD T PENSON, MD, MRCP</p>	Cisplatin/paclitaxel/bevacizumab
 <p>MATTHEW A POWELL, MD</p>	Carboplatin/paclitaxel/bevacizumab
 <p>BRIAN M SLOMOVITZ, MD</p>	Test for PD-L1 CPS and administer pembrolizumab if 1% or higher
 <p>KRISHNANSU S TEWARI, MD</p>	Carboplatin/paclitaxel/bevacizumab
 <p>PROFESSOR IGNACE VERGOTE</p>	Carboplatin/paclitaxel/bevacizumab

CPS = combined positive score

In general, what would be your preferred second-line therapy for a patient with MSS metastatic cervical cancer who experiences disease progression on carboplatin/paclitaxel/bevacizumab?

1. Other chemotherapy
2. Test for PD-L1 CPS and administer pembrolizumab if 1% or higher
3. Pembrolizumab
4. Other

In general, what would be your preferred second-line therapy for a patient with MSS metastatic cervical cancer who experienced disease progression on carboplatin/paclitaxel/bevacizumab?



MICHAEL J BIRRER, MD, PHD

Pembrolizumab



ROBERT L COLEMAN, MD

Test for PD-L1 CPS and administer pembrolizumab if 1% or higher



ANA OAKNIN, MD, PHD

Anti-PD-1/PD-L1 antibody in general



DAVID M O'MALLEY, MD

Test for PD-L1 CPS and administer pembrolizumab if 1% or higher



RICHARD T PENSON, MD, MRCP

Test for PD-L1 CPS and administer pembrolizumab if 1% or higher



MATTHEW A POWELL, MD

Test for PD-L1 CPS and administer pembrolizumab if 1% or higher



BRIAN M SLOMOVITZ, MD

Test for PD-L1 CPS and administer pembrolizumab if 1% or higher



KRISHNANSU S TEWARI, MD








Test for PD-L1 CPS and administer pembrolizumab if 1% or higher



PROFESSOR IGNACE VERGOTE

Tisotumab vedotin

Based on your clinical experience and/or the published literature, how would you characterize the tolerability of tisetumab vedotin in the treatment of metastatic cervical cancer?

 <p>MICHAEL J BIRRER, MD, PHD</p>	Well tolerated except for epistaxis
 <p>ROBERT L COLEMAN, MD</p>	Similar to other single-agent chemotherapy
 <p>ANA OAKNIN, MD, PHD</p>	Moderate toxicity
 <p>DAVID M O'MALLEY, MD</p>	Reasonable toxicity
 <p>RICHARD T PENSON, MD, MRCP</p>	Excited by it
 <p>MATTHEW A POWELL, MD</p>	Reasonable toxicity
 <p>BRIAN M SLOMOVITZ, MD</p>	Well tolerated; ocular side effects
 <p>KRISHNANSU S TEWARI, MD</p>	Relatively well tolerated so far
 <p>PROFESSOR IGNACE VERGOTE</p>	Good tolerability

A patient with PD-L1-positive metastatic cervical cancer experiences disease progression on platinum-based therapy and has significant symptoms from her disease. If tisetumab vedotin were approved, what would likely be your next line of treatment?










1. Pembrolizumab
2. Tisetumab vedotin
3. Other

Do you generally evaluate microsatellite instability status in your patients with advanced ovarian cancer?

1. Yes

2. No

Do you generally evaluate microsatellite instability status in your patients with advanced ovarian cancer?

 <p>MICHAEL J BIRRER, MD, PHD</p>	Yes
 <p>ROBERT L COLEMAN, MD</p>	Yes
 <p>ANA OAKNIN, MD, PHD</p>	No
 <p>DAVID M O'MALLEY, MD</p>	Yes
 <p>RICHARD T PENSON, MD, MRCP</p>	Yes
 <p>MATTHEW A POWELL, MD</p>	Yes
 <p>BRIAN M SLOMOVITZ, MD</p>	No
 <p>KRISHNANSU S TEWARI, MD</p>	No
 <p>PROFESSOR IGNACE VERGOTE</p>	No

Meet The Professor with Dr Tewari

MODULE 1: Cases and Questions from Drs Freedman, Morganstein and Slomovitz

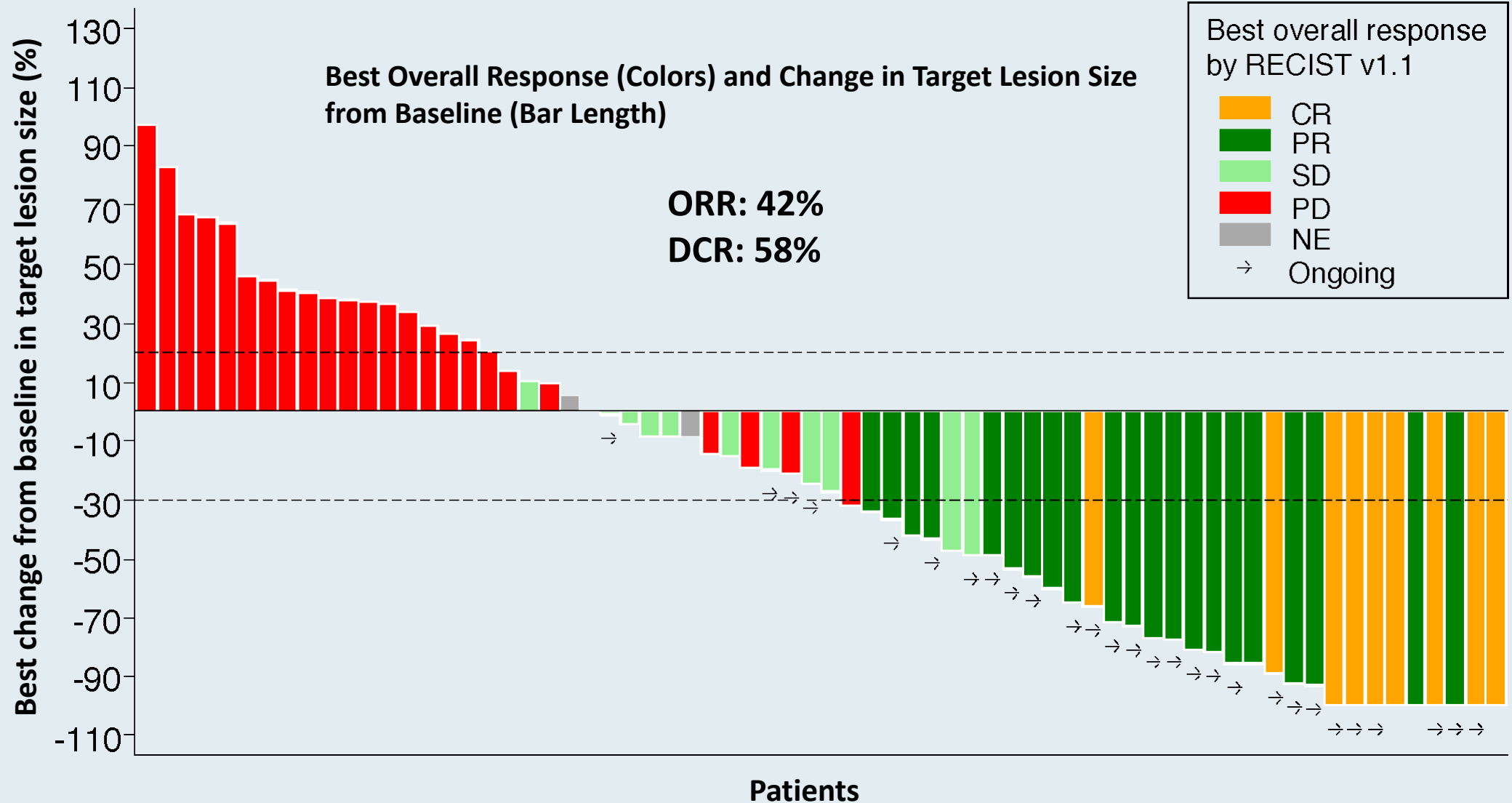
MODULE 2: Gynecologic Oncology Journal Club with Dr Tewari

- Philip John DiSaia, MD
- Robotic surgery for gynecologic cancers
- Evidence-based treatment paradigms for the management of cervical carcinoma
- GOG-240: Circulating tumor cells in advanced cervical cancer
- Education, screening and current challenges in the management of cervical cancer in Tanzania
- Fertility-preserving treatment for and pregnancy with gynecologic cancers
- Review of endometrial cancer in the morbidly obese
- OVAL: VB-111 combined with paclitaxel for platinum-resistant ovarian cancer
- NRG Oncology/GOG-0209: Carboplatin and paclitaxel for advanced endometrial cancer

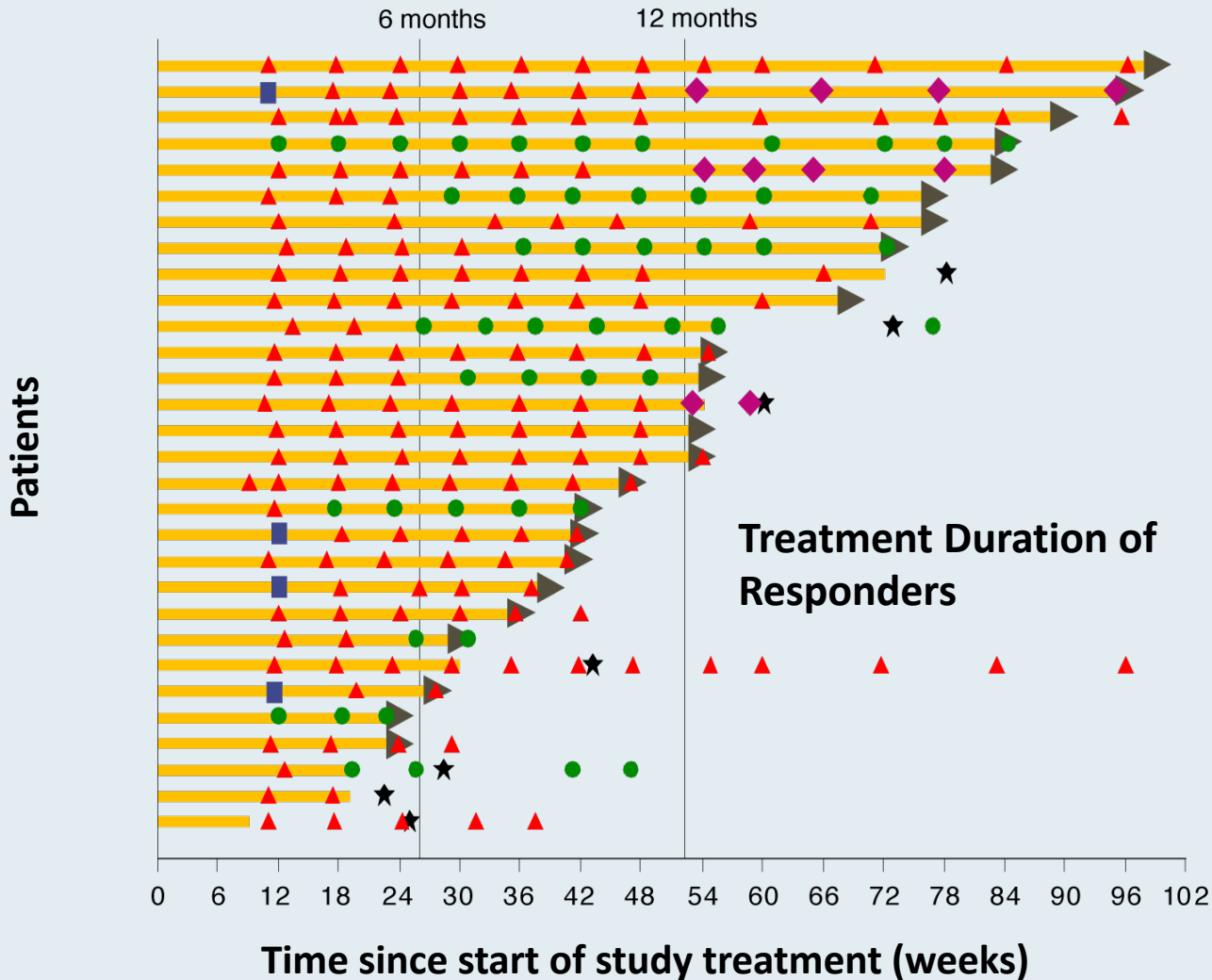
MODULE 3: Beyond the Guidelines – Clinical Investigator Approaches to Common Clinical Scenarios

MODULE 4: Key Recent Data Sets

GARNET: Dostarlimab in Recurrent or Advanced dMMR Endometrial Cancer



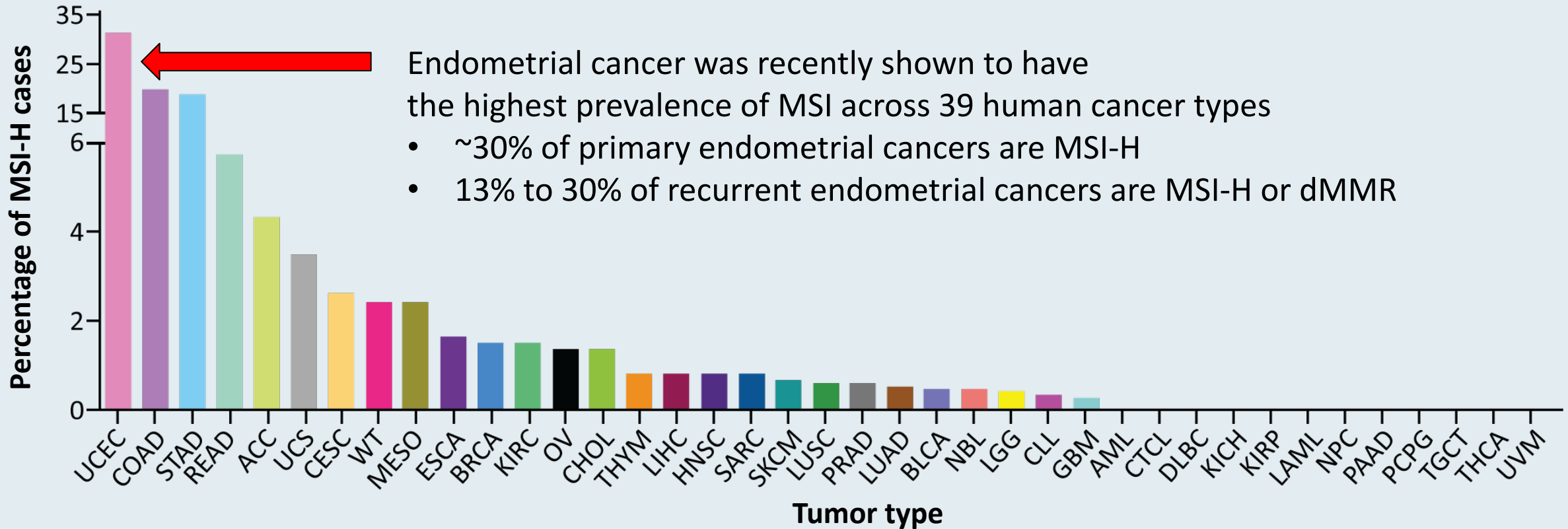
GARNET: Dostarlimab in Recurrent or Advanced dMMR Endometrial Cancer



- Median follow-up is 11.2 mos
- Median DOR not reached (1.87+ to 19.61+ mos)
- 25 of 30 (83%) responders remain in response as of the data cutoff
- Deepening of responses:
 - SD → PR: 4 patients
 - PR → CR: 7 patients

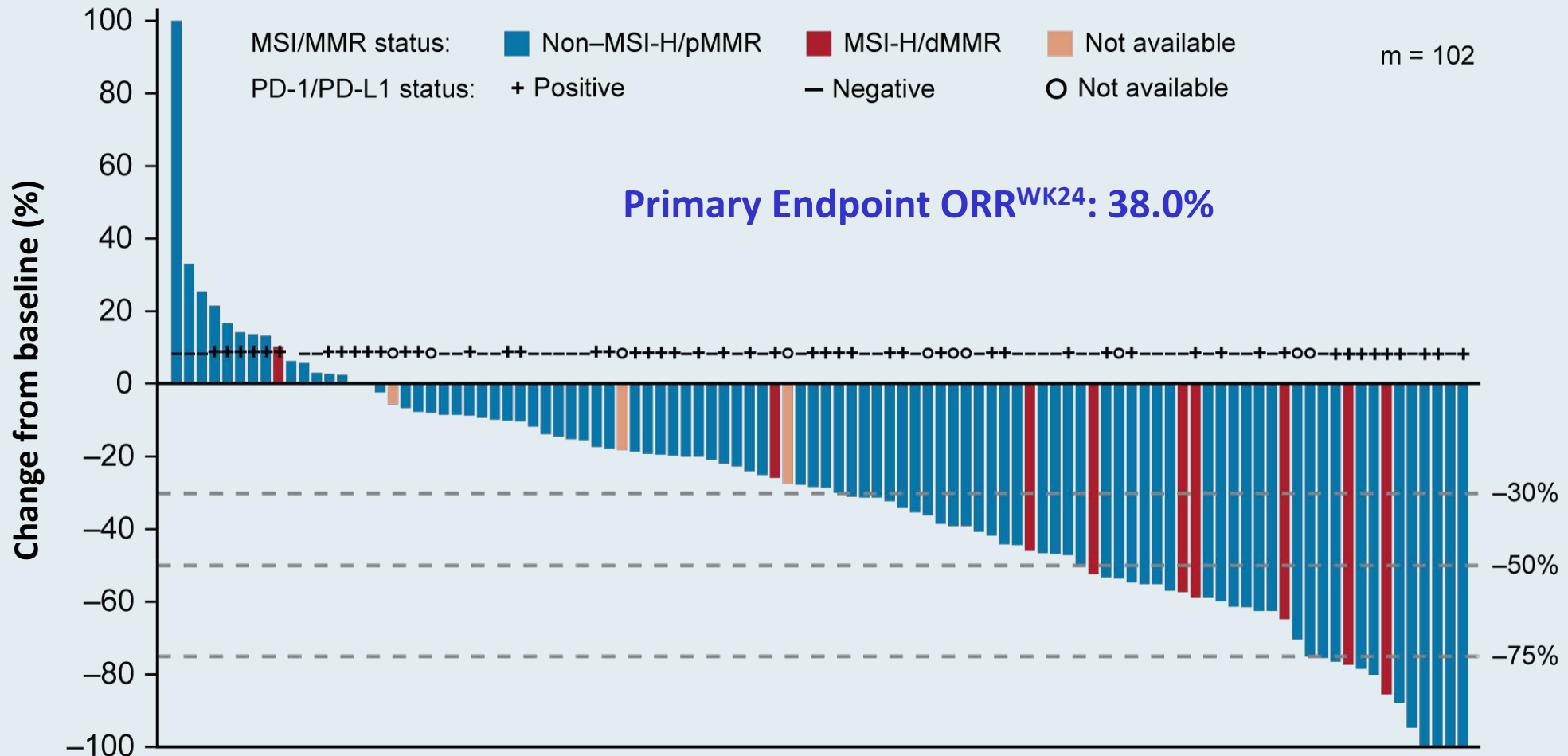
MSI-High Across 39 Cancer Types

Whole-exome data from 11,139 tumor-normal pairs from The Cancer Genome Atlas and Therapeutically Applicable Research to Generate Effective Treatments projects

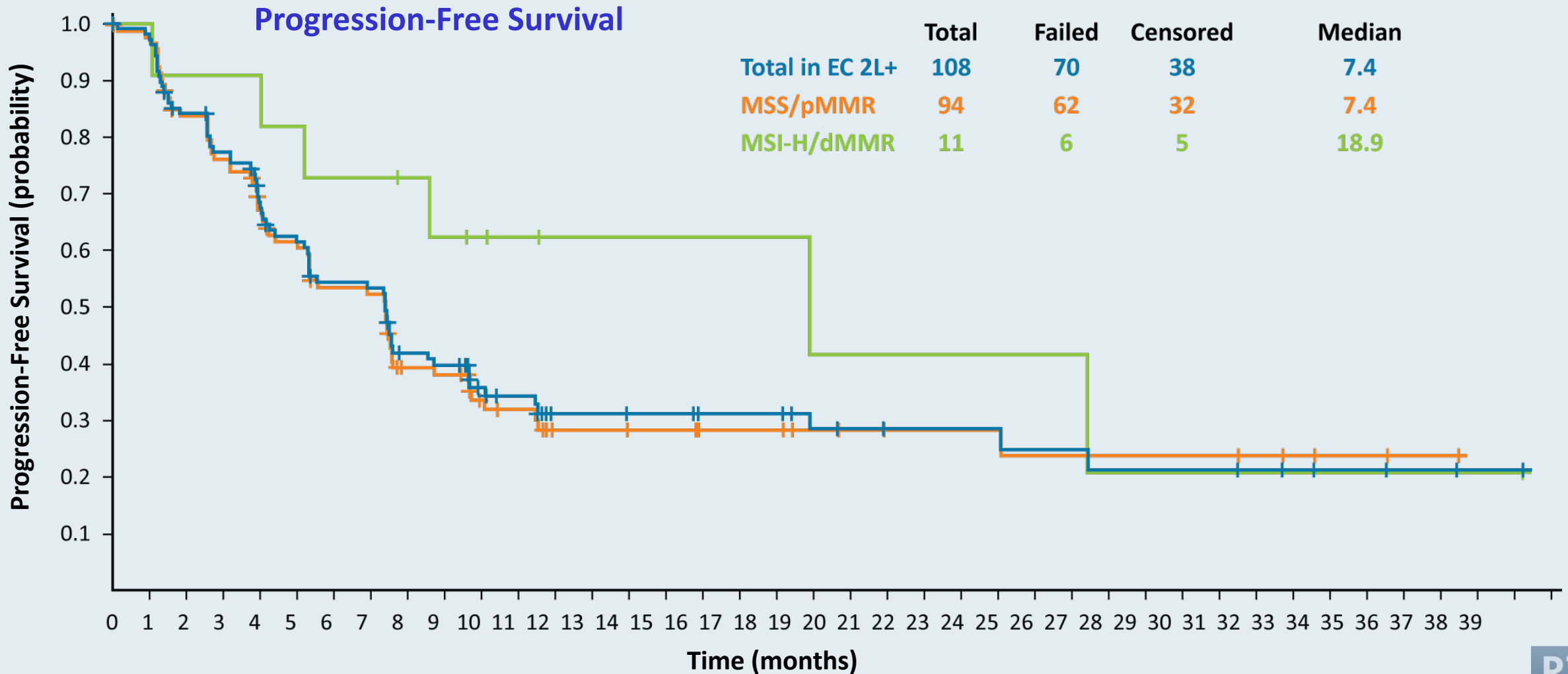


UCEC = uterine corpus endometrial carcinoma

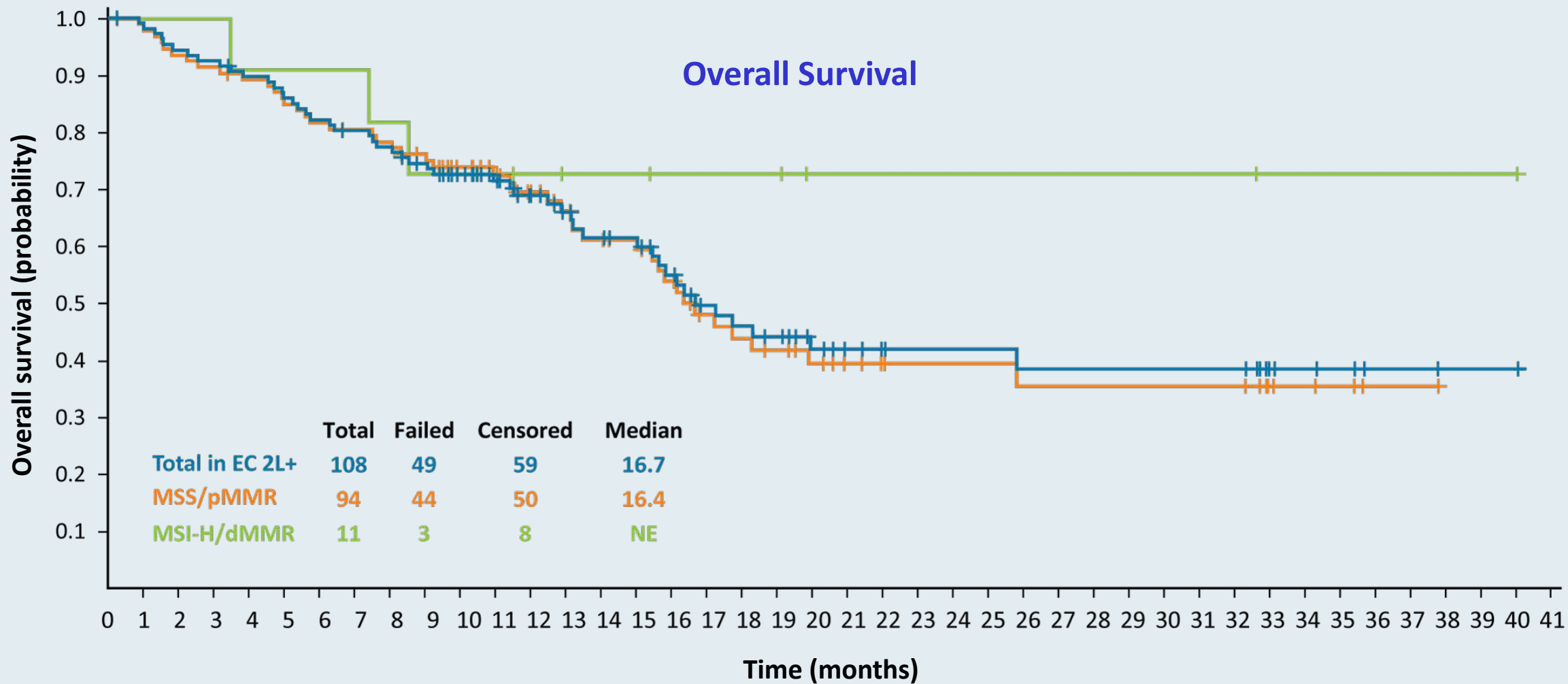
KEYNOTE-146: Pembrolizumab/Lenvatinib in Advanced Endometrial Cancer That Is Not MSI-H or dMMR After Disease Progression on Prior Systemic Therapy



KEYNOTE-146: Pembrolizumab/Lenvatinib in Advanced Endometrial Cancer That Is Not MSI-H or dMMR After Progression on Prior Systemic Therapy



KEYNOTE-146: Pembrolizumab/Lenvatinib in Advanced Endometrial Cancer That Is Not MSI-H or dMMR After Progression on Prior Systemic Therapy

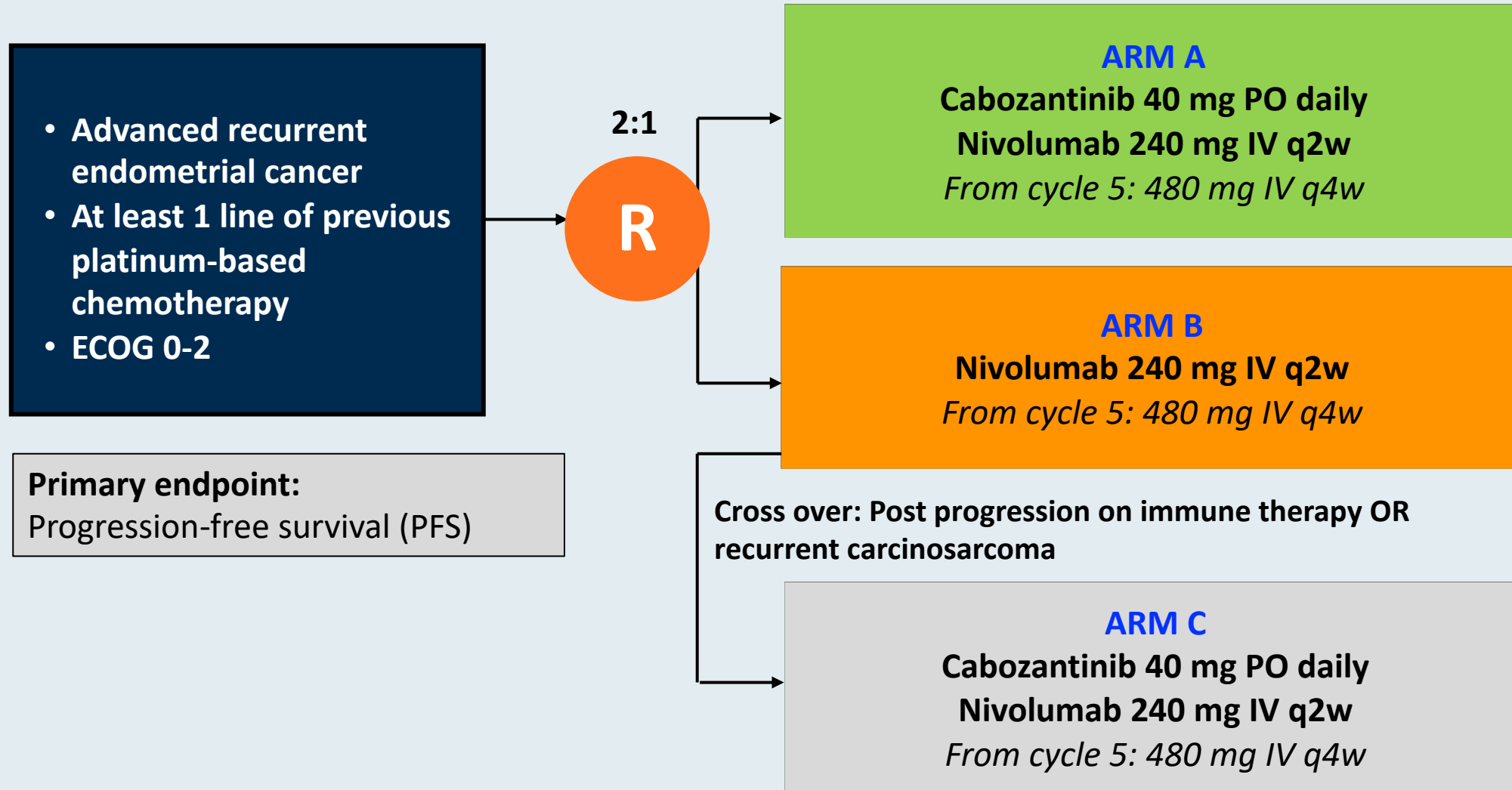


NCI 10104: A Randomized Phase 2 Study of Cabozantinib in Combination with Nivolumab in Advanced, Recurrent Metastatic Endometrial Cancer

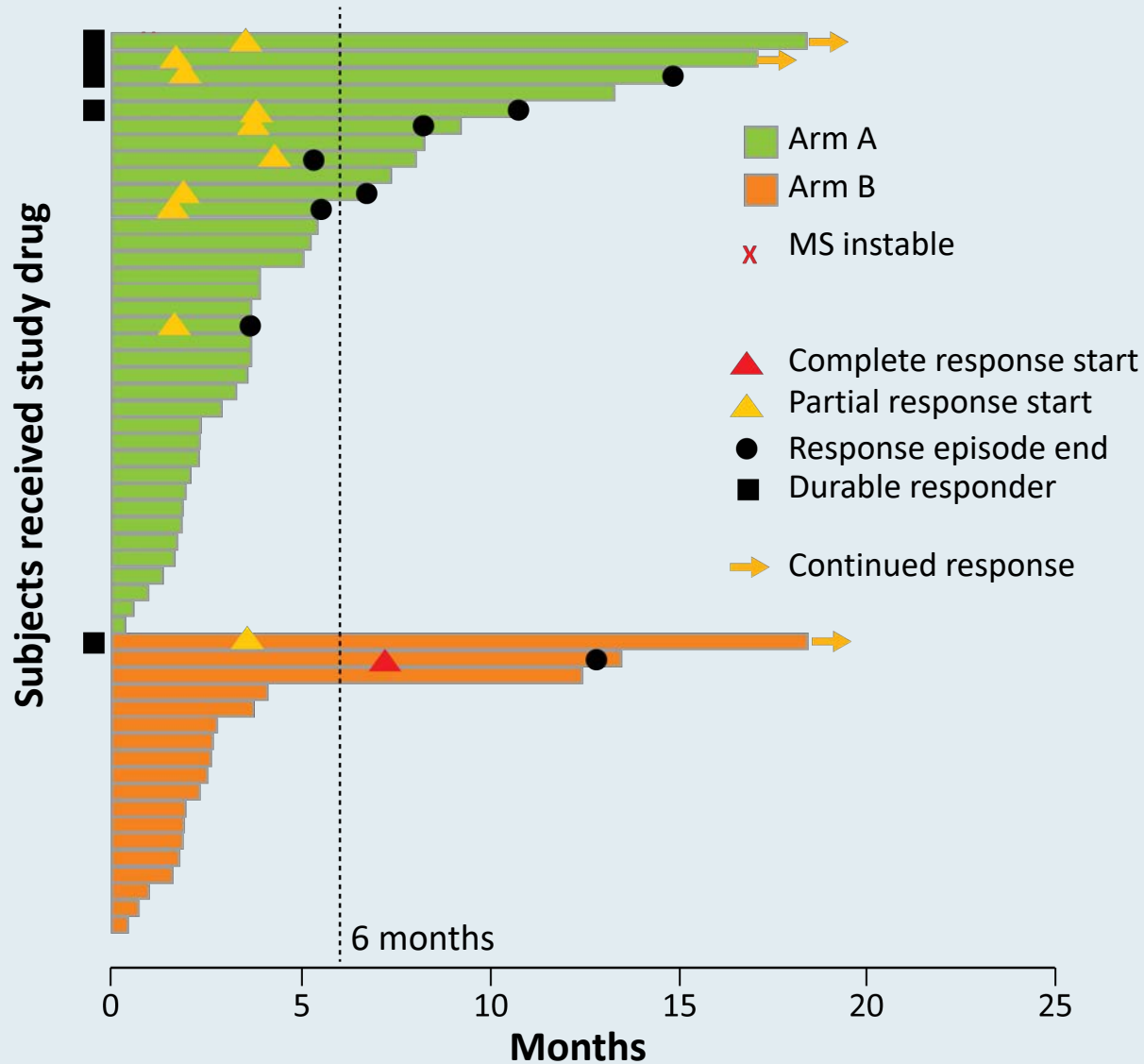
Lheureux S et al.

ASCO 2020;Abstract 6010.

NCI 10104 Phase II Study Schema



NCI 10104: Response Rate and Duration and Survival Analyses



	Arm A Cabo/nivolumab (n = 36)	Arm B Nivolumab (n = 18)
ORR	25%	11%
SD as best response	44%	11%
CBR	69%	22%
Median PFS*	5.3 mo	1.9 mo
Median OS [†]	13.0 mo	7.9 mo

* HR: 0.59, significant

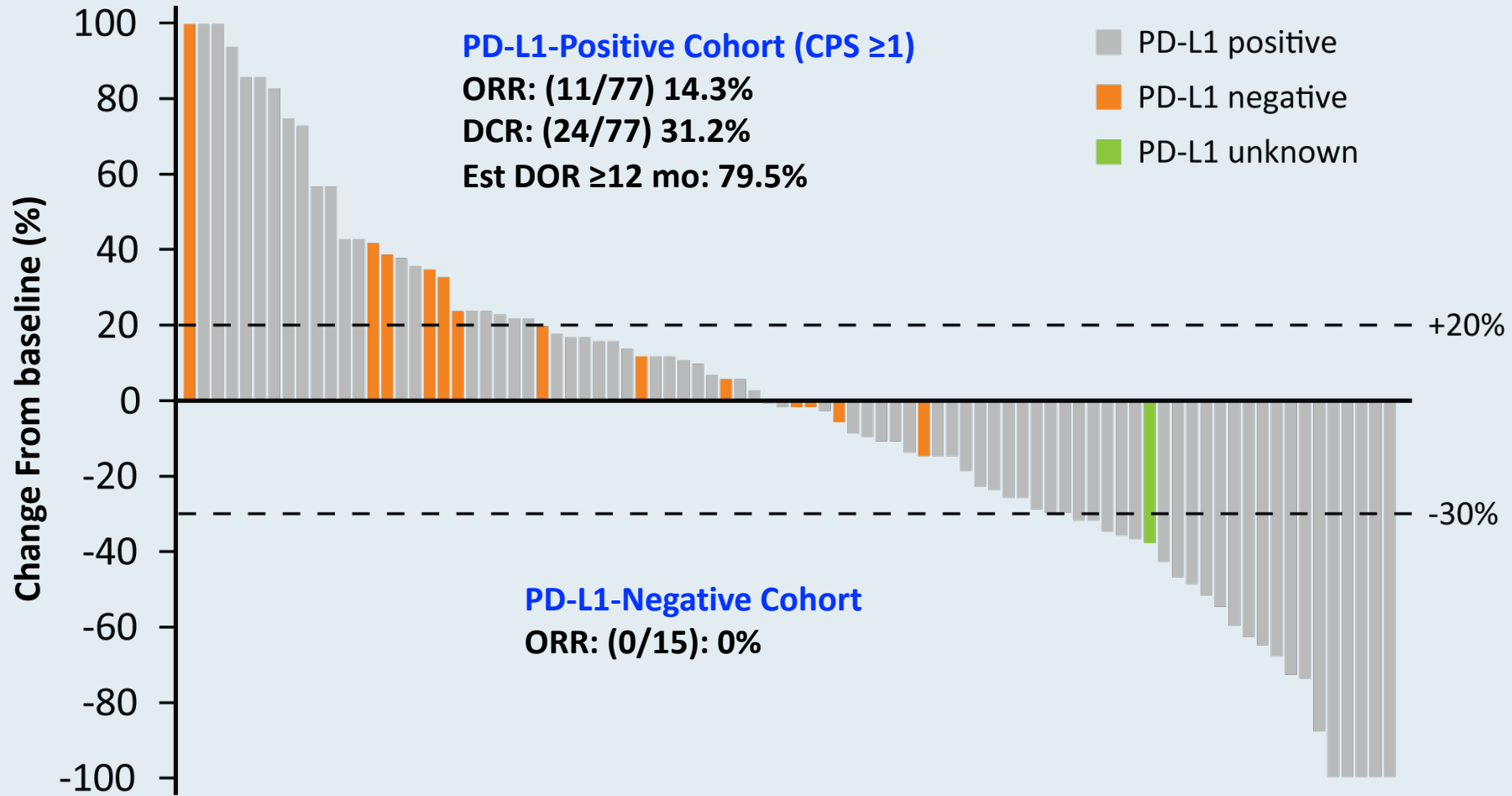
[†] Immature, 55% events

Select Ongoing Phase III Immune Checkpoint Inhibitor Combination Studies

Trial	N	Eligibility	Randomization
KEYNOTE-775	780	<ul style="list-style-type: none"> Advanced, recurrent or metastatic EC PD after 1 prior platinum-based chemo regimen 	<ul style="list-style-type: none"> Pembro + lenvatinib Paclitaxel + carboplatin
LEAP-001	720	<ul style="list-style-type: none"> Stage III, IV or recurrent EC May have received 1 prior line of platinum-based adjuvant or neoadjuvant chemo 	<ul style="list-style-type: none"> Pembro + lenvatinib Paclitaxel + carboplatin
NRG-GY018	810	<ul style="list-style-type: none"> Stage III, IVA or IVB or recurrent EC No prior chemo for EC, except adjuvant 	<ul style="list-style-type: none"> Pembro + paclitaxel + carboplatin → Pembro Placebo + paclitaxel + carboplatin → Placebo
RUBY	470	<ul style="list-style-type: none"> Stage III, IV or first recurrent EC 	<ul style="list-style-type: none"> Dostarlimab + paclitaxel + carboplatin Placebo + paclitaxel + carboplatin
AtTEnd	550	<ul style="list-style-type: none"> Newly dx with residual disease after surgery, OR inoperable Stage III-IV naïve to first-line systemic treatment 	<ul style="list-style-type: none"> Atezolizumab + paclitaxel + carboplatin Placebo + paclitaxel + carboplatin

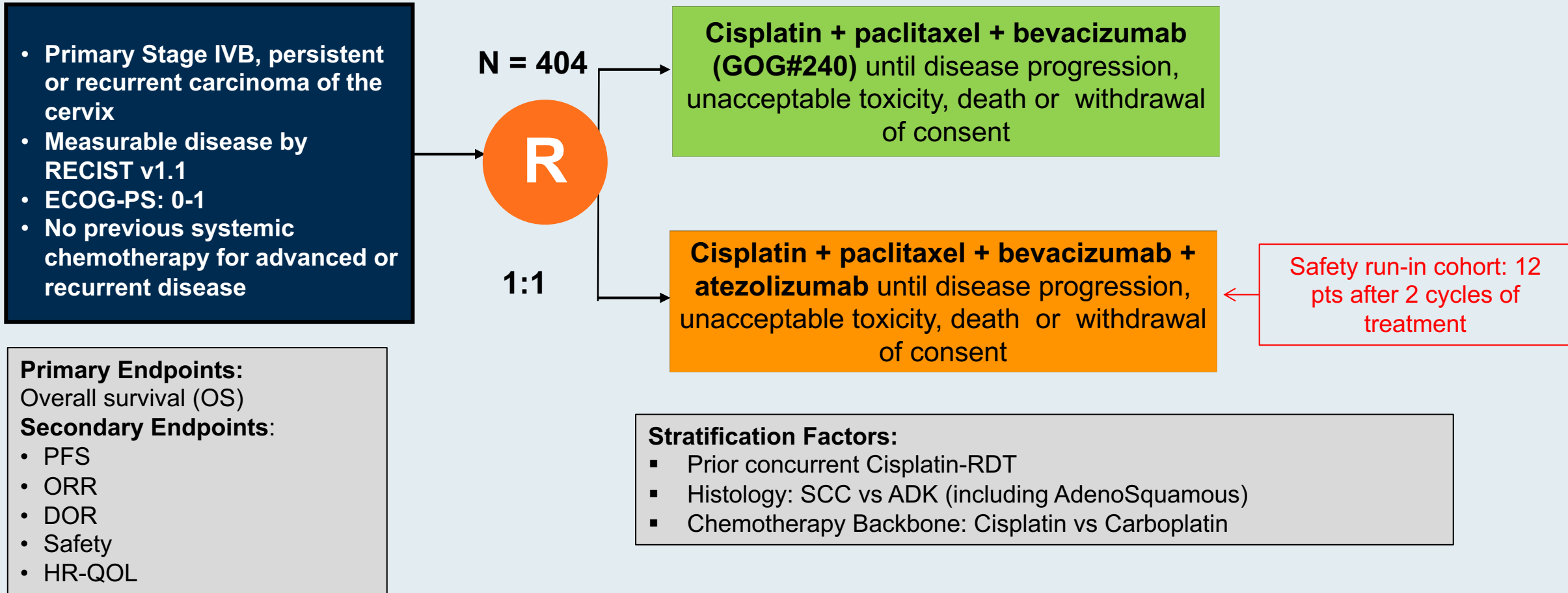
Anti-PD-1/PD-L1 Antibodies in Cervical Cancer

Phase II KEYNOTE-158: Pembrolizumab in Previously Treated Advanced Cervical Cancer

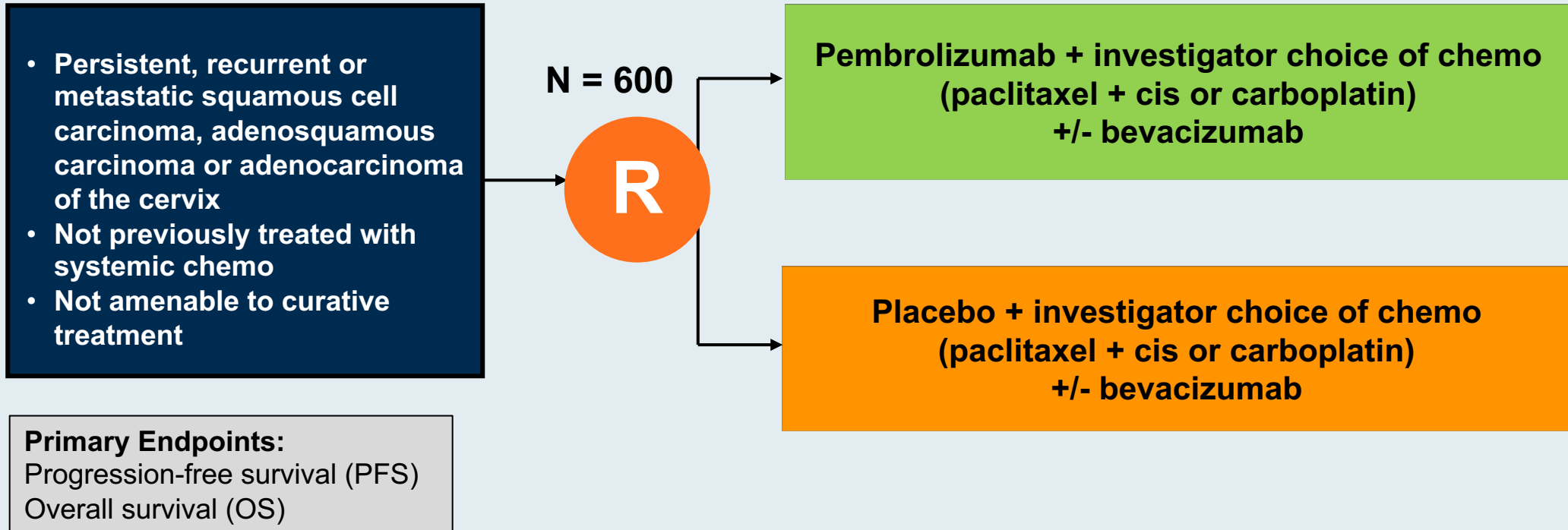


Combined Positive Score (CPS) = PD-L1+ cells (tumor cells, lymphocytes, macrophages) / Total number of tumor cells x 100

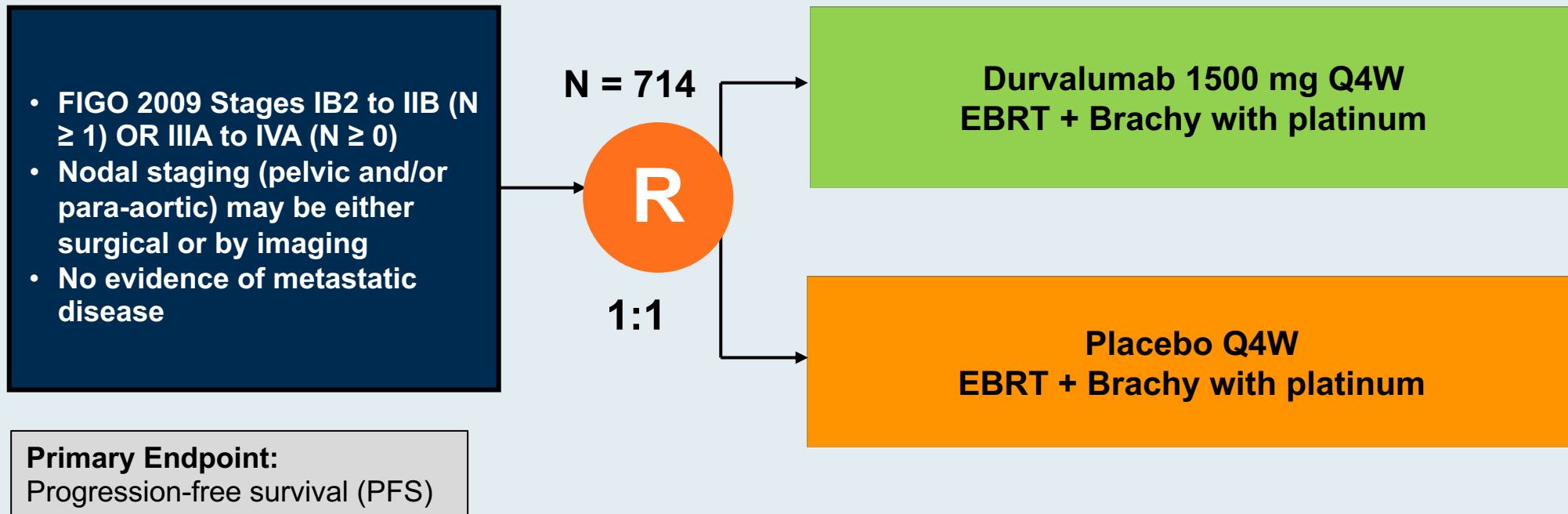
BEATcc Phase III Randomized Front-Line Trial of Atezolizumab



KEYNOTE-826 Phase III Schema



CALLA Phase III Schema



Anti-PD-1/PD-L1 Antibodies in Ovarian Cancer

FDA-Approved Indications for Immunotherapy in Ovarian Cancer

Pembrolizumab: 2017 FDA approval for MSI-high/MMR deficient cancers

- The incidence of germline MMR gene mutations in high grade serous cancers is 1-8%
- MMR deficiency is more common in non-serous ovarian cancer

2020 ASCO ovarian cancer genetics guidelines re MMR testing:

- Women diagnosed with clear cell, endometrioid, or mucinous ovarian cancer should be offered somatic tumor testing for mismatch repair deficiency
- Testing for MMR deficiency may be offered to women diagnosed with other histologic types of epithelial ovarian cancer

Final Results from the KEYNOTE-100 Trial of Pembrolizumab in Patients with Advanced Recurrent Ovarian Cancer

Matulonis UA et al.

ASCO 2020;Abstract 6005.

KEYNOTE-100 Phase II, 2-Cohort Study Schema

Patients (N = 376)

- Recurrent, advanced epithelial ovarian, fallopian tube, or primary peritoneal cancer
- ECOG PS 0 or 1
- Provision of a tumor sample for biomarker analysis

Key exclusion criteria

- Mucinous histology
- No bowel obstruction within 3 months
- No active autoimmune disease
- No active CNS metastases and/or carcinomatous meningitis

Cohort A
1-3 prior lines
PFI or TFI of 3-12 months

Total enrollment: n = 285

↑
**Pembrolizumab 200 mg IV q3wk until PD,
prohibitive toxicity, death, or completion of 2 years**
↓

Cohort B
4-6 prior lines
PFI or TFI of ≥3 months

Total enrollment: n = 91

PFI = platinum-free interval; TFI = treatment-free interval

KEYNOTE-100: Summary of Efficacy, Including by PD-L1 Status

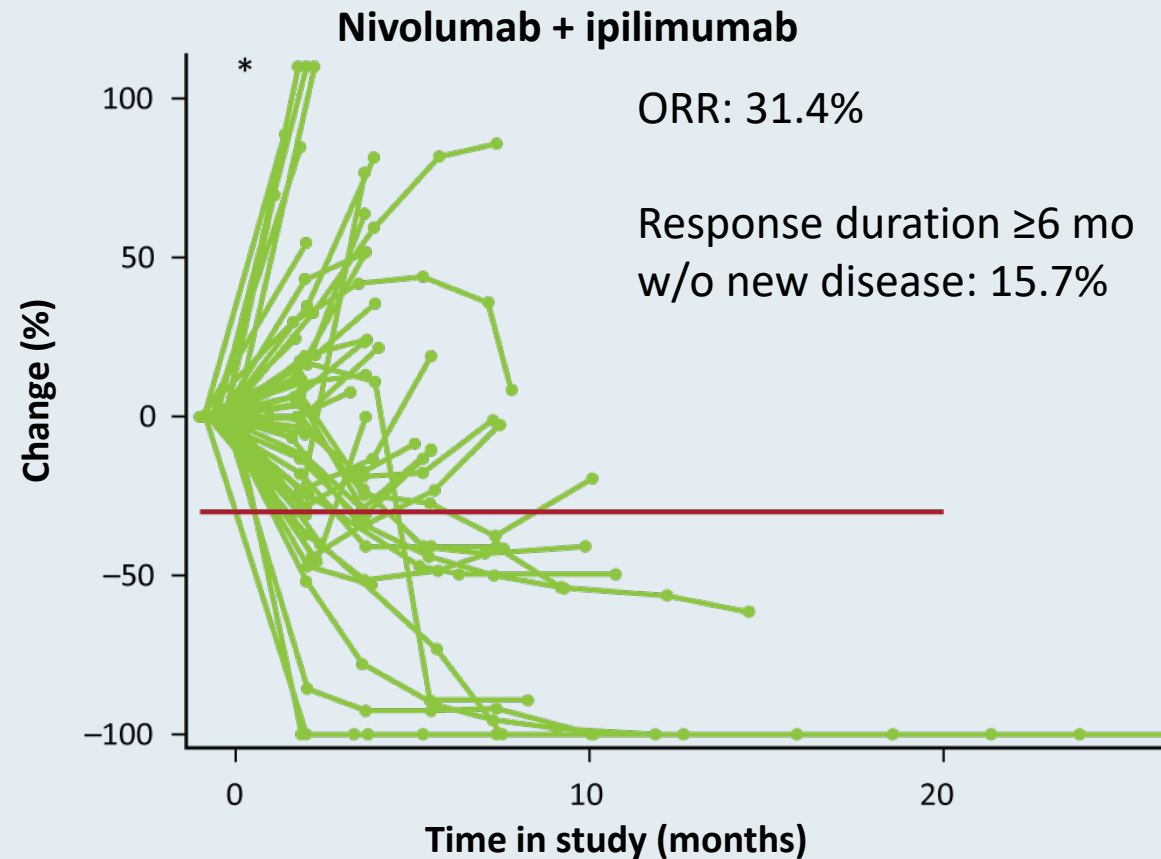
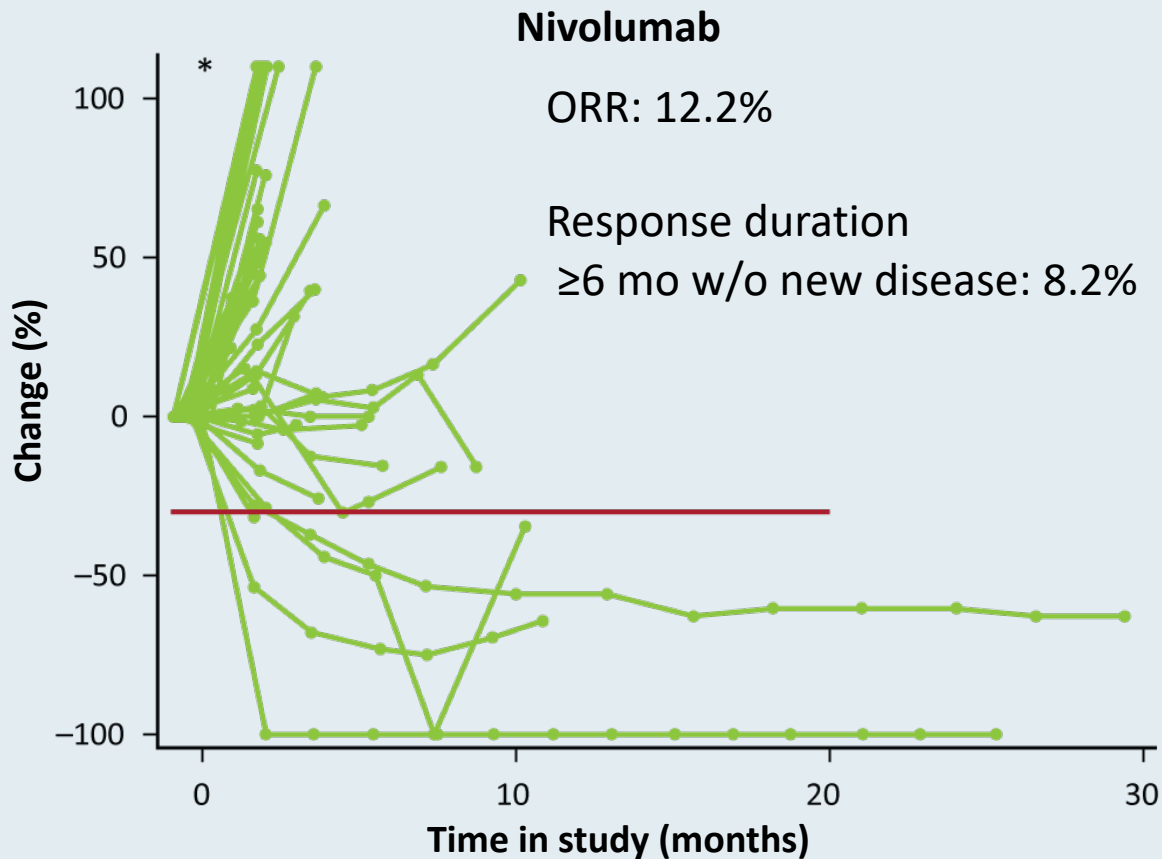
Endpoint	Cohort A 1-3 prior lines PFI/TFI 3-12 months			Cohort B 4-6 prior lines PFI/TFI ≥3 months			Cohorts A + B All comers		
	All n = 285	CPS ≥1 n = 101	CPS ≥10 n =43	All n = 91	CPS ≥1 n = 49	CPS ≥10 n = 22	All n = 376	CPS ≥1 n = 150	CPS ≥10 n = 65
ORR	8.1%	6.9%	11.6%	9.9%	10.2%	18.2%	8.5%	8.0%	13.8%
DoR	8.3 mo	Not reported	Not reported	23.6 mo	Not reported	Not reported	10.2 mo	Not reported	Not reported
OS	18.7 mo	20.6 mo	21.9 mo	17.6 mo	20.7 mo	24.0 mo	Not reported	Not reported	Not reported

JAVELIN Ovarian 200: Avelumab Alone or in Combination with Pegylated Liposomal Doxorubicin (PLD) versus PLD Alone in Platinum-Resistant or Refractory OC

	Avelumab (n = 188)		Avelumab + PLD (n = 188)		PLD (n = 190)	
All patients						
Median OS	11.8 mo		15.7 mo		13.1 mo	
	HR: 1.14, <i>p</i> = 0.83		HR: 0.80, <i>p</i> = 0.21		Reference	
Median PFS	1.9 mo		3.7 mo		3.5 mo	
	HR: 1.68, <i>p</i> > 0.99		HR: 0.78, <i>p</i> = 0.03		Reference	
PD-L1 evaluable	PD-L1+ (n = 91)	PD-L1- (n = 62)	PD-L1+ (n = 92)	PD-L1- (n = 58)	PD-L1+ (n = 73)	PD-L1- (n = 66)
Median OS	13.7 mo	10.5 mo	18.4 mo	12.7 mo	13.8 mo	13.1 mo
	HR: 0.80	HR: 1.4	HR: 0.72	HR: 1.1	Ref	Ref
Median PFS	1.9 mo	1.8 mo	3.7 mo	3.9 mo	1.9 mo	3.7 mo
	HR: 1.3	HR: 1.8	HR: 0.59	HR: 0.92	Ref	Ref

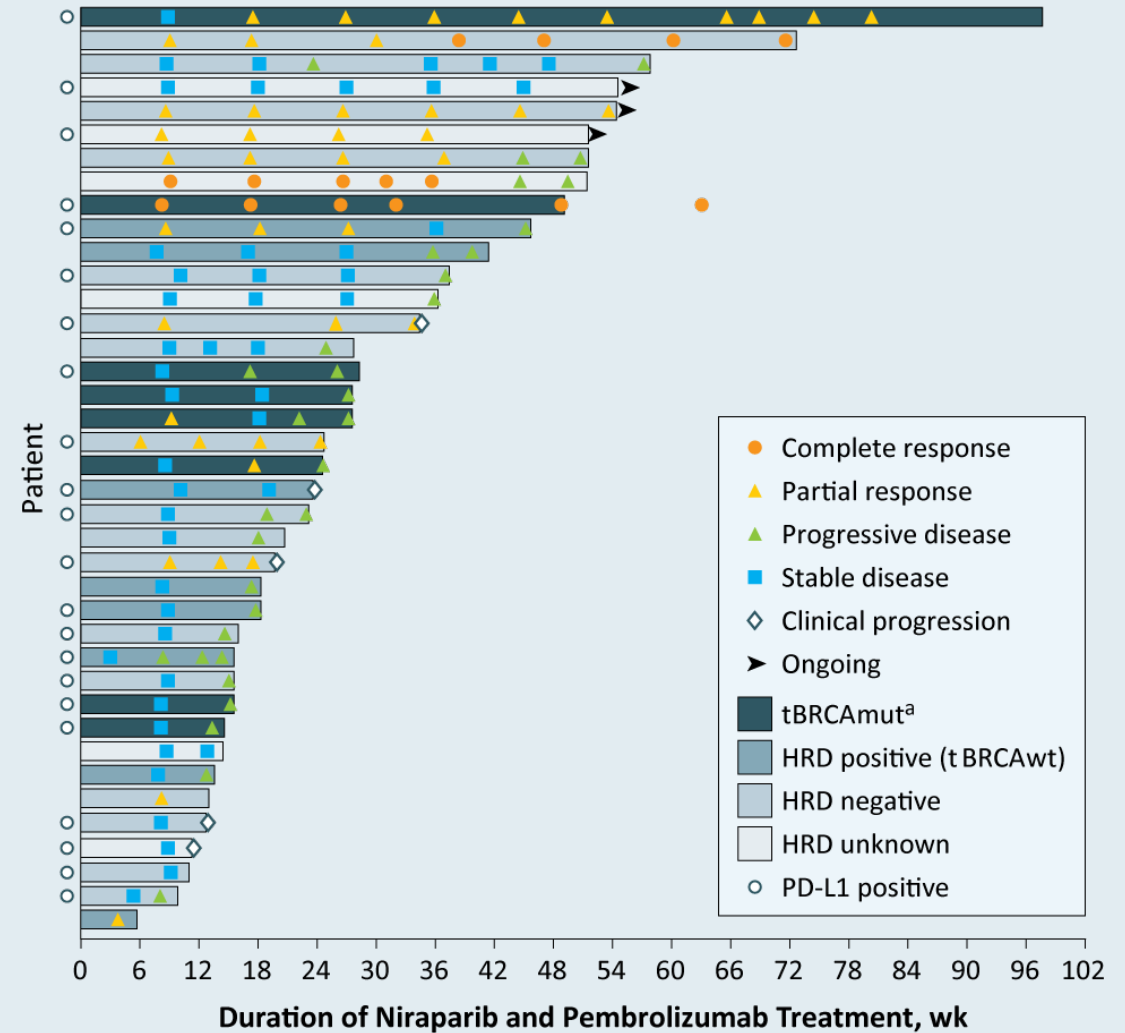
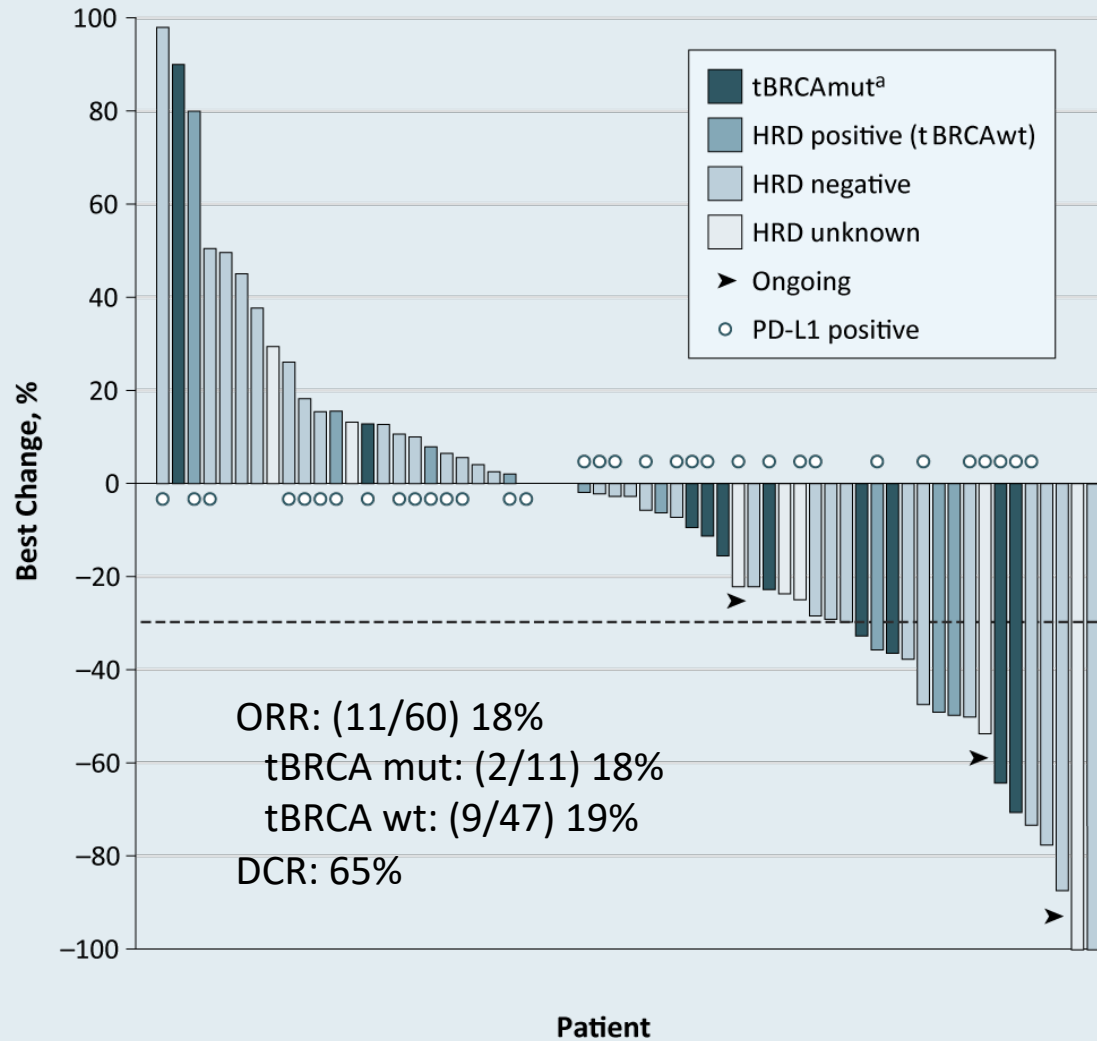
NRG GY003 Phase II Study of Nivolumab with or without Ipilimumab in Recurrent or Persistent OC

(PFI <6 months: 62%, ≥ 2 prior cytotoxic regimens: 70%+ of patients)

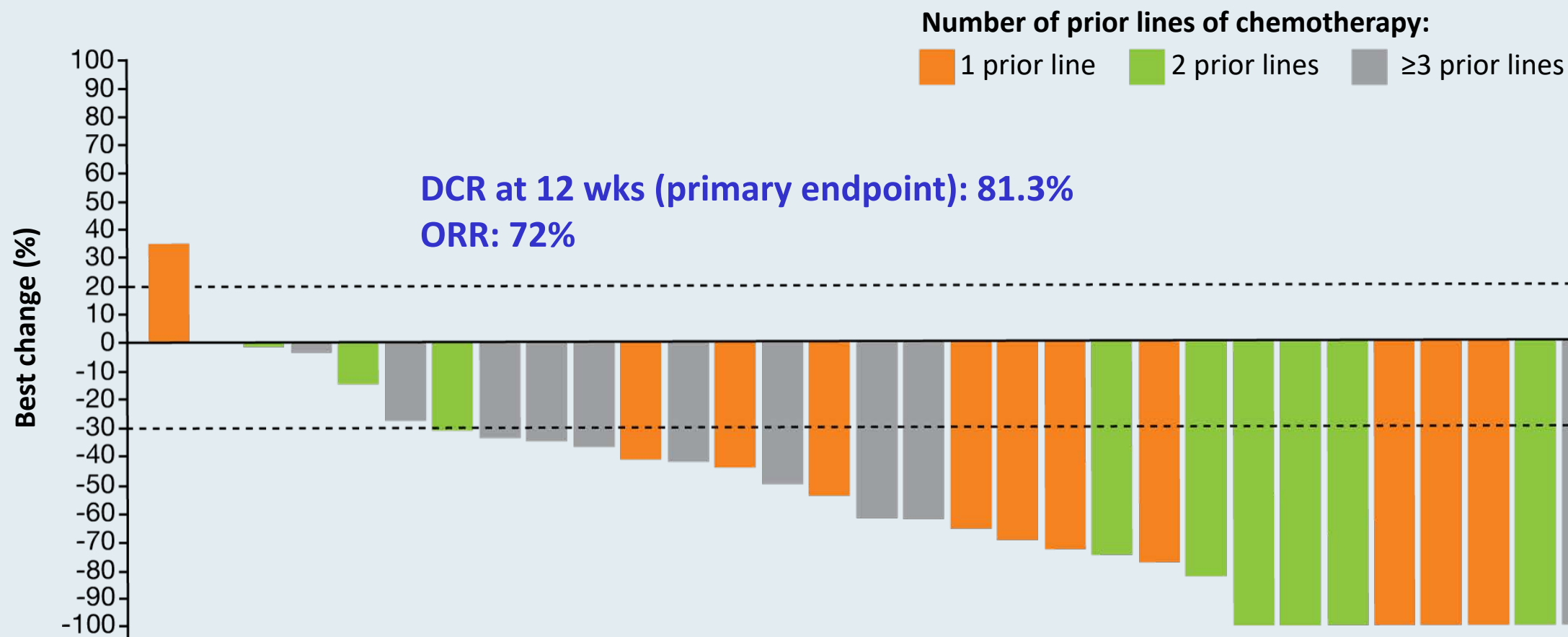


PD-L1 expression was not significantly associated with response in either treatment group

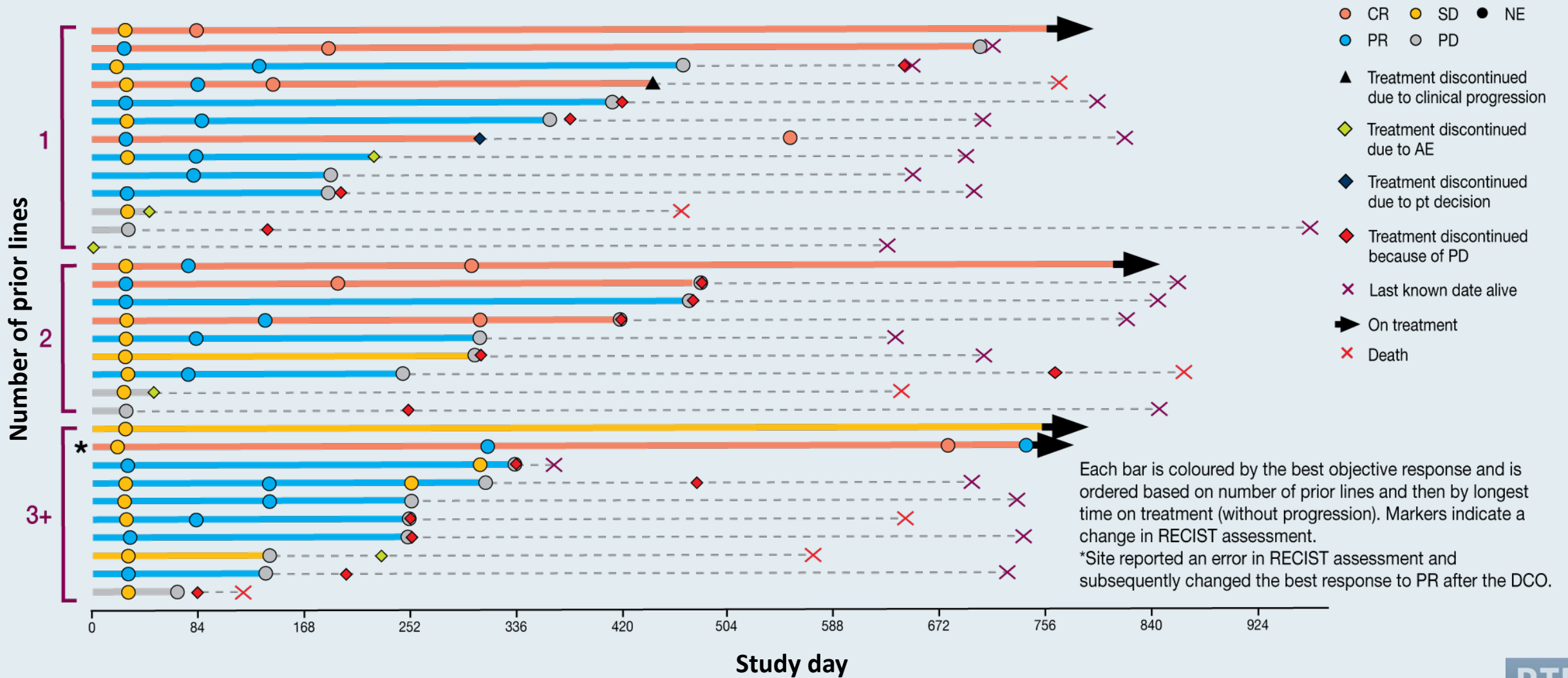
TOPACIO/KEYNOTE-162: Niraparib and Pembrolizumab in Recurrent Platinum-Resistant Ovarian Cancer



MEDIOLA: A Phase II Study of Olaparib and Durvalumab in gBRCA-Mutated Platinum-Sensitive Relapsed OC



MEDIOLA: Time to Disease Progression or Treatment Discontinuation, Based on Number of Prior Lines of Therapy



Phase II Study of Olaparib (O) plus Durvalumab (D) and Bevacizumab (B) (MEDIOLA): Initial Results in Patients (pts) with Non-Germline BRCA-Mutated (Non-gBRCAm) Platinum Sensitive Relapsed (PSR) Ovarian Cancer (OC)

Drew Y et al.

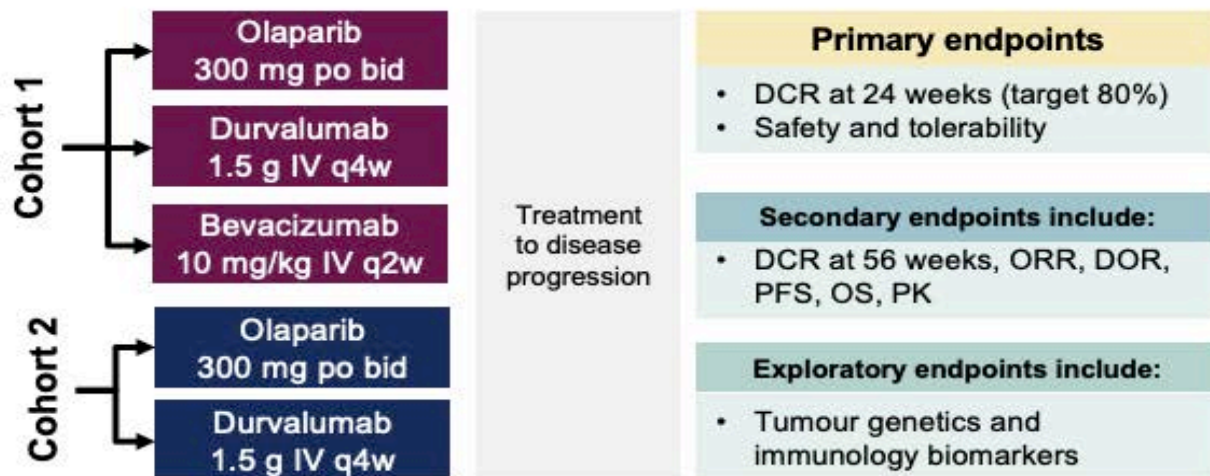
ESMO 2020;Abstract 814MO.

MEDIOLA: gBRCAwt Cohorts

Study Design

Patient population

- gBRCAwt
- PSR ovarian cancer
- ≤2 prior lines of chemotherapy
- PARP inhibitor and IO agent naïve



Sequential enrolment

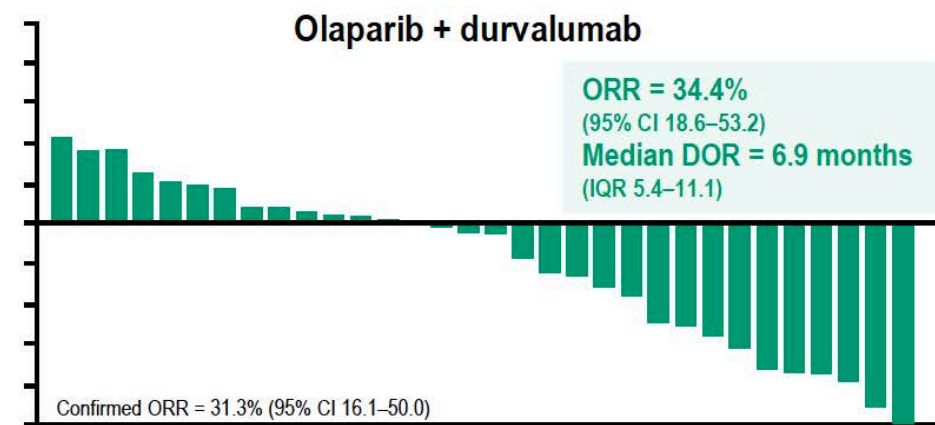
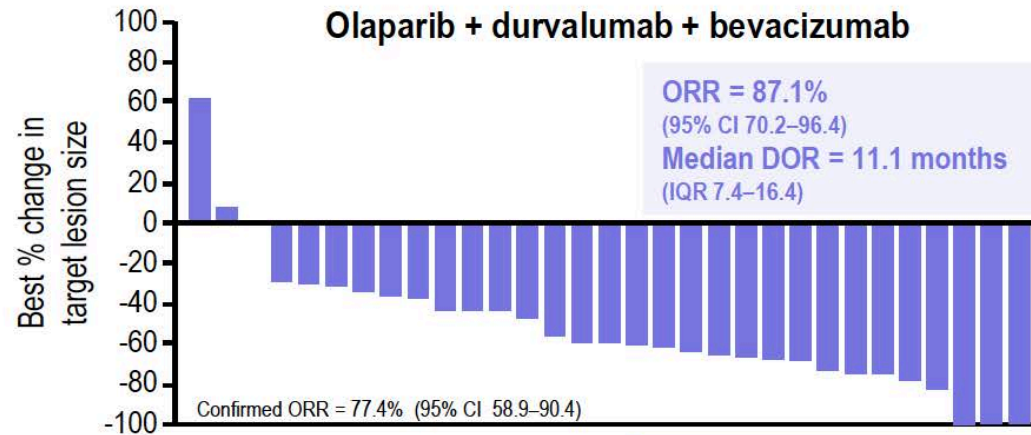
Tumour assessments every 8 weeks

Patient Characteristics

	Olap + durva + bev (N=31)	Olap + durva (N=32)
Median age, years	64.0	68.5
Age group (years), n (%)		
<50	3 (9.7)	4 (12.5)
≥50–<65	14 (45.2)	8 (25.0)
≥65	14 (45.2)	20 (62.5)
Race, n (%)		
White	20 (64.5)	24 (75.0)
Asian	10 (32.3)	3 (9.4)
Other	1 (3.2)	5 (15.6)
Platinum sensitivity, n (%)		
>6–12 months	18 (58.1)	14 (43.8)
>12 months	13 (41.9)	18 (56.3)
Number of prior lines of chemotherapy, n (%)		
1 prior line	20 (64.5)	23 (71.9)
2 prior lines	11 (35.5)	9 (28.1)
Enrolment completed	January 2019	February 2019
Patients on study treatment at DCO, n (%) (13 February 2020)		
Olap; durva; bev	13 (41.9); 13 (41.9); 12 (38.7)	7 (21.9); 6 (18.8); NA

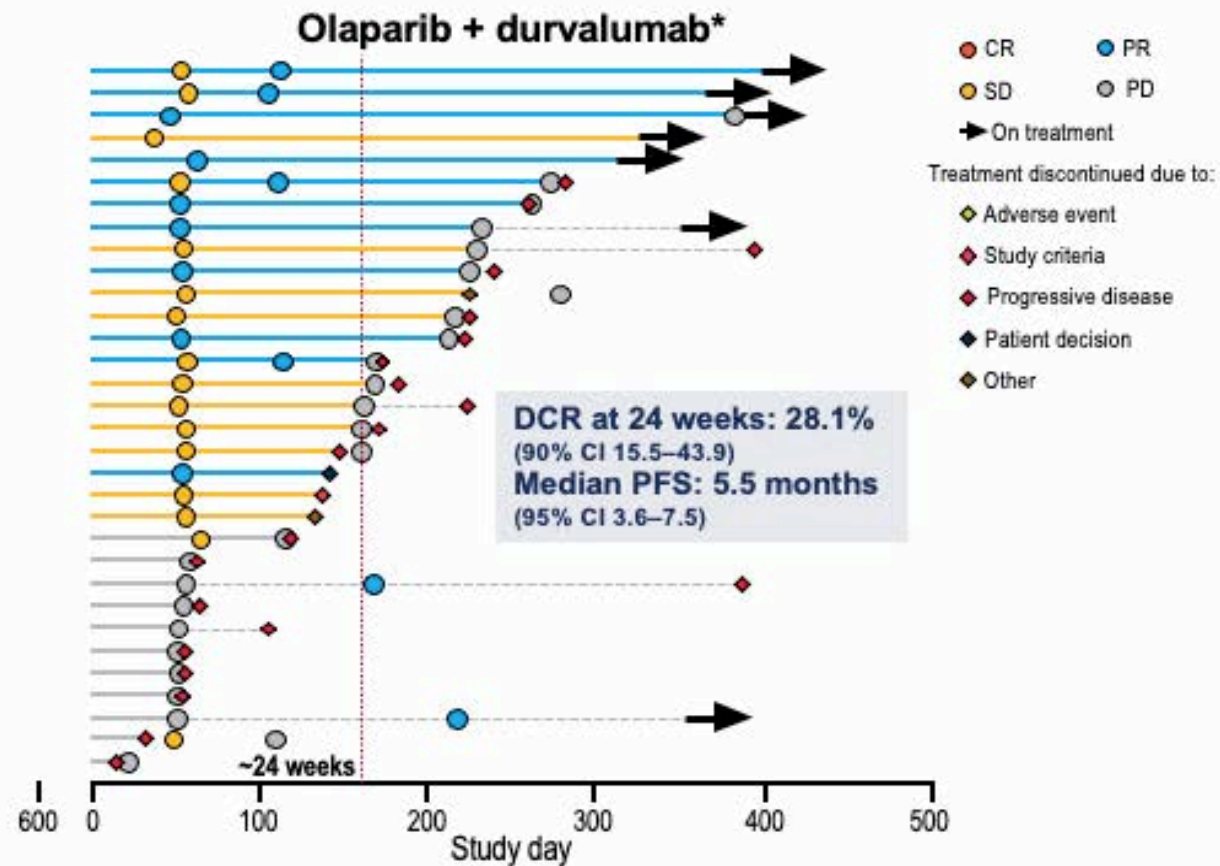
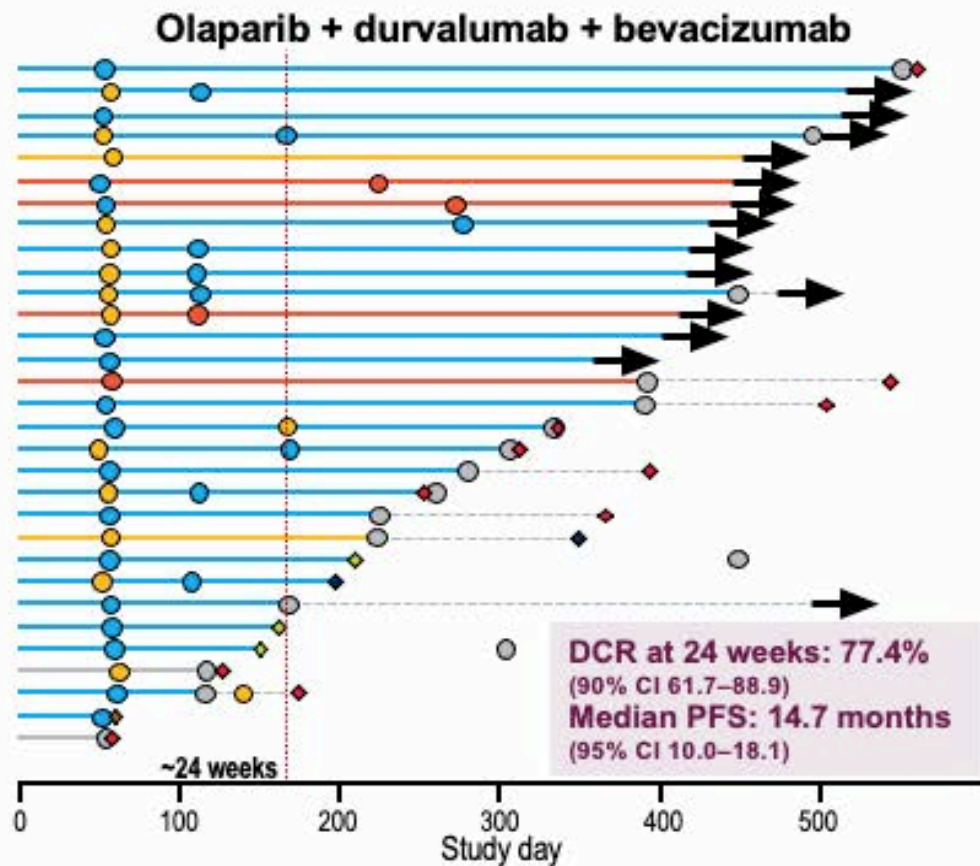
MEDIOLA: A Phase II Study of Olaparib and Durvalumab with or without Bevacizumab for Platinum-Sensitive Relapsed OC: No Germline BRCA Mutation Cohort

Exploratory analysis suggests ORR with triplet cohort is not dependent on genomic instability status (GIS)



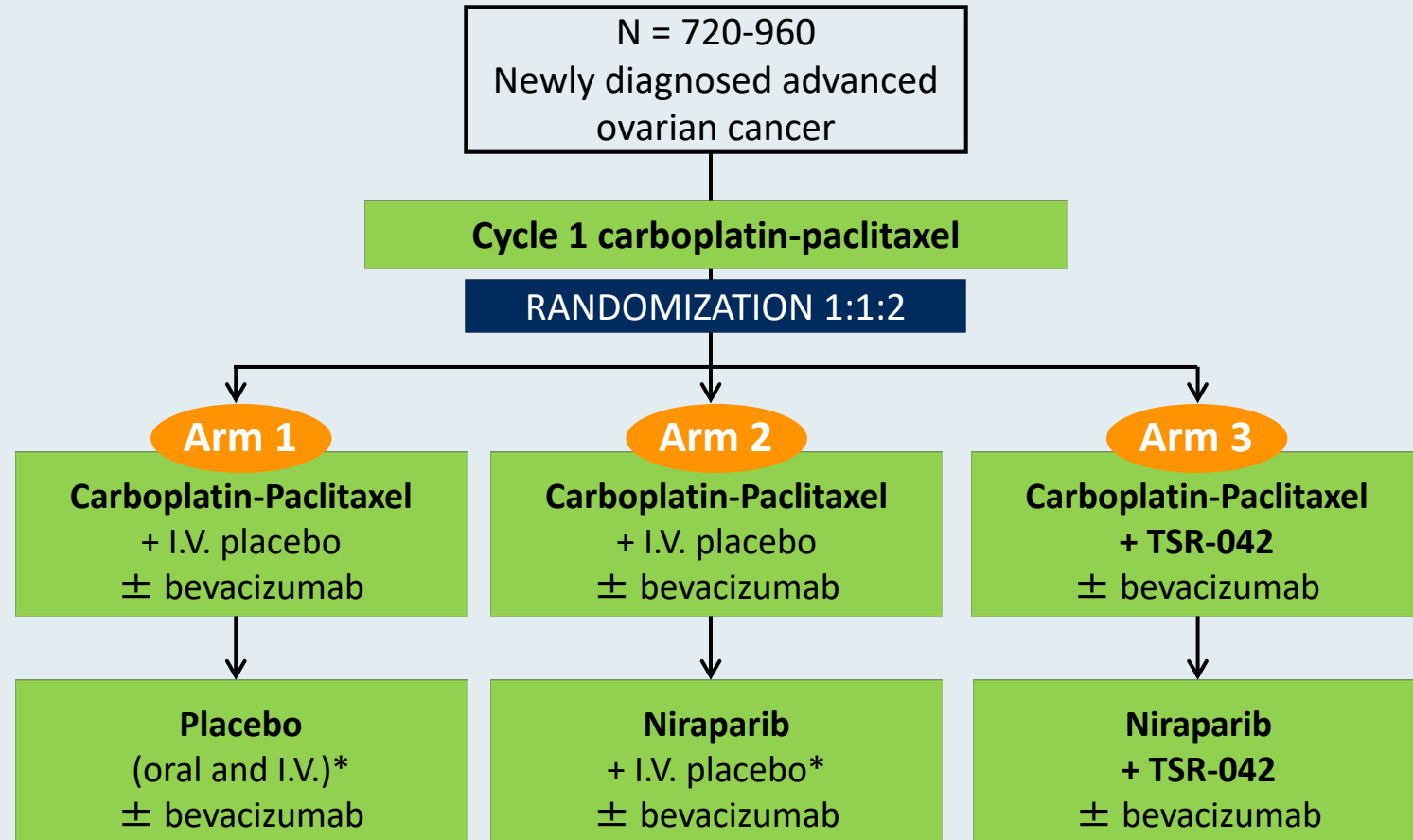
Genomic instability status* subgroup	Olaparib + durvalumab + bevacizumab		Olaparib + durvalumab	
	ORR (95% CI), %	n/N patients	ORR (95% CI), %	n/N patients
GIS-positive	100.0 (69.2–100.0)	10/10	50.0 (18.7–81.3)	5/10
GIS-negative	75.0 (34.9–96.8)	6/8	16.7 (0.4–64.1)	1/6
GIS-unknown	84.6 (54.6–98.1)	11/13	31.3 (11.0–58.7)	5/16

MEDIOLA: TTP or Treatment Discontinuation



- Triplet cohort showed high DCT at 24 weeks and a long median PFS

FIRST Phase III Trial of Dostarlimab (TSR-042) in Newly Diagnosed Ovarian Cancer



*I.V. placebo up to 15 months in total

Primary endpoint: PFS
Secondary endpoints: ORR, DOR, DCR, PROs, TFST, TSST, PFS2, OS

Phase II MOONSTONE Study Design

Eligibility

- Completed 1-3 prior lines of therapy for advanced or metastatic ovarian cancer
- Previously treated with platinum-based chemo, taxane and bevacizumab
- Resistant to last administered platinum agent
- No known BRCA 1 or 2 mutation

N=150

Niraparib + Dostarlimab

Primary endpoint: ORR

Secondary endpoints: DOR, PFS, OS, DCR

Select Ongoing Phase III Trials of Immunotherapy in Combination with PARP Inhibitors

Trial name (Trial identifier)	N	Setting	Treatment arms
ATHENA (NCT03522246)	1,012	Maintenance therapy after 1L platinum-based chemo	<ul style="list-style-type: none"> • Rucaparib + nivolumab • Rucaparib + placebo • Nivolumab + placebo • Placebo
DUO-O (NCT03737643)	1,056	Maintenance therapy after 1L platinum-based chemo/bev ± durvalumab	<ul style="list-style-type: none"> • Bevacizumab • Bevacizumab + durvalumab • Bevacizumab + durvalumab + olaparib

HER2-Positive Endometrial Cancer

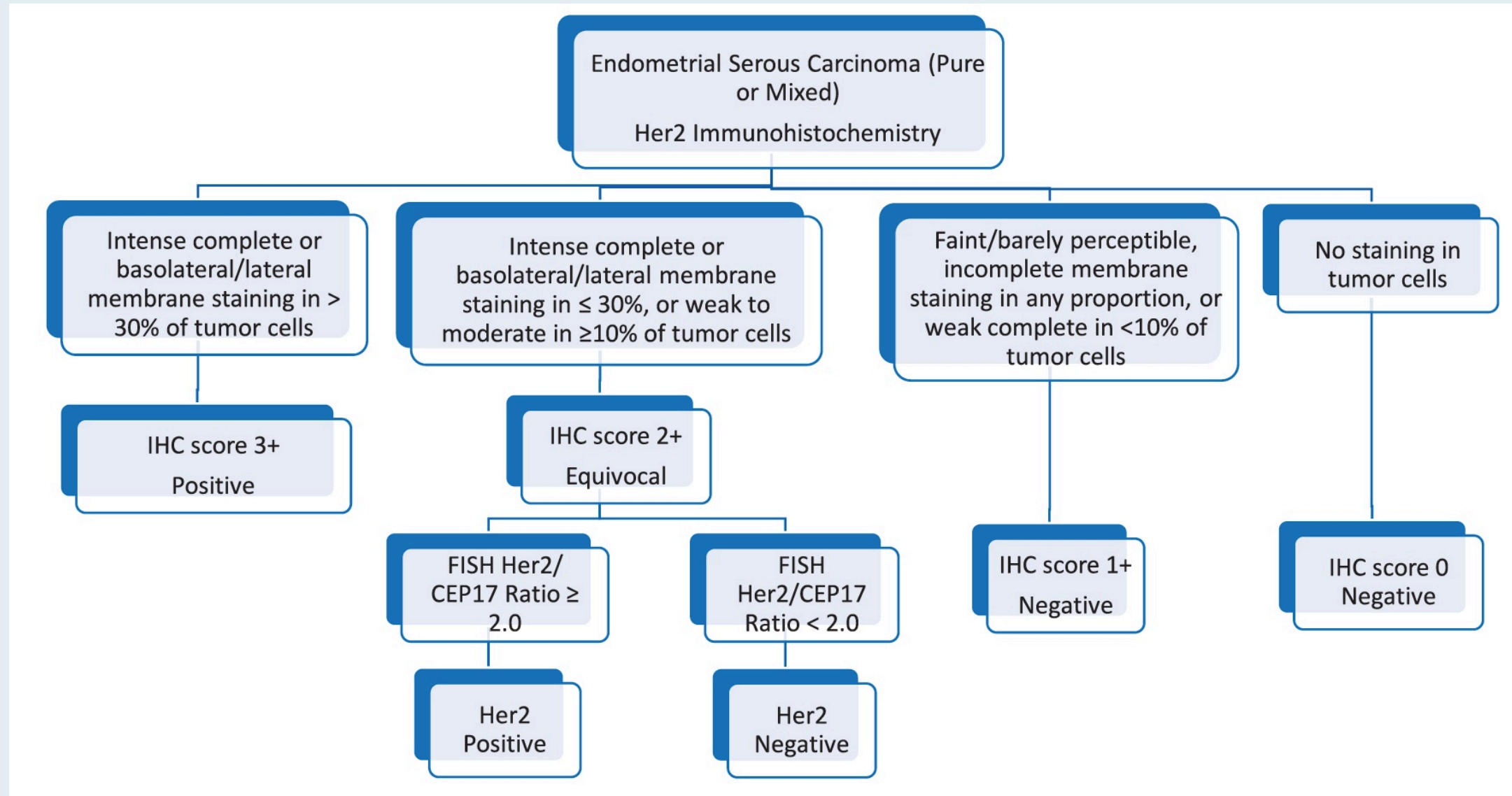
HER2 Testing in Endometrial Serous Carcinoma

Current Criteria (Approved or Proposed) for HER2 Positivity by Immunohistochemistry (IHC) and Fluorescence In Situ Hybridization (FISH) in Different Tumor Types

	Breast (ASCO/CAP 2018) ²³	Gastric (ASCO/CAP 2016) ³⁶	Colorectal (HERACLES Trial) ³⁹	Endometrial Serous (Fader et al Clinical Trial) ²¹
HER2 IHC 3+	>10% circumferential, strong, complete	≥10%, strong complete, or basolateral/lateral	≥50% strong complete, or basolateral/lateral	>30% strong complete or basolateral/lateral
HER2 FISH amplification	HER2/CEP17 ratio ≥2.0 and HER2 signal ≥4.0 per nucleus OR ratio <2.0 and HER2 signal ≥6.0 per nucleus (if IHC score 2+ or 3+)	HER2/CEP17 ratio ≥2.0 OR ratio <2.0 and HER2 signal >6.0 per nucleus	HER2/CEP17 ratio ≥2.0 in ≥50% of cells	HER2/CEP17 ratio ≥2.0

Abbreviations: ASCO, American Society of Clinical Oncology; CAP, College of American Pathologists.

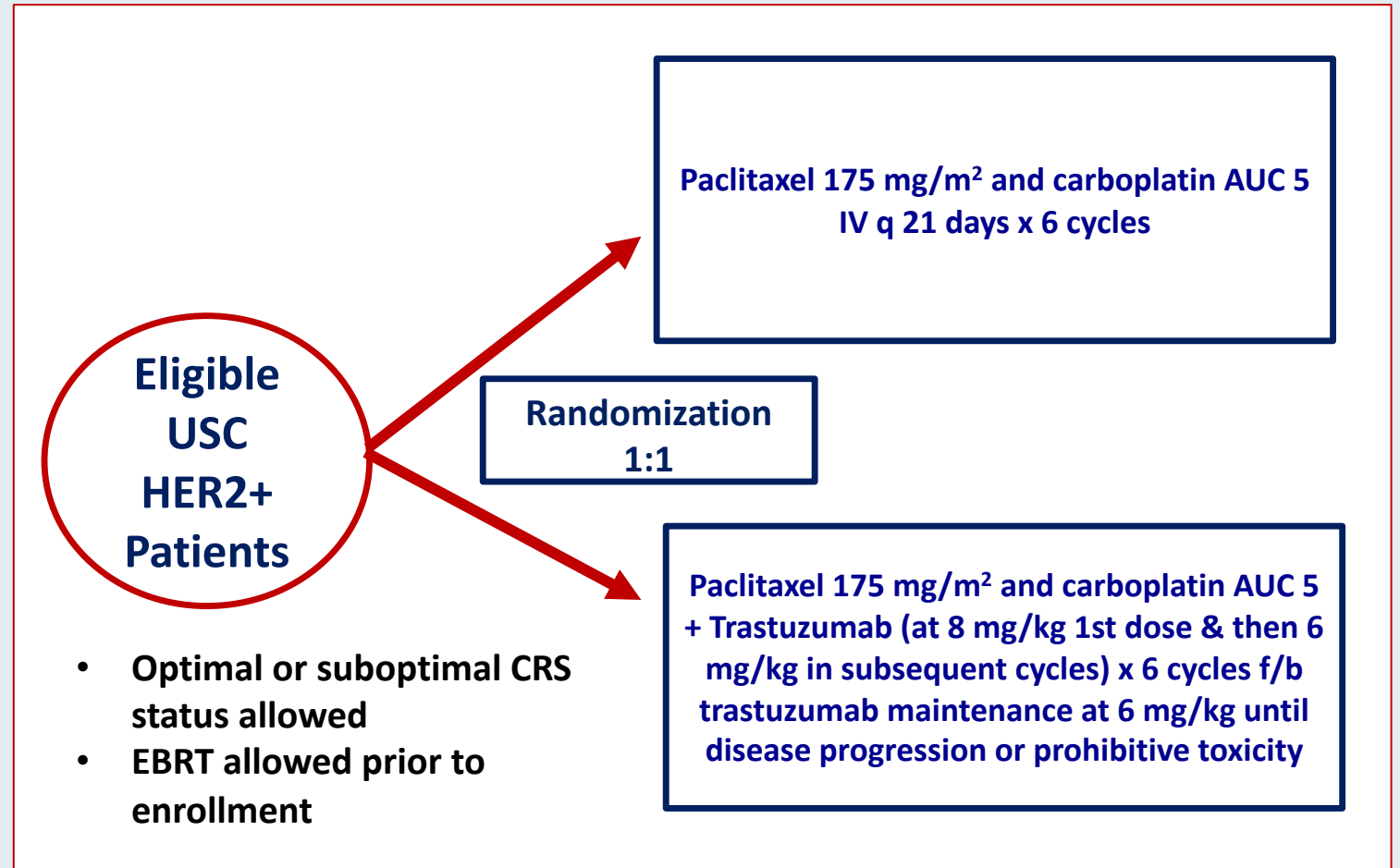
Proposed HER2 Testing Algorithm for Endometrial Serous Carcinoma



Randomized Phase II Trial of Carboplatin/Paclitaxel versus Carboplatin/Paclitaxel/Trastuzumab for Uterine Serous Carcinoma That Overexpresses HER2/Neu: Updated Survival Analysis

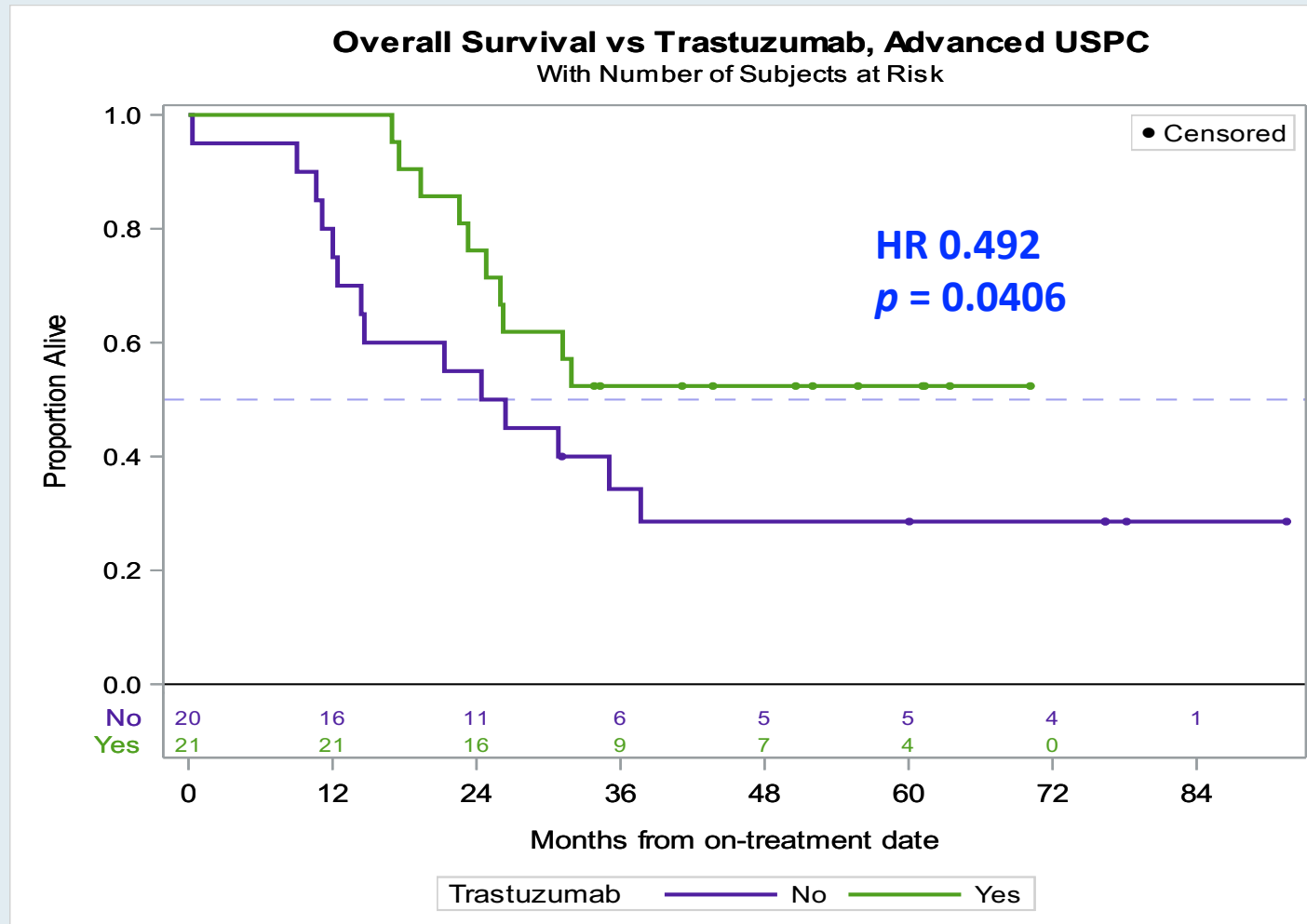
Eligibility

- FIGO Stage III-IV USC or recurrent USC
- HER2/neu+ USC as defined by IHC score of 3+ (ASCO/CAP 2007 criteria) or 2+ with gene amplification confirmed by FISH
- Patients diagnosed with recurrence were required to have measurable disease, defined as at least one target lesion per RECIST 1.1
- Patients with recurrent disease may not have received >3 prior chemotherapies for treatment of their EC, and a treatment-free interval of >6 months from last C/T was required for patients with recurrent disease



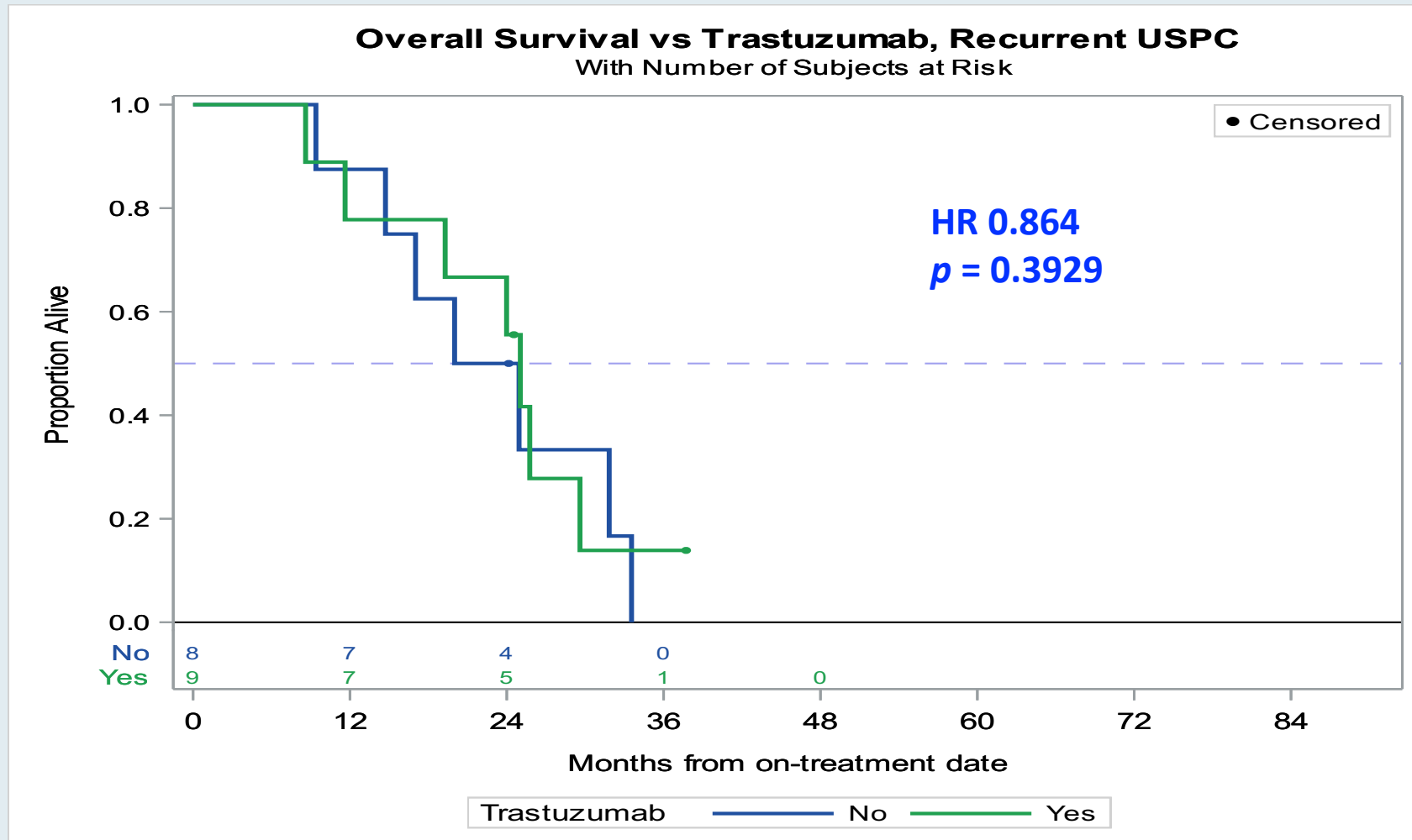
Overall Survival with the Addition of Trastuzumab to Carboplatin/Paclitaxel for Advanced Uterine Serous Papillary Carcinoma (USPC)

- Benefit was particularly striking in the Stage III-IV pts, with a median OS of 25.4 mo (control) compared with an unreached median OS (experimental; $p = 0.0406$, HR 0.492)



Overall Survival with the Addition of Trastuzumab to Carboplatin/Paclitaxel for Recurrent USPC

- No significant OS benefit was observed in the recurrence cohort



Carboplatin/Paclitaxel/Trastuzumab: Summary

- First trial of targeted therapy in USC ONLY patients
- Demonstration that HER2 is an important prognostic and actionable target in USC
- NCCN designation of C/T/Trastuzumab as a preferred regimen in HER2+ USC (Level IIA)

Phase II DESTINY-PanTumor02 Study Design

Trial Identifier: NCT04482309 (Not yet recruiting)

Estimated Enrollment: 280

Eligibility

- Locally advanced, unresectable or metastatic disease
- Disease progression after prior treatment or no satisfactory alternative treatment option
- Prior HER2-targeted therapy allowed
- HER2 expression may be based on local or central assessment



Trastuzumab deruxtecan

7 cohorts will be evaluated:
Endometrial cancer, cervical cancer, ovarian cancer, bladder cancer, biliary tract cancer, pancreatic cancer and rare tumors

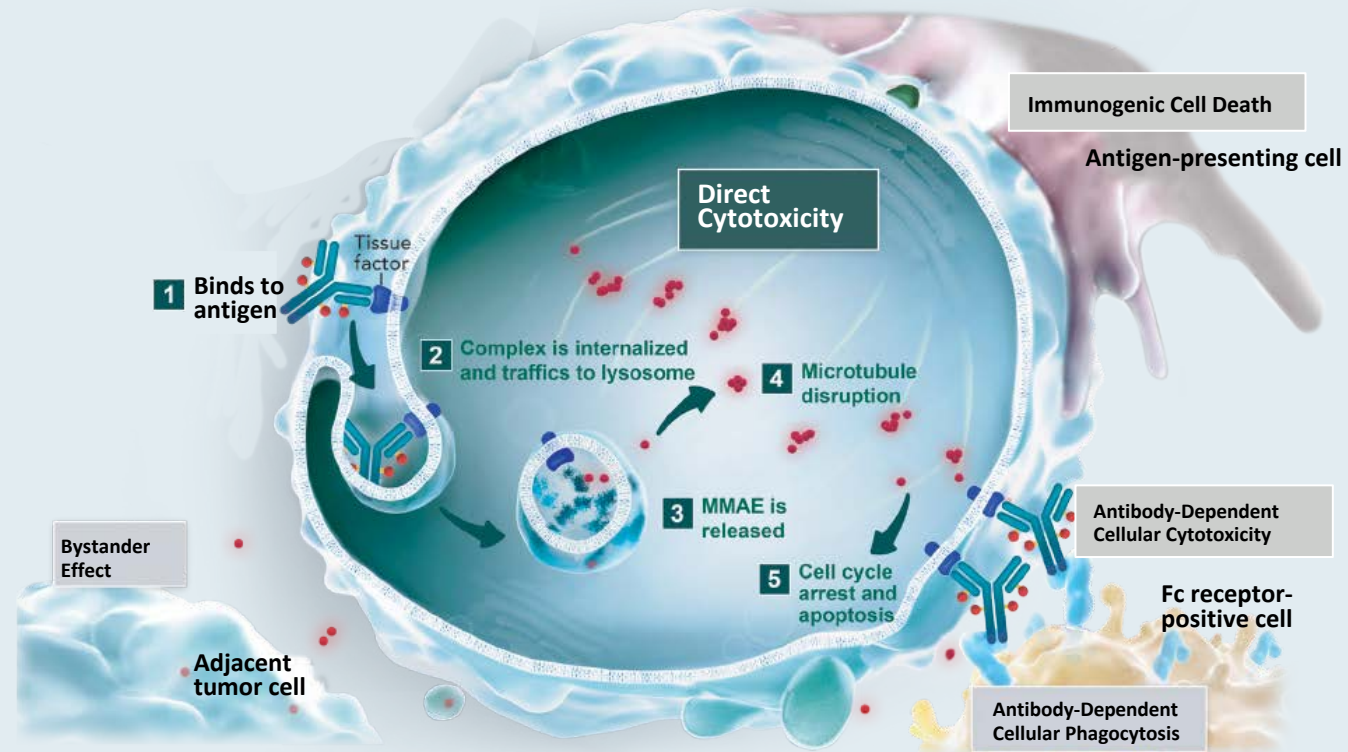
Primary endpoint: ORR

Secondary endpoints include DOR, PFS, OS, DCR

Tisotumab Vedotin and Other Novel Agents in Gynecologic Cancers

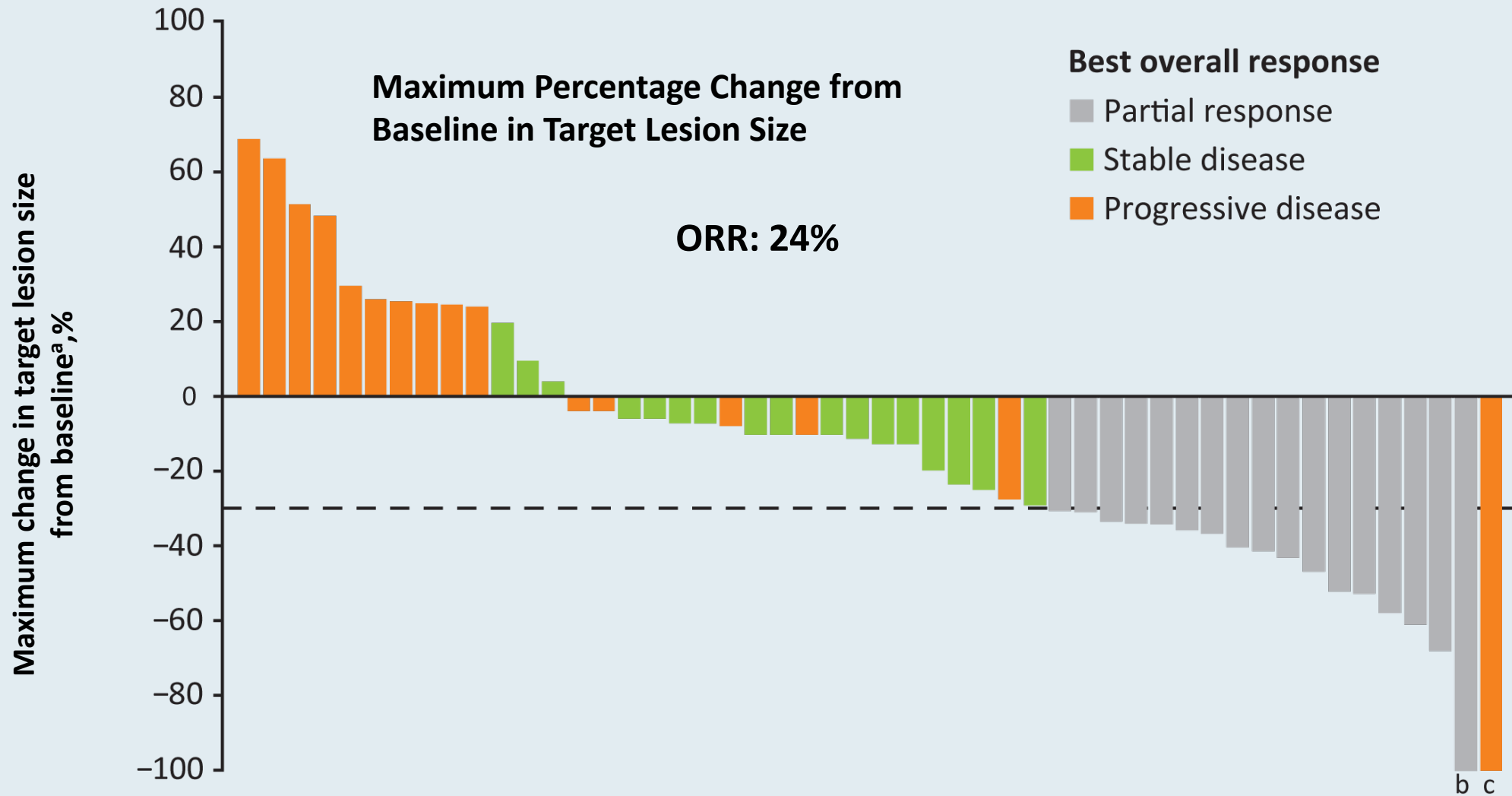
Mechanism of Action of Tisotumab Vedotin

- Tissue factor (TF) is aberrantly expressed in a broad range of solid tumours, including cervical cancer,^{1,2} and TF expression has been associated with higher tumour stage and grade, higher metastatic burden and poor prognosis²
- TF expression in cervical cancer makes TF a novel target for patients with cervical cancer
- ADC targets TF
 - Monoclonal Antibody targets TF
 - Payload: Microtubule disrupting MMAE
- Allowing for direct cytotoxicity and bystander killing, as well as antibody-dependent cellular cytotoxicity^{3,4}

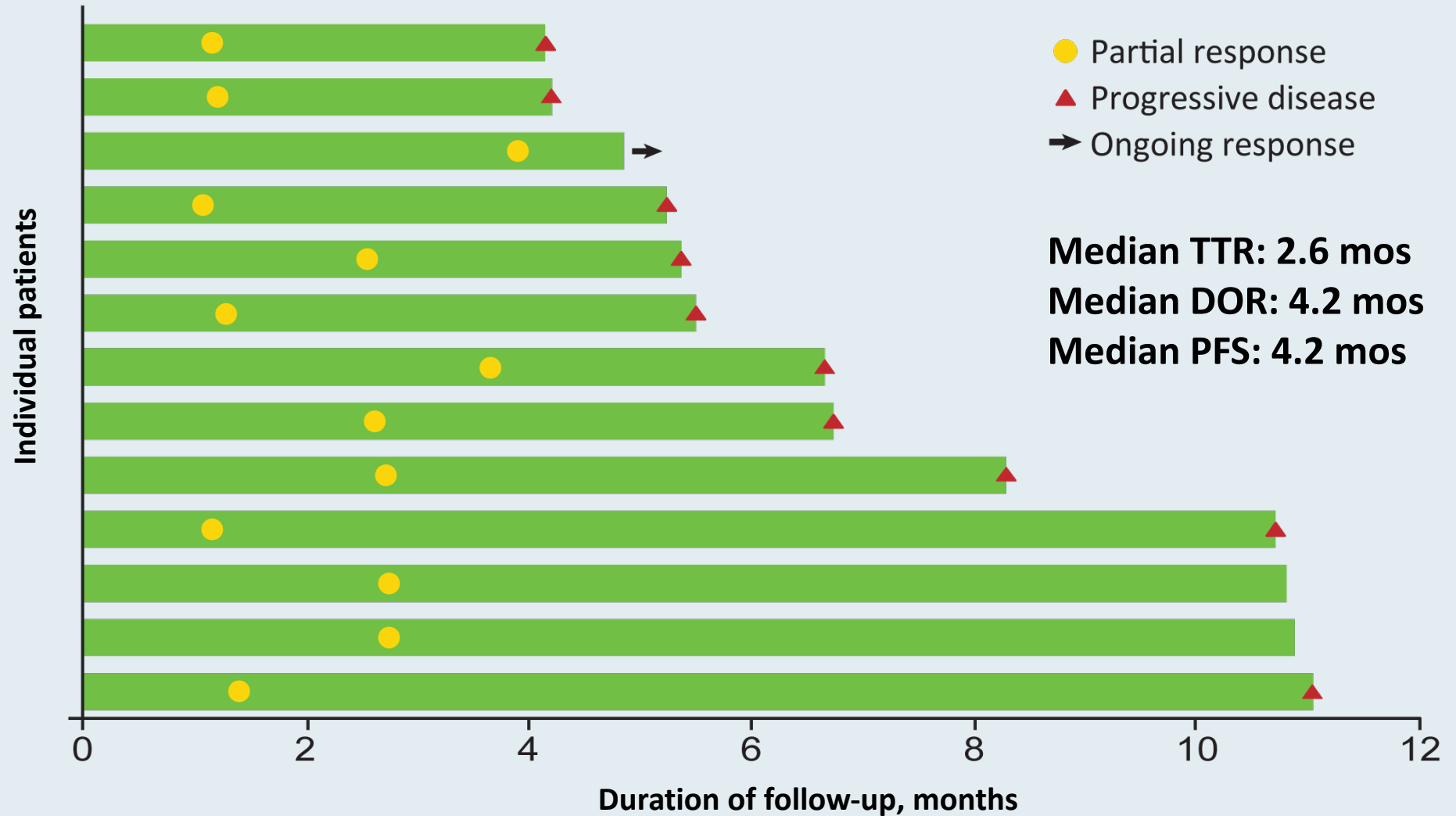


1. Förster Y, et al. *Clin Chim Acta*, 2006. 2. Cocco E, et al. *BMC Cancer*, 2011.
3. Breij EC, et al. *Cancer Res*, 2014. 4. De Goeij BE, et al. *Mol Cancer Ther*, 2015.

innovaTV 201: Best Overall Response to TV

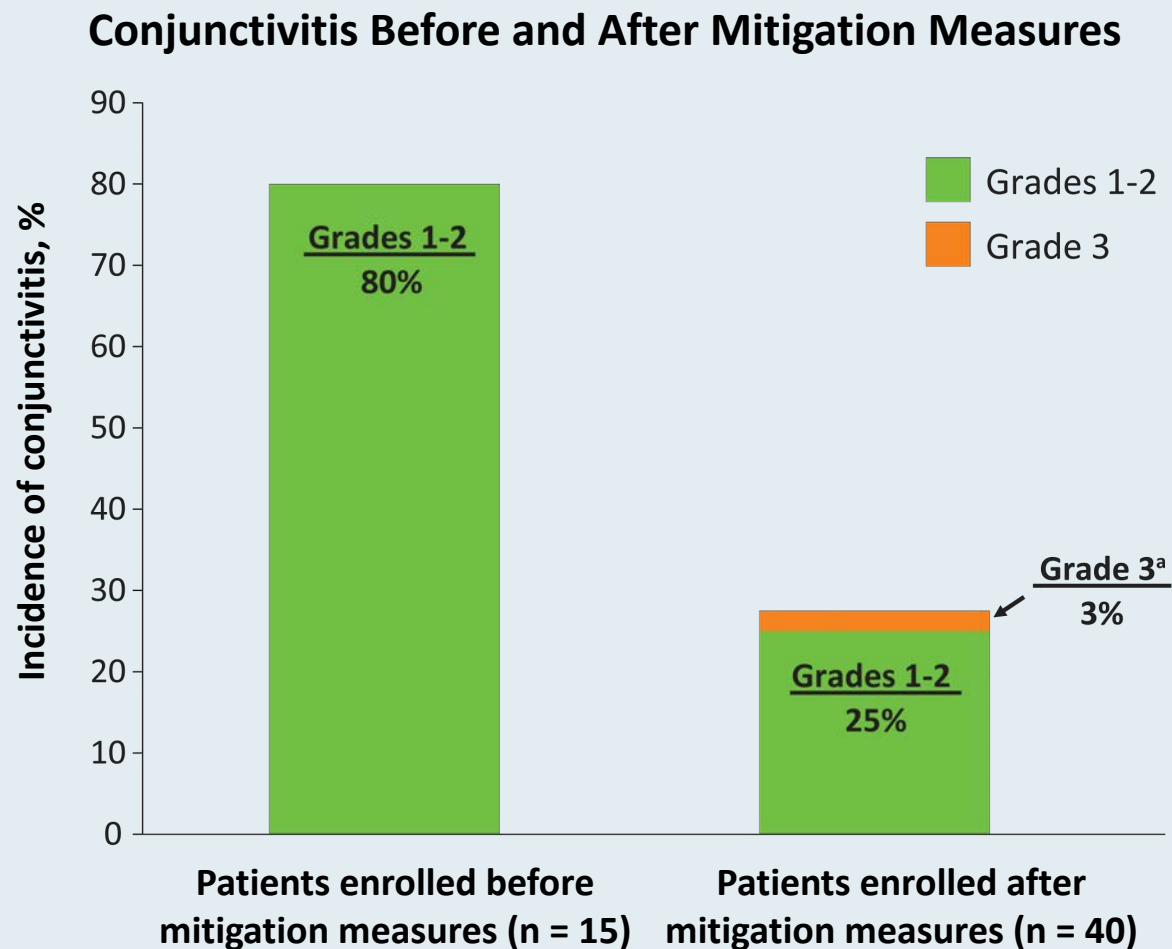


innovaTV 201: Time to Response and Duration of Response in Patients with a Confirmed PR to TV



innovaTV 201: Treatment-Emergent Adverse Events

Adverse events	N = 55	
	All grade	Grade ≥3
Fatigue	51%	9%
Nausea	49%	5%
Neuropathy	55%	11%
Bleeding-related AEs	73%	5%
Ocular AEs	65%	2%
Conjunctivitis	42%	2%
Dry eye	24%	0
Ulcerative keratitis	7%	0
Blepharitis	5%	0
Keratitis	5%	0



^a One patient with grade 3 conjunctivitis after mitigation measures were implemented. No grade 3 events were observed before mitigation measures were implemented.

Tisotumab Vedotin in Previously Treated Recurrent or Metastatic Cervical Cancer: Results from the Phase II innovaTV 204/GOG-3023/ENGOT-cx6 Study

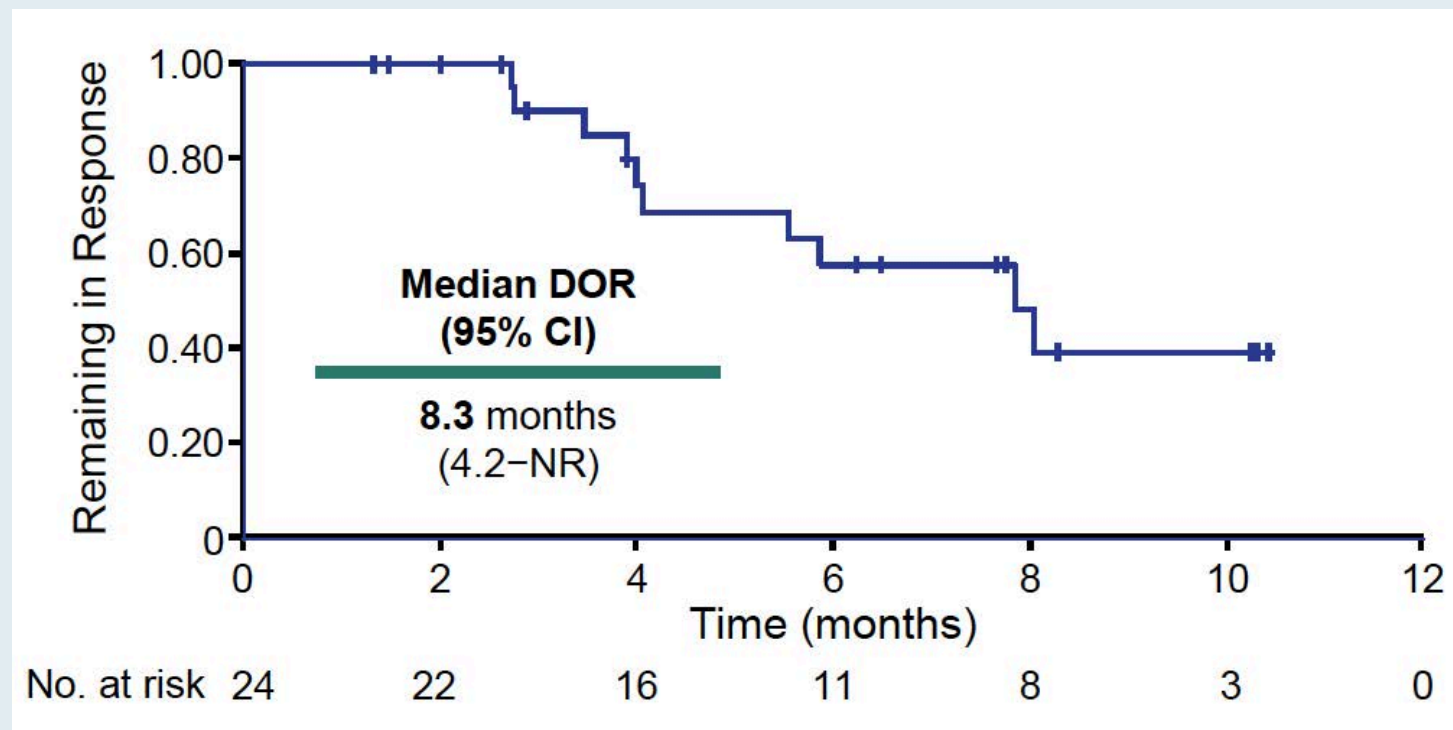
Coleman RL et al.

ESMO 2020;Abstract LBA32.

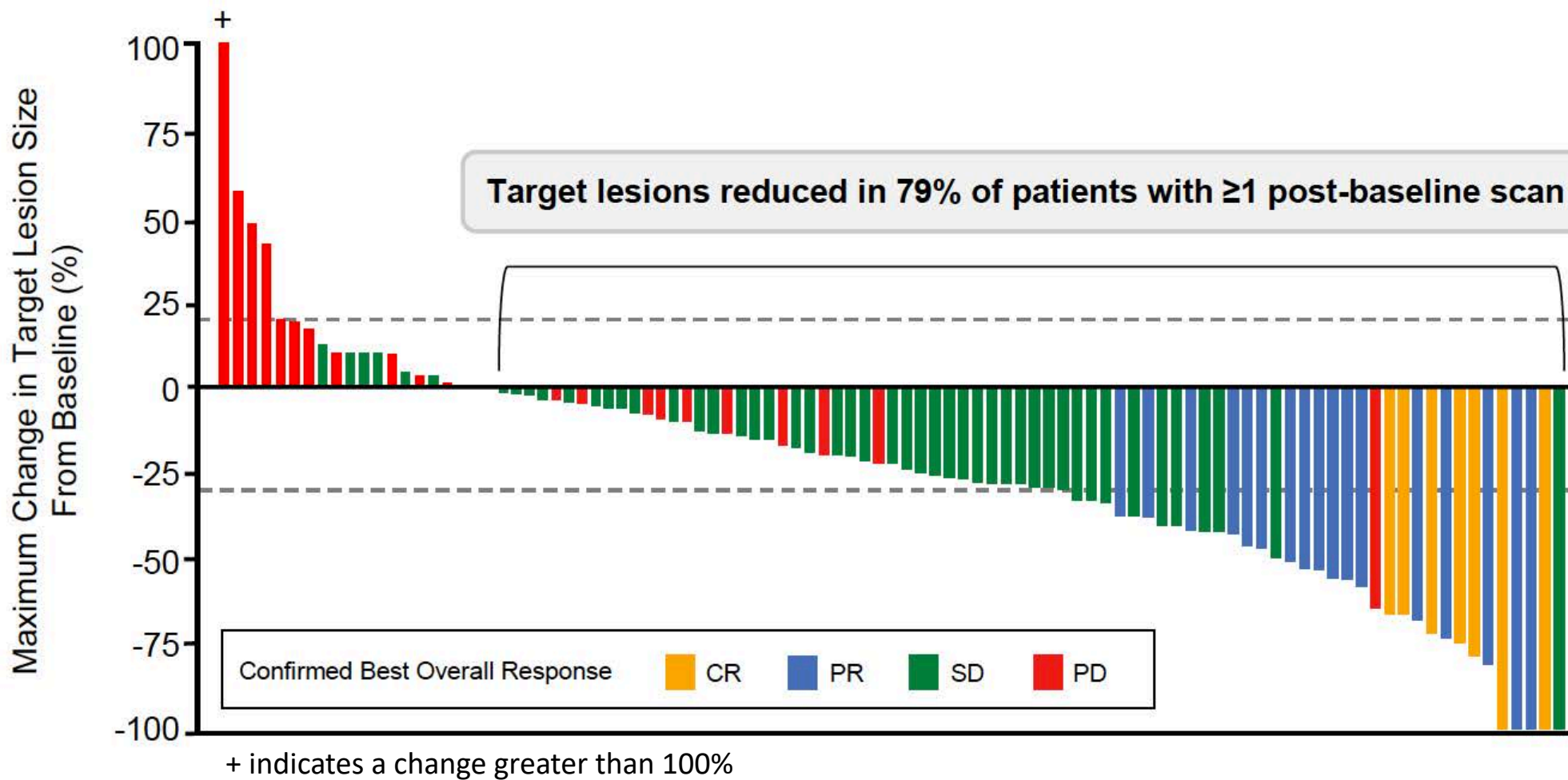
innovaTV 204: Antitumor Activity by IRC Assessment

Clinical Variable	N = 101
Confirmed ORR	24%
CR	7%
PR	17%
SD	49%
PD	24%
Not evaluable	4%

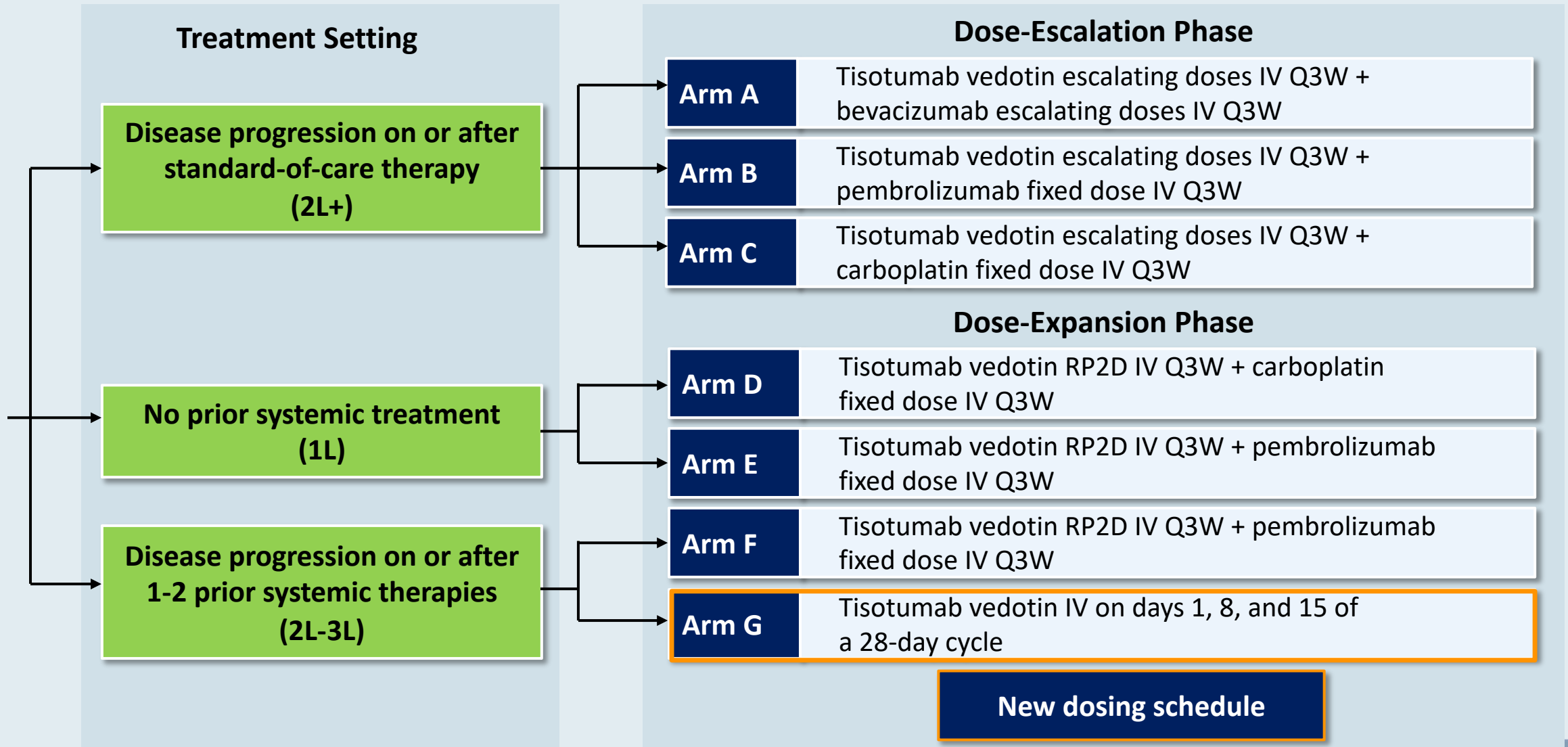
Duration of Response



innovaTV 204: Maximum Change in Target Lesion Size by IRC Assessment



innovaTV 205 (GOG 3024): Recurrent or Metastatic Cervical Cancer



Meet The Professor
Management of Multiple Myeloma

Thursday, November 19, 2020
12:00 PM – 1:00 PM ET

Faculty

Kenneth C Anderson, MD

Moderator

Neil Love, MD

Thank you for joining us!

***CME and MOC credit information will be emailed
to each participant within 5 business days.***