What I Tell My Patients:
New Treatments and Clinical Trial Options

An NCPD Hybrid Symposium Series
Held During the 47th Annual ONS Congress

Cervical and Endometrial Cancer

Saturday, April 30, 2022
6:00 AM – 7:30 AM PT

Faculty

Paula J Anastasia, MN, RN, AOCN
Robert L Coleman, MD
David M O'Malley, MD
Jaclyn Shaver, MS, APRN, CNP, WHNP

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Faculty

Paula J Anastasia, MN, RN, AOCN
GYN Oncology Advanced Practice Nurse
University of California, Los Angeles
Los Angeles, California

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

David M O'Malley, MD
Professor
Division Director, Gynecologic Oncology
The Ohio State University and The James Cancer Center
Columbus, Ohio

Jaclyn Shaver, MS, APRN, CNP, WHNP
Section of Gynecologic Oncology
Stephenson Cancer Center
OU Health
Oklahoma City, Oklahoma

Moderator

Neil Love, MD
Research To Practice
Miami, Florida

RTP
RESEARCH
TO PRACTICE

Ms Anastasia — Disclosures

Advisory Committee and Consulting Agreement	Merck
Speakers Bureau	Genentech, a member of the Roche Group, Seagen Inc

Dr Coleman — Disclosures

Advisory Committee	Agenus Inc, AstraZeneca Pharmaceuticals LP, Genentech, a member of the Roche Group, Janssen Biotech Inc, Merck, Novartis, OncXerna Therapeutics Inc, Onxeo
Consulting Agreements	AbbVie Inc, Agenus Inc, Alkermes, AstraZeneca Pharmaceuticals LP, Clovis Oncology, Eisai Inc, Genentech, a member of the Roche Group, Genmab, GlaxoSmithKline, Gradalis Inc, ImmunoGen Inc, Incyte Corporation, Janssen Biotech Inc, Merck, Myriad Genetic Laboratories Inc, Novartis, OncXerna Therapeutics Inc, Onxeo, Seagen Inc
Contracted Research	AstraZeneca Pharmaceuticals LP, Clovis Oncology, Genentech, a member of the Roche Group, ImmunoGen Inc, Merck, Novartis
Data and Safety Monitoring Board/Committee	GOG Foundation Inc, VBL Therapeutics
Employment	Texas Oncology

Dr O'Malley — Disclosures

Funding for Clinical Research	AbbVie Inc, Agenus Inc, Ajinomoto Co Inc, Amgen Inc, Array BioPharma Inc, a subsidiary of Pfizer Inc, AstraZeneca Pharmaceuticals LP, Bristol-Myers Squibb Company, Clovis Oncology, Daré Bioscience, Eisai Inc, EMD Serono Inc, Ergomed Plc, Genentech, a member of the Roche Group, Genmab, GOG Foundation Inc, ImmunoGen Inc, Iovance Biotherapeutics, Janssen Biotech Inc, Johnson & Johnson Pharmaceuticals, Ludwig Institute for Cancer Research Ltd, Merck, Merck Serono, Mersana Therapeutics Inc, New Mexico Cancer Care Alliance, Novocure Inc, PRA Health Sciences, Regeneron Pharmaceuticals Inc, Seagen Inc, Stemcentrx, Sumitomo Dainippon Pharma Oncology Inc, Syneos Health, Tesaro, A GSK Company, TRACON Pharmaceuticals Inc, VentiRx Pharmaceuticals Inc, Yale University
Personal Fees (Consulting and/or Advisory Boards)	AbbVie Inc, Ambry Genetics, Amgen Inc, Arquer Diagnostics, AstraZeneca Pharmaceuticals LP, Celsion Corporation, Clovis Oncology, Corcept Therapeutics, Eisai Inc, Elevar Therapeutics, Genentech, a member of the Roche Group, GOG Foundation Inc, ImmunoGen Inc, InxMed, Iovance Biotherapeutics, Janssen Biotech Inc, Johnson & Johnson Pharmaceuticals, Merck, Mersana Therapeutics Inc, Novartis, Novocure Inc, Regeneron Pharmaceuticals Inc, Roche Diagnostics MSA, Seagen Inc, Sorrento Therapeutics, Sumitomo Dainippon Pharma Oncology Inc, Takeda Pharmaceuticals USA Inc, Tesaro, A GSK Company, Toray
Personal Fees	Agenus Inc, Myriad Genetic Laboratories Inc, Rubis, Tarveda Therapeutics

RTP RESEARCH TO PRACTICE

Ms Shaver — Disclosures

No relevant conflicts of interest to disclose

Commercial Support

This activity is supported by educational grants from Genmab and Seagen Inc, and GlaxoSmithKline.

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.

Clinicians in the Meeting Room

Networked iPads are available.

Review Program Slides: Tap the Program Slides button to review speaker presentations and other program content.

Answer Survey Questions: Complete the premeeting survey before the meeting. Survey results will be presented and discussed throughout the meeting.

Ask a Question: Tap Ask a Question to submit a challenging case or question for discussion. We will aim to address as many questions as possible during the program.

Complete Your Evaluation: Tap the CME Evaluation button to complete your evaluation electronically to receive credit for your participation.

For assistance, please raise your hand. Devices will be collected at the conclusion of the activity.

RTP RESEARCH TO PRACTICE

About the Enduring Program

- The live meeting is being video and audio recorded.
- The proceedings from today will be edited and developed into an enduring web-based video/PowerPoint program.
  An email will be sent to all attendees when the activity is available.
- To learn more about our education programs, visit our website, **www.ResearchToPractice.com**

RTP
RESEARCH
TO PRACTICE

"What I Tell My Patients"
14th Annual RTP-ONS NCPD Symposium Series
ONS Congress, Anaheim, California — April 27 - May 1, 2022

Thursday April 28	**Prostate Cancer** 6:00 AM – 7:30 AM PT (9:00 AM – 10:30 AM ET)
	Ovarian Cancer 12:15 PM – 1:45 PM PT (3:15 PM – 4:45 PM ET)
	Non–Small Cell Lung Cancer 6:00 PM – 8:00 PM PT (9:00 PM – 11:00 PM ET)
	Hepatobiliary Cancers 8:20 PM – 9:20 PM PT (11:20 PM – 12:20 AM ET)
Friday April 29	**Small Cell Lung Cancer** 6:00 AM – 7:30 AM PT (9:00 AM – 10:30 AM ET)
	Chronic Lymphocytic Leukemia 12:15 PM – 1:45 PM PT (3:15 PM – 4:45 PM ET)
	Breast Cancer 6:00 PM – 8:00 PM PT (9:00 PM – 11:00 PM ET)
	Acute Myeloid Leukemia and Myelodysplastic Syndromes 8:20 PM – 9:20 PM PT (11:20 PM – 12:20 AM ET)
Saturday April 30	**Cervical and Endometrial Cancer** 6:00 AM – 7:30 AM PT (9:00 AM – 10:30 AM ET)
	Bladder Cancer 12:15 PM – 1:45 PM PT (3:15 PM – 4:45 PM ET)

RTP RESEARCH TO PRACTICE

What I Tell My Patients: Expert Insights into Patient Education on New Treatments and Clinical Trial Participation

An NCPD Hybrid Symposium Series Held During the 47th Annual ONS Congress

Cervical and Endometrial Cancer

Saturday, April 30, 2022
6:00 AM – 7:30 AM PT (9:00 AM – 10:30 AM ET)

Faculty
Paula J Anastasia, MN, RN, AOCN
Robert L Coleman, MD
David M O'Malley, MD
Jaclyn Shaver, MS, APRN, CNP, WHNP

Bladder Cancer

Saturday, April 30, 2022
12:15 PM – 1:45 PM PT (3:15 PM – 4:45 PM ET)

Faculty
Monica Averia, MSN, AOCNP, NP-C
Shilpa Gupta, MD
Brenda Martone, MSN, NP-BC, AOCNP
Sumanta Kumar Pal, MD

Join Us After ONS for Our Series Continuation

What I Tell My Patients —
A 2-Part NCPD Webinar Series

Hodgkin and Non-Hodgkin Lymphomas

Date and time to be announced

Gastroesophageal Cancers

Wednesday, May 18, 2022

5:00 PM – 6:00 PM ET

RTP
RESEARCH
TO PRACTICE

When was the last time you felt a deep sense of satisfaction from an interaction you had with a patient?

1. Today
2. In the last week
3. In the last two weeks
4. In the last month
5. In the last 6 months

RTP
RESEARCH
TO PRACTICE

Faculty

Paula J Anastasia, MN, RN, AOCN
GYN Oncology Advanced Practice Nurse
University of California, Los Angeles
Los Angeles, California

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

David M O'Malley, MD
Professor
Division Director, Gynecologic Oncology
The Ohio State University and The James Cancer Center
Columbus, Ohio

Jaclyn Shaver, MS, APRN, CNP, WHNP
Section of Gynecologic Oncology
Stephenson Cancer Center
OU Health
Oklahoma City, Oklahoma

Moderator

Neil Love, MD
Research To Practice
Miami, Florida

RTP
RESEARCH
TO PRACTICE

What I Tell My Patients:
New Treatments and Clinical Trial Options

An NCPD Hybrid Symposium Series
Held During the 47th Annual ONS Congress

Cervical and Endometrial Cancer

Saturday, April 30, 2022
6:00 AM – 7:30 AM PT

Faculty

Paula J Anastasia, MN, RN, AOCN
Robert L Coleman, MD
David M O'Malley, MD
Jaclyn Shaver, MS, APRN, CNP, WHNP

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Agenda

Module 1 – Endometrial Cancer

Module 2 – Cervical Cancer

Module 3 – Clinical Care of Patients Receiving Checkpoint Inhibitors

Module 4 – COVID-19: Considerations in Cervical and Endometrial Cancer

Module 5 – Oncology 2032 Crystal Ball: Part 1

RTP
RESEARCH
TO PRACTICE

Agenda

Module 1 – Endometrial Cancer

Module 2 – Cervical Cancer

Module 3 – Clinical Care of Patients Receiving Checkpoint Inhibitors

Module 4 – COVID-19: Considerations in Cervical and Endometrial Cancer

Module 5 – Oncology 2032 Crystal Ball: Part 1

RTP
RESEARCH
TO PRACTICE

SELF-ASSESSMENT QUIZ

Checkpoint inhibitors are approved and commonly used for cervical and endometrial cancer but not ovarian cancer.

1. Agree
2. Disagree
3. I don’t know

RTP
RESEARCH
TO PRACTICE

SELF-ASSESSMENT QUIZ

What is the usual second-line treatment for patients with MSI-high metastatic endometrial cancer after first-line chemotherapy?

1. Checkpoint inhibitor
2. Checkpoint inhibitor for increased PD-L1 levels
3. Checkpoint inhibitor/lenvatinib
4. Chemotherapy
5. I don’t know

RTP RESEARCH TO PRACTICE

SELF-ASSESSMENT QUIZ

What is the usual second-line treatment for patients with MSS metastatic endometrial cancer after first-line chemotherapy?

1. Checkpoint inhibitor
2. Checkpoint inhibitor for increased PD-L1 levels
3. Checkpoint inhibitor/lenvatinib
4. Chemotherapy
5. I don’t know

RTP RESEARCH TO PRACTICE

SELF-ASSESSMENT QUIZ

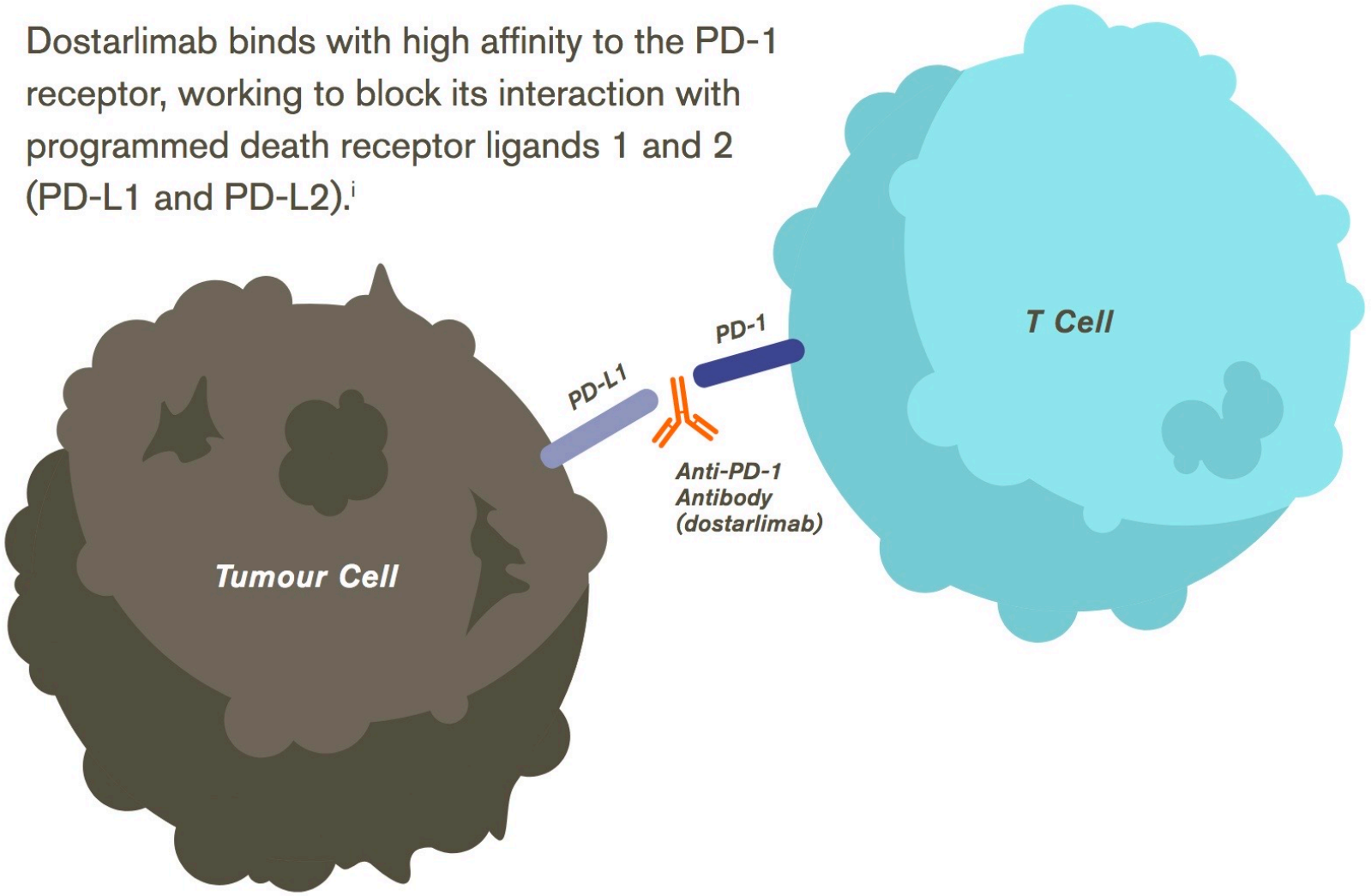
The rapidity of onset and severity of hypertension associated with lenvatinib is greater than that with bevacizumab.

1. Agree
2. Disagree
3. I don’t know

RTP
RESEARCH
TO PRACTICE

Dostarlimab Mechanism of Action

Dostarlimab binds with high affinity to the PD-1 receptor, working to block its interaction with programmed death receptor ligands 1 and 2 (PD-L1 and PD-L2).[i]



https://us.gsk.com/media/5875/dostarlimab-infographic_approved-0422.pdf

RTP RESEARCH TO PRACTICE

Open access Original research

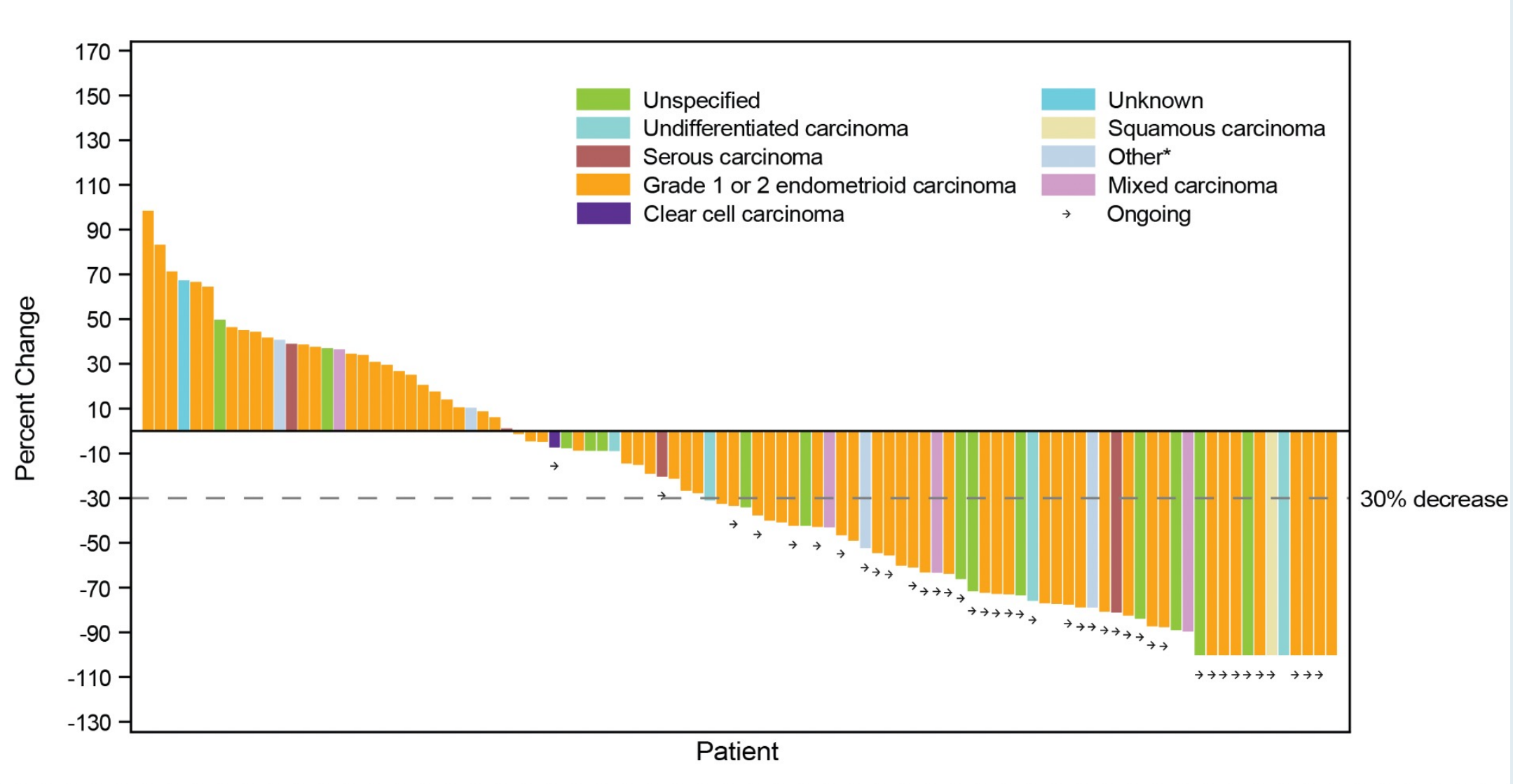
Journal for ImmunoTherapy of Cancer

Safety and antitumor activity of dostarlimab in patients with advanced or recurrent DNA mismatch repair deficient/microsatellite instability-high (dMMR/MSI-H) or proficient/stable (MMRp/MSS) endometrial cancer: interim results from GARNET—a phase I, single-arm study

Journal for Immunotherapy of Cancer 2022;10(2):e003777

Ana Oaknin ,[1] Lucy Gilbert,[2] Anna V Tinker,[3] Jubilee Brown,[4] Cara Mathews,[5] Joshua Press,[6] Renaud Sabatier,[7] David M O'Malley,[8] Vanessa Samouelian,[9] Valentina Boni,[10] Linda Duska,[11] Sharad Ghamande,[12] Prafull Ghatage,[13] Rebecca Kristeleit,[14] Charles Leath III,[15] Wei Guo,[16] Ellie Im,[16] Sybil Zildjian,[16] Xinwei Han,[16] Tao Duan,[16] Jennifer Veneris,[16] Bhavana Pothuri[17]

GARNET: Best Percent Change from Baseline with Dostarlimab



Oaknin A et al. *J Immunother Cancer* 2022;10(1):e003777.

RTP RESEARCH TO PRACTICE

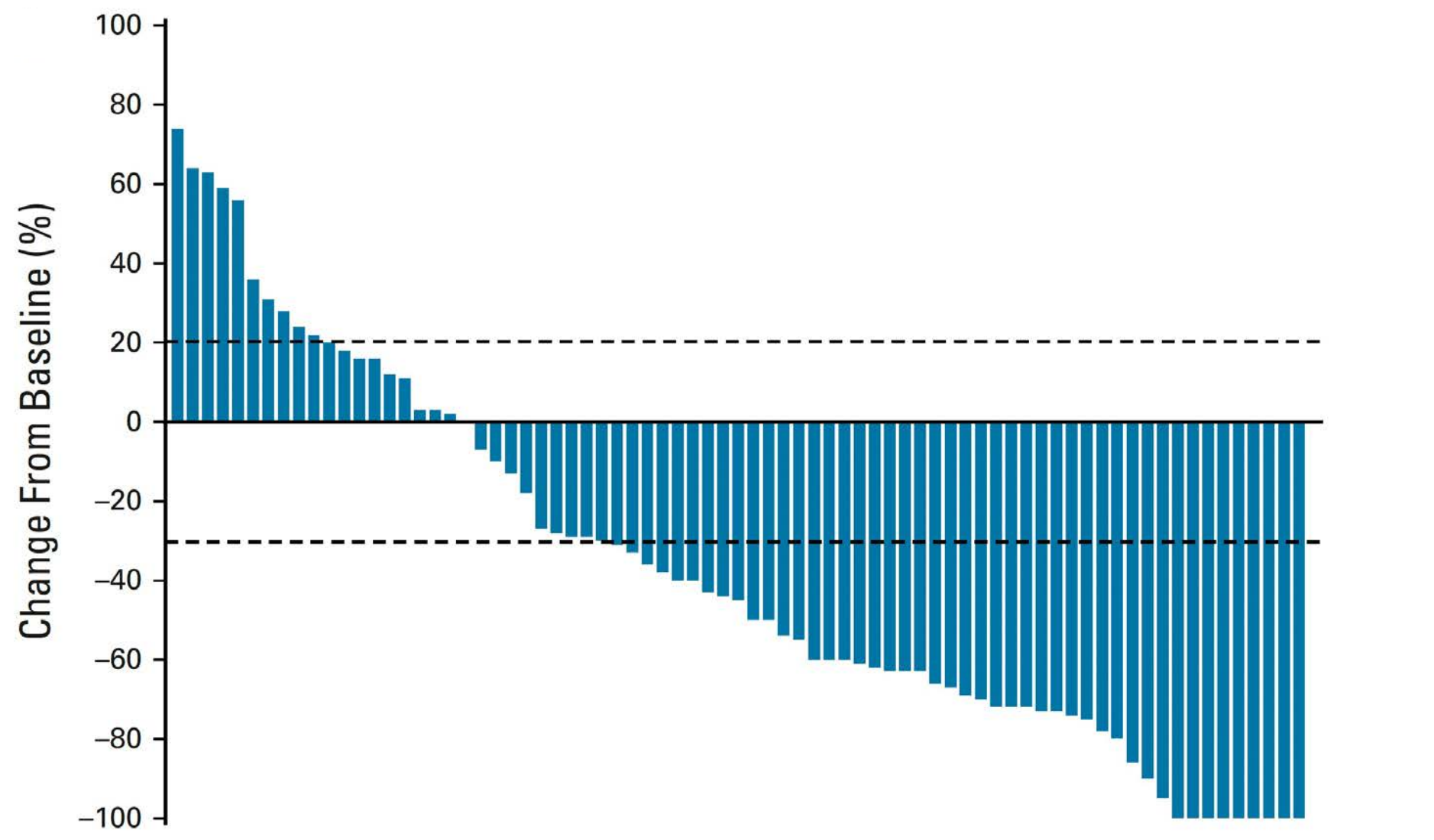
original reports

Pembrolizumab in Patients With Microsatellite Instability–High Advanced Endometrial Cancer: Results From the KEYNOTE-158 Study

David M. O'Malley, MD[1]; Giovanni Mendonca Bariani, MD[2]; Philippe A. Cassier, MD[3]; Aurelien Marabelle, MD, PhD[4]; Aaron R. Hansen, MBBS[5]; Ana De Jesus Acosta, MD[6]; Wilson H. Miller Jr, MD, PhD[7,8]; Tamar Safra, MD[9,10]; Antoine Italiano, MD, PhD[11,12]; Linda Mileshkin, MBBS[13]; Lei Xu, PhD[14]; Fan Jin, MD[14]; Kevin Norwood, MD[14]; and Michele Maio, MD[15]

Journal of Clinical Oncology 2022;40(7):752-61.

KEYNOTE-158: Objective Response in the Efficacy Analysis Population



O'Malley DM et al. *J Clin Oncol* 2022;40(7):752-61.

RTP RESEARCH TO PRACTICE

The NEW ENGLAND JOURNAL of MEDICINE

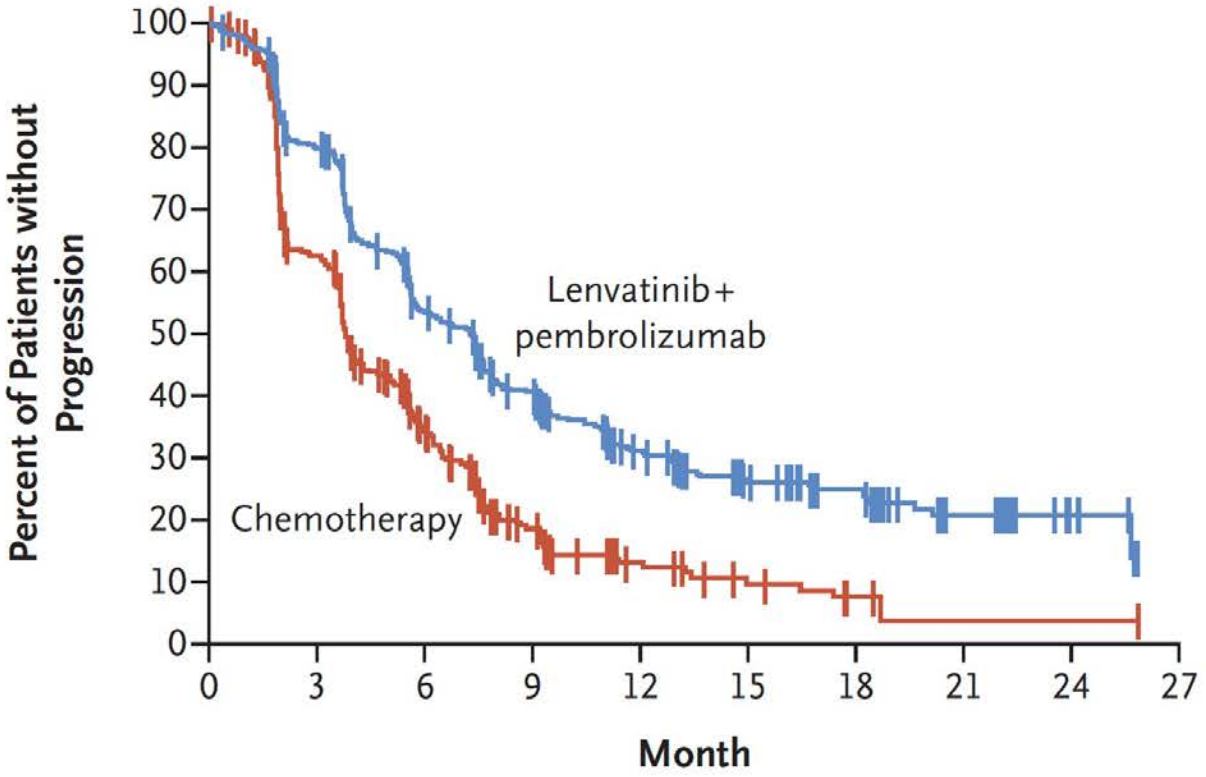
ORIGINAL ARTICLE

Lenvatinib plus Pembrolizumab for Advanced Endometrial Cancer

V. Makker, N. Colombo, A. Casado Herráez, A.D. Santin, E. Colomba, D.S. Miller, K. Fujiwara, S. Pignata, S. Baron-Hay, I. Ray-Coquard, R. Shapira-Frommer, K. Ushijima, J. Sakata, K. Yonemori, Y.M. Kim, E.M. Guerra, U.A. Sanli, M.M. McCormack, A.D. Smith, S. Keefe, S. Bird, L. Dutta, R.J. Orlowski, and D. Lorusso, for the Study 309–KEYNOTE-775 Investigators*

***New Engl J Med* 2022;386(5):437-48.**

Study 309/KEYNOTE-775: PFS in the Overall Population



	Median Progression-free Survival (95% CI)
	mo
Lenvatinib+ Pembrolizumab	7.2 (5.7–7.6)
Chemotherapy	3.8 (3.6–4.2)

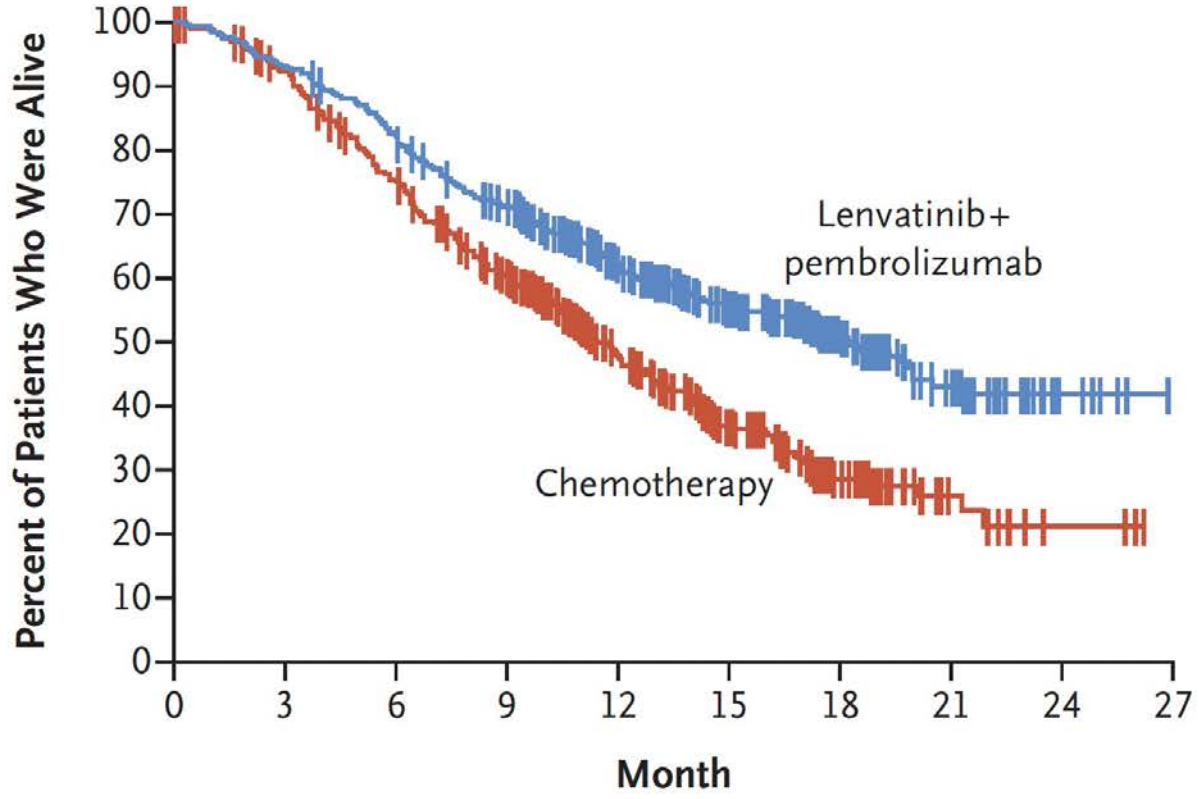
Hazard ratio for progression or death, 0.56 (95% CI, 0.47–0.66)
P<0.001

No. at Risk

Lenvatinib+pembrolizumab	411	316	202	144	86	56	43	17	6	0
Chemotherapy	416	214	95	42	18	10	4	1	1	0

Makker V et al. *NEJM* 2022;386(5):437-48.

Study 309/KEYNOTE-775: OS in the Overall Population



Median Overall Survival (95% CI)	*mo*
Lenvatinib+ Pembrolizumab	18.3 (15.2–20.5)
Chemotherapy	11.4 (10.5–12.9)

Hazard ratio for death, 0.62 (95% CI, 0.51–0.75)
P<0.001

No. at Risk

Lenvatinib+pembrolizumab	411	383	337	282	198	136	81	40	7	0
Chemotherapy	416	373	300	228	138	80	40	11	3	0

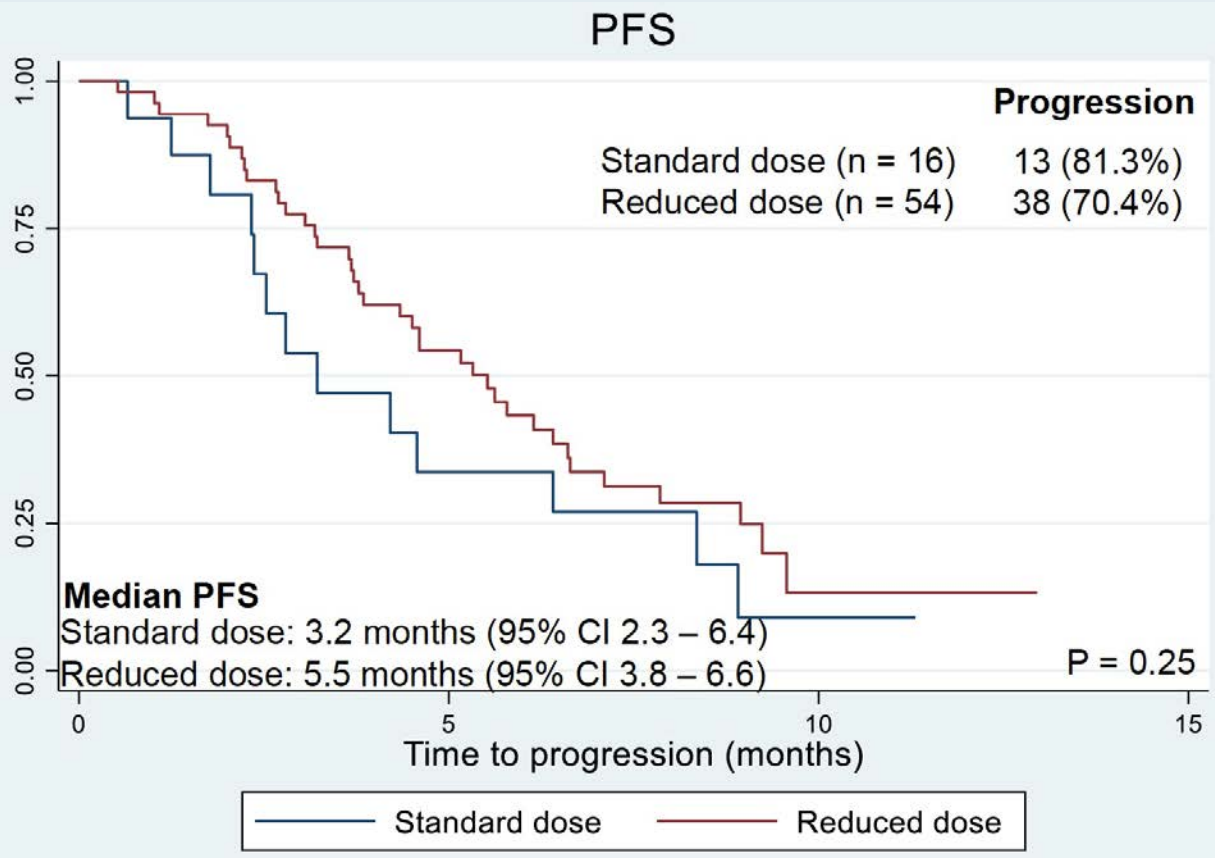
Makker V et al. *NEJM* 2022;386(5):437-48.

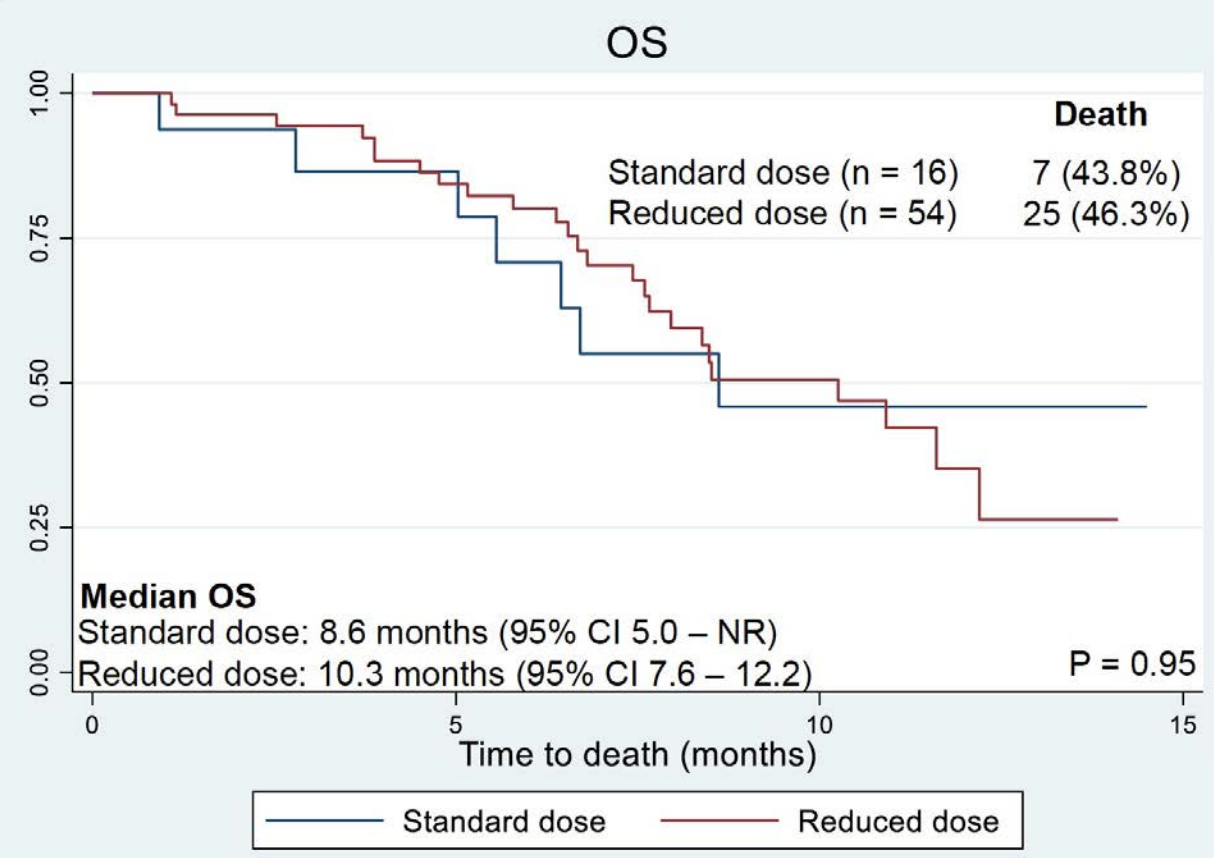
The Use of Pembrolizumab and Lenvatinib Combination Therapy in Endometrial Cancer: An Examination of Toxicity and Treatment Efficacy in Clinical Practice

How JA et al.

SGO 2021;Abstract 10775.

Retrospective Analysis of Reduced-Dose Lenvatinib (<20 mg) with Pembrolizumab at MD Anderson Cancer Center





- Reduced starting dose of lenvatinib was associated with longer time to treatment toxicity and fewer dose de-escalations.
- "Published studies and these results may support using lenvatinib at a starting dose of 14 mg daily in clinical practice."

How JA et al. SGO 2021;Abstract 10775.

RTP RESEARCH TO PRACTICE

Questions — David M O'Malley, MD

Patients with metastatic endometrial cancer

- **What is the typical clinical history of a patient who is receiving treatment for metastatic endometrial cancer?**
- **What is MSI status, and how do you explain to a patient with metastatic endometrial cancer how this affects your treatment recommendation?**

Commentary — David M O'Malley, MD

Patients with metastatic endometrial cancer

- **What is the typical clinical history of a patient who is receiving treatment for metastatic endometrial cancer?**
  - **30 y.o patient presented with widespread disease after being diagnosed at 21 y.o with Grade 1 endometrioid cancer (MMRp)**
  - **65 y.o presented with widely metastatic serous cancer (Stage IVB) – MMRp, HER2 -**
  - **57 y.o who presented with metastatic serous cancer 16 months after completing carboplatin/paclitaxel for stage IB serous cancer – MMRp, HER2-**
  - **70 y.o originally diagnosed with IIIC1 Gr 3 endometrioid. Completed C/T x 6, WPRT. Presented 4 months later with adrenal lesion and brain mets. MMRd.**

Commentary — David M O'Malley, MD

- **MSI testing measures the ability of a cell to correct mistakes in DNA repair (MMR). These mistakes create abnormal proteins (ie, neoantigens) which are recognized by the immune system once the "brakes" are removed by immune therapies (ICI).**
- **Treatment of R/M uterine cancer: clinical trial is first option**
  - **First-line metastatic or recurrent: Chemotherapy (+ trastuzumab for HER2+ USC)**
  - **Second-line:**
    - **dMMR: single agent I/O**
    - **pMMR: pembrolizumab and lenvatinib**
  - **Third-line and beyond:**
    - **Hormonal therapy (mTOR, CDK 4/6) - endometrioid**
    - **"Other" chemotherapy**

RTP RESEARCH TO PRACTICE

Questions — Jaclyn Shaver, MS, APRN, CNP, WHNP

Patients with metastatic endometrial cancer

- **What are some of the clinical issues that you discuss with patients who are about to start on immunotherapy alone?**
- **What are some of the clinical issues that you discuss with patients who are about to start on immunotherapy in combination with a tyrosine kinase inhibitor (eg, lenvatinib/ pembrolizumab)?**
- **What are some of the psychosocial issues that arise in these situations?**

RTP
RESEARCH
TO PRACTICE

Commentary —Jaclyn Shaver, MS, APRN, CNP, WHNP

Patients with metastatic endometrial cancer

- **Immunotherapy alone**
  - **Speak to patient in language they can understand, Early Recognition, Importance of notifying Clinic**
  - **Discuss Side effects and Proper Education**
- **Immunotherapy in Combination with TKI**
  - **Educate Patient – Similar Side Effect Profile**
  - **Can increase severity of toxicity leading to hold/Dose reduction/Discontinuation**
- **Patient Examples**
  - **Patient #1 – Stage IV Endometrial Cancer with PD on Len/Pembro**
  - **Patient #2 – Stage IV Endometrial Cancer with Recurrence on Len/Pembro**
- **Psychosocial Issues**
  - **Low self-esteem, altered-image, depression, anxiety.**

RTP
RESEARCH
TO PRACTICE

Agenda

Module 1 – Endometrial Cancer

Module 2 – Cervical Cancer

Module 3 – Clinical Care of Patients Receiving Checkpoint Inhibitors

Module 4 – COVID-19: Considerations in Cervical and Endometrial Cancer

Module 5 – Oncology 2032 Crystal Ball: Part 1

RTP RESEARCH TO PRACTICE

FDA Approves Pembrolizumab Combination for the First-Line Treatment of Cervical Cancer

Press Release – October 13, 2021

"On October 13, 2021, the Food and Drug Administration approved pembrolizumab in combination with chemotherapy, with or without bevacizumab, for patients with persistent, recurrent or metastatic cervical cancer whose tumors express PD-L1 (CPS ≥1), as determined by an FDA-approved test.

KEYNOTE-826 (NCT03635567), a multicenter, randomized, double-blind, placebo-controlled trial, examined pembrolizumab with paclitaxel and cisplatin or paclitaxel and carboplatin, with or without bevacizumab. The trial enrolled 617 patients with persistent, recurrent, or first-line metastatic cervical cancer who had not been treated with chemotherapy. Patients were enrolled irrespective of PD-L1 expression status.

For patients with tumors expressing PD-L1 (CPS ≥1, N=548), the median OS was not reached in the pembrolizumab arm and was 16.3 months in the placebo arm. Median PFS was 10.4 months in the pembrolizumab arm and 8.2 months in the placebo arm."

https://www.fda.gov/drugs/resources-information-approved-drugs/fda-approves-pembrolizumab-combination-first-line-treatment-cervical-cancer.

RTP RESEARCH TO PRACTICE

The NEW ENGLAND JOURNAL of MEDICINE

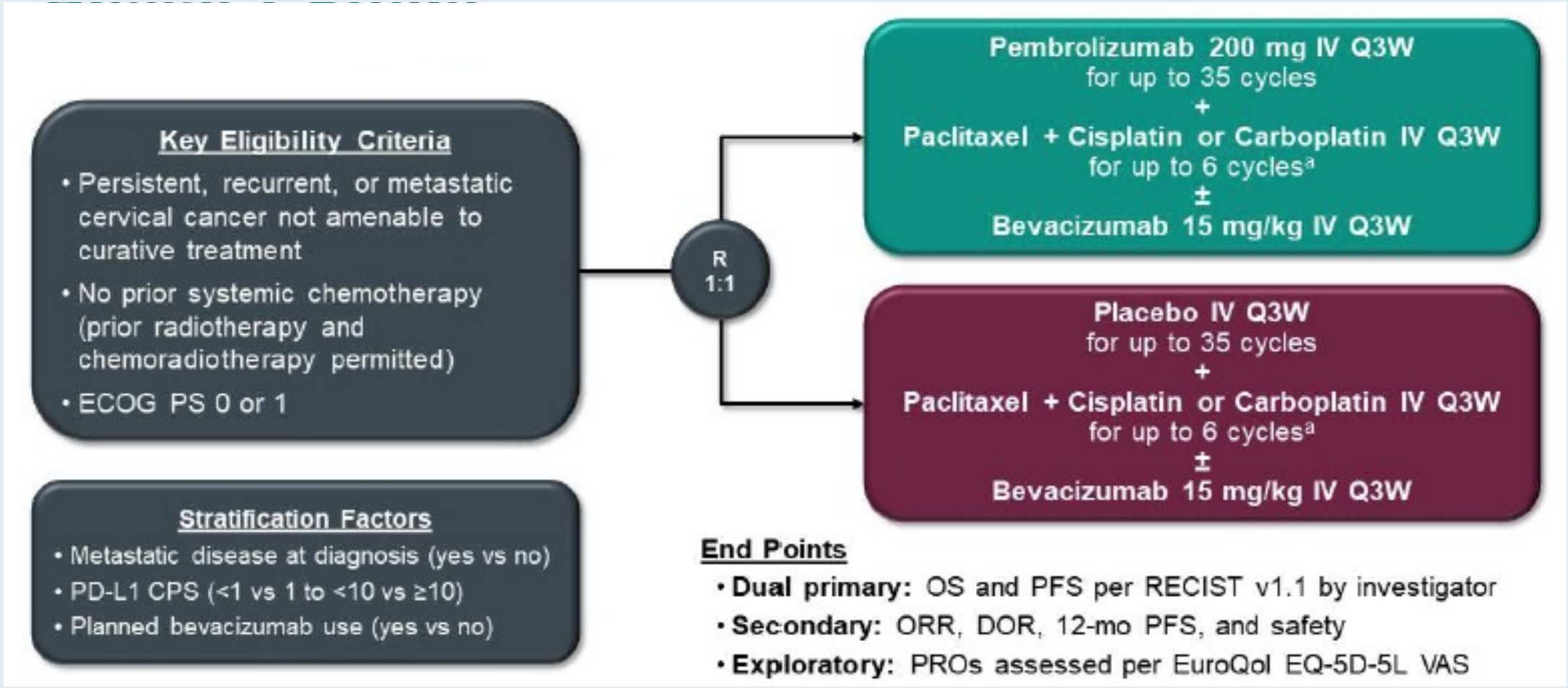
ORIGINAL ARTICLE

Pembrolizumab for Persistent, Recurrent, or Metastatic Cervical Cancer

N. Colombo, C. Dubot, D. Lorusso, M.V. Caceres, K. Hasegawa, R. Shapira-Frommer, K.S. Tewari, P. Salman, E. Hoyos Usta, E. Yañez, M. Gümüş, M. Olivera Hurtado de Mendoza, V. Samouëlian, V. Castonguay, A. Arkhipov, S. Toker, K. Li, S.M. Keefe, and B.J. Monk, for the KEYNOTE-826 Investigators*

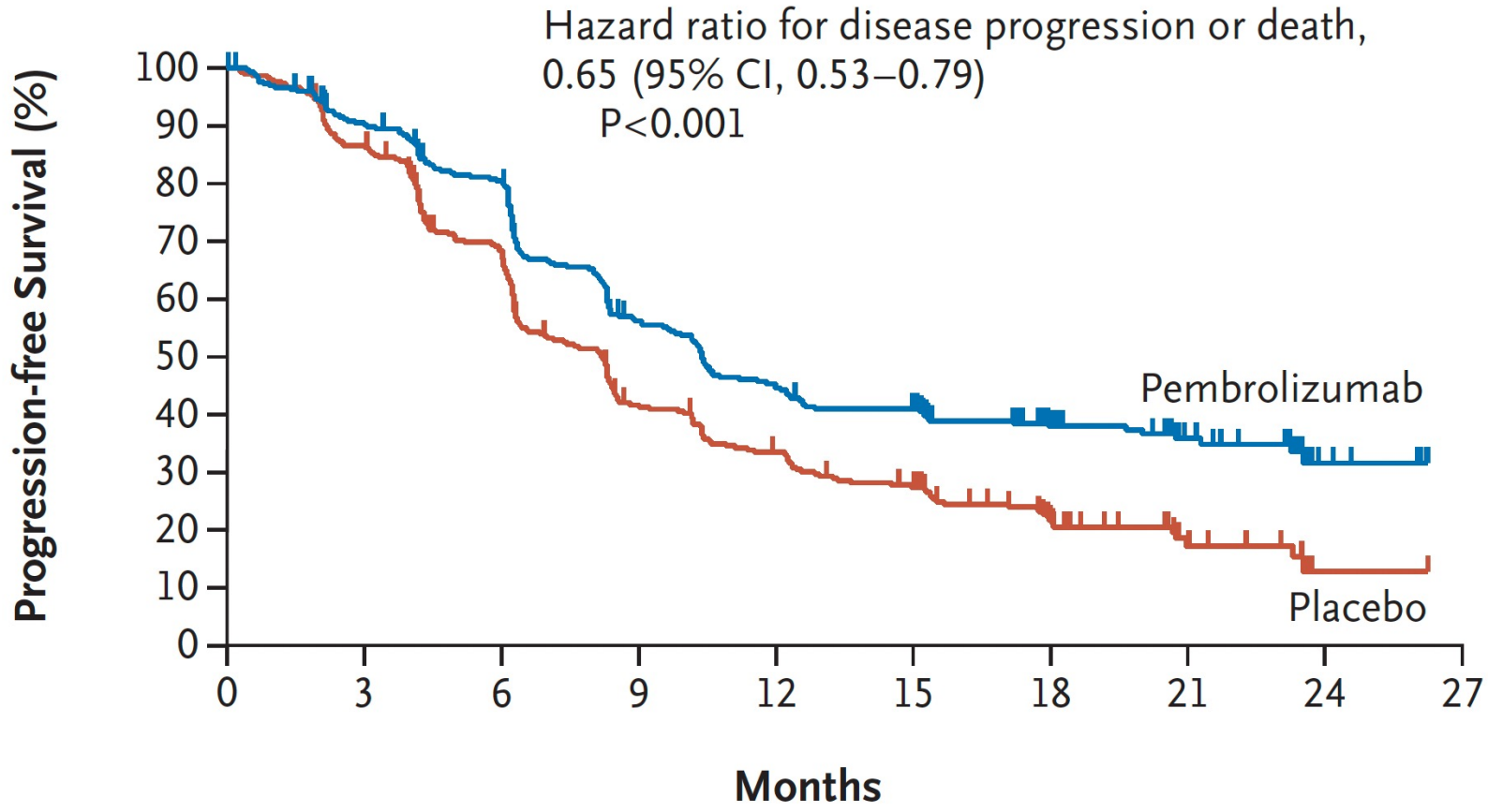
NEJM 2021;385(20):1856-67.

KEYNOTE-826: Phase III Trial Schema



Colombo N et al. ESMO 2021;Abstract LBA2_PR.

KEYNOTE-826: Progression-Free Survival

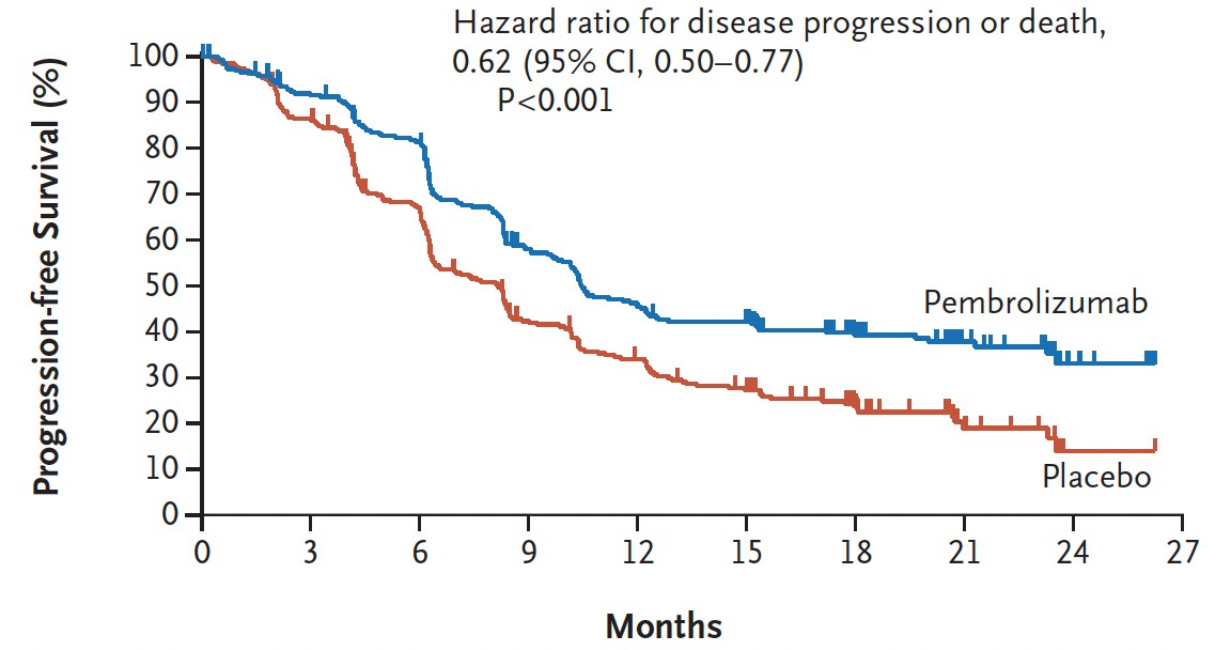


No. at Risk									
Pembrolizumab	308	263	229	155	123	110	70	35	10	0
Placebo	309	259	195	113	89	71	39	13	1	0

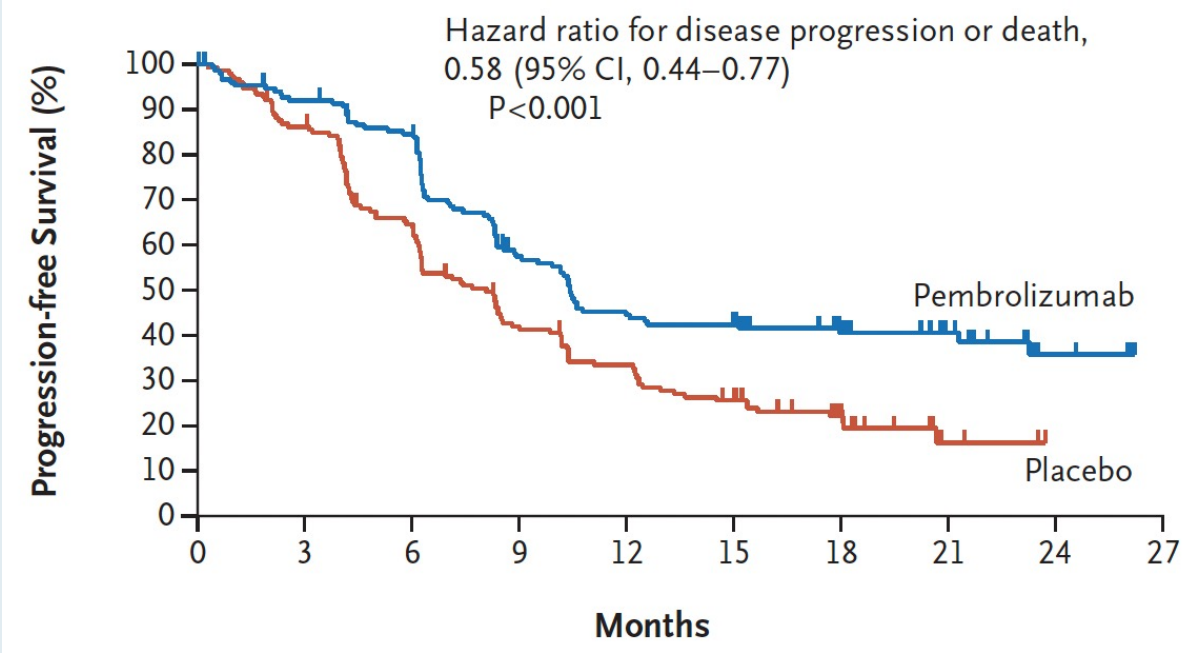
Colombo N et al. *NEJM* 2021;385(20):1856-67.

KEYNOTE-826: Progression-Free Survival According to PD-L1 Status

PD-L1 Combined Positive Score ≥1



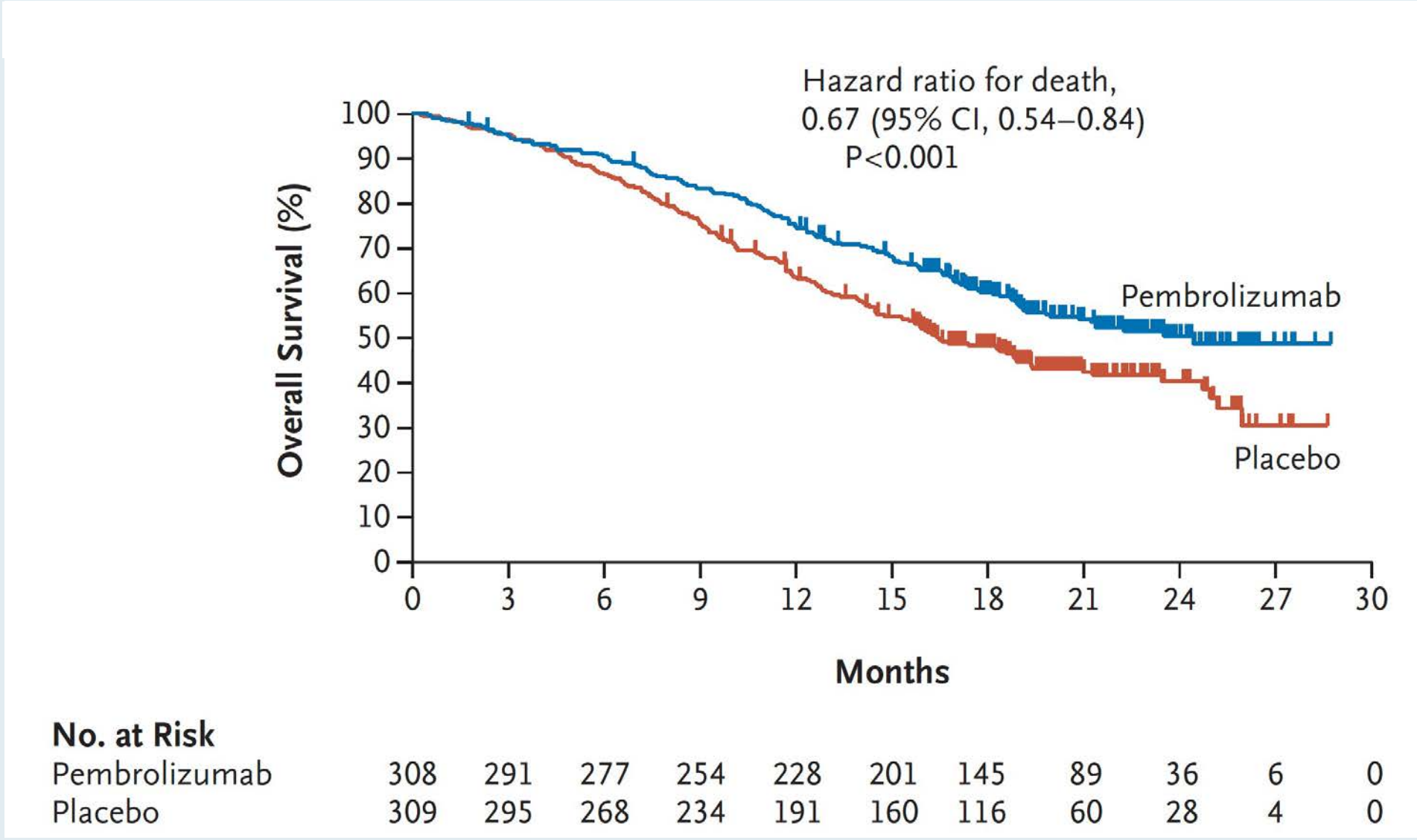
PD-L1 Combined Positive Score ≥10



Colombo N et al. *NEJM* 2021;385(20):1856-67.

RTP RESEARCH TO PRACTICE

KEYNOTE-826: Overall Survival



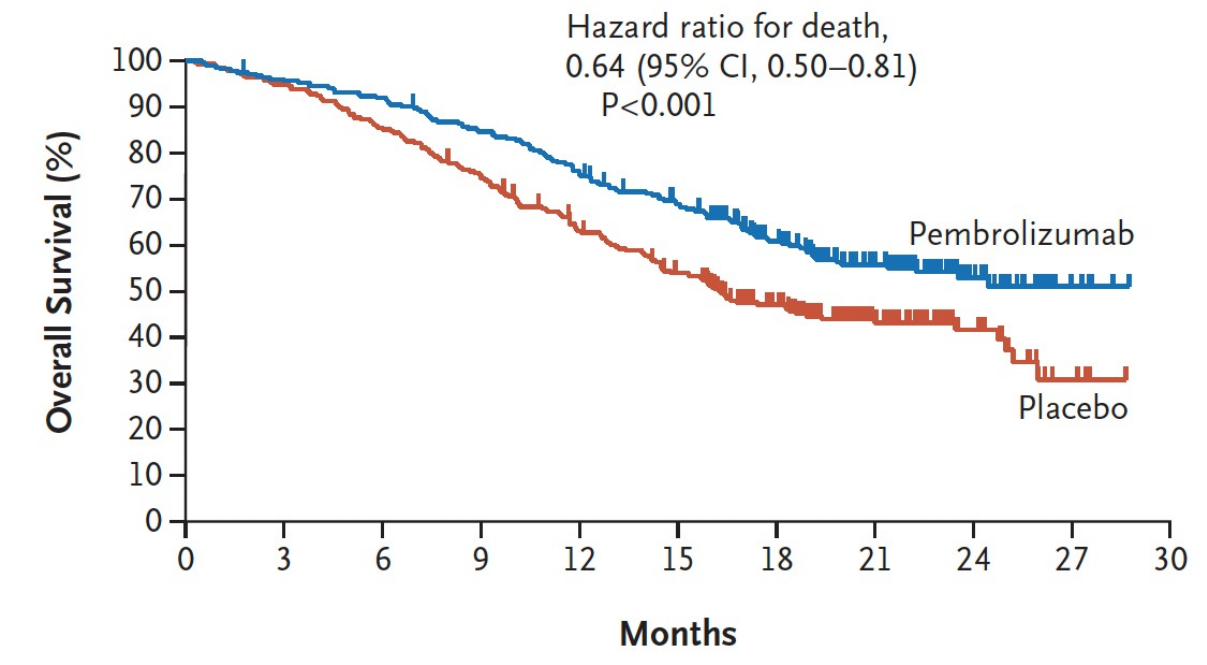
No. at Risk

Pembrolizumab	308	291	277	254	228	201	145	89	36	6	0
Placebo	309	295	268	234	191	160	116	60	28	4	0

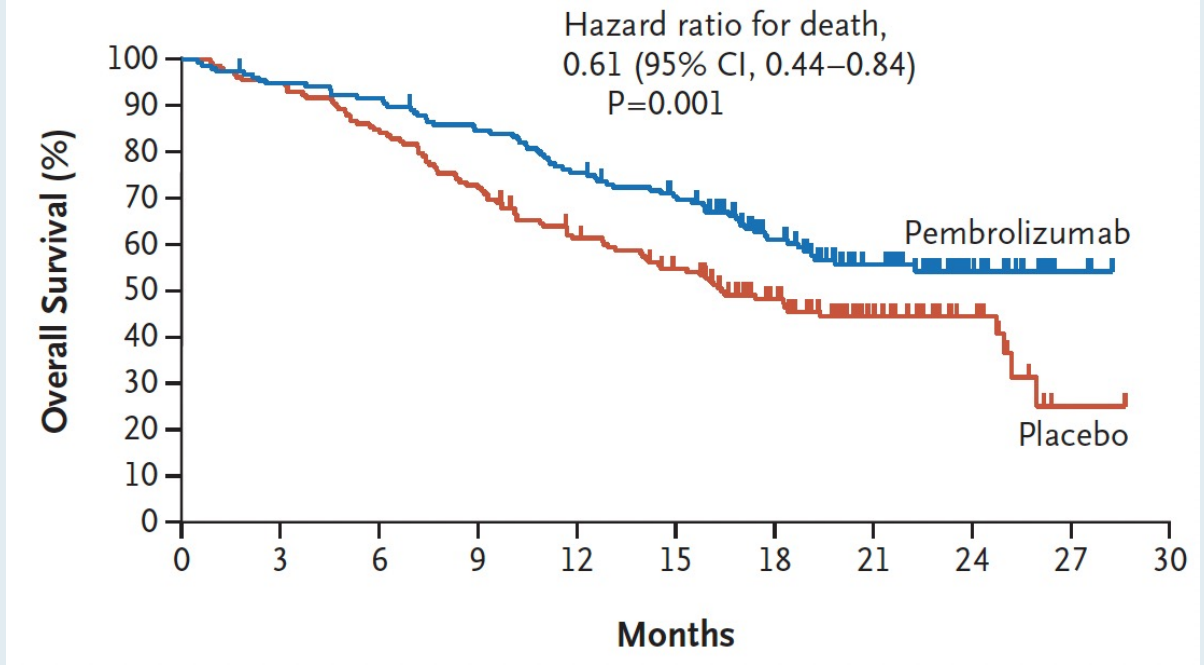
Colombo N et al. *NEJM* 2021;385(20):1856-67.

KEYNOTE-826: Overall Survival According to PD-L1 Status

PD-L1 Combined Positive Score ≥1



PD-L1 Combined Positive Score ≥10



Colombo N et al. *NEJM* 2021;385(20):1856-67.

RTP RESEARCH TO PRACTICE

FDA Accelerated Approval Granted to Tisotumab Vedotin-tftv for Previously Treated Recurrent or Metastatic Cervical Cancer

Press Release – September 20, 2021

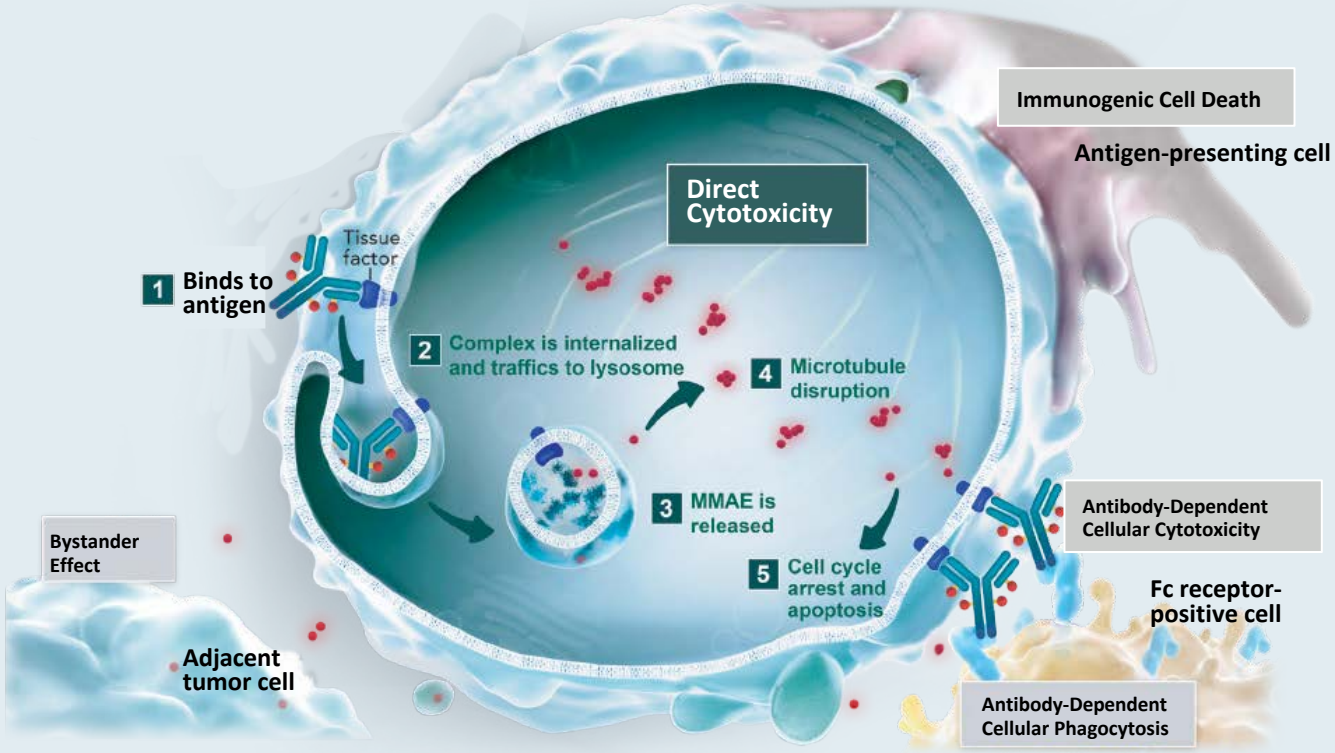
"[It was announced today that the FDA] has granted accelerated approval to tisotumab vedotin-tftv, the first and only approved antibody-drug conjugate (ADC) for the treatment of adult patients with recurrent or metastatic cervical cancer with disease progression on or after chemotherapy. Tisotumab vedotin-tftv is approved under the FDA's Accelerated Approval Program based on tumor response and the durability of the response. Continued approval may be contingent upon verification and description of clinical benefit in confirmatory trials."

The accelerated approval is based on results from the innovaTV 204 trial. InnovaTV 301, a global, randomized Phase III clinical trial intended to support global registrations, is under way. The prescribing information for tisotumab vedotin-tftv includes a BOXED WARNING for ocular toxicity and warnings for peripheral neuropathy, hemorrhage, pneumonitis and embryo-fetal toxicity.

https://investor.seagen.com/press-releases/news-details/2021/Seagen-and-Genmab-Announce-FDA-Accelerated-Approval-for-TIVDAK-tisotumab-vedotin-tftv-in-Previously-Treated-Recurrent-or-Metastatic-Cervical-Cancer/default.aspx

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 prognosis[2]
- 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.

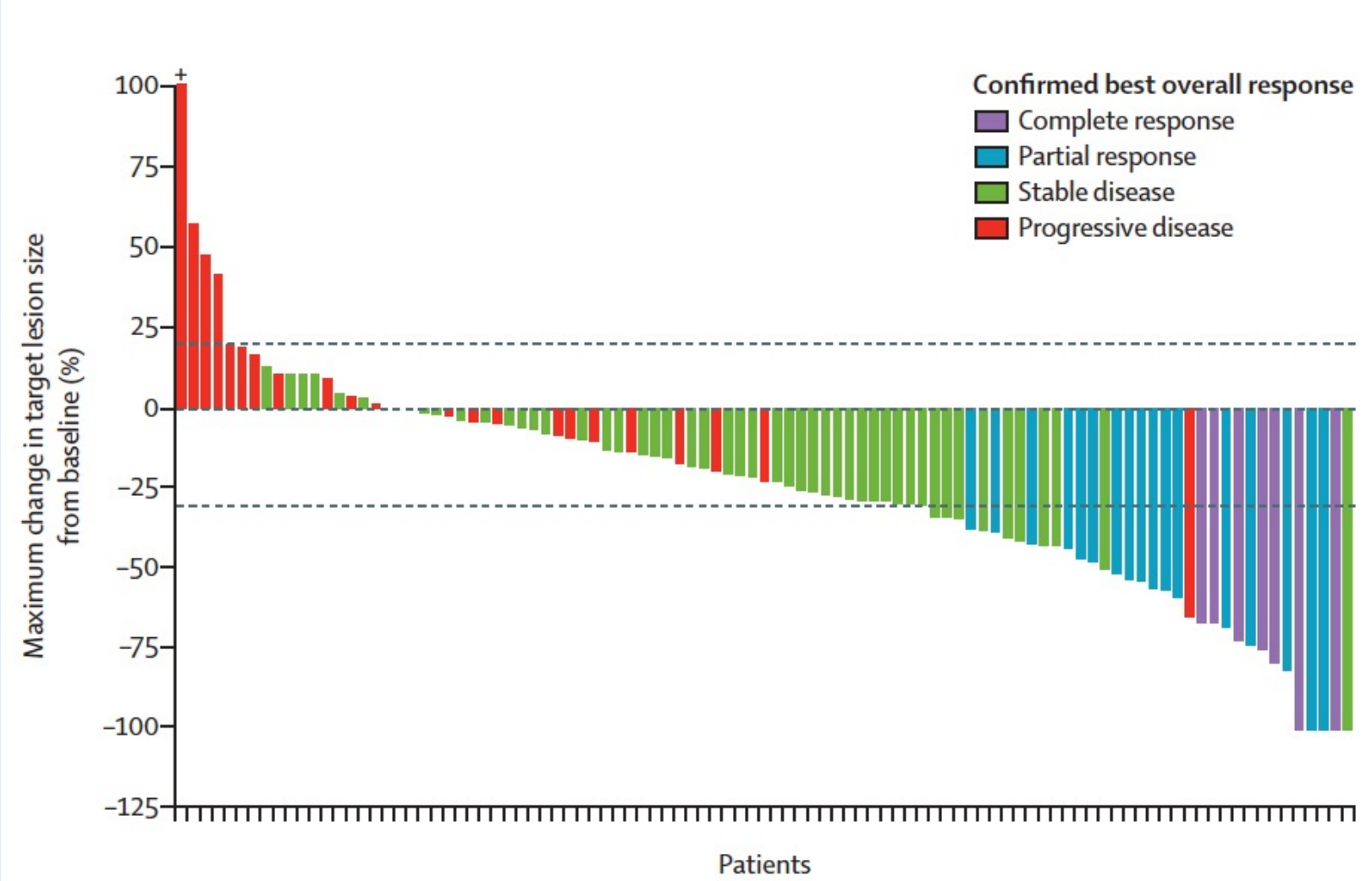
Courtesy of David M O'Malley, MD

Efficacy and safety of tisotumab vedotin in previously treated recurrent or metastatic cervical cancer (innovaTV 204/GOG-3023/ENGOT-cx6): a multicentre, open-label, single-arm, phase 2 study

*Robert L Coleman, Domenica Lorusso, Christine Gennigens, Antonio González-Martín, Leslie Randall, David Cibula, Bente Lund, Linn Woelber, Sandro Pignata, Frederic Forget, Andrés Redondo, Signe Diness Vindeløv, Menghui Chen, Jeffrey R Harris, Margaret Smith, Leonardo Viana Nicacio, Melinda S L Teng, Annouschka Laenen, Reshma Rangwala, Luis Manso, Mansoor Mirza, Bradley J Monk, Ignace Vergote, on behalf of the innovaTV 204/GOG-3023/ENGOT-cx6 Collaborators**

Lancet Oncol 2021; 22: 609–19

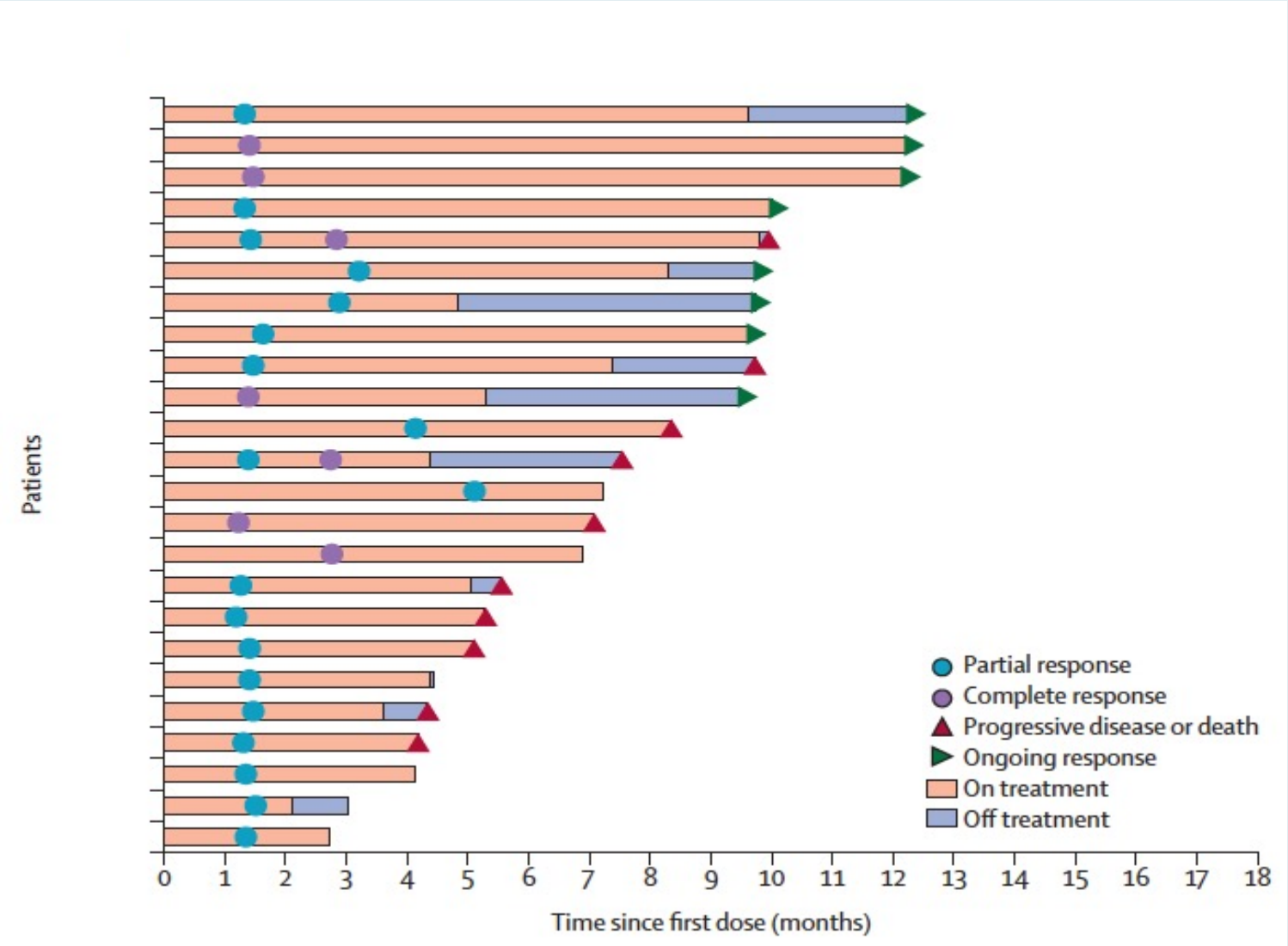
innovaTV 204: Antitumor Activity by IRC Assessment



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

Coleman RL et al. *Lancet Oncol* 2021;22(5):609-19.

innovaTV 204: Swimmer Plot of Confirmed Responses



Coleman RL et al. *Lancet Oncol* 2021;22(5):609-19.

innovaTV 204: Select Adverse Events

	Grade 1–2	Grade 3	Grade 4	Grade 5
Patients with at least one treatment-related adverse event	65 (65%)	25 (25%)	2 (2%)	1 (1%)
Treatment-related adverse events, by preferred terms, with an incidence of 10% or higher, or any grade 3 or worse event				
Alopecia	38 (38%)	0	0	0
Epistaxis	30 (30%)	0	0	0
Nausea	27 (27%)	0	0	0
Conjunctivitis	26 (26%)	0	0	0
Fatigue	24 (24%)	2 (2%)	0	0
Dry eye	23 (23%)	0	0	0
Myalgia	15 (15%)	0	0	0
Anaemia	12 (12%)	1 (1%)	0	0
Asthenia	12 (12%)	1 (1%)	0	0
Arthralgia	12 (12%)	0	0	0
Decreased appetite	11 (11%)	0	0	0
Keratitis	11 (11%)	0	0	0
Pruritus	10 (10%)	1 (1%)	0	0
Neuropathy peripheral	8 (8%)	2 (2%)	0	0
Constipation	8 (8%)	1 (1%)	0	0
Peripheral sensory neuropathy	7 (7%)	2 (2%)	0	0
Peripheral sensorimotor neuropathy	3 (3%)	2 (2%)	0	0
Neutropenia	1 (1%)	3 (3%)	0	0

Coleman RL et al. *Lancet Oncol* 2021;22(5):609-19.

innovaTV 204: Select Ocular Adverse Events Regardless of Causality

Incidence, n (%)	N = 101	
	Any grade	Grade 3
Patients with ≥1 ocular AE	55 (54)	3 (3)
Ocular AE in ≥2 patients[†]		
Conjunctivitis	31 (31)	0
Dry eye	25 (25)	0
Keratitis	11 (11)	0
Blepharitis	7 (7)	0
Punctate keratitis	6 (6)	0
Increased lacrimation	4 (4)	0
Ocular hyperemia	4 (4)	0
Blurred vision	3 (3)	0
Entropion	3 (3)	0
Meibomianitis	3 (3)	0
Ulcerative keratitis	3 (3)	3 (3)

Coleman RL et al. *Lancet Oncol* 2021;22(5):609-19.

RTP RESEARCH TO PRACTICE

Tisotumab Vedotin + Carboplatin in First-Line or + Pembrolizumab in Previously Treated Recurrent/Metastatic Cervical Cancer: Interim Results of ENGOT-Cx8/GOG-3024/innovaTV 205

Ignace Vergote,[1] Bradley J. Monk,[2] Roisin E. O'Cearbhaill,[3] Anneke Westermann,[4] Susana Banerjee,[5] Dearbhaile Catherine Collins,[6] Mansoor Raza Mirza,[7] David O'Malley,[8] Christine Gennigens,[9] Sandro Pignata,[10] Bohuslav Melichar,[11] Azmat Sadozye,[12] Frederic Forget,[13] Krishnansu S. Tewari,[14] Eelke Gort,[15] Ibrahima Soumaoro,[16] Camilla Mondrup Andreassen,[17] Leonardo Viana Nicacio,[18] Els Van Nieuwenhuysen,[1] Domenica Lorusso[19]

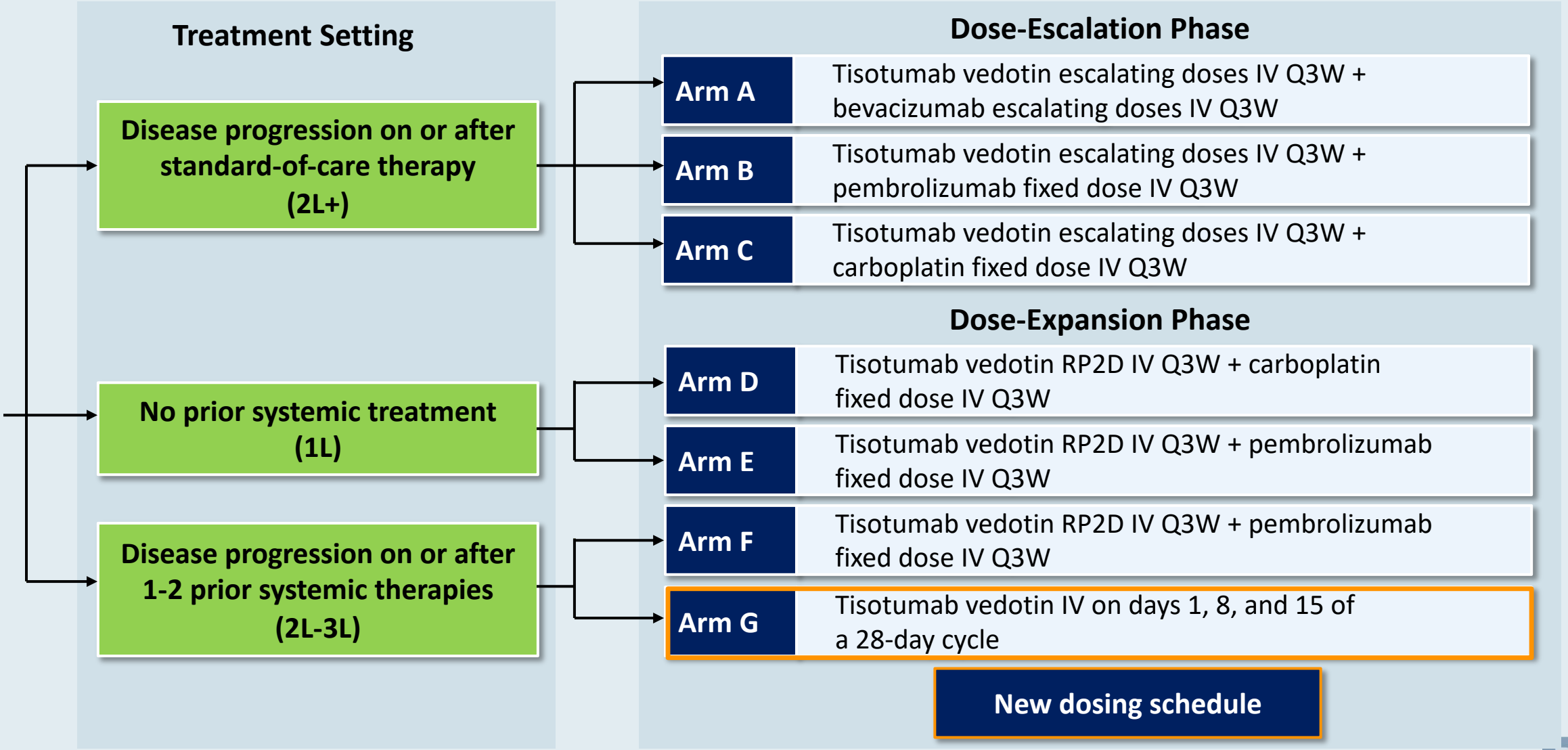
[1]Belgium and Luxembourg Gynaecological Oncology Group, University of Leuven, Leuven Cancer Institute, Leuven, Belgium; [2]Arizona Oncology (US Oncology Network), University of Arizona College of Medicine, Creighton University School of Medicine, Phoenix, AZ, USA; [3]Memorial Sloan Kettering Cancer Center and Weill Cornell Medical College, New York, NY, USA; [4]Amsterdam University Medical Centers, Amsterdam, Netherlands; [5]The Royal Marsden NHS Foundation Trust, London, UK; [6]Cork University Hospital/Oncology Trials Unit, Cork, Ireland; [7]Rigshospitalet Copenhagen University Hospital, Copenhagen, Denmark; [8]Division of Gynecology Oncology, Department of Gynecology and Obstetrics, The Ohio State University College of Medicine, Columbus, Ohio, USA; [9]Department of Medical Oncology, Liège University Hospital, Liège, Belgium; [10]Istituto Nazionale Tumori IRCCS Fondazione G. Pascale, Naples, Italy; [11]Palacký University Medical School and Teaching Hospital, Olomouc, Czech Republic ; [12]NHS Greater Glasgow and Clyde, Glasgow, United Kingdom; [13]Centre Hospitalier de l'Ardenne, Libramont, Belgium; [14]University of California, Irvine Medical Center, Orange, CA, USA; [15]University Medical Center Utrecht, Utrecht, Netherlands; [16]Genmab US, Inc., Princeton, NJ, USA; [17]Genmab A/S, Copenhagen, Denmark; [18]Seagen Inc., Bothell, WA, USA; [19]Fondazione IRCCS, Foundation Policlinico Universitario Agostino Gemelli IRCCS, Rome, Italy

2021 ESMO congress

Ignace Vergote

ESMO 2021; Abstract 723MO

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



Courtesy of David M O'Malley, MD

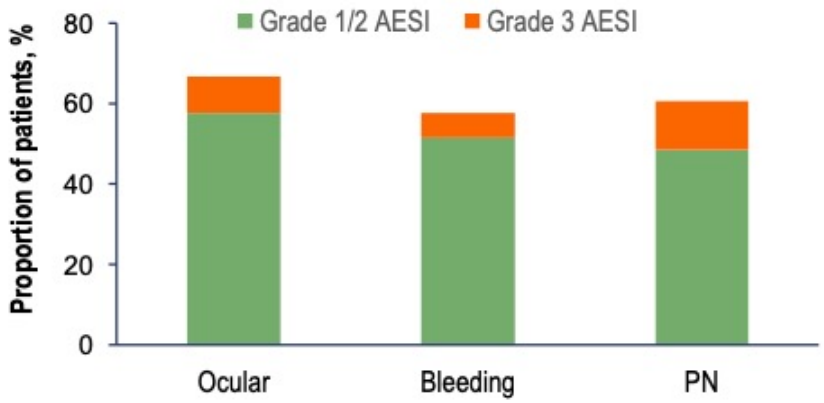
innovaTV 205 (GOG 3024):

Summary of Efficacy & Safety for 1L TV + Carbo

Parameters	1L TV + Carbo (N = 33) Median FU: 7.9 months
Median duration of exposure, months (range)	TV: 4.9 (1 – 9) Carbo: 4.1 (1 – 9)
Median number of cycles initiated (range)	TV: 6.0 (1 – 12) Carbo: 6.0 (1 – 12)
Confirmed response rate, n (%) [95% CI] Complete response, n (%) Partial response, n (%) Stable disease, n (%) Progressive disease, n (%) Not evaluable, n (%)	18 (55) [36 – 72] 4 (12) 14 (42) 12 (36) 2 (6) 1 (3)
Median duration of response, months (95% CI)	8.3 (4.2 – NR)
Median time to response, months (range)	1.4 (1.1 – 4.4)
Median PFS, months (95% CI)	9.5 (4.0 – NR)
Median OS, months (range)	NR (0.8+ – 14.1+)

Treatment ongoing in 9 patients. +, censored.

	TV + Carbo (N=33)
Patients with ≥1 TEAE, n (%) AE related to TV	33 (100.0) 32 (97.0)
Grade ≥3 AE, n (%) Grade ≥3 AE related to TV	26 (78.8) 19 (57.6)
SAE, n (%) SAE related to TV	14 (42.4) 5 (15.2)
Fatal AE, n (%) Fatal AE related to TV	0 0



2021 ESMO congress

Vergote I., et al.

1L, first-line; AE, adverse event; AESI, adverse event of special interest; carbo, carboplatin; FU, follow-up; NR, not reached; ORR, objective response rate; OS, overall survival; PFS, progression-free survival; PN; peripheral neuropathy; r/mCC, recurrent/metastatic cervical cancer; SAE, serious adverse event; TEAE, treatment-emergent adverse event; TV, tisotumab vedotin.

Vergote I et al. ESMO 2021;Abstract 723MO.

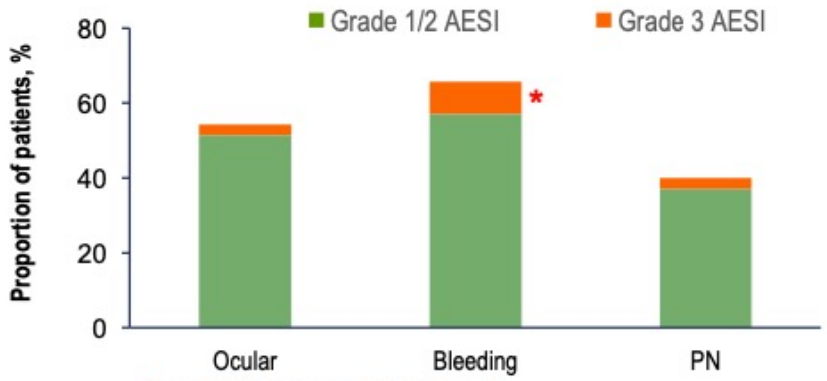
innovaTV 205 (GOG 3024):

Summary of Efficacy & Safety for 2L/3L TV + Pembro

Parameters	2L/3L TV + Pembro (N = 34)[a] Median FU: 13.0 months
Median duration of exposure, months (range)	TV: 4.1 (1 – 16) Pembro: 4.3 (1 – 17)
Median number of cycles initiated (range)	TV: 6.0 (1 – 21) Pembro: 6.0 (1 – 25)
Confirmed response rate, n (%) [95% CI] Complete response, n (%) Partial response, n (%) Stable Disease, n (%) Progressive disease, n (%) Not evaluable, n (%)	13 (38) [22 – 56] 2 (6) 11 (32) 12 (35) 7 (21) 2 (6)
Median DOR, months (95% CI)	13.8 (2.8 – NR)
Median time to response, months (range)	1.4 (1.3 - 5.8)
Median PFS, months (95% CI)	5.6 (2.7 – 13.7)
Median OS, months (range)	NR (1.3 – 17.5+)

[a]1 pt was excluded from the full analysis set as they didn't have any target or non-target lesions at baseline. Treatment ongoing in 4 patients.

	TV + Pembro (N = 35)
Patients with ≥1 TEAE, n (%) AE related to TV	35 (100.0) 34 (97.1)
Grade ≥3 AE, n (%) Grade ≥3 AE related to TV	26 (74.3) 16 (45.7)
SAE, n (%) SAE related to TV	18 (51.4) 5 (14.3)
Fatal AE, n (%) Fatal AE related to TV	1 (2.9) 0



*One patient had a grade 4 bleeding event.

2021 ESMO congress

Vergote I., et al.

+, censored; 1L, first-line; AE, adverse event; AESI, adverse event of special interest; DOR, duration of response; FU, follow-up; NR, not reached; ORR, objective response rate; OS, overall survival; pembro, pembrolizumab; PFS, progression-free survival; PN; peripheral neuropathy; r/mCC, recurrent/metastatic cervical cancer; SAE, serious adverse event; TEAE, treatment-emergent adverse event; TV, tisotumab vedotin.

Vergote I et al. ESMO 2021;Abstract 723MO.

Questions — Robert L Coleman, MD

Patients with advanced cervical cancer

- **What is the typical clinical history of a patient who is receiving treatment for metastatic cervical cancer?**
- **In what situations do you consider immunotherapy for patients with metastatic cervical cancer?**
- **In what situations do you consider tisotumab vedotin for patients with metastatic cervical cancer?**

Commentary — Robert L Coleman, MD

Patients with advanced cervical cancer

- **There's no one typical clinical phenotype for this disease**
  - **Often under-screened, low health literacy, and with poor resources but in no way is this a way to differentiate affected patients. HPV is endemic and the cause**
- **Immunotherapy should be used either as FDA-labeled (e.g. pembrolizumab in advanced stage/recurrent disease with chemotherapy ± bevacizumab, or if following chemotherapy, as a single agent, e.g. pembrolizumab or nivolumab) or on clinical trial**
- **Like above, tisotumab vedotin should be used per its FDA label or in a clinical trial**

RTP RESEARCH TO PRACTICE

Commentary — Robert L Coleman, MD

- **What to be on the look out for:**
  - **Immunotherapy: rash, gut and pulmonary effects, changes in energy – don't be afraid to let us know – we want to act quicky to evaluate and treat**
  - **TV: the cold packs are to help with side effects. We will be monitoring for side effects like conjunctivitis (red eye), dry eyes, and blurred vision, bleeding (mostly bloody nose), and increasing numbness/tingling in hands and feet (neuropathy)**

Questions — Paula J Anastasia, MN, RN, AOCN

Patients with advanced cervical cancer

- **What are some of the clinical issues that you discuss with patients who are about to receive tisotumab vedotin?**
- **What are some of the psychosocial issues that arise in this situation?**

RTP
RESEARCH
TO PRACTICE

Commentary — Paula J Anastasia, MN, RN, AOCN

Patients with advanced cervical cancer

- **Clinical Issues with Tisotumab Vedotin**
- **Class Effects with Antibody Drug Conjugates (ADC):**
- **Manageable ? Only with Shared Communication and Decision Making**
- **Ocular toxicities: Common, early onset - standard eye care protocol**
  - **Require eye exam and eye drops before, during and after treatment**
  - **Common: dry eye, conjunctivitis; serious in 3.8%**
- **Peripheral Neuropathy: Pre-existing neuropathy from platinum-taxane? Non-Prescription Recommendations: Wait for It**
  - **What are your "go to" prophylactic interventions**
- **Bleeding: Isn't that what they said about Bevacizumab?**
  - **Usually nosebleeds, hematuria, vaginal; serious events seen in 5% patients**

RTP RESEARCH TO PRACTICE

Commentary — Paula J Anastasia, MN, RN, AOCN

- **Psychosocial**
- **Sadly there is shame with cervical cancer as if this is their fault (HPV)**
- **Healthcare disparities:**
  - **Delay in diagnosis**
  - **Delay in treatment due to authorization, type of health insurance**
  - **Delay in referral to other providers (eye)**
- **Advanced, non curable disease: goals of care, difficult conversations**

Agenda

Module 1 – Endometrial Cancer

Module 2 – Cervical Cancer

Module 3 – Clinical Care of Patients Receiving Checkpoint Inhibitors

Module 4 – COVID-19: Considerations in Cervical and Endometrial Cancer

Module 5 – Oncology 2032 Crystal Ball: Part 1

RTP RESEARCH TO PRACTICE

SELF-ASSESSMENT QUIZ

Which of the following is a common side effect of immunotherapy?

1. Rash
2. Thyroid dysfunction
3. Both 1 and 2
4. Neither 1 nor 2
5. I don’t know

RTP
RESEARCH
TO PRACTICE

Symptoms of Immunotherapy Toxicity

Hypophysitis
(fatigue)

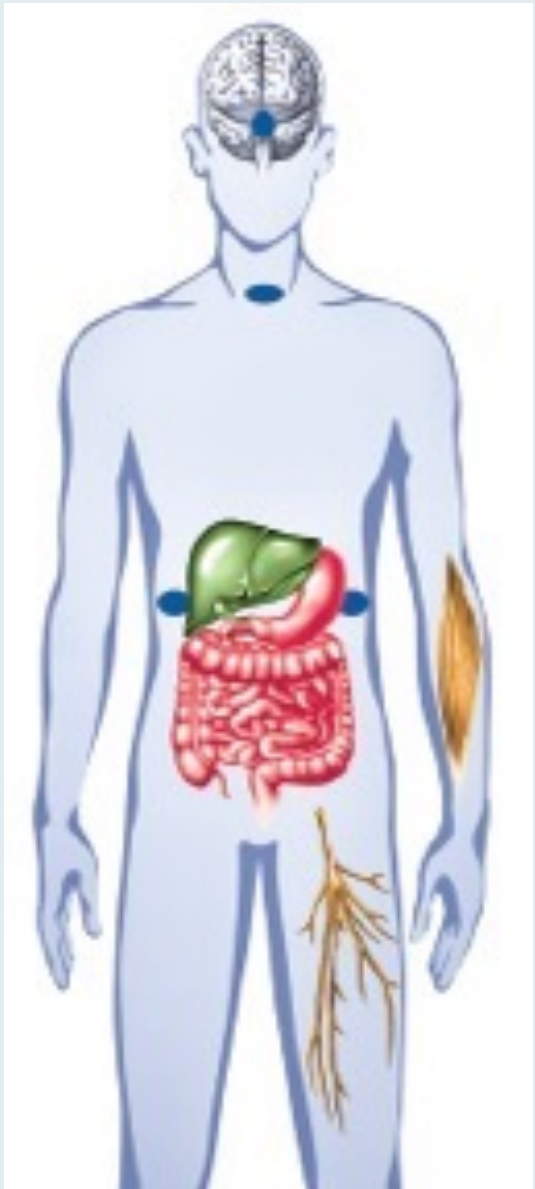
Thyroiditis
(over/underactive thyroid)

Adrenal Insufficiency
(fatigue)

Diabetes Mellitus
(type I, II, fatigue, DKA)

Colitis
(diarrhea, abd pain)

Dermatitis
(skin rash, itch, blistering)



Pneumonitis
(dyspnea, cough)

Myocarditis
(chest pain, dyspnea)

Hepatitis
(abn LFTs, jaundice)

Pancreatitis
(abd pain)

Neurotoxicities
(MG, encephalitis)

Arthritis
(joint pain)

RTP
RESEARCH
TO PRACTICE

Name an -itis, Any -itis

Organ System	Reported Toxicities
Integumentary	Hives, Eczema, Vitiligo, Pemphigus, Lichenoid Reactions
Gastrointestinal	Enterocolitis, Pancreatitis, Gastritis, Celiac Disease
Hepatic	Autoimmune Hepatitis, Sclerosing Cholangitis, Primary Biliary Cirrhosis
Renal	Interstitial Nephritis, Nephrotic Syndrome, Autoimmune Nephropathy
Pulmonary	Pneumonitis, Interstitial Lung Disease, Pleuritis
Cardiac	Myocarditis, Pericarditis, Cardiomyopathy
Endocrine	Hypo/Hyperthyroidism, Hypophysitis, Adrenal Insufficiency
Neurologic	Encephalitis, Guillain-Barre Syndrome, Myasthenia Gravis, Mononeuritis, Autoimmune inner ear disease
Hematologic	Hemolytic Anemia, Immune Thrombocytopenic Purpura, Thrombotic Thrombocytopenic Purpura, Hemophilia, Evans Syndrome
Rheumatologic	Polyarthritis, Systemic Lupus Erythematosus, Antiphospholipid Syndrome

Courtesy of: Susan K Roethke, CRNP, MSN, ANP-BC, AOCNP

JOURNAL OF CLINICAL ONCOLOGY | ASCO SPECIAL ARTICLE

J Clin Oncol 2018;36(17):1714-68.

Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: American Society of Clinical Oncology Clinical Practice Guideline

Julie R. Brahmer, Christina Lacchetti, Bryan J. Schneider, Michael B. Atkins, Kelly J. Brassil, Jeffrey M. Caterino, Ian Chau, Marc S. Ernstoff, Jennifer M. Gardner, Pamela Ginex, Sigrun Hallmeyer, Jennifer Holter Chakrabarty, Natasha B. Leighl, Jennifer S. Mammen, David F. McDermott, Aung Naing, Loretta J. Nastoupil, Tanyanika Phillips, Laura D. Porter, Igor Puzanov, Cristina A. Reichner, Bianca D. Santomasso, Carole Seigel, Alexander Spira, Maria E. Suarez-Almazor, Yinghong Wang, Jeffrey S. Weber, Jedd D. Wolchok, and John A. Thompson in collaboration with the National Comprehensive Cancer Network

J Clin Oncol 2021;39(36):4073-126.

ASCO special articles

Management of Immune-Related Adverse Events in Patients Treated With Immune Checkpoint Inhibitor Therapy: ASCO Guideline Update

Bryan J. Schneider, MD[1]; Jarushka Naidoo, MD[2,3]; Bianca D. Santomasso, MD, PhD[4]; Christina Lacchetti, MHSc[5]; Sherry Adkins, MS[6]; Milan Anadkat, MD[7]; Michael B. Atkins, MD[8]; Kelly J. Brassil, PhD[6]; Jeffrey M. Caterino, MD, MPH[9]; Ian Chau, MD[10]; Marianne J. Davies, DNP[11]; Marc S. Ernstoff, MD[12]; Leslie Fecher, MD[1]; Monalisa Ghosh, MD[13]; Ishmael Jaiyesimi, DO, MS[14]; Jennifer S. Mammen, MD, PhD[15]; Aung Naing, MD[6]; Loretta J. Nastoupil, MD[6]; Tanyanika Phillips, MD[16]; Laura D. Porter, MD[17]; Cristina A. Reichner, MD[18]; Carole Seigel, MBA[19], Jung-Min Song, MSN, RN, CNS[20]; Alexander Spira, MD, PhD[21]; Maria Suarez-Almazor, MD[6]; Umang Swami, MD[22]; John A. Thompson, MD[23]; Praveen Vikas, MD[24]; Yinghong Wang, MD[6]; Jeffrey S. Weber, MD, PhD[25]; Pauline Funchain, MD[20]; and Kathryn Bollin, MD[26]

Patient Education with Immunotherapies

- Establish means of communication—and reconfirm!

- Stress importance of calling with new onset symptoms:
  - Cough, chest pain, dyspnea
  - Diarrhea or severe abdominal pain
  - Severe nausea/vomiting, right sided abdominal pain, jaundice, easy bruising/bleeding
  - New onset fatigue, palpitations, hair loss, skin changes, increased thirst
  - Fever, urinary tract infection symptoms

Reminders!!

Side effects differ from traditional chemotherapy and often treatable, however though overall less common, side effects can occur and be severe

Courtesy of: Susan K Roethke, CRNP, MSN, ANP-BC, AOCNP

Immunotherapy Toxicities

- Rash
- Anorexia
- Nausea/Vomiting
- Fatigue
- Elevated LFTs
- Arthralgias/Myalgias
- Hyper/Hypothyroidism

Courtesy of: Susan K Roethke, CRNP, MSN, ANP-BC, AOCNP

RED FLAGS

- Any new signs or symptoms
  - Most important: cough, diarrhea, rash, extreme fatigue, headache, chest pain
- New onset sign or symptom impacting daily living in any way
- Labs
  - Creatinine >1.5x over baseline
  - AST/ALT >3x ULN and/or Tbili >1.5x ULN
  - Glucose >200
  - Do NOT need to act immediately for abnormal TSH

Courtesy of: Susan K Roethke, CRNP, MSN, ANP-BC, AOCNP

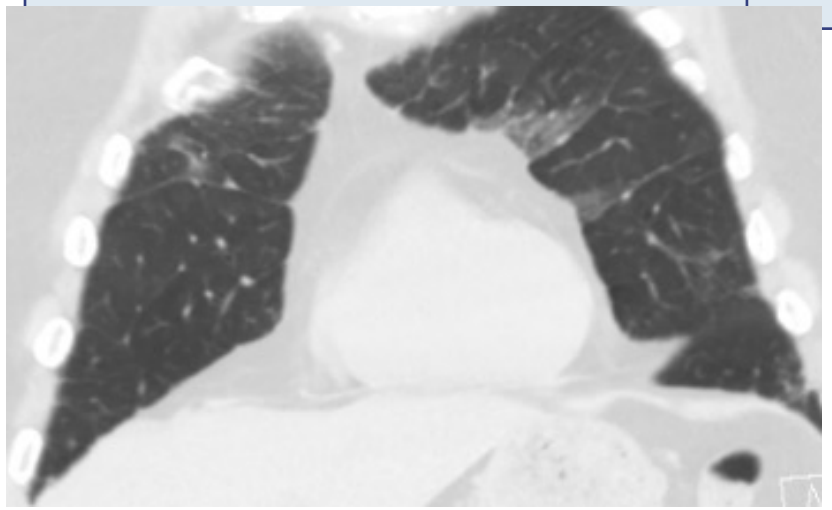
Management of Immune Related AEs

- Immune related AEs typically occur within the first 32 weeks of tx; most within the first 16 weeks, but can occur at any time
- No evidence that intervening with steroids curtails antitumor efficacy of agent

Courtesy of: Susan K Roethke, CRNP, MSN, ANP-BC, AOCNP

IO-Related Pneumonitis

Mild (Gr 1)	Moderate (Gr 2)	Severe (Gr 3-4)
• Consider holding immunotherapy • Reassess in 1-2 weeks • Pulse oximetry (resting and with ambulation) • Consider CT chest w/ or w/o contrast • Repeat CT in 4 weeks or as clinically indicated for worsening symptoms	• Hold immunotherapy • Consult pulmonary specialist • Must r/o infection (nasal swab, sputum, blood culture, urine culture) • Bronchoscopy • CT chest • Empiric abx if infection not r/o • Prednisone/methylprednisolone 1-2 mg/kg/day – monitor every 3-7 days	• Permanently d/c immunotherapy • Inpatient care • Infectious workup • Bronchoscopy • Methylprednisolone 1-2 mg/kg/day – assess response w/in 48 hours and plan to taper over 6 weeks • If not improvement after 48 hours THEN



Consider adding:

- Infliximab 5mg/kg/IV, 2nd dose may be repeated 14 days at discretion of tx provider
- IVIG
- Mycophenolate mofetil 1-1.5g BID then taper in consultation w/pulmonary service

Courtesy, Suresh Ramalingam, MD

Pneumonitis

- Pneumonitis differential
  - Radiation pneumonitis (consider radiation fields)
  - Immune-mediated pneumonitis (consider timing)
  - Pneumonia or infection (consider other symptoms)
- If non-infectious, initial management of radiation pneumonitis and immune-mediated pneumonitis is similar (steroid therapy)

Courtesy of Stephen V Liu, MD, PhD

Pneumonitis Management

- Symptoms must be monitored closely
  - Engage entire medical team and caregivers
  - New dyspnea/cough, new hypoxia warrant workup
    - Low threshold to hold therapy for evaluation
- Management guided by grade of pneumonitis
  - Grade 1: asymptomatic, no intervention needed
  - Grade 2: symptomatic, intervention required
  - Grade 3: severe symptoms, limiting ADLs, oxygen indicated
  - Grade 4: life threatening

Courtesy of Stephen V Liu, MD, PhD

Brahmer, JCO 2018

Agenda

Module 1 – Endometrial Cancer

Module 2 – Cervical Cancer

Module 3 – Clinical Care of Patients Receiving Checkpoint Inhibitors

Module 4 – COVID-19: Considerations in Cervical and Endometrial Cancer

Module 5 – Oncology 2032 Crystal Ball: Part 1

RTP RESEARCH TO PRACTICE

Curr. Treat. Options in Oncol. (2021) 22:117
DOI 10.1007/s11864-021-00905-5

Gynecologic Cancers (LA Cantrell, Section Editor)

COVID-19 and Gynecologic Oncology: What Have We Learned?

Aurora Leibold, MD[1]
Katyayani Papatla, MD[2]
Kristen P. Zeligs, MD[2,*]
Stephanie V. Blank, MD[2]

Questions — David M O'Malley, MD

COVID-19: Considerations in cervical and endometrial cancer

- **During the past 2 years, how have COVID-19 considerations affected your clinical practice patterns in general?**
- **Currently how do you approach a patient with cancer, either receiving treatment for their cancer or not, who develops asymptomatic COVID-19?**

RTP
RESEARCH
TO PRACTICE

Commentary — David M O'Malley, MD

COVID-19: Considerations in cervical and endometrial cancer

- **COVID-19 considerations (2020-2022): Fear (nearly 100% televisits, teams of the week, alternative treatments); paranoid (no visitors, face shields, widespread testing); concerned (vaccines now available, getting back to some normalcy); optimism (boosters, back to nearly normal); accepting (new normal).**
- **Currently how do you approach a patient with cancer, either receiving treatment for their cancer or not, who develops asymptomatic COVID-19?**
  - **COVID-19 Treatment: A new monoclonal antibody, bebtelovimab, has received EUA approval for the treatment of patients with COVID-19**
    - **Bebtelovimab is the only monoclonal with clinical efficacy against BA2.**
    - **eConsult referral will determine which therapy (monoclonal or antiviral) is the most appropriate for the patient based on current supply**

RTP RESEARCH TO PRACTICE

Commentary — David M O'Malley, MD

- Patients who are not eligible for bebtelovimab or other oral therapies may be eligible to enter the NIH-sponsored ACTIV-2 clinical trial which is currently evaluating multiple experimental treatment products against all variants of the SARS-COV-2 virus

– **Post-Exposure Prophylaxis: Since the only products currently approved for post-exposure prophylaxis are casirivimab/imdevimab and bamlanivimab/etesevimab which do not have activity against Omicron or BA2, this program has been suspended until a new product is approved for this indication by the FDA.**

– **Vaccinated, Boosted and not an active therapy – precautions**

- **Examples of COVID impacting practice**

  – **Cervical cancer patient delayed rad hyst for 3 months recovering from in-pt admission**

  – **Multiple delayed tumor reductive surgeries (6 cycles of chemo prior to surgery)**

  – **2 weeks delay in chemotherapy schedules**

https://osu.app.box.com/s/c17x2mbsycftktj9jifey0gd4vchgc17. Accessed 4/24/22

RTP RESEARCH TO PRACTICE

Questions — Jaclyn Shaver, MS, APRN, CNP, WHNP

COVID-19: Considerations in cervical and endometrial cancer

- **What are some of the ways that telemedicine and tele-education have affected your clinical practice during the COVID-19 pandemic?**
- **Currently what is your approach to COVID-19 vaccines, antibodies and other preventive strategies?**
- **What are some of the psychosocial issues that arise in these situations?**

RTP
RESEARCH
TO PRACTICE

Commentary —Jaclyn Shaver, MS, APRN, CNP, WHNP

COVID-19: Considerations in cervical and endometrial cancer

- **TeleMedicine**
  - **Benefit both Provider and Patient**
  - **Challenges**
- **Approach to COVID**
  - **Patient Recommendations**
  - **Treatments**
  - **Facility Standards**
- **Psychosocial Issues**
  - **Isolation**
  - **Financial/Social Strains**
  - **Grief Process**

RTP RESEARCH TO PRACTICE

Agenda

Module 1 – Endometrial Cancer

Module 2 – Cervical Cancer

Module 3 – Clinical Care of Patients Receiving Checkpoint Inhibitors

Module 4 – COVID-19: Considerations in Cervical and Endometrial Cancer

Module 5 – Oncology 2032 Crystal Ball: Part 1

RTP
RESEARCH
TO PRACTICE

Questions — Robert L Coleman, MD

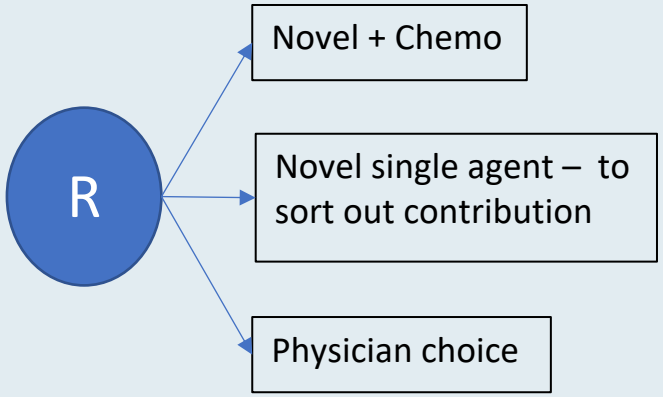
Fantasies for the future… Oncology 2032?

- **What are some of the ongoing trial concepts and strategies that are attempting to take oncology therapy to the next level that excite you the most?**

Commentary — Robert L Coleman, MD

Fantasies for the future… Oncology 2032?

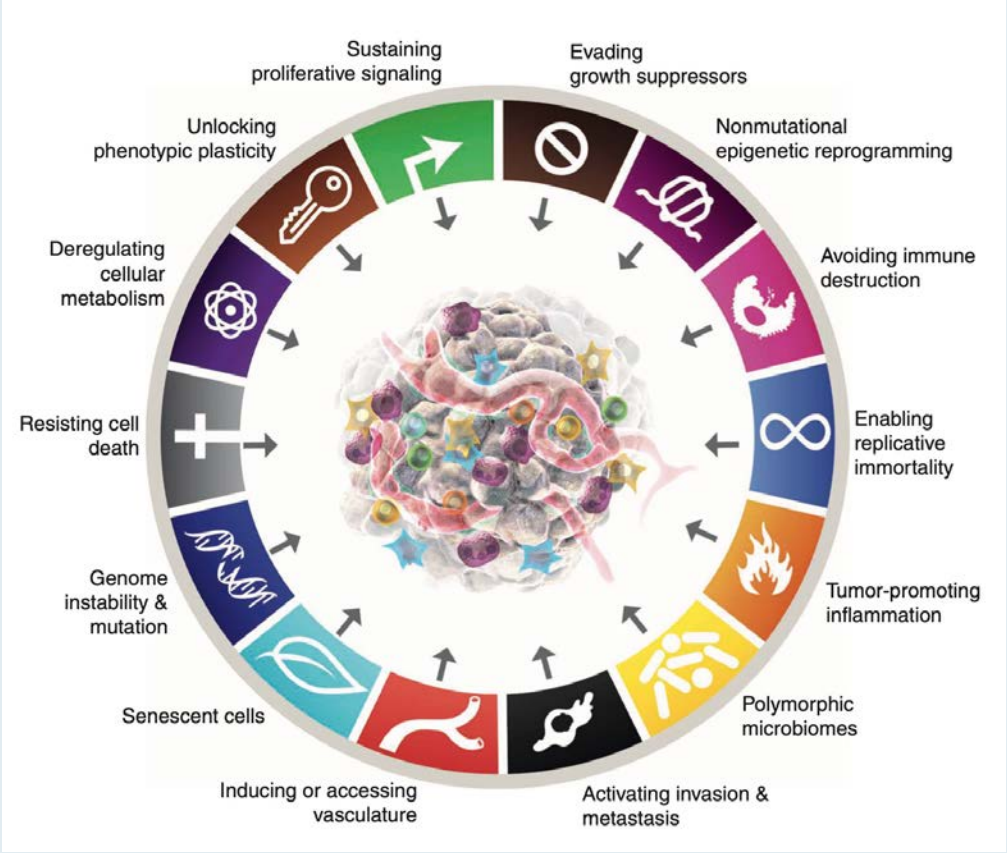
- <u>Eligibility: Disease State</u>
- Prior therapy allowance
  - (e.g. if BRCAmut, must have PARPi
  - 1-X lines of therapy
- Prior treatment requirement (e.g. bevacizumab required)
- ECOG 0-1



Key exclusion: Ascites (paracentesis within 6 weeks), bowel obstruction (air in small bowel or admission) or visceral crisis

Statistical Design:
- Adaptive designs (e.g. Phase 2 portion ORR by BICR for AA; Phase 3 portion PFS and interim OS
- Sample size

Regulatory strategy



Questions — Paula J Anastasia, MN, RN, AOCN

Fantasies for the future… Oncology 2032?

- **What are some of the ways that you could foresee that complementary treatment strategies such as massage, acupuncture, nutrition and exercise support, yoga and meditation could be optimized, including the use of electronic and online tools?**

RTP
RESEARCH
TO PRACTICE

Commentary — Ms Paula Anastasia

Fantasies for the future… Oncology 2032?

- **Complementary Treatment**
- **Recommend/Endorse complementary therapy, including but not limited to exercise, acupuncture, massage, supportive outlets**
  - **Support groups may provide some of these relaxation self care modalities**
  - **Online exercise, meditation (Head Space, Calm Meditation, Ten Percent happier, Buddhify)**
  - **National Cervical Cancer Coalition provides a list of national cancer resources**
  - **Introduce patients of similar demographics to each other: buddy system**
  - **Ted Talks for affirmation or motivation**
  - **Information: Foundation for Women's Cancer, American Cancer Society**
- **Future: Nurse – WRITE symptom tracking modeled after other disease sites**

RTP RESEARCH TO PRACTICE

Appendix

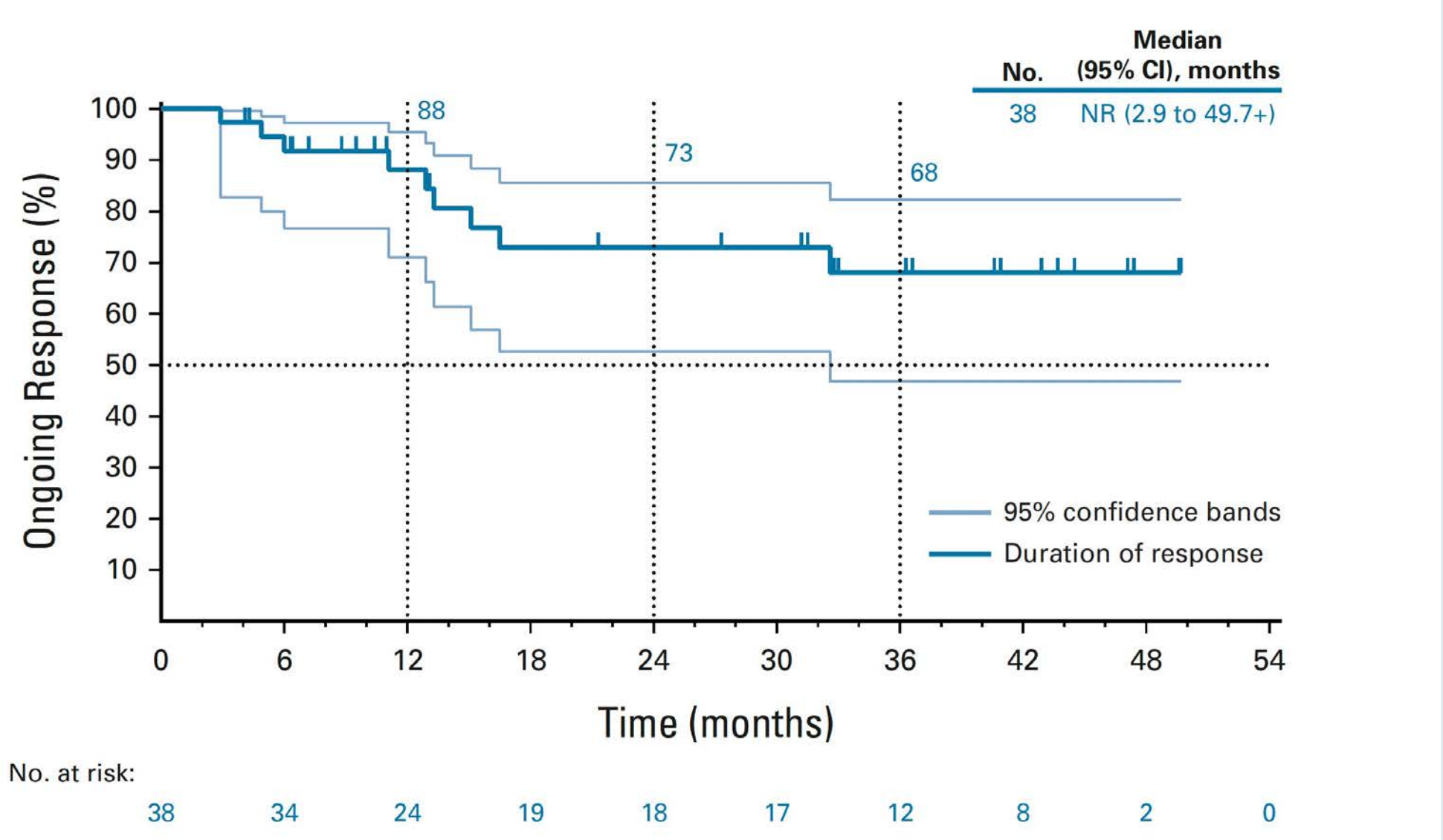
original reports

Pembrolizumab in Patients With Microsatellite Instability–High Advanced Endometrial Cancer: Results From the KEYNOTE-158 Study

David M. O'Malley, MD[1]; Giovanni Mendonca Bariani, MD[2]; Philippe A. Cassier, MD[3]; Aurelien Marabelle, MD, PhD[4]; Aaron R. Hansen, MBBS[5]; Ana De Jesus Acosta, MD[6]; Wilson H. Miller Jr, MD, PhD[7,8]; Tamar Safra, MD[9,10]; Antoine Italiano, MD, PhD[11,12]; Linda Mileshkin, MBBS[13]; Lei Xu, PhD[14]; Fan Jin, MD[14]; Kevin Norwood, MD[14]; and Michele Maio, MD[15]

Journal of Clinical Oncology 2022;40(7):752-61.

KEYNOTE-158: Kaplan-Meier Analysis of Duration of Response



O'Malley DM et al. *J Clin Oncol* 2022;40(7):752-61.

RTP RESEARCH TO PRACTICE

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Pembrolizumab for Persistent, Recurrent, or Metastatic Cervical Cancer

N. Colombo, C. Dubot, D. Lorusso, M.V. Caceres, K. Hasegawa, R. Shapira-Frommer, K.S. Tewari, P. Salman, E. Hoyos Usta, E. Yañez, M. Gümüş, M. Olivera Hurtado de Mendoza, V. Samouëlian, V. Castonguay, A. Arkhipov, S. Toker, K. Li, S.M. Keefe, and B.J. Monk, for the KEYNOTE-826 Investigators*

NEJM 2021;385:1856-67.

KEYNOTE 826: Adverse Events of Any Cause with an Incidence of 20% or More in Either Group

Event	Pembrolizumab Group (N = 307)†		Placebo Group (N = 309)†	
	Any Grade	Grade 3–5	Any Grade	Grade 3–5
	number of patients (percent)			
Any event	305 (99.3)	251 (81.8)‡	307 (99.4)	232 (75.1)§
Anemia	188 (61.2)	93 (30.3)	165 (53.4)	83 (26.9)
Alopecia	173 (56.4)	0	179 (57.9)	0
Nausea	122 (39.7)	6 (2.0)	135 (43.7)	5 (1.6)
Diarrhea	109 (35.5)	6 (2.0)	92 (29.8)	8 (2.6)
Fatigue	88 (28.7)	11 (3.6)	84 (27.2)	14 (4.5)
Constipation	87 (28.3)	1 (0.3)	102 (33.0)	3 (1.0)
Arthralgia	82 (26.7)	2 (0.7)	80 (25.9)	4 (1.3)
Peripheral neuropathy	81 (26.4)	8 (2.6)	79 (25.6)	9 (2.9)
Vomiting	81 (26.4)	8 (2.6)	84 (27.2)	6 (1.9)
Hypertension	74 (24.1)	29 (9.4)	71 (23.0)	33 (10.7)
Urinary tract infection	73 (23.8)	27 (8.8)	80 (25.9)	25 (8.1)
Neutropenia	72 (23.5)	38 (12.4)	60 (19.4)	30 (9.7)
Peripheral sensory neuropathy	71 (23.1)	3 (1.0)	79 (25.6)	6 (1.9)
Asthenia	63 (20.5)	11 (3.6)	66 (21.4)	5 (1.6)
Thrombocytopenia	61 (19.9)	23 (7.5)	62 (20.1)	14 (4.5)

Colombo et al. *NEJM* 2021;385:1856-67.

What I Tell My Patients:
New Treatments and Clinical Trial Options

An NCPD Hybrid Symposium Series
Held During the 47th Annual ONS Congress

Bladder Cancer

Saturday, April 30, 2022
12:15 PM – 1:45 PM PT

Faculty

Monica Averia, MSN, AOCNP, NP-C
Shilpa Gupta, MD
Brenda Martone, MSN, NP-BC, AOCNP
Sumanta Kumar Pal, MD

Moderator

Neil Love, MD

RTP
RESEARCH
TO PRACTICE

Thank you for joining us!

In-person attendees: Please fill out your Educational Assessment and NCPD Credit Form.

Online attendees: NCPD credit information will be emailed to each participant within 3 business days.

RTP
RESEARCH
TO PRACTICE