Investigator Perspectives on Available Research Findings and Challenging Questions in Renal Cell Carcinoma

A CME-Accredited Virtual Event Held in Conjunction with the 2023 ASCO® Annual Meeting

Tuesday, June 6, 2023
7:00 AM – 8:00 AM

Faculty

David F McDermott, MD
Sumanta Kumar Pal, MD

Moderator

Neil Love, MD

RTP RESEARCH TO PRACTICE

Faculty

David F McDermott, MD
Chief, Medical Oncology
Beth Israel Deaconess Medical Center
Leader, Kidney Cancer Program
Dana-Farber/Harvard Cancer Center
Professor of Medicine
Harvard Medical School
Boston, Massachusetts

Sumanta Kumar Pal, MD
Professor, Department of Medical Oncology
and Therapeutics Research
City of Hope
Duarte, California

Moderator

Neil Love, MD
Research To Practice
Miami, Florida

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Friday June 2	**Gastroesophageal Cancers** 11:45 AM – 12:45 PM CT (12:45 PM – 1:45 PM ET)
	Non-Small Cell Lung Cancer 6:30 PM – 9:00 PM CT (7:30 PM – 10:00 PM ET)
Saturday June 3	**Hepatobiliary Cancers** 6:45 AM – 7:45 AM CT (7:45 AM – 8:45 AM ET)
	Prostate Cancer 7:00 PM – 9:00 PM CT (8:00 PM – 10:00 PM ET)
Sunday June 4	**Ovarian Cancer** 6:45 AM – 7:45 AM CT (7:45 AM – 8:45 AM ET)
	Lymphoma, Chronic Lymphocytic Leukemia and Multiple Myeloma 7:00 PM – 9:30 PM CT (8:00 PM – 10:30 PM ET)
Monday June 5	**Urothelial Bladder Cancer** 6:45 AM – 7:45 AM CT (7:45 AM – 8:45 AM ET)
	Breast Cancer 7:00 PM – 9:30 PM CT (8:00 PM – 10:30 PM ET)
Tuesday June 6	**Renal Cell Carcinoma (Webinar)** 7:00 AM – 8:00 AM CT (8:00 AM – 9:00 AM ET)

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Exciting CME Events in Chicago You Do Not Want to Miss

A CME Hybrid Symposium Series Held in Conjunction with the 2023 ASCO Annual Meeting

Gastroesophageal Cancers

Friday, June 2, 2023

11:45 AM – 12:45 PM CT (12:45 PM – 1:45 PM ET)

Faculty

Yelena Y Janjigian, MD
Manish A Shah, MD
Harry H Yoon, MD, MHS
Additional faculty to be announced

Hepatobiliary Cancers

Saturday, June 3, 2023

6:45 AM – 7:45 AM CT (7:45 AM – 8:45 AM ET)

Faculty

Anthony El-Khoueiry, MD
Robin K (Katie) Kelley, MD
Professor Arndt Vogel, MD

Non-Small Cell Lung Cancer

Friday, June 2, 2023

6:30 PM – 9:00 PM CT (7:30 PM – 10:00 PM ET)

Faculty

Edward B Garon, MD, MS
John V Heymach, MD, PhD
Ticiana Leal, MD
Helena Yu, MD
Additional faculty to be announced

Prostate Cancer

Saturday, June 3, 2023

7:00 PM – 9:00 PM CT (8:00 PM – 10:00 PM ET)

Faculty

Emmanuel S Antonarakis, MD
Prof Karim Fizazi, MD, PhD
Rana R McKay, MD
Alicia K Morgans, MD, MPH
A Oliver Sartor, MD

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Ovarian Cancer

Sunday, June 4, 2023

6:45 AM – 7:45 AM CT (7:45 AM – 8:45 AM ET)

Faculty

Philipp Harter, MD, PhD
David M O'Malley, MD
Shannon N Westin, MD, MPH

Urothelial Bladder Cancer

Monday, June 5, 2023

6:45 AM – 7:45 AM CT (7:45 AM – 8:45 AM ET)

Faculty

Matthew D Galsky, MD
Scott T Tagawa, MD, MS
Andrea Necchi, MD

Lymphoma, Chronic Lymphocytic Leukemia and Multiple Myeloma

Sunday, June 4, 2023

7:00 PM – 9:30 PM CT (8:00 PM – 10:30 PM ET)

Faculty

Shaji K Kumar, MD
Ann S LaCasce, MD, MMSc
Sagar Lonial, MD
Loretta J Nastoupil, MD
Additional faculty to be announced

Breast Cancer

Monday, June 5, 2023

7:00 PM – 9:30 PM CT (8:00 PM – 10:30 PM ET)

Faculty

Kevin Kalinsky, MD, MS
Ian E Krop, MD, PhD
Joyce O'Shaughnessy, MD
Hope S Rugo, MD
Professor Peter Schmid, FRCP, MD, PhD
Additional faculty to be announced

Exciting CME Events in Chicago You Do Not Want to Miss

A CME Hybrid Symposium Series Held in Conjunction with the 2023 ASCO Annual Meeting

Renal Cell Carcinoma Webinar

Tuesday, June 6, 2023

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Faculty

David F McDermott, MD

Sumanta Kumar Pal, MD

What I Tell My Patients: Faculty Physicians and Nurses Discuss Patient Education About New Treatments and Clinical Trials

Part 2 of a 3-Part Complimentary NCPD Webinar Series
in Partnership with the 2023 ONS Congress

Colorectal and Gastroesophageal Cancers

Wednesday, June 14, 2023
5:00 PM – 6:00 PM ET

Faculty

Kristen K Ciombor, MD, MSCI
Amanda K Wagner, APRN-CNP, AOCNP

Moderator

Neil Love, MD

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RESEARCH TO PRACTICE

Meet The Professor

The Current and Future Management of Non-Hodgkin Lymphoma

Thursday, June 15, 2023
5:00 PM – 6:00 PM ET

Faculty

Ian W Flinn, MD, PhD

Moderator

Neil Love, MD

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The Implications of New Research Findings for the Management of Endometrial Cancer

A CME/MOC-Accredited Virtual Event in Partnership with the Society of Gynecologic Oncology

Wednesday, June 28, 2023

5:00 PM – 6:00 PM ET

Faculty

Bradley J Monk, MD

Matthew A Powell, MD

Moderator

Neil Love, MD

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Commercial Support

This activity is supported by educational grants from Aveo Pharmaceuticals and Exelixis Inc.

Dr Love — Disclosures

Dr Love is president and CEO of Research To Practice. Research To Practice receives funds in the form of educational grants to develop CME activities from the following companies: AbbVie Inc, Adaptive Biotechnologies Corporation, ADC Therapeutics, Agios Pharmaceuticals Inc, Alexion Pharmaceuticals, Amgen Inc, Array BioPharma Inc, a subsidiary of Pfizer Inc, Astellas, AstraZeneca Pharmaceuticals LP, Aveo Pharmaceuticals, Bayer HealthCare Pharmaceuticals, BeiGene Ltd, BeyondSpring Pharmaceuticals Inc, Blueprint Medicines, Boehringer Ingelheim Pharmaceuticals Inc, Bristol Myers Squibb, Celgene Corporation, Clovis Oncology, Coherus BioSciences, CTI BioPharma Corp, Daiichi Sankyo Inc, Eisai Inc, Elevation Oncology Inc, EMD Serono Inc, Epizyme Inc, Exact Sciences Corporation, Exelixis Inc, Five Prime Therapeutics Inc, Foundation Medicine, G1 Therapeutics Inc, Genentech, a member of the Roche Group, Genmab US Inc, Gilead Sciences Inc, Grail Inc, GSK, Halozyme Inc, Helsinn Healthcare SA, ImmunoGen Inc, Incyte Corporation, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Karyopharm Therapeutics, Kite, A Gilead Company, Kronos Bio Inc, Lilly, Loxo Oncology Inc, a wholly owned subsidiary of Eli Lilly & Company, MEI Pharma Inc, Merck, Mersana Therapeutics Inc, Mirati Therapeutics Inc, Natera Inc, Novartis, Novartis Pharmaceuticals Corporation on behalf of Advanced Accelerator Applications, Novocure Inc, Oncopeptides, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sanofi, Seagen Inc, Servier Pharmaceuticals LLC, SpringWorks Therapeutics Inc, Stemline Therapeutics Inc, Sumitomo Dainippon Pharma Oncology Inc, Taiho Oncology Inc, Takeda Pharmaceuticals USA Inc, TerSera Therapeutics LLC, Tesaro, A GSK Company, TG Therapeutics Inc, Turning Point Therapeutics Inc, Verastem Inc, and Zymeworks Inc.

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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 McDermott — Disclosures

Consulting Agreements	Bristol Myers Squibb, Clinigen Limited, Exelixis Inc, Iovance Biotherapeutics, Merck, Pfizer Inc
Data and Safety Monitoring Board/Committee (Unpaid)	RAMPART RCC trial

Dr Pal — Disclosures

Travel	CRISPR Therapeutics, Ipsen Biopharmaceuticals Inc

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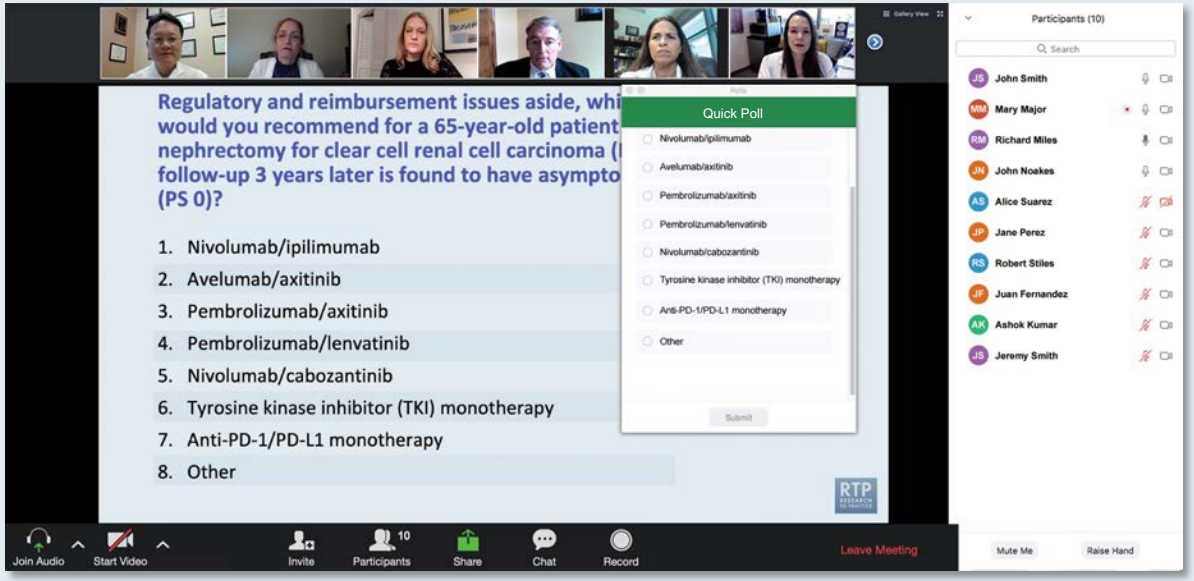
Clinicians, Please Complete the Pre- and Postmeeting Surveys



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Download the RTP Live app on your smartphone or tablet to access program information, including slides being presented during the program:

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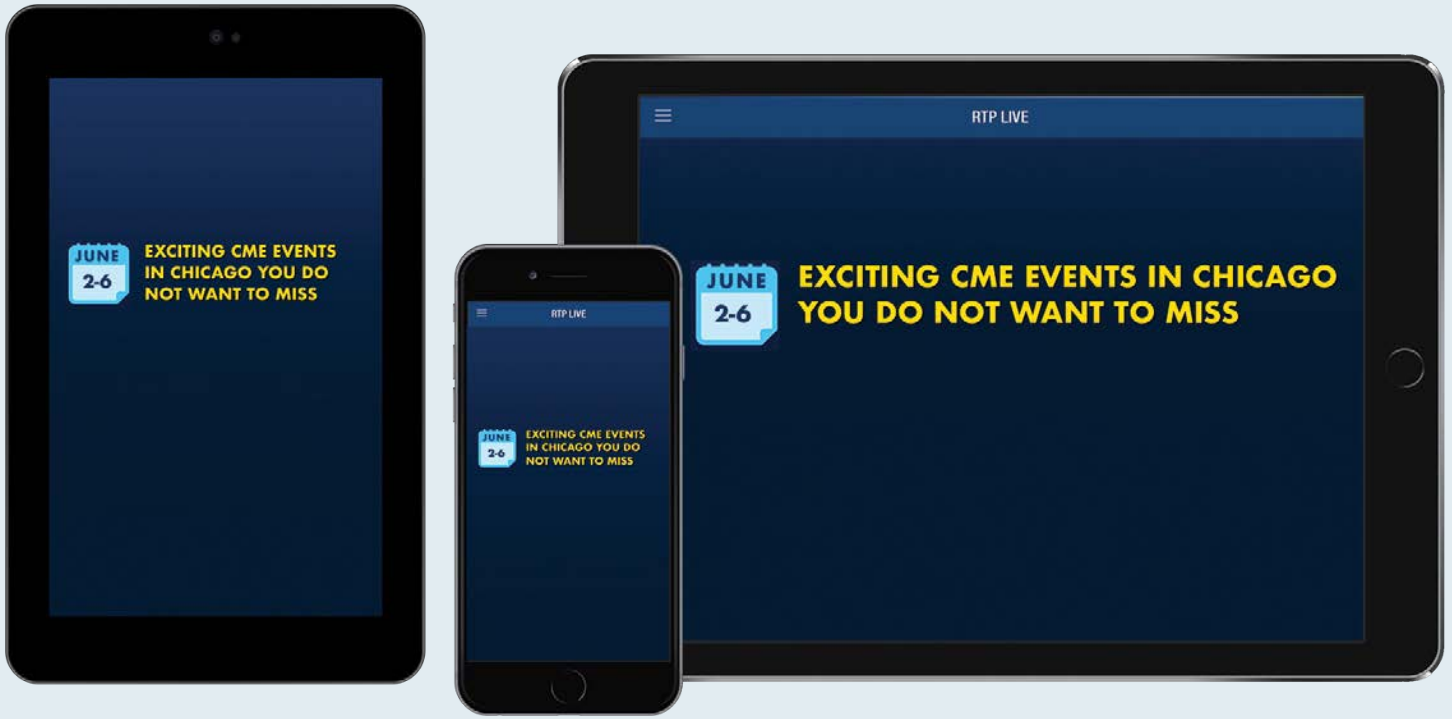

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ONCOLOGY TODAY

WITH DR NEIL LOVE

Management of Renal Cell Carcinoma

DR TONI CHOUEIRI
DANA-FARBER CANCER INSTITUTE

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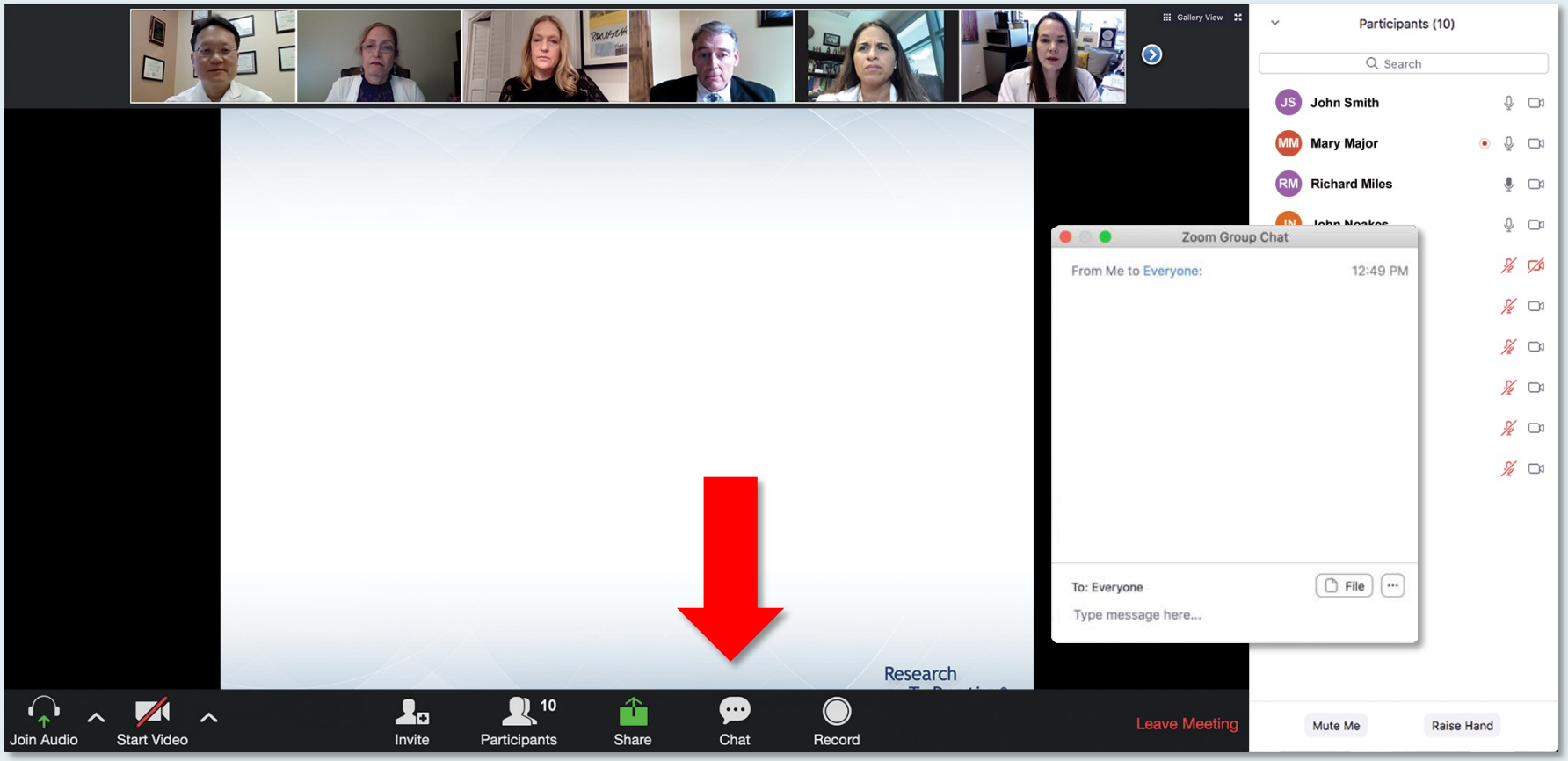
We Encourage Clinicians in Practice to Submit Questions



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

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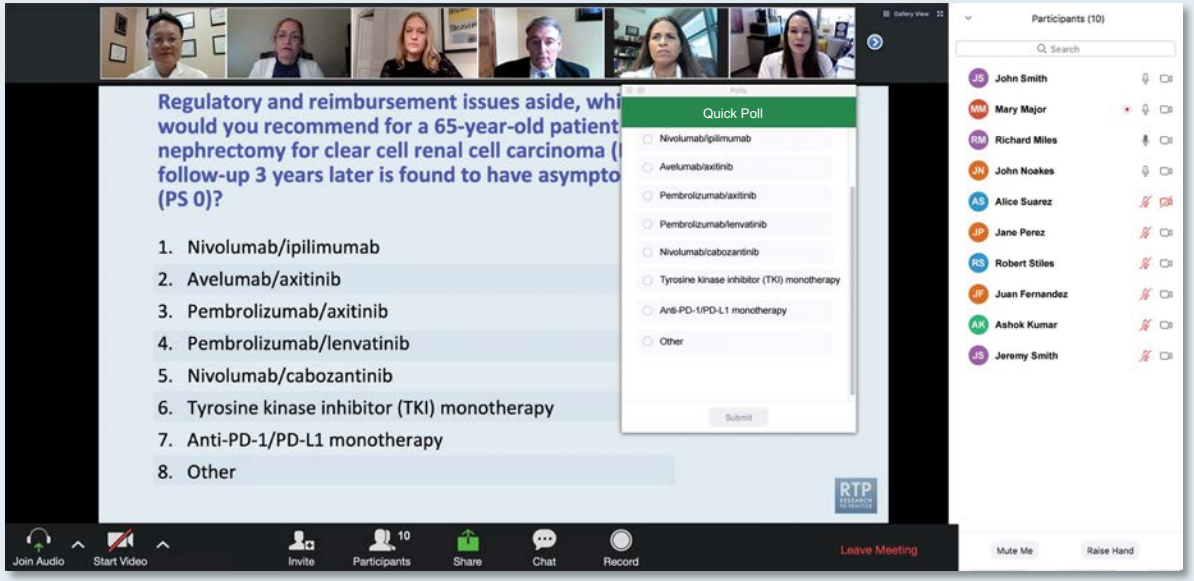
Clinicians in the Audience, Please Complete the Pre- and Postmeeting Surveys



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RTP RESEARCH TO PRACTICE

Agenda

Module 1 – ASCO 2023

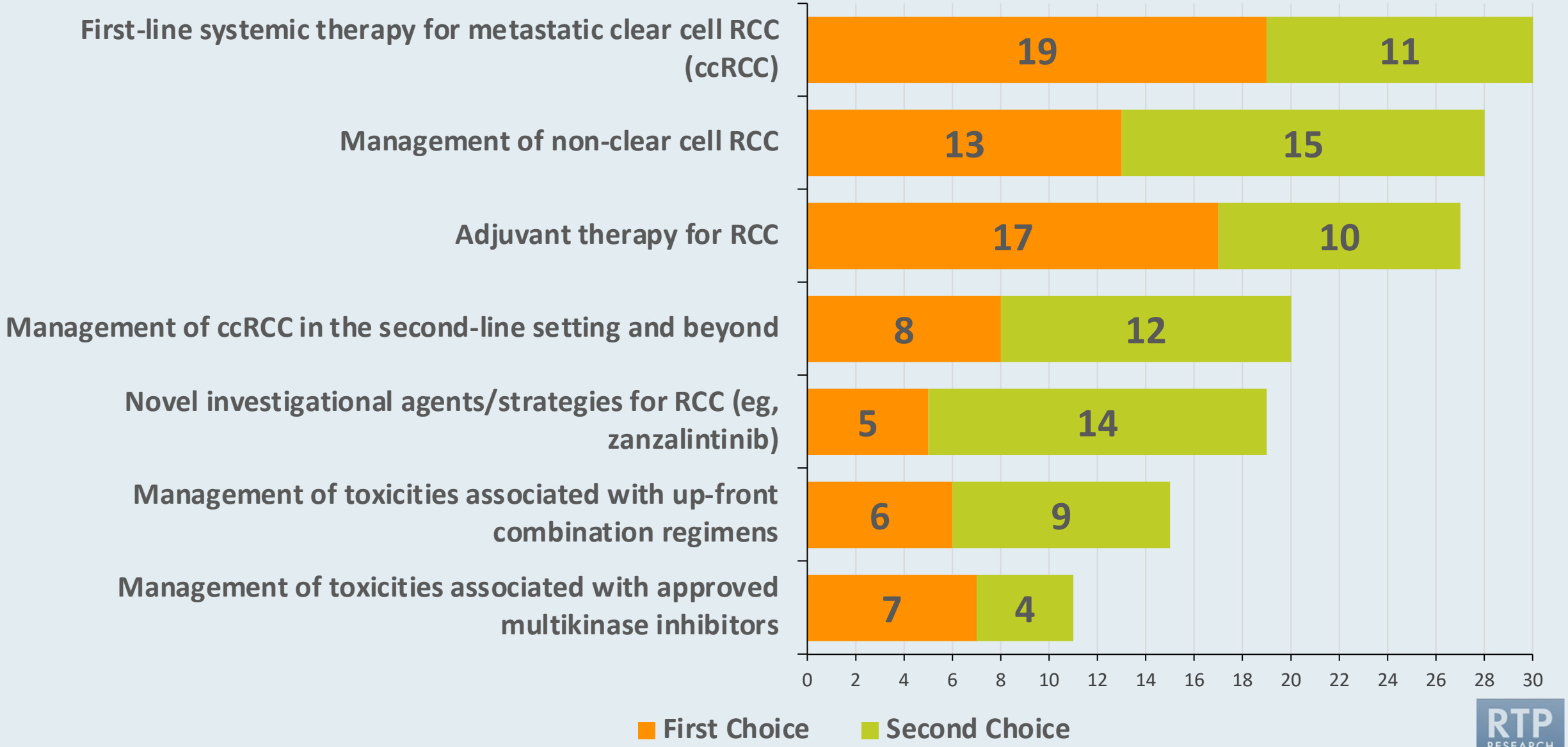
Module 2 – Management of Advanced Renal Cell Carcinoma (RCC)

- First-line systemic therapy for metastatic clear cell RCC (ccRCC)
- Management of toxicities associated with up-front combination regimens
- Management of ccRCC in the second-line setting and beyond
- Management of toxicities associated with approved multikinase inhibitors

Module 3 – Treatment Approaches for Nonmetastatic RCC; Optimal care of Patients with Non-Clear Cell RCC

- Adjuvant therapy for RCC
- Management of non-clear cell RCC
- Novel investigational agents/strategies for RCC (eg, zanzalintinib)

Topics of Interest for Future CME Programs



Survey of US-based general medical oncologists, May 2023. N = 75

RTP RESEARCH TO PRACTICE

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ASCO 2023 – Advanced RCC

- Choueiri TK et al. **Efficacy and safety of atezolizumab plus cabozantinib vs cabozantinib alone after progression with prior immune checkpoint inhibitor (ICI) treatment in metastatic renal cell carcinoma (RCC): Primary PFS analysis from the phase 3, randomized, open-label CONTACT-03 study.** ASCO 2023;Abstract LBA4500
- Rini BI et al. **Pembrolizumab plus axitinib versus sunitinib as first-line therapy for advanced clear cell renal cell carcinoma: 5-year analysis of KEYNOTE-426.** ASCO 2023;Abstract LBA4501
- Hutson TE et al**. Final prespecified overall survival (OS) analysis of CLEAR: 4-year follow-up of lenvatinib plus pembrolizumab (L+P) vs sunitinib (S) in patients (pts) with advanced renal cell carcinoma (aRCC).** ASCO 2023;Abstract 4502
- Cella D et al. **Health-related quality of life (HRQoL) of risk-based patient subgroups with advanced renal cell cancer (aRCC) treated with nivolumab plus cabozantinib (NIVO+CABO) vs sunitinib (SUN) in the CheckMate 9ER trial.** ASCO 2023;Abstract 4527
- Albiges L et al. **Belzutifan plus lenvatinib for patients (pts) with advanced clear cell renal cell carcinoma (ccRCC) after progression on a PD-1/L1 and VEGF inhibitor: Preliminary results of arm B5 of the phase 1/2 KEYMAKER-U03B study.** ASCO 2023;Abstract 4553

ASCO 2023 – Adjuvant and Non-clear cell RCC

Adjuvant Treatment

- Motzer RJ et al. **Adjuvant nivolumab plus ipilimumab vs placebo for patients with localized renal cell carcinoma at high risk of relapse after nephrectomy: Subgroup analyses from the phase 3 CheckMate 914 (part A) trial.** ASCO 2023;Abstract 4506

Non-clear Clear Cell RCC

- Lee C-H et al**. First-line lenvatinib + pembrolizumab treatment across non-clear cell renal cell carcinomas: Results of the phase 2 KEYNOTE-B61 study.** ASCO 2023; Abstract 4518
- McGregor BA et al. **Phase II study of cabozantinib (Cabo) with nivolumab (Nivo) and ipilimumab (Ipi) in advanced renal cell carcinoma with variant histologies (RCCvh).** ASCO 2023;Abstract 4520
- Lee C-H et al. **Nivolumab plus cabozantinib in patients with non-clear cell renal cell carcinoma: Updated results from a phase 2 trial.** ASCO 2023;Abstract 4537
- Labaki C et al. **Efficacy of first-line (1L) immunotherapy (IO)-based regimens in patients with sarcomatoid and/or rhabdoid (S/R) metastatic non-clear cell renal cell carcinoma (nccRCC): Results from the International Metastatic Renal Cell Carcinoma Database Consortium (IMDC).** ASCO 2023;Abstract 4519

ASCO 2023 – Non-clear cell RCC (con't)

- Tripathi A et al. **Pathologic concordance rate and outcomes by histologic subtype in advanced papillary renal cell (pRCC) carcinoma: An analysis from the SWOG S1500 (PAPMET) trial.** ASCO 2023;Abstract 4562

- Johns A et al. **CABOSUN II: Results from a phase 2, open-label, multi-center randomized study of cabozantinib (CABO) vs. sunitinib (SUN) for non-clear cell renal cell carcinoma (NCCRCC).** ASCO 2023;Abstract 4597

ASCO 2023 – RCC Education Sessions

- **Oligometastatic renal Cell Carcinoma: Observe, Exercise, Ablate?**

  Tuesday, June 6; 9:45 AM CT

- **Doublet and Triplet Therapy for Metastatic Renal Cell Carcinoma: The More the Merrier or Is Three a Crowd?**

  Tuesday, June 6; 11:30 AM CT

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PRECISION MANAGEMENT OF ADVANCED KIDNEY CANCER

David McDermott, MD
Beth Israel Deaconess Medical Center
Harvard Medical School

Beth Israel Lahey Health

Beth Israel Deaconess Medical Center

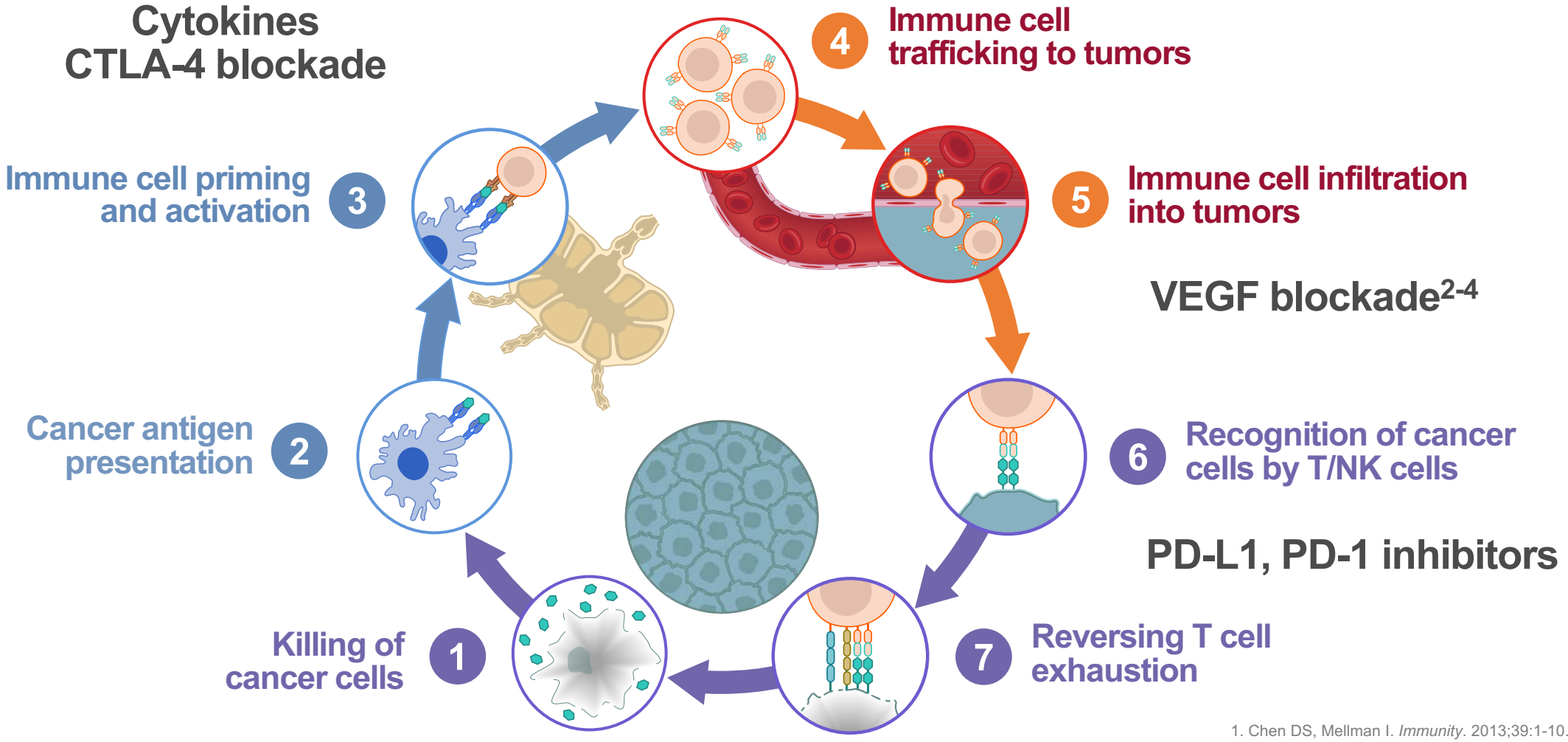
HARVARD MEDICAL SCHOOL TEACHING HOSPITAL

Kidney Cancer: Most Applied Sequence 2015

Setting	NCCN	Alternative
1st-Line Therapy	VEGF Blockade	
2nd-Line Therapy	PD-1 Blockade	

Strengthen the Anti-Kidney Cancer Immune Response[1]

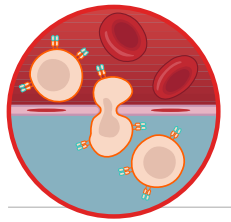
Immune desert
Immune excluded
Inflamed



1. Chen DS, Mellman I. *Immunity*. 2013;39:1-10.
2. Shrimali RK et al. *Can Res.* 2010;70:6171-6180.
3. Manning EA et al. *Clin Cancer Res.* 2007;13:3951-3959.
4. Motz GT et al. *Nat Med.* 2014;20:607-615.

Fusion of First- and Second-line Therapy

Setting	NCCN	Alternative
Treatment Naïve	PD-1 + VEGF Blockade	
3rd-Line Therapy		



5 Immune cell infiltration into tumors

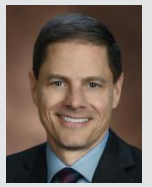
Confirmation of combination benefit

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Pembrolizumab plus Axitinib versus Sunitinib for Advanced Renal-Cell Carcinoma

B.I. Rini, E.R. Plimack, V. Stus, R. Gafanov, R. Hawkins, D. Nosov, F. Pouliot, B. Alekseev, D. Soulières, B. Melichar, I. Vynnychenko, A. Kryzhanivska, I. Bondarenko, S.J. Azevedo, D. Borchiellini, C. Szczylik, M. Markus, R.S. McDermott, J. Bedke, S. Tartas, Y.-H. Chang, S. Tamada, Q. Shou, R.F. Perini, M. Chen, M.B. Atkins, and T. Powles, for the KEYNOTE-426 Investigators*


Rini


Atkins


Powles


Plimack

Rini BI et al, NEJM 2019; 380:1116-1127

mRCC: Superior Front-Line Combination Therapy

Setting	NCCN	Alternative
1st-Line Therapy	PD-1 + CTLA-4 Blockade	
2nd-Line Therapy		

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 APRIL 5, 2018 VOL. 378 NO. 14

Nivolumab plus Ipilimumab versus Sunitinib in Advanced Renal-Cell Carcinoma

R.J. Motzer, N.M. Tannir, D.F. McDermott, O. Arén Frontera, B. Melichar, T.K. Choueiri, E.R. Plimack, P. Barthélémy, C. Porta, S. George, T. Powles, F. Donskov, V. Neiman, C.K. Kollmannsberger, P. Salman, H. Gurney, R. Hawkins, A. Ravaud, M.-O. Grimm, S. Bracarda, C.H. Barrios, Y. Tomita, D. Castellano, B.I. Rini, A.C. Chen, S. Mekan, M.B. McHenry, M. Wind-Rotolo, J. Doan, P. Sharma, H.J. Hammers, and B. Escudier, for the CheckMate 214 Investigators*

Motzer, RJ et al. N Engl J Med 2018;378:1277-90

First-Line Phase 3 Trials in Advanced Kidney Cancer

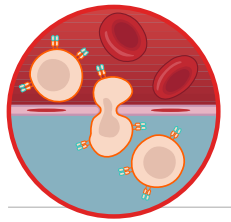
Control	Experimental Arm
Sunitinib	Axitinib + avelumab
Sunitinib	Bevacizumab + atezolizumab
Sunitinib	**Nivolumab + cabozantinib**
Sunitinib	**Lenvatinib + pembrolizumab**
Sunitinib	**Axitinib + pembrolizumab**
Sunitinib	**Nivolumab + ipilimumab**

Which regimen should be favored?

Bold – met both OS and PFS endpoints

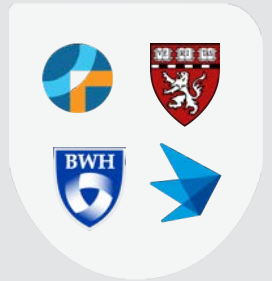
Clinical Take-Homes

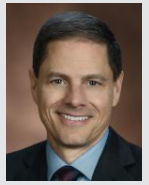
PD-1 + VEGF	PD-1/CTLA-1
PROS	
• Improved OS • **High ORR, low PD rate** • **Longer PFS** • Lower irAE rate	• Improved OS • Mature follow-up data available • **Durable responses** • **Potential to stop therapy** • QOL during maintenance
CONS	
• Unclear AE attribution • Less mature follow-up • Chronic TKI toxicity	• Higher irAE rate • Lower PFS/response rate



5 Immune cell infiltration into tumors

Trouble with the Curves?

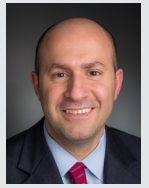



Rini

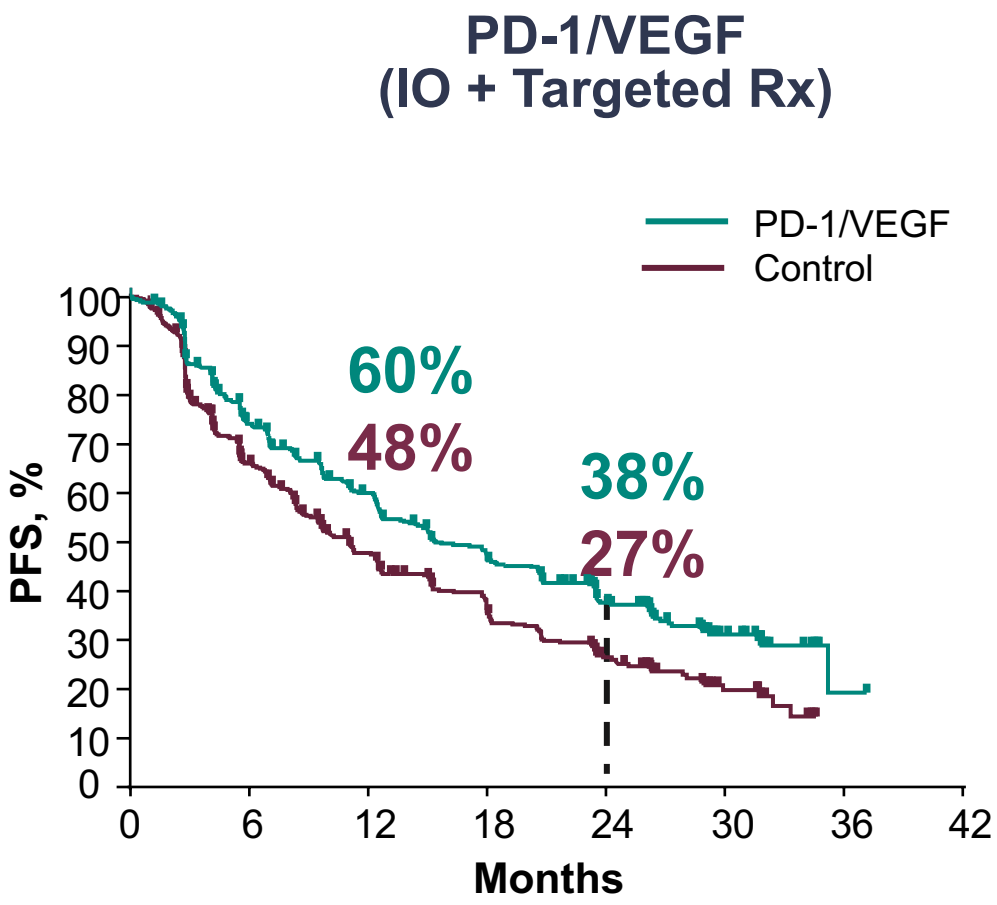

Atkins

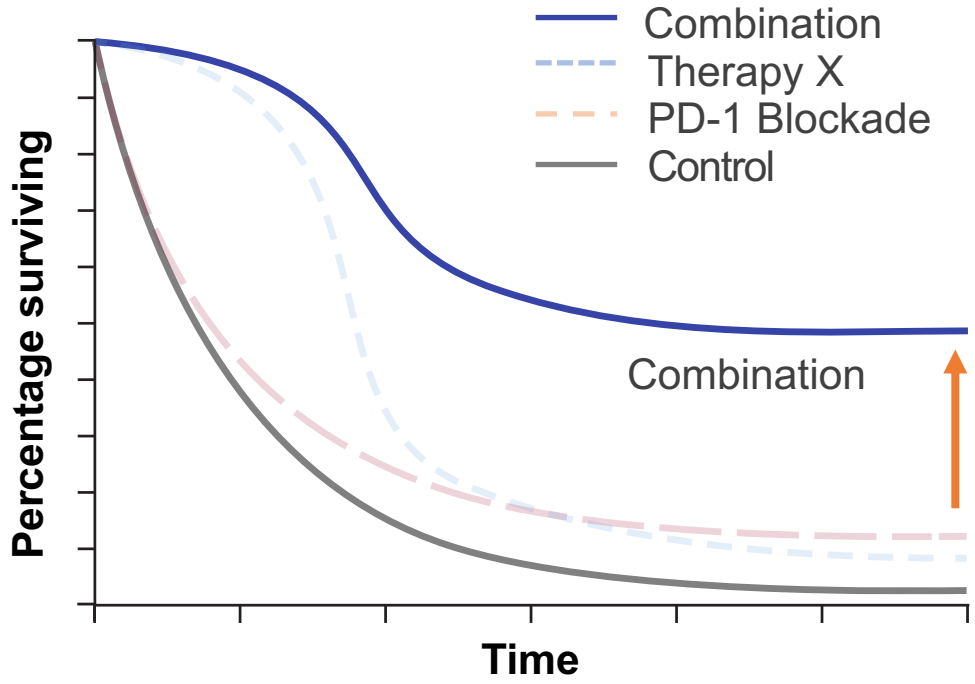

Powles


Plimack


Choueiri

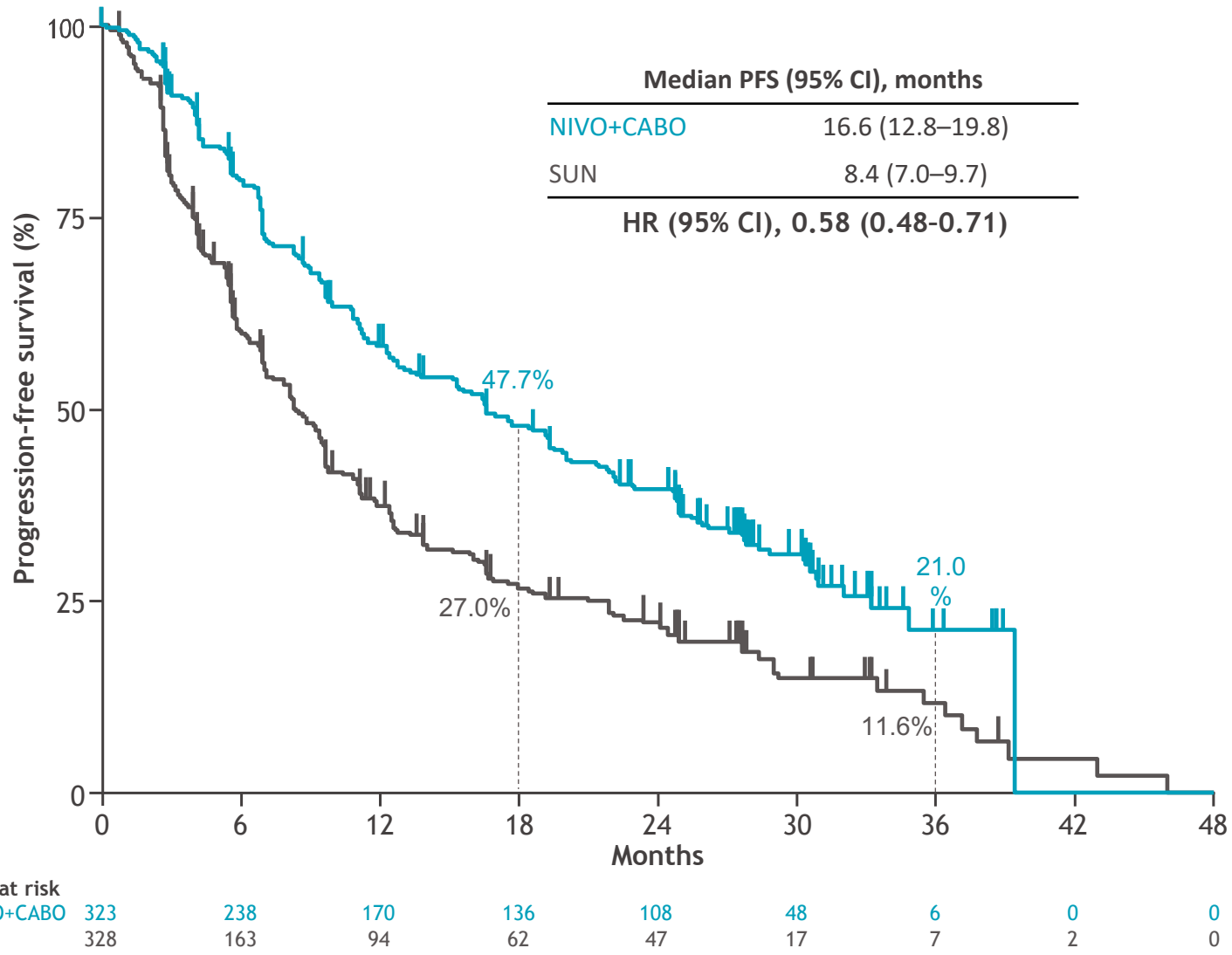

Motzer





Rini NEJM 2019, Motzer NEJM 2021,

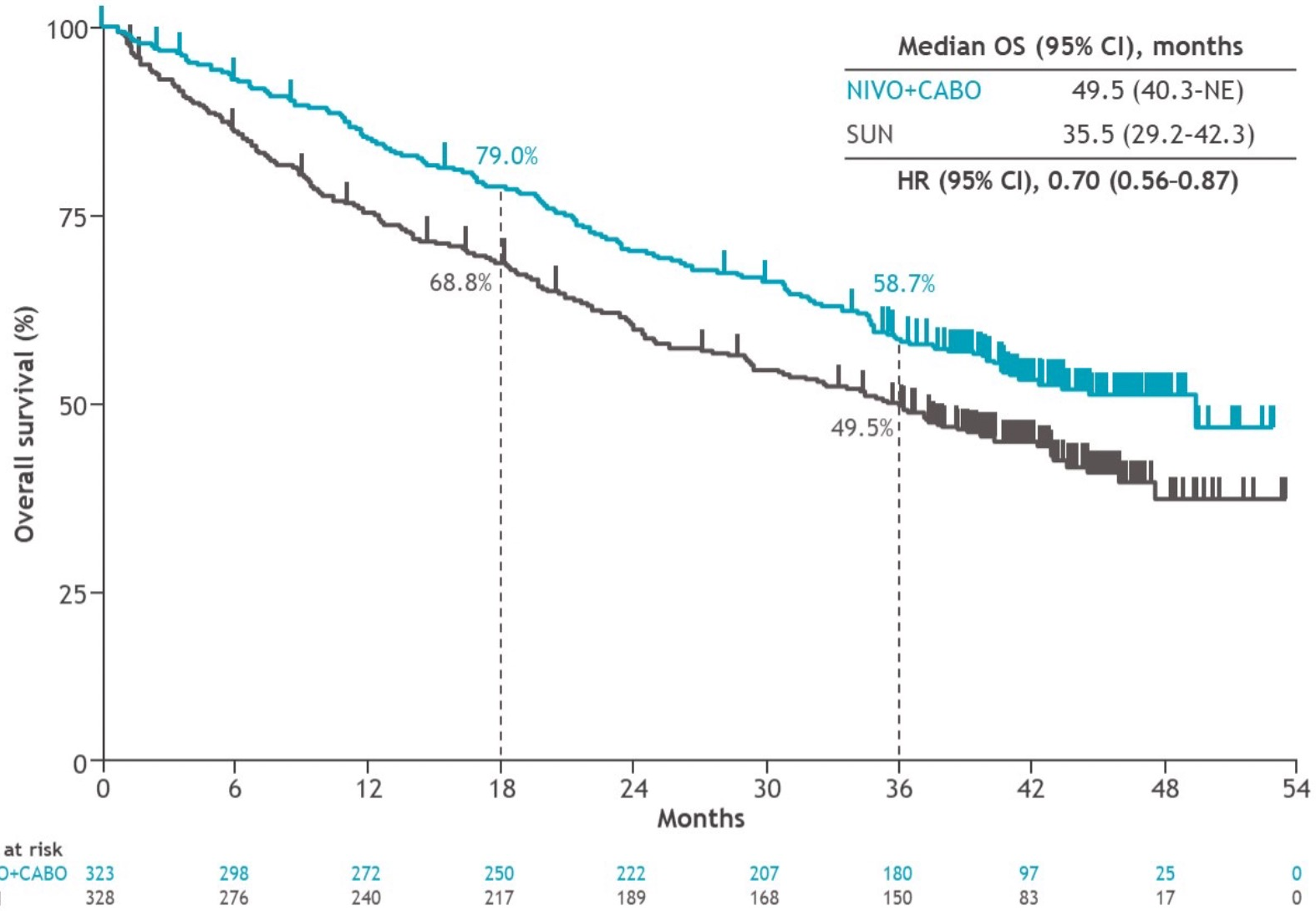
CheckMate 9ER: PFS: ITT population



Burotto et al GU ASCO 2023

Median follow-up for OS, 44.0 months. Stratified Cox proportional hazard model used for HR.
CI, confidence interval.

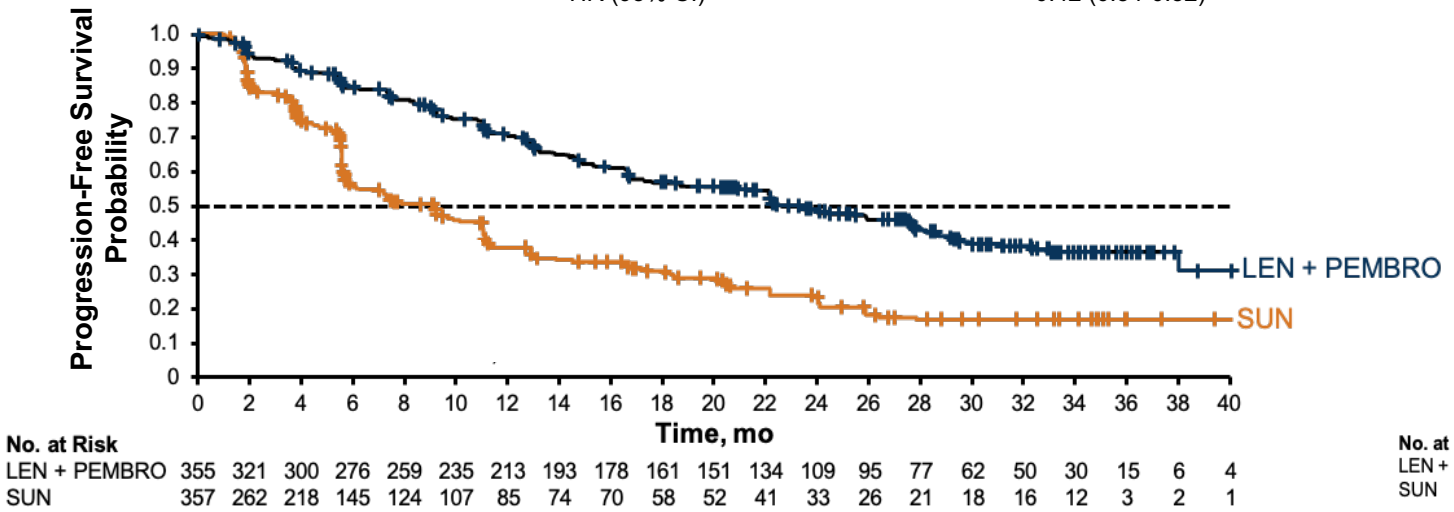
CheckMate 9ER: OS: ITT population



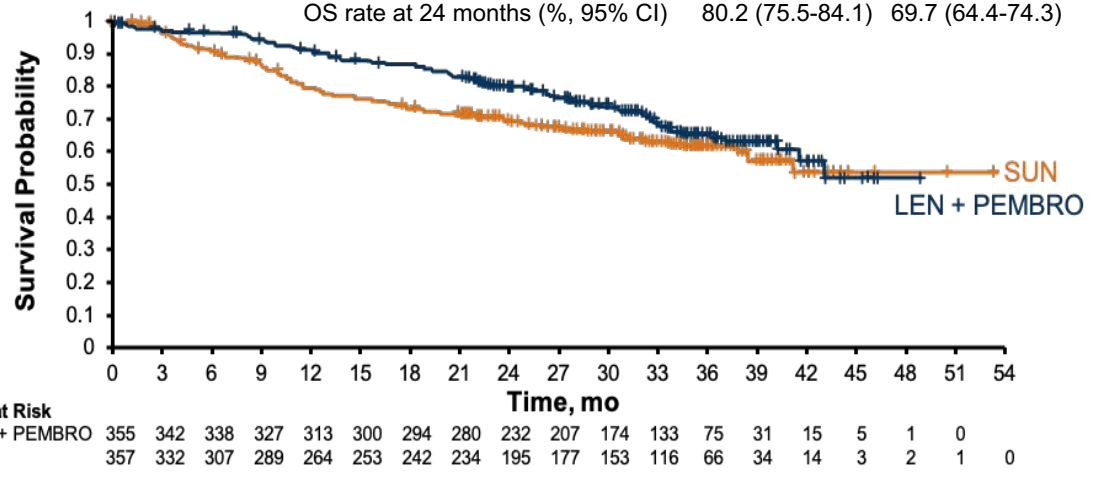
Burotto et al Genitourinary Cancers Symposium 2023

CLEAR: Pembrolizumab Plus Lenvatinib[1,2]

	LEN + PEMBRO	SUN
Median PFS, mo (95% CI)	23.3 (20.8-27.7)	9.2 (6.0-11.0)
HR (95% CI)	0.42 (0.34-0.52)	



	LEN + PEMBRO	SUN
Median OS, mo (95% CI)	NR (41.5-NE)	NR (38.4-NE)
HR (95% CI): 0.72	0.72 (0.55-0.93)	
OS rate at 12 months (%, 95% CI)	91.4 (87.9-93.9)	80.2 (75.5-84.1)
OS rate at 24 months (%, 95% CI)	80.2 (75.5-84.1)	69.7 (64.4-74.3)



- Pembrolizumab + lenvatinib demonstrated significant improvement in PFS, OS, and ORR vs sunitinib[a]
- ORR: 71.0% (CR 17.2%)
- PFS across all MSKCC and IMDC risk groups and OS across poor and intermediate risk groups favored lenvatinib + pembrolizumab

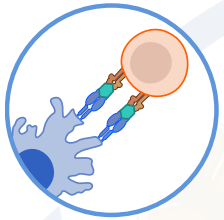
[a] Data cutoff: March 31, 2021.

1. Motzer RJ et al. *N Engl J Med.* 2021;384:1289-1300. 2. Porta CG et al. ESMO 2022. Abstract 1449MO.

Strengthen the Anti-Kidney Cancer Immune Response[1]

Immune desert
Immune excluded
Inflamed

Immune cell priming and activation 3



CTLA-4 blockade

4 Immune cell trafficking to tumors

5 Immune cell infiltration into tumors

VEGF blockade[2-4]

6 Recognition of cancer cells by T/NK cells

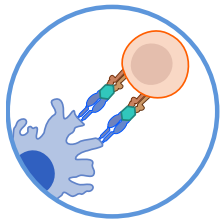
PD-L1, PD-1 inhibitors

7 Reversing T cell exhaustion

1 Killing of cancer cells

2 Cancer antigen presentation

1. Chen DS, Mellman I. *Immunity*. 2013;39:1-10.
2. Shrimali RK et al. *Can Res*. 2010;70:6171-6180.
3. Manning EA et al. *Clin Cancer Res*. 2007;13:3951-3959.
4. Motz GT et al. *Nat Med*. 2014;20:607-615.

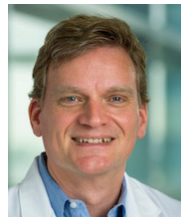


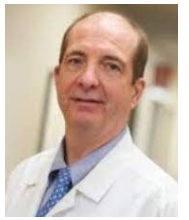
3 Immune cell priming and activation

Durable Benefit

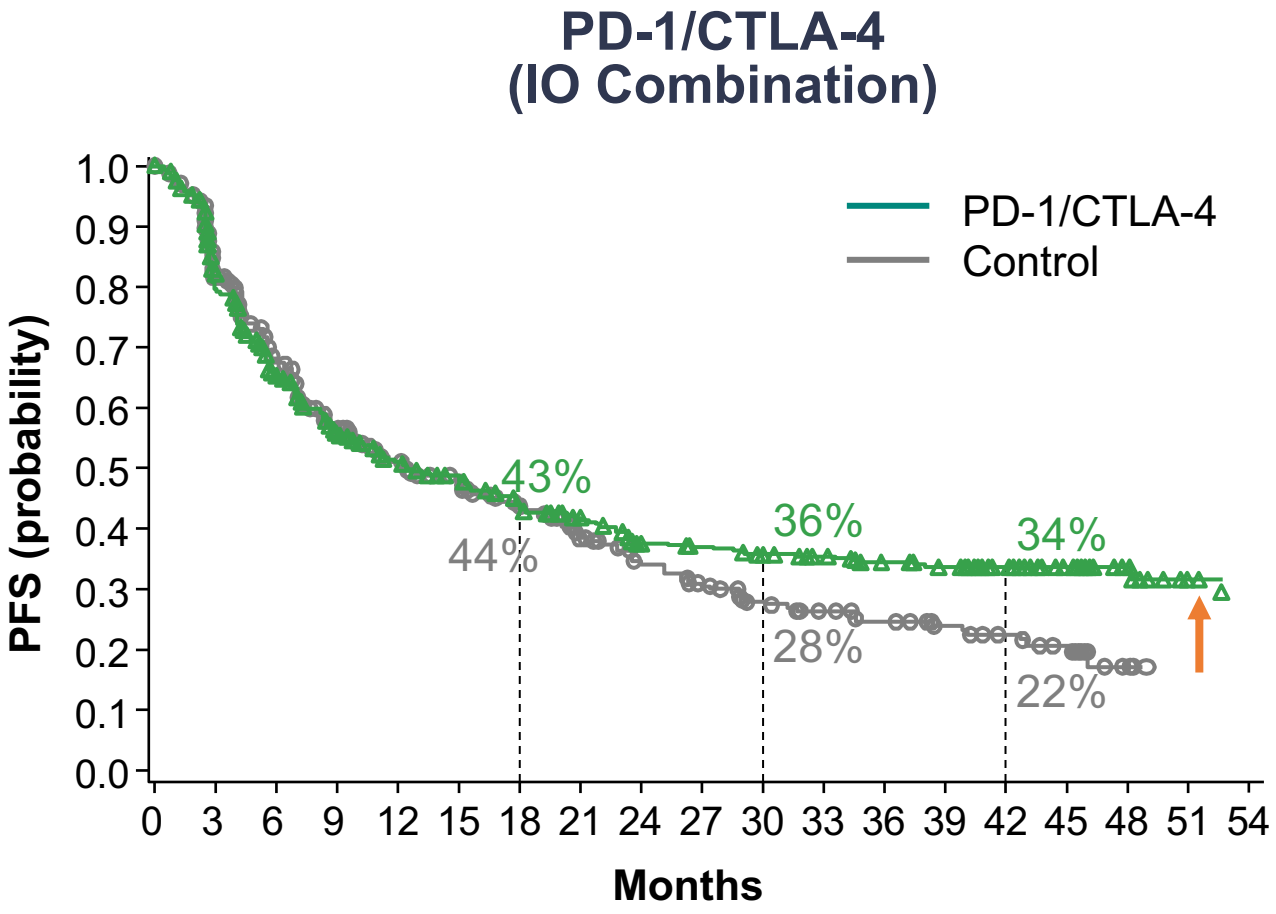

Albiges

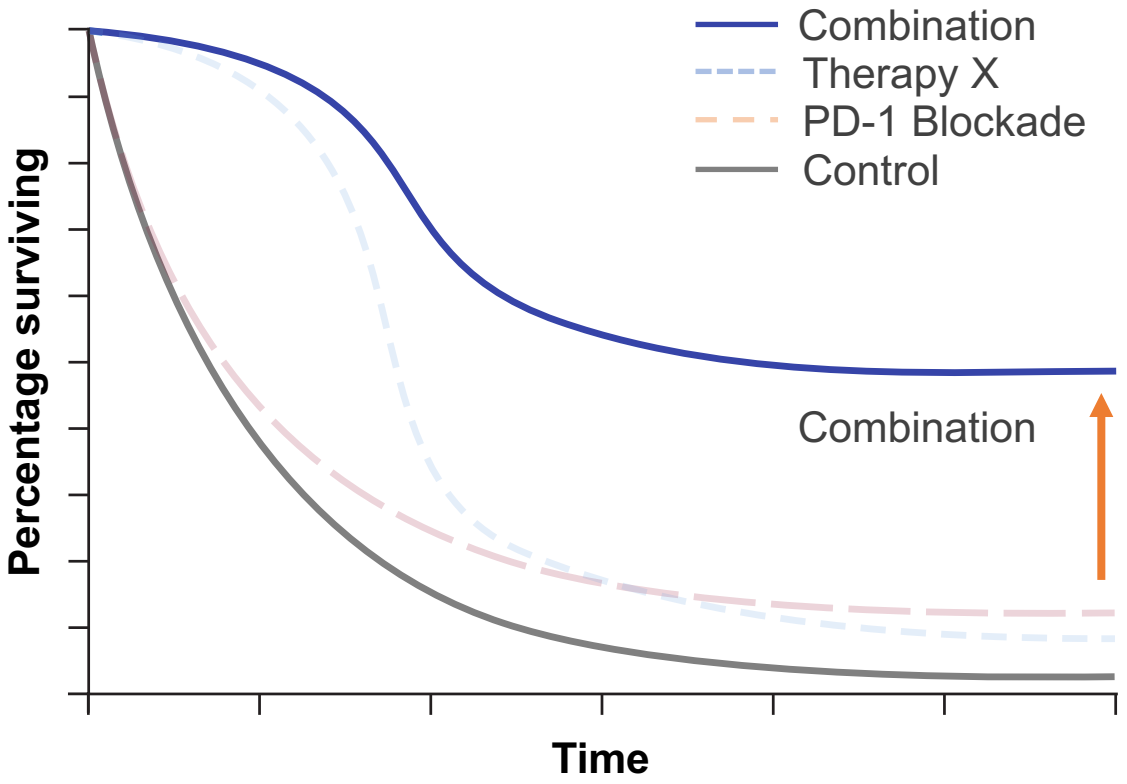

Escudier


Hammers


Motzer


Tannir





Hammers JCO 2017, Albiges ESMO Open 2020,
Motzer, Cancer 2022; NEJM 2015, 2018

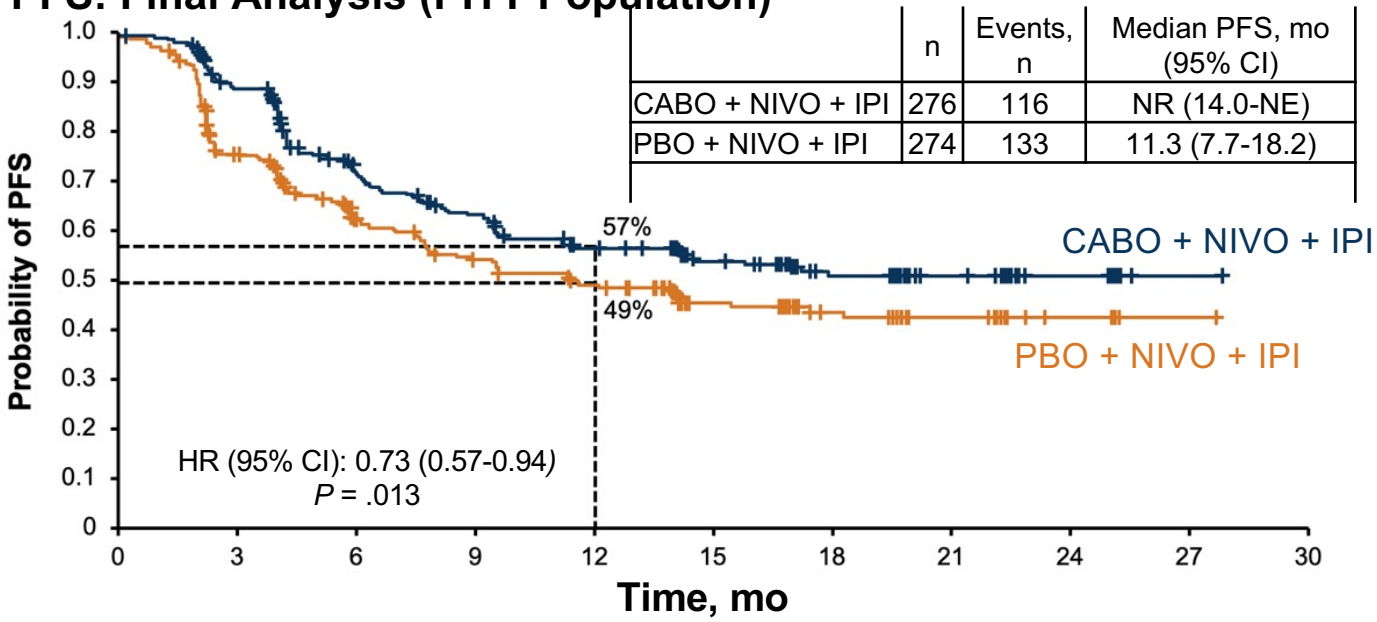
Which PD-1 based combination is superior?

Endpoints	PD-1/VEGF	PD-1/CTLA-4
Early – first 2 years (ORR, mPFS)	✓	
Late – after 2 years (DOR, lmPFS, ItOS)		✓
Durable – post treatment (TFS)		✓

Rini, McDermott, Atkins, Lancet Oncology 2021

COSMIC-313: Triplet Therapy With Cabozantinib Plus Nivolumab Plus Ipilimumab[1]

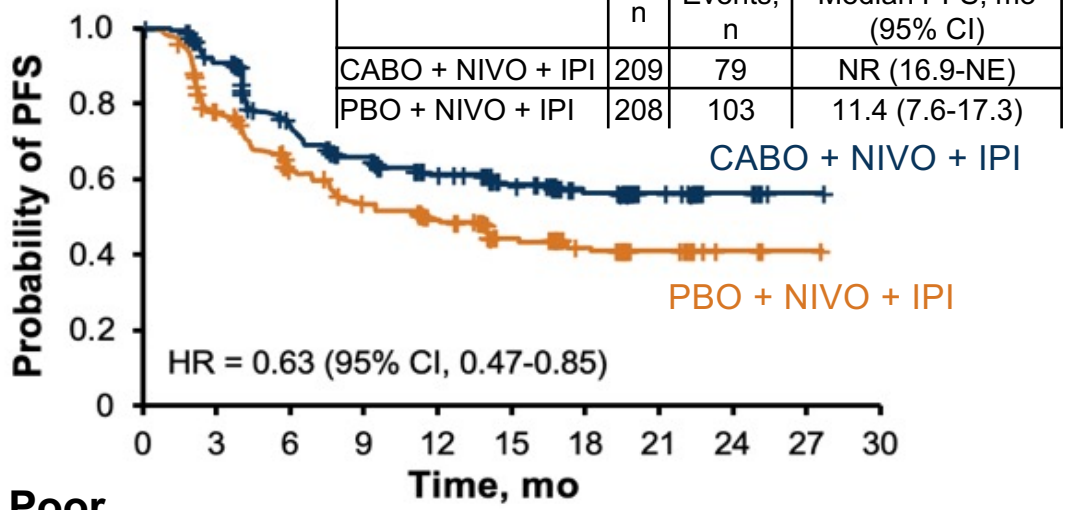
PFS: Final Analysis (PITT Population)



	n	Events, n	Median PFS, mo (95% CI)
CABO + NIVO + IPI	276	116	NR (14.0-NE)
PBO + NIVO + IPI	274	133	11.3 (7.7-18.2)

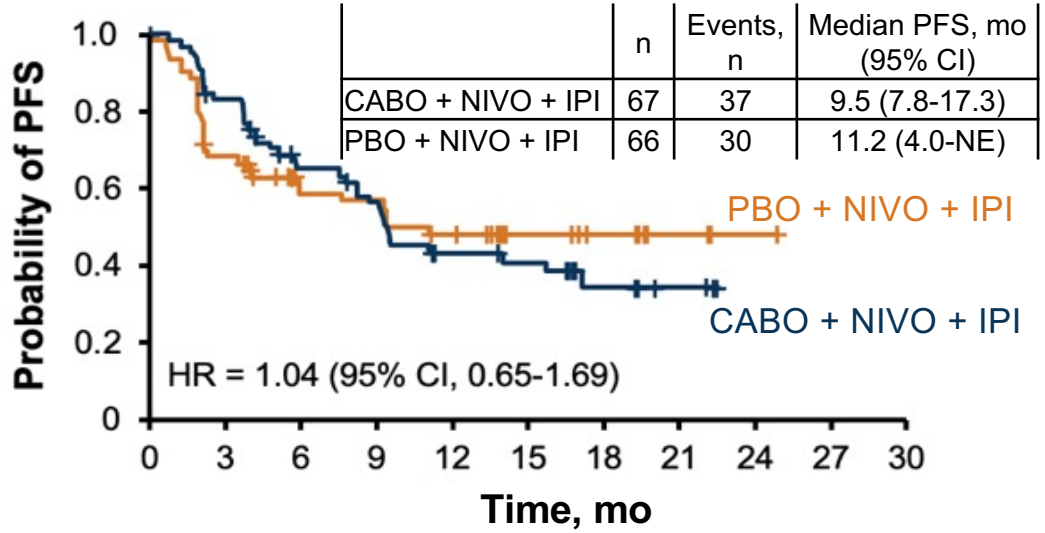
- Primary endpoint (PFS in PITT) = met
- OS analysis still needed –likely negative
- Toxicity impact
  - Rate of grade 3/4 toxicities in triplet substantially higher (e.g., liver)
- Path to the clinic is bumpy

Intermediate



	n	Events, n	Median PFS, mo (95% CI)
CABO + NIVO + IPI	209	79	NR (16.9-NE)
PBO + NIVO + IPI	208	103	11.4 (7.6-17.3)

Poor



	n	Events, n	Median PFS, mo (95% CI)
CABO + NIVO + IPI	67	37	9.5 (7.8-17.3)
PBO + NIVO + IPI	66	30	11.2 (4.0-NE)

1. Choueiri TK et al. NEJM 2023; 388:1767-1778

What Emerging Data Could Impact Standards of Care?

- What novel therapies and approaches are most promising?

- **What works after PD-1 failure?**

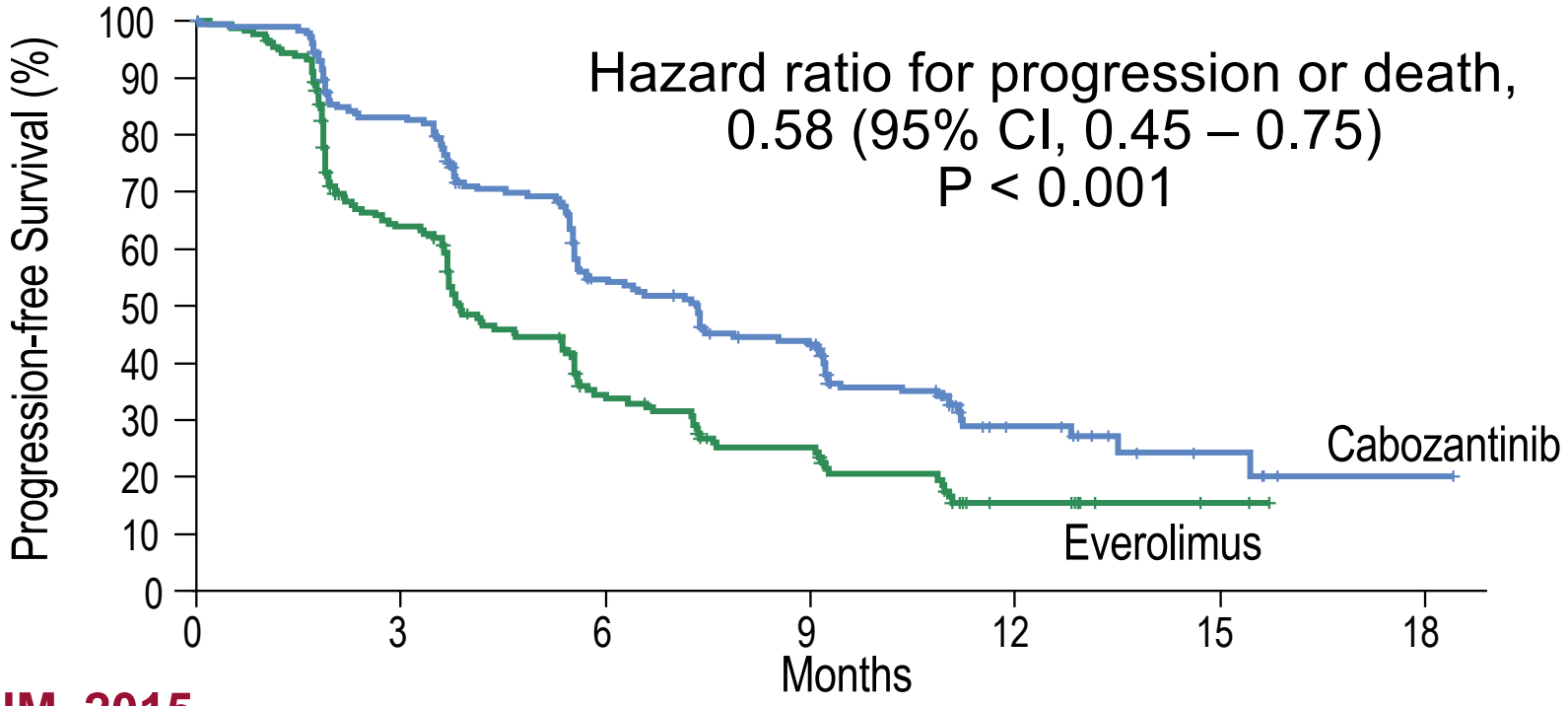
PD-1, program death receptor-1

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Cabozantinib versus Everolimus in Advanced Renal-Cell Carcinoma

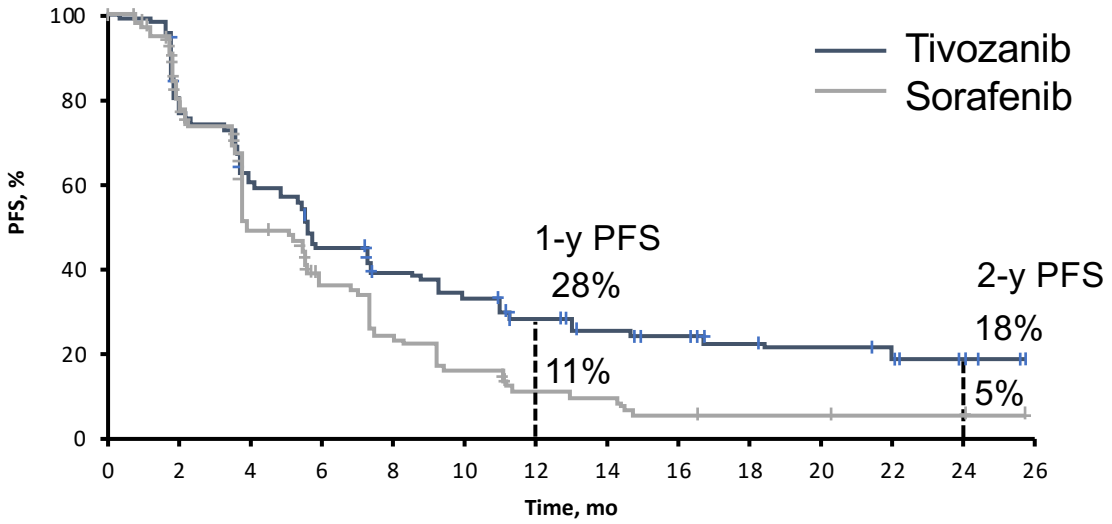
T.K. Choueiri, B. Escudier, T. Powles, Paul N. Mainwaring, B.I. Rini, F. Donskov, H. Hammers, T.E. Hutson, D.O., J.-L. Lee, K. Peltola, B.J. Roth, G.A. Bjarnason, L. Géczi, B. Keam, P. Maroto, D.Y.C. Heng, M. Schmidinger, P.W. Kantoff, A. Borgman-Hagey, C. Hessel, C. Scheffold, G.M. Schwab, N.M. Tannir, and R.J. Motzer, for the METEOR Investigators

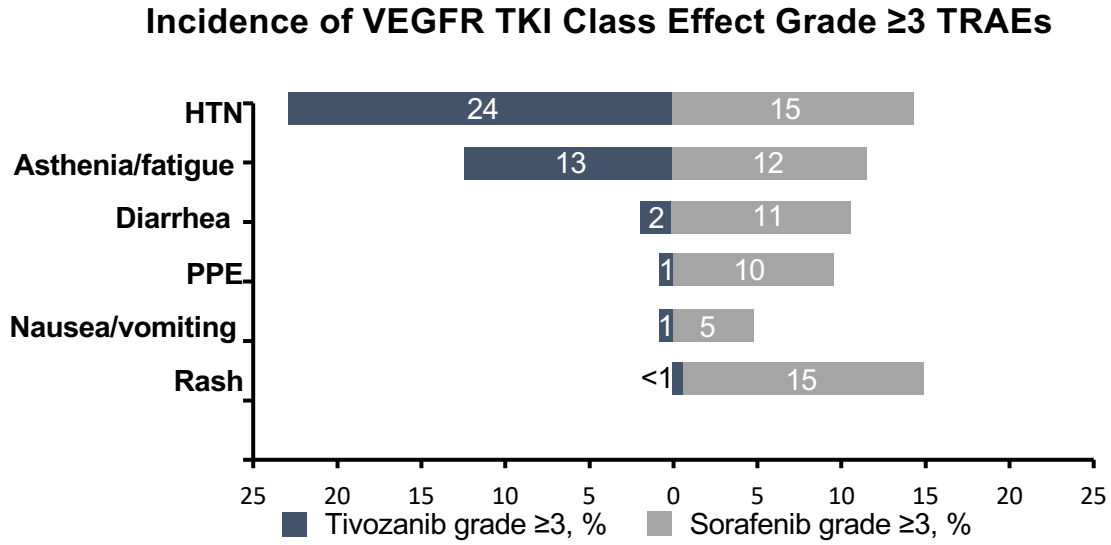


Choueiri[DFCI]

NEJM 2015

Phase 3 TIVO-3: Tivozanib in RCC[1-3]





FDA approved for patients with relapsed or refractory advanced RCC following ≥2 prior systemic therapies

B. Rini

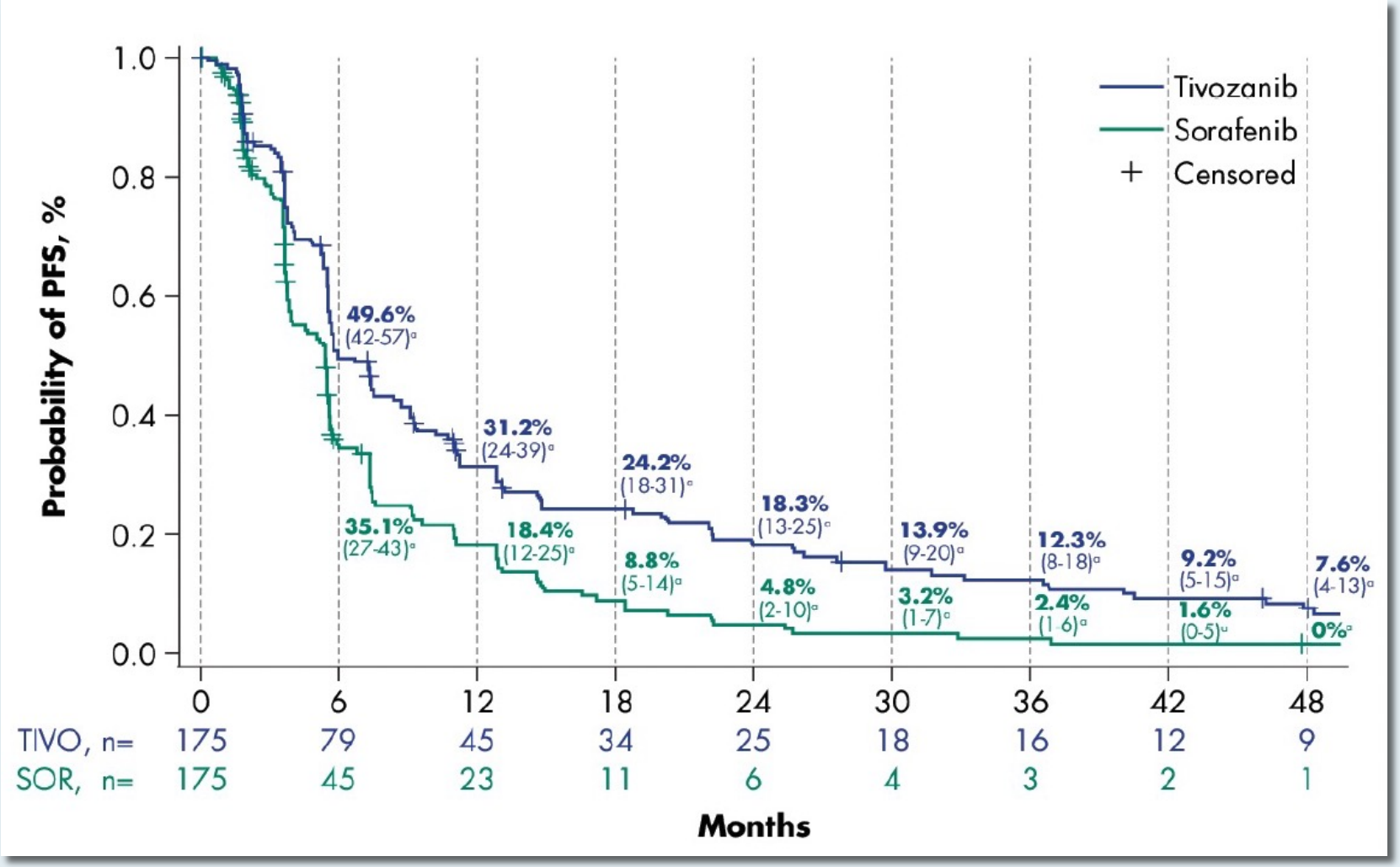
1. Rini BI et al. *Lancet Oncol.* 2020;21:95-104. 2. Pal SK et al. ASCO 2020. Abstract 5062. 3. Verzoni E et al. ASCO 2021. Abstract 4546.

Long-Term PFS from TIVO-3: Tivozanib (TIVO) versus Sorafenib (SOR) in Relapsed/Refractory (R/R) Advanced RCC

Atkins MB et al.

Genitourinary Cancers Symposium 2022;Abstract 362.

TIVO-3: Long-Term (48-Month) Progression-Free Survival



Atkins MB et al. Genitourinary Cancers Symposium 2022;Abstract 362.

RTP RESEARCH TO PRACTICE

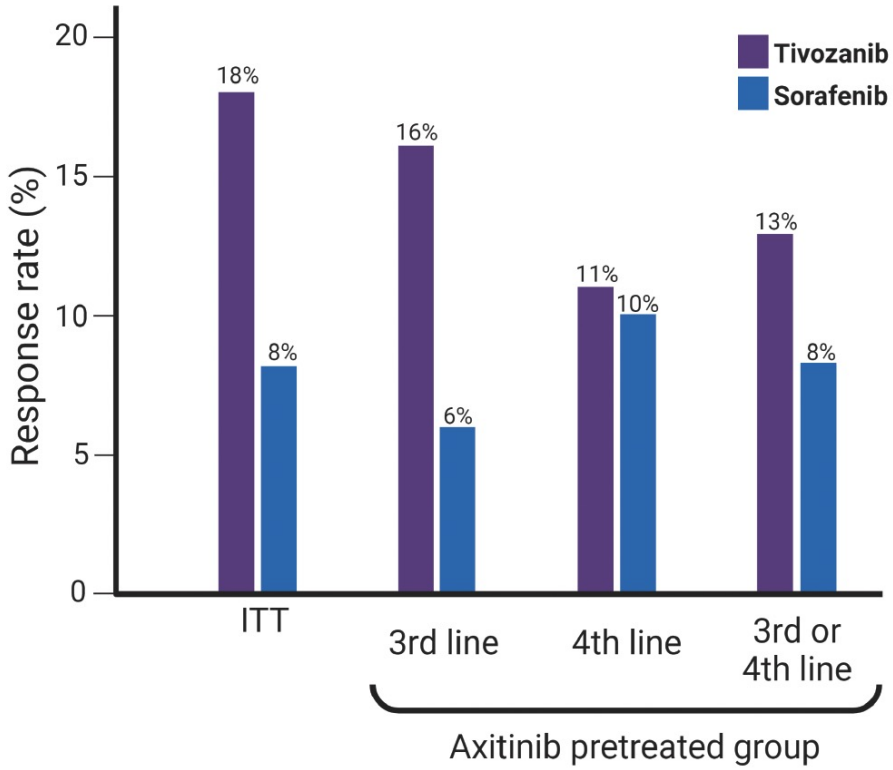
OXFORD

Tivozanib in Patients with Advanced Renal Cell Carcinoma Previously Treated with Axitinib: Subgroup Analysis from TIVO-3

Luis Meza[1], David F. McDermott[2], Bernard Escudier[3], Thomas E. Hutson[4], Camillo Porta[5], Elena Verzoni[6], Michael B. Atkins[7], Vijay Kasturi[8], Sumanta K. Pal[*,1,‡], Brian Rini[*,9,‡]

The Oncologist 2023;28(3):e167-70.

TIVO-3: Response Rates and Safety of Tivozanib in Patients with Prior Axitinib Treatment



AE	Prior axitinib	No prior axitinib
Treatment-related AE	84.5%	92.3%
Reduction due to AE	28.0%	29.7%
Interruption due to AE	53.5%	53.8%
Discontinuation due to AE	25.6%	19.8%

Abbreviation: AE, adverse event.

Meza L et al. *The Oncologist* 2023;28(3):e167-70.

PD-1 Blockade Salvage Therapy

Setting	NCCN
Treatment-Naïve	PD-1 Blockade Based Tx
Salvage Therapy	VEGF Blockade

NCCN, National Comprehensive Cancer Network; PD-1, program death receptor-1; tx, treatment; VEGF, vascular endothelial growth factor

Rini BI et al. *N Engl J Med.* 2019;380:1116-1127.
Choueiri TK et al. *N Engl J Med*. 2015;373:1814-1823.

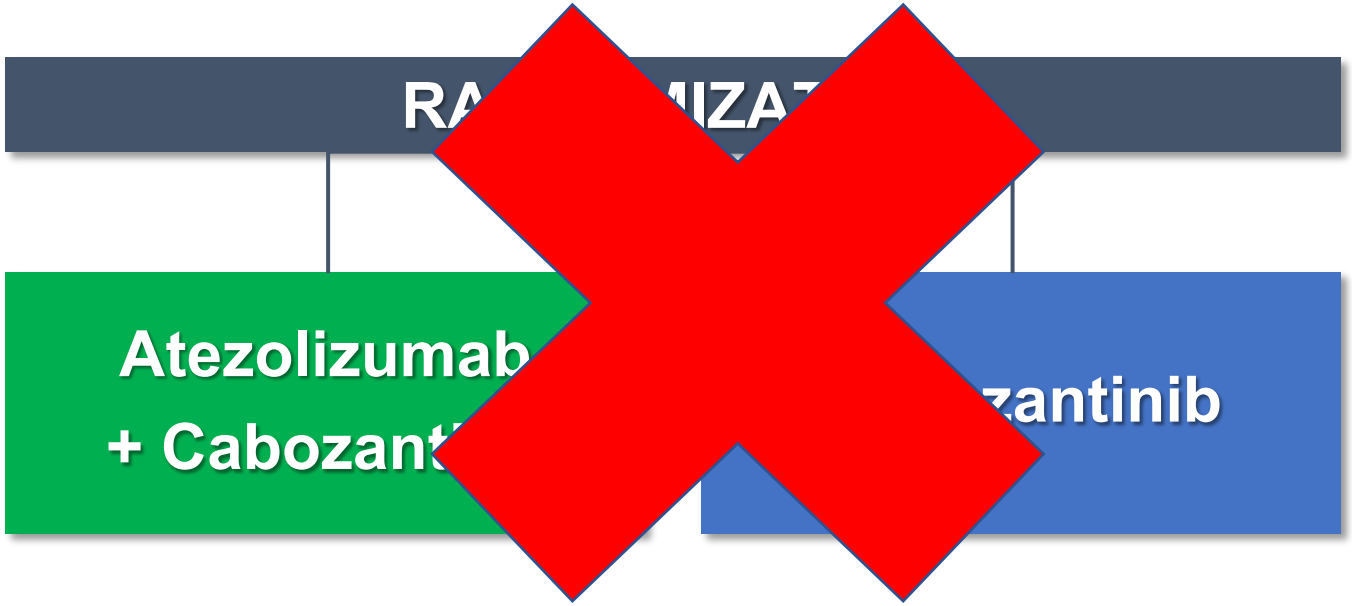
Randomized PD-1/VEGF Blockade Salvage Trial = Negative

CONTACT-03 (NCT04338269)

mRCC 2/3L

VEGFR TKI ± PD-L1 inhibition

Phase 3 (N = 500)
Primary endpoints: PFS, OS



2/3L, second/third line; OS, overall survival; PD-1, program death receptor-1; PD-L1, programmed death-ligand 1; PFS, progression-free survival; TKI, tyrosine kinase inhibitor; VEGFR, vascular endothelial growth factor receptor

CONTACT-03. NCT04338269. Updated January 22, 2021. Accessed February 7, 2021. https://clinicaltrials.gov/ct2/show/NCT04338269

Standard Therapy for mRCC: 2030

Setting	NCCN	Alternative
1st-Line Therapy	**Treatment based on TME Profile**	
2nd-Line Therapy	**Not Necessary**	

Questions from General Medical Oncologists
Advanced RCC

- **A 72 yo male presents with metastatic renal cell cancer with severe pain from several bone metastases. You decide to use len/pembro. What advice would you give about dosing and support for the lenvatinib**
- **Role of nephrectomy for debulking in metastatic RCC**
- **What is the preferred TKI + ICI combo with bone mets?**
- **60 yo with metastatic RCC on nivo + cabozantinib presents for restaging scan, which showed one new lesion in the jejunum. He is clinically well and does not have any symptoms. What would be your recommendation in this case?**
- **What are the reasons for which IPI + NIVO + CABO clinical trial was not that impressive?**

Survey of US-based general medical oncologists, May 2023. N = 75

Questions from General Medical Oncologists Advanced RCC

- **I have a patient with metastatic kidney cancer to the bones who I was never able to treat because he was too afraid to initiate therapy. I bargained with him, I tried, offering him single-agent therapy, and then transitioning to perhaps combination. He ultimately died because of a pain control issue… I was unable to find someone to help me in changing his mind to choose therapy over death and suffering. Have your specialists had difficulties such as this, and do they have any pearls of wisdom as to how to try to ease our patients into decisions that are difficult?**
- **Do you ever select nivo/ipi for low-risk patients with metastatic ccRCC? If so, why?**
- **I have a 67-year-old patient with metastatic RCC who got adjuvant TKI + PD-L1 with good response. He had brain mets that were resected. Would you consider nephrectomy in such a patient?**

Survey of US-based general medical oncologists, May 2023. N = 75

Questions from General Medical Oncologists
Advanced RCC

- **Tivozanib, cabozantinib and lenvatinib/everolimus all generally have poor durable responses second line and are largely chosen by toxicity profile. Is there more to this decision?**
- **Len/everolimus benefits versus single-agent TKIs**
- **Given all the choices in systemic, how often is high-dose IL-2 used and when?**
- **How do you decide second-line lenvatinib vs tivozanib?**
  Do you base the decision on type of histology?
- **Cabo second line if not already used? Or would you try tivozanib?**

Survey of US-based general medical oncologists, May 2023. N = 75

Questions from General Medical Oncologists
Advanced RCC

- **Belzutifan has a different MOA and may have better results than using other TKIs at progression. Is there an assay that can determine if HIF is a driver mutation in any given patient? Can ICIs be reintroduced in a later line of therapy?**
- **For a somatic VHL mutation, can we use belzutifan?**
- **When do we use belzutifan? Is HLA typing needed?**
- **With belzutifan combination clinical trials in progress, do you think there will be any role for triplets in the future for metastatic renal cell cancer?**

Survey of US-based general medical oncologists, May 2023. N = 75

Questions from General Medical Oncologists
TKI-associated Toxicity

- **I have a 66-year-old on cabo. He had hand/foot syndrome. How would you manage this?**
- **Fatigue has been a significant issue with lenvatinib in my patients. How low could you go on the dose?**
- **Patient has severe diarrhea with cabozantinib even with 20 mg and on max dose of antidiarrhea meds. What would you recommend?**
- **Compare the toxicity profiles of tivozanib, cabozantinib and lenvatinib**
- **Lenvatinib dose reductions needed in almost all patients getting this in combo with pembrolizumab. Will this alter the efficacy?**

Survey of US-based general medical oncologists, May 2023. N = 75

Questions from General Medical Oncologists
TKI-associated Toxicity

- **In a patient with significant thrombocytopenia on cabozantinib, how do you adjust the dosing and what do you use as a starting dose?**

Survey of US-based general medical oncologists, May 2023. N = 75

Questions from General Medical Oncologists Immune-meditated Toxicity

- **Patient develops Guillain-Barre to adjuvant immunotherapy. Now what?**
- **If patient has rheumatoid arthritis but under control, should we use pembro in this setting or not?**
- **How to manage immunotherapy-mediated skin issues**
- **I have a patient who achieved a response with pembrolizumab and then developed OPTIC NEURITIS! She now has relapsed. Can I re-treat her with another checkpoint inhibitor?**
- **Can experts take us through some real cases of pts who experienced significant toxicities and walk us through their approach?**

Survey of US-based general medical oncologists, May 2023. N = 75

Agenda

Module 1 – ASCO 2023

Module 2 – Management of Advanced Renal Cell Carcinoma (RCC)

- First-line systemic therapy for metastatic clear cell RCC (ccRCC)
- Management of toxicities associated with up-front combination regimens
- Management of ccRCC in the second-line setting and beyond
- Management of toxicities associated with approved multikinase inhibitors

Module 3 – Treatment Approaches for Nonmetastatic RCC; Optimal care of Patients with Non-Clear Cell RCC

- Adjuvant therapy for RCC
- Management of non-clear cell RCC
- Novel investigational agents/strategies for RCC (eg, zanzalintinib)

Treatment Approaches for Nonmetastatic RCC & Optimal Care of Patients with Non-Clear Cell

Sumanta Kumar Pal, M.D.
Clinical Professor
Department of Medical Oncology & Experimental Therapeutics
City of Hope Comprehensive Cancer Center

Key Trials in the Adjuvant Space

KEYNOTE-564

Key Eligibility Criteria

- Histologically confirmed clear cell renal cell carcinoma
  - pT2, grade 4 or sarcomatoid, N0, M0
  - pT3 or pT4, any grade, N0, M0
  - Any pT, any grade, N+, M0
  - M1 no evidence of disease (NED) after surgery
- Surgery ≤12 weeks prior to randomization
- No prior systemic therapy
- ECOG PS 0 or 1
- Tissue sample for PD-L1 assessment

Stratification Factors

- Metastatic status (M0 vs M1 NED)
- M0 group further stratified:
  - ECOG PS 0 vs 1
  - US vs non-US

R (1:1)

- Pembrolizumab 200 mg Q3W for ~1 year[a]
- Placebo Q3W for ~1 year[a]

- Primary endpoint: DFS per investigator
- Key secondary endpoint: OS
- Other secondary endpoints: Safety, PROs

Immotion010

Key eligibility criteria

- Resected intermediate- to high-risk[a] RCC
  - T2 Grade 4
  - T3a Grade 3/4
  - T3b/c or T4 any Grade
  - TXN+ any Grade
  - M1 NED[b]
- Clear cell and/or sarcomatoid component

R 1:1 N=778

- Atezolizumab 1200 mg IV q3w for 16 cycles or 1 year[c]
- Placebo IV q3w for 16 cycles or 1 year[c]

Stratification factors

- **Disease stage** (T2/T3a vs T3b/c/T4/N+ vs M1 NED)
- **PD-L1 expression on IC[d]** (IC0 [<1%] vs IC1/2/3 [≥1%])
- **Region** (North America[e] vs rest of world)

Primary endpoint

- Investigator-assessed DFS in ITT population

Key secondary endpoints

- OS in the ITT population
- Investigator-assessed DFS in the IC1/2/3 population
- IRF-assessed DFS in the ITT and IC1/2/3 populations
- IRF-assessed EFS in the ITT population
- Safety

CheckMate 914

N = 816

Key inclusion criteria[1]

- Radical or partial nephrectomy with negative surgical margins
- Predominant clear cell histology, including sarcomatoid features
- Pathologic TNM staging:
  - pT2a, G3 or G4, N0 M0
  - pT2b, G any, N0 M0
  - pT3, G any, N0 M0
  - pT4, G any, N0 M0
  - pT any, G any, N1 M0
- No clinical/radiological evidence of residual disease or distant metastases after nephrectomy, confirmed by BICR
- ECOG performance status of 0-1

Stratification factors:

- Pathologic TNM staging[a]
- Type of nephrectomy

R 1:1

Expected treatment duration of 24 weeks[b]

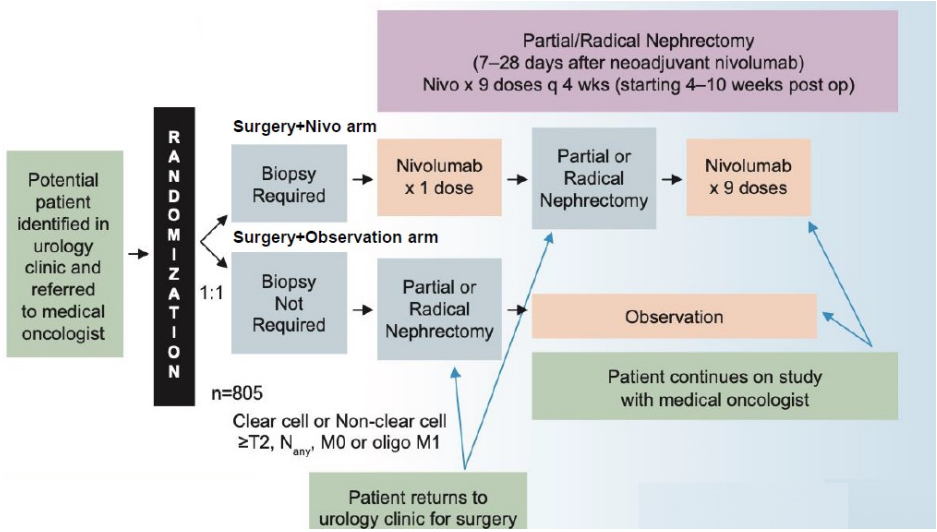
- NIVO 240 mg IV Q2W (× 12 doses) + IPI 1 mg/kg IV Q6W (× 4 doses) N = 405
- Placebo IV Q2W (× 12 doses) + Placebo IV Q6W (× 4 doses) N = 411

Randomization > 4 weeks but ≤ 12 weeks after surgery

Primary endpoint: DFS by BICR

Secondary endpoints: OS and safety

ECOG PROSPER



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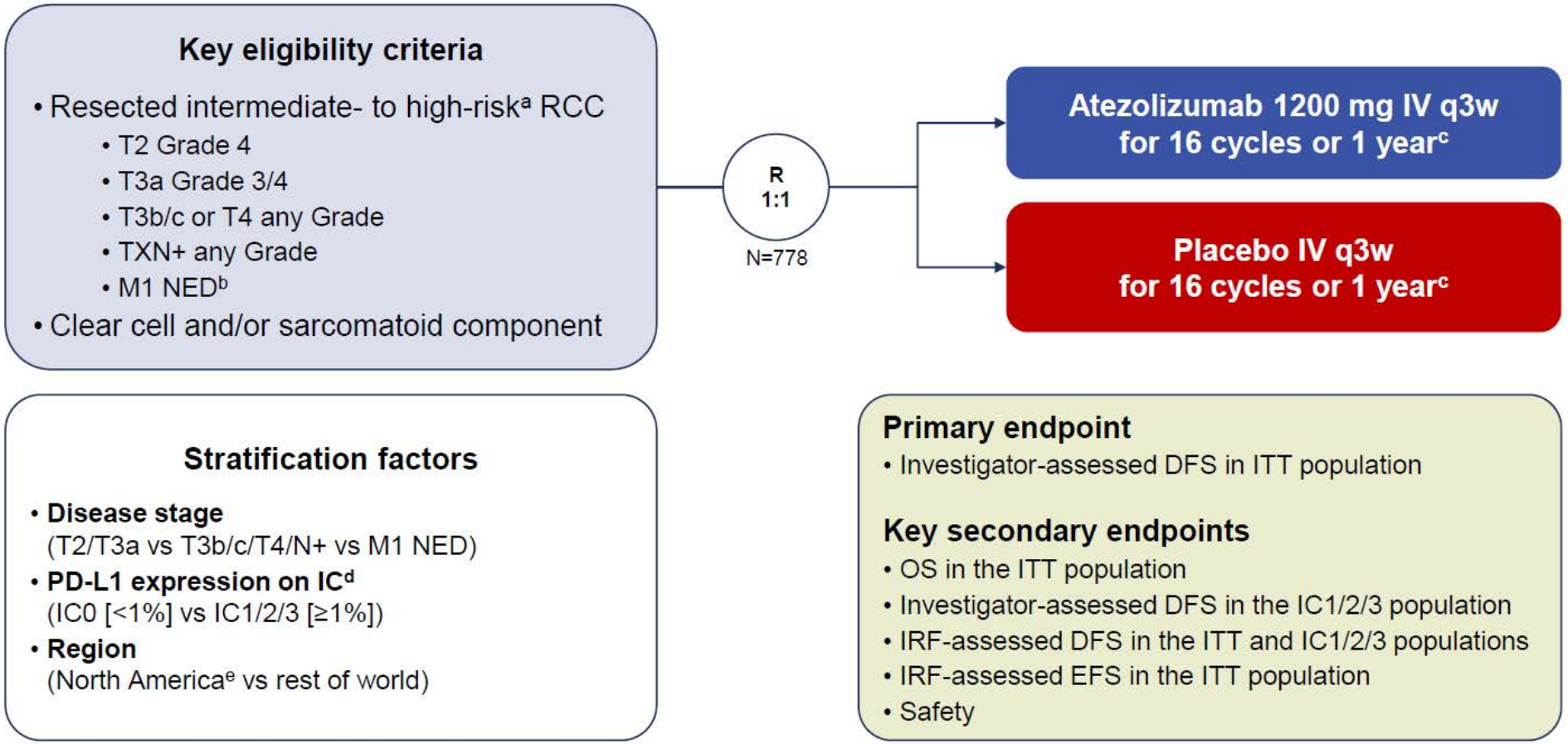

Pal SK, Uzzo R *et al* Lancet 2022

City of Hope

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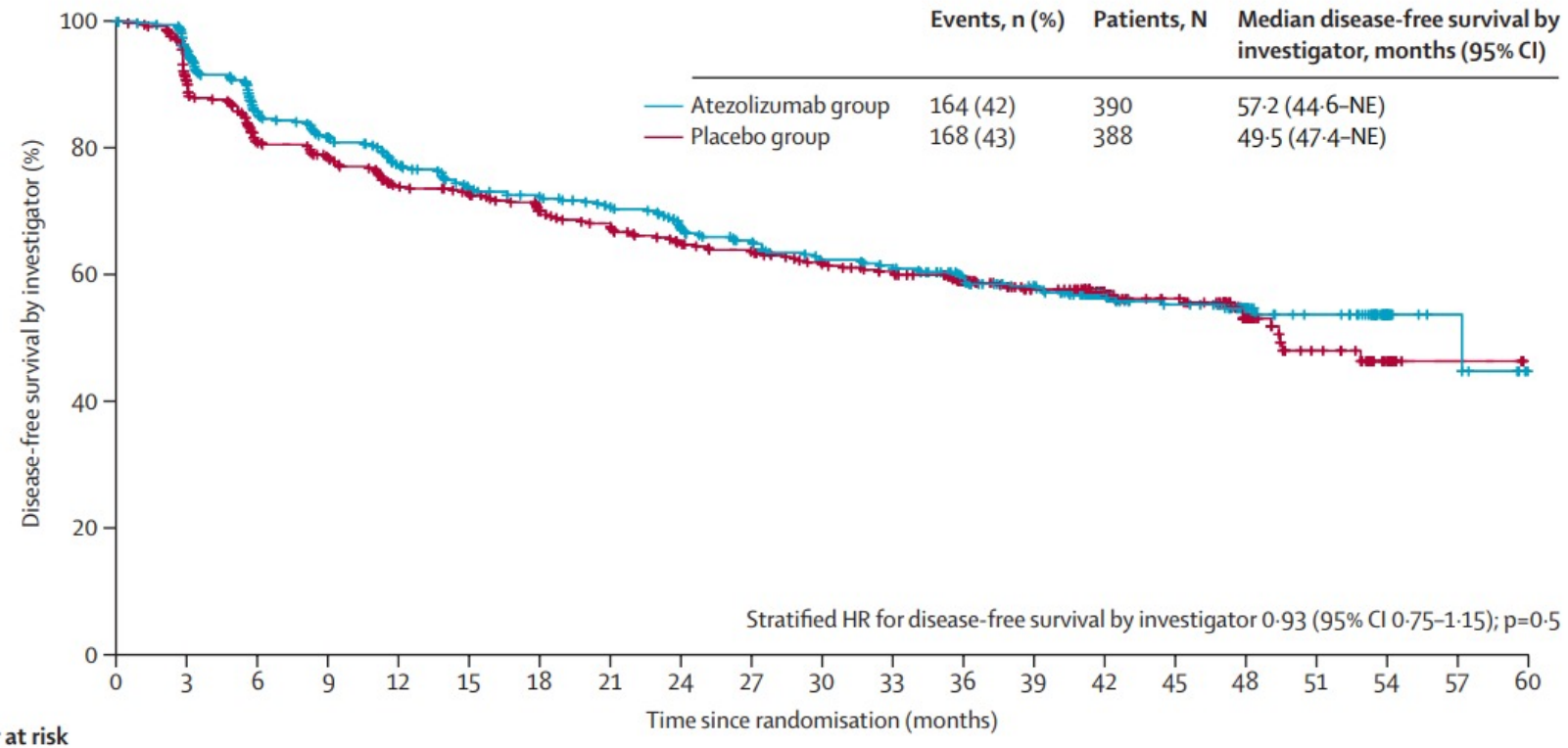


Number at risk (number censored)

Atezolizumab group	390 (0)	360 (12)	322 (14)	306 (15)	288 (17)	272 (19)	265 (21)	257 (23)	244 (24)	234 (27)	222 (28)	218 (29)	194 (46)	171 (65)	124 (108)	100 (129)	75 (155)	48 (179)	22 (205)	6 (221)	1 (225)
Placebo group	388 (0)	343 (7)	305 (10)	294 (13)	275 (15)	268 (17)	254 (21)	243 (23)	232 (25)	226 (26)	216 (29)	209 (32)	187 (49)	161 (71)	121 (110)	91 (138)	56 (170)	33 (188)	15 (205)	3 (217)	NE

Pal SK, Uzzo R *et al* Lancet 2022

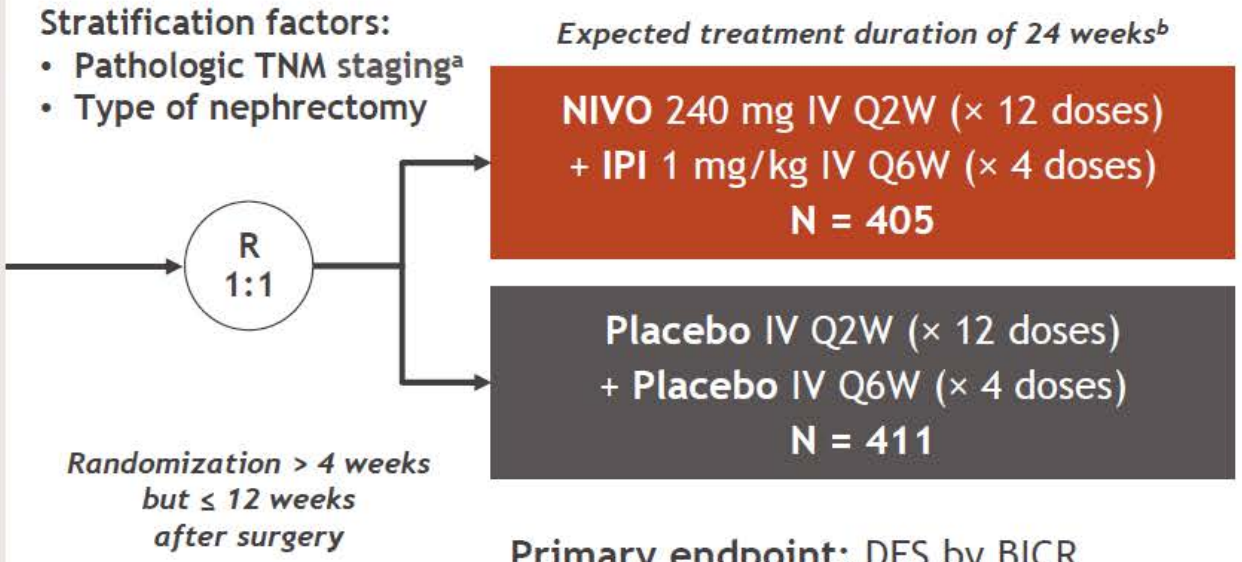
City of Hope

CheckMate-914 (NCT03138512)

N = 816

Key inclusion criteria[1]

- Radical or partial nephrectomy with negative surgical margins
- Predominant clear cell histology, including sarcomatoid features
- Pathologic TNM staging:
  - pT2a, G3 or G4, N0 M0
  - pT2b, G any, N0 M0
  - pT3, G any, N0 M0
  - pT4, G any, N0 M0
  - pT any, G any, N1 M0
- No clinical/radiological evidence of residual disease or distant metastases after nephrectomy, confirmed by BICR
- ECOG performance status of 0-1



Primary endpoint: DFS by BICR

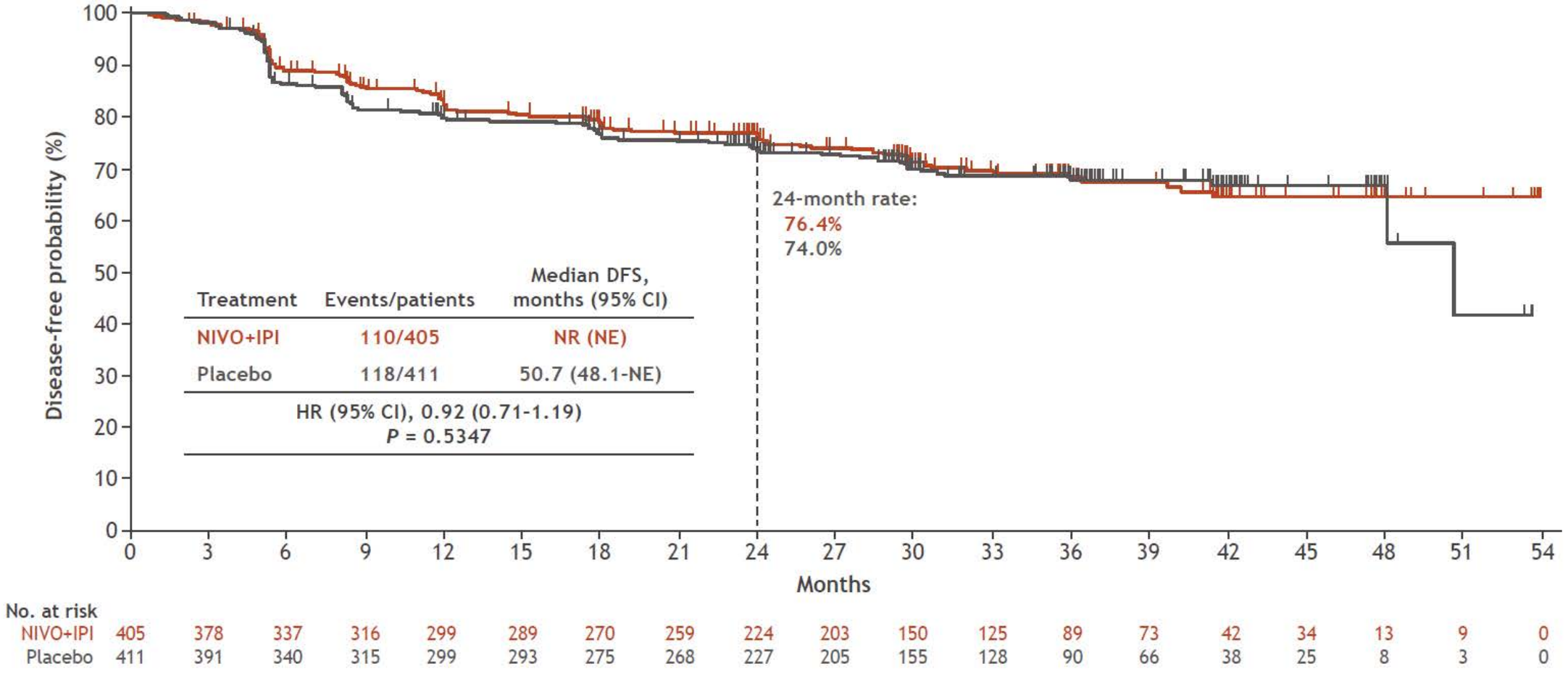
Secondary endpoints: OS and safety

Median (range) study follow-up, 37.0 (15.4-58.0) months

Motzer *et al* ESMO 2022

City of Hope

CheckMate-914 (NCT03138512)



Motzer *et al* ESMO 2022

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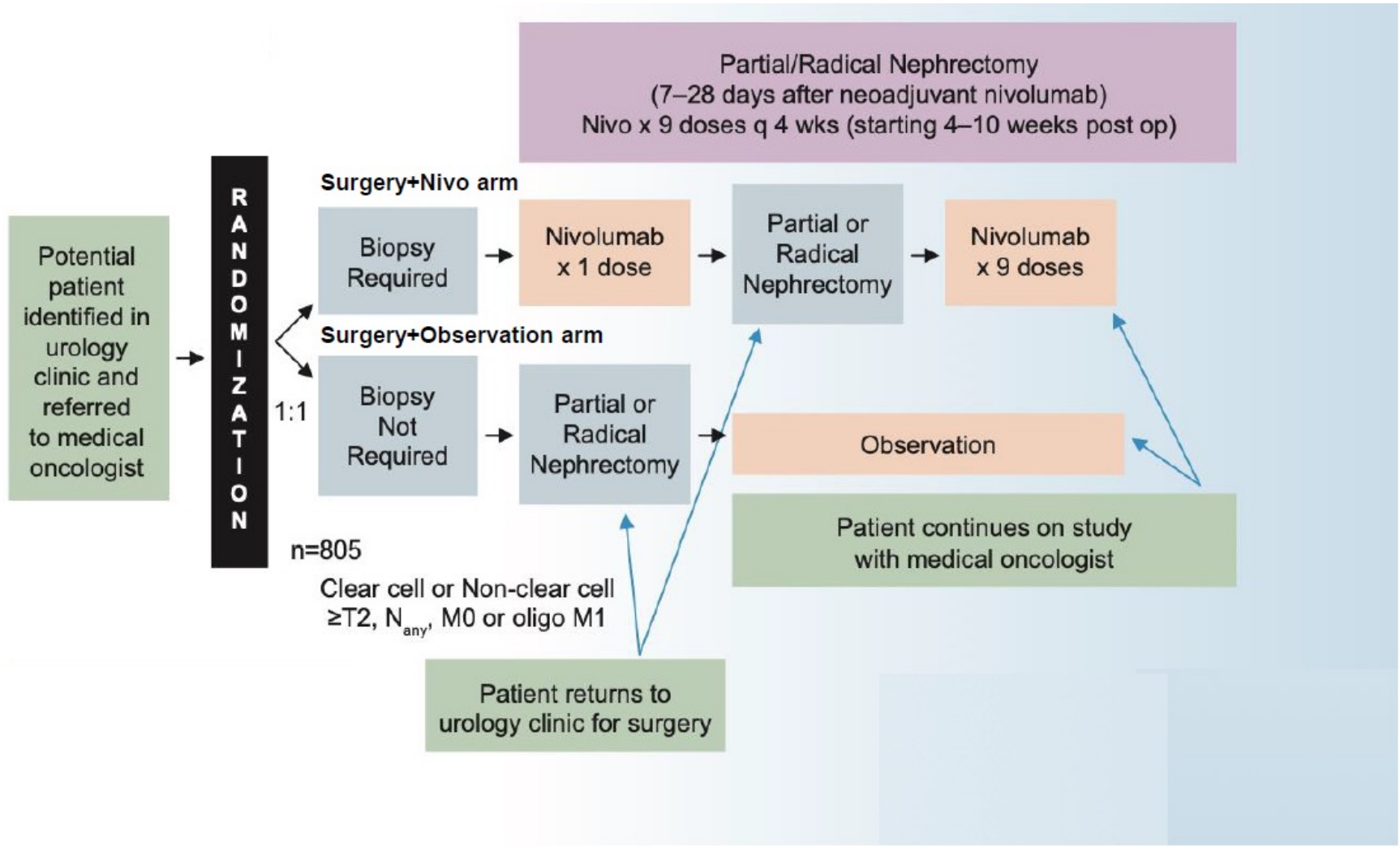
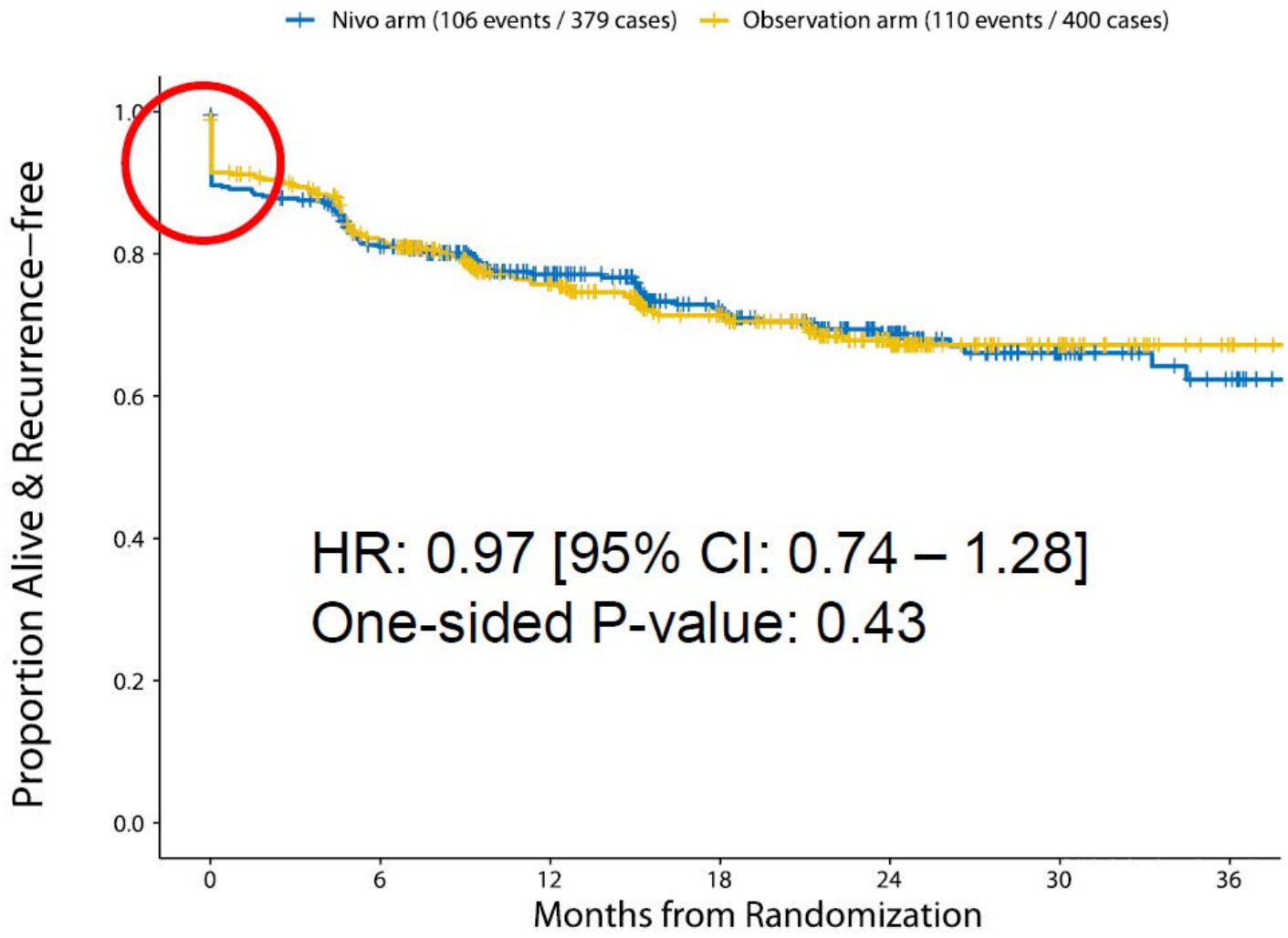
ECOG-ACRIN EA8143: PROSPER



Allaf *et al* ESMO 2022

ECOG-ACRIN EA8143: PROSPER



Allaf *et al* ESMO 2022

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The Bottom Line …

KEYNOTE-564

Key Eligibility Criteria

- Histologically confirmed clear cell renal cell carcinoma
  - pT2, grade 4 or sarcomatoid, N0, M0
  - pT3 or pT4, any grade, N0, M0
  - Any pT, any grade, N+, M0
  - M1 no evidence of disease (NED) after surgery
- Surgery ≤12 weeks prior to randomization
- No prior systemic therapy
- ECOG PS 0 or 1
- Tissue sample for PD-L1 assessment

Stratification Factors

- Metastatic status (M0 vs M1 NED)
- M0 group further stratified:
  - ECOG PS 0 vs 1
  - US vs non-US

R (1:1)

- Pembrolizumab 200 mg Q3W for ~1 year[a]
- Placebo Q3W for ~1 year[a]

- Primary endpoint: DFS per investigator
- Key secondary endpoint: OS
- Other secondary endpoints: Safety, PROs

Immotion010

Key eligibility criteria

- Resected intermediate- to high-risk[a] RCC
  - T2 Grade 4
  - T3a Grade 3/4
  - T3b/c or T4 any Grade
  - TXN+ any Grade
  - M1 NED[b]
- Clear cell and/or sarcomatoid component

R 1:1 N=778

- Atezolizumab 1200 mg IV q3w for 16 cycles or 1 year[c]
- Placebo IV q3w for 16 cycles or 1 year[c]

Stratification factors

- **Disease stage** (T2/T3a vs T3b/c/T4/N+ vs M1 NED)
- **PD-L1 expression on IC**[d] (IC0 [<1%] vs IC1/2/3 [≥1%])
- **Region** (North America[e] vs rest of world)

Primary endpoint

- Investigator-assessed DFS in ITT population

Key secondary endpoints

- OS in the ITT population
- Investigator-assessed DFS in the IC1/2/3 population
- IRF-assessed DFS in the ITT and IC1/2/3 populations
- IRF-assessed EFS in the ITT population
- Safety

CheckMate 914

N = 816

Key inclusion criteria[1]

- Radical or partial nephrectomy with negative surgical margins
- Predominant clear cell histology, including sarcomatoid features
- Pathologic TNM staging:
  - pT2a, G3 or G4, N0 M0
  - pT2b, G any, N0 M0
  - pT3, G any, N0 M0
  - pT4, G any, N0 M0
  - pT any, G any, N1 M0
- No clinical/radiological evidence of residual disease or distant metastases after nephrectomy, confirmed by BICR
- ECOG performance status of 0-1

Stratification factors:

- Pathologic TNM staging[a]
- Type of nephrectomy

R 1:1

Randomization > 4 weeks but ≤ 12 weeks after surgery

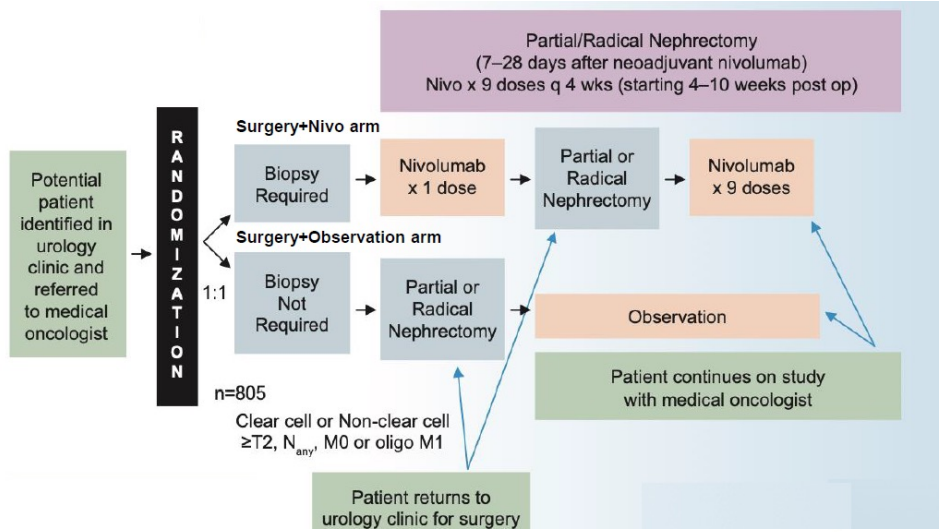
Expected treatment duration of 24 weeks[b]

- NIVO 240 mg IV Q2W (× 12 doses) + IPI 1 mg/kg IV Q6W (× 4 doses) N = 405
- Placebo IV Q2W (× 12 doses) + Placebo IV Q6W (× 4 doses) N = 411

Primary endpoint: DFS by BICR

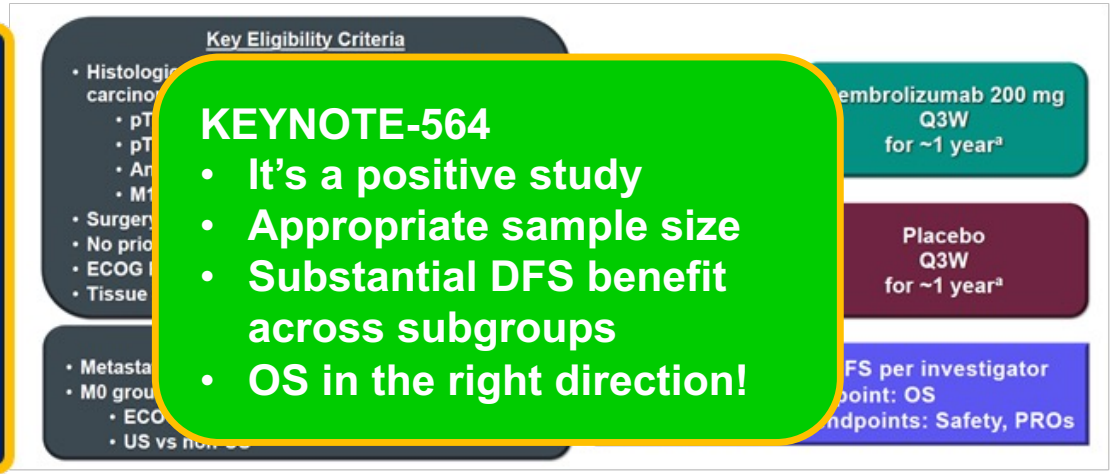
Secondary endpoints: OS and safety

ECOG PROSPER



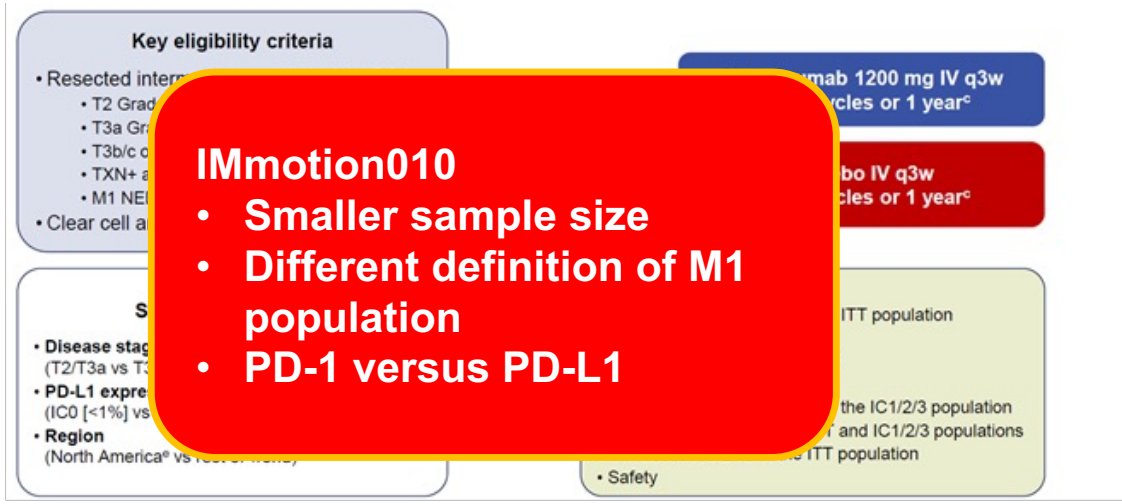
The Bottom Line …

KEYNOTE-564



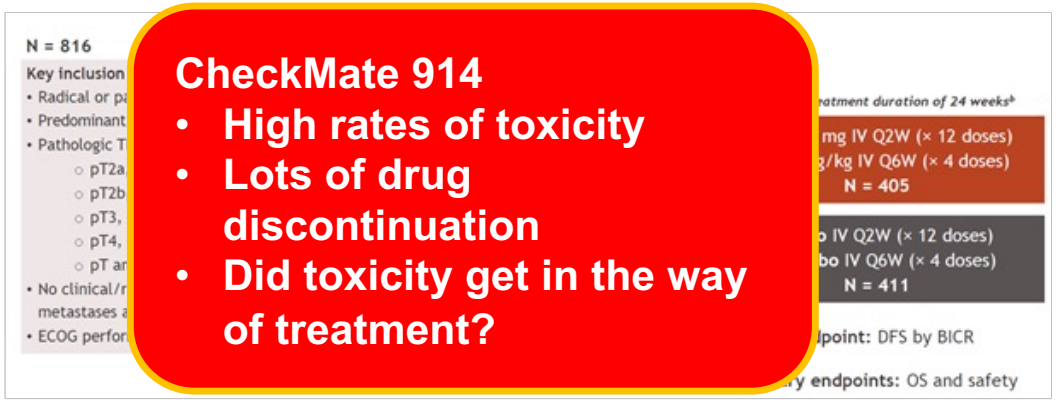
KEYNOTE-564
- It's a positive study
- Appropriate sample size
- Substantial DFS benefit across subgroups
- OS in the right direction!

Immotion010



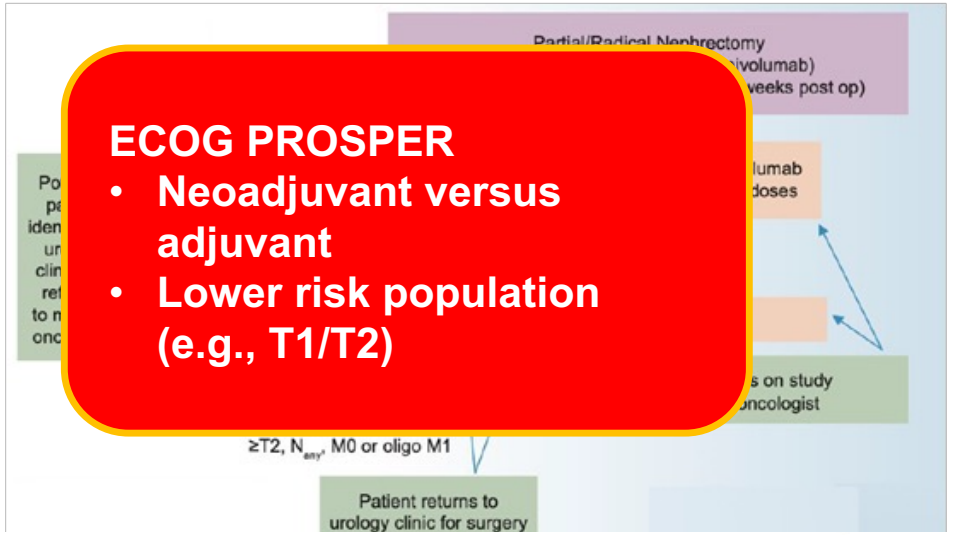
IMmotion010
- Smaller sample size
- Different definition of M1 population
- PD-1 versus PD-L1

CheckMate 914



CheckMate 914
- High rates of toxicity
- Lots of drug discontinuation
- Did toxicity get in the way of treatment?

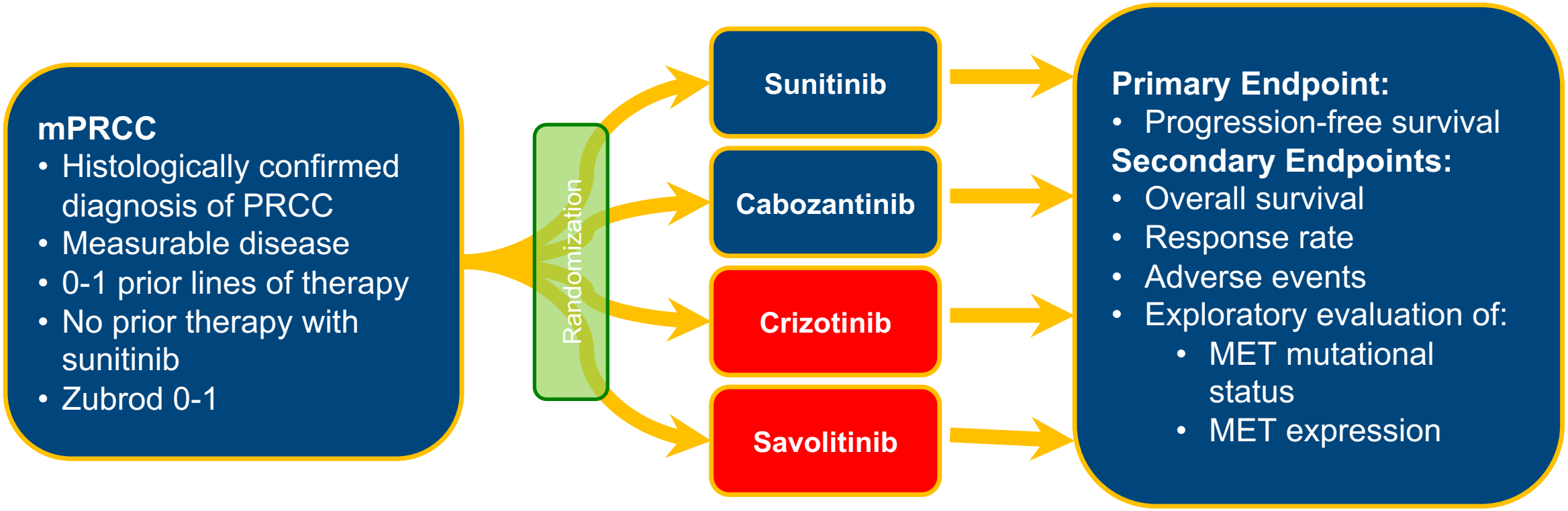
ECOG PROSPER



ECOG PROSPER
- Neoadjuvant versus adjuvant
- Lower risk population (e.g., T1/T2)

Non-Clear Cell RCC

SWOG 1500: PAPMET



N=152 across 65 centers; Accrual: 3.6 patients/month

Pal *et al* Lancet 2021

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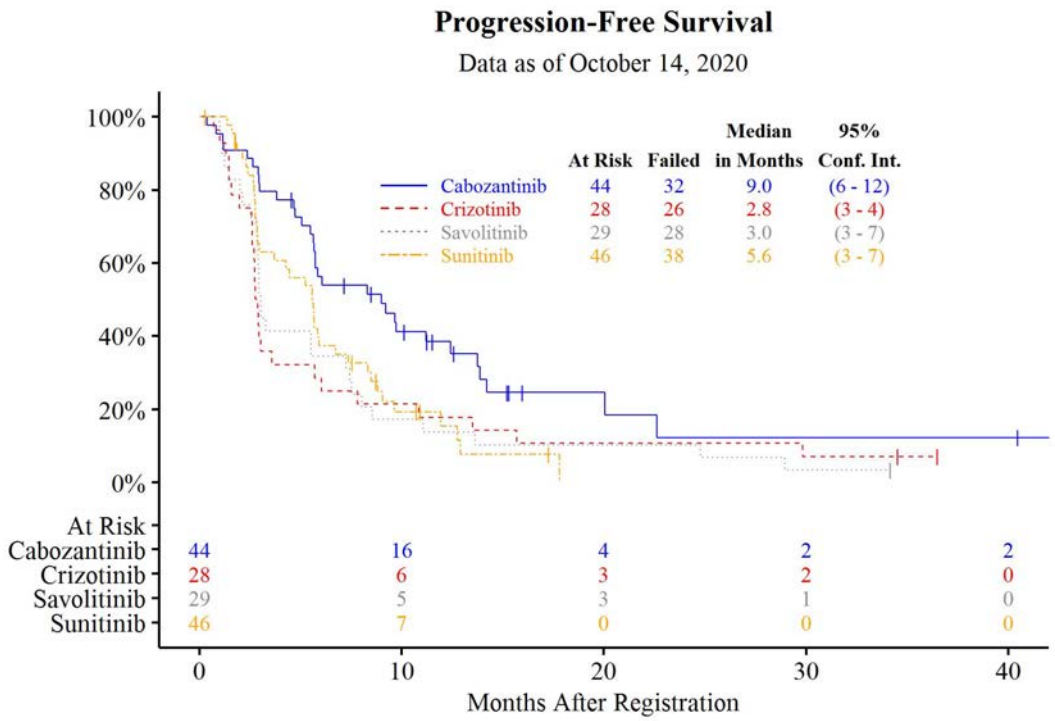
Non-Clear Cell RCC

SWOG 1500: PAPMET



	Sunitinib [n (%)]	Cabozantinib [n (%)]	Crizotinib [n (%)]	Savolitinib [n (%)]
Complete Response	0 (0)	2 (5)	0 (0)	0 (0)
Partial Response (PR)	2 (4)	8 (18)	0 (0)	1 (3)
Unconfirmed Partial Response	1 (2)	2 (5)	1 (4)	2 (7)
Stable Disease	23 (50)	23 (51)	7 (25)	8 (28)
Increasing Disease	11 (24)	4 (9)	12 (43)	8 (28)
Symptomatic Deterioration	1 (2)	1 (2)	3 (11)	1 (3)
Early Death	1 (2)	1 (2)	0 (0)	0 (0)
Assessment Inadequate	7 (15)	3 (7)	5 (18)	9 (31)
Total	46 (100)	44 (100)	28 (100)	29 (100)

Confirmed overall response rate with cabozantinib (23%) significantly higher than with sunitinib (4%) (2-sided P-value= 0.010)

Pal *et al* Lancet 2021

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Non-Clear Cell RCC

SAVOIR

Patients with locally advanced or metastatic PRCC

Key inclusion criteria
- ≥18 years
- Central confirmation of a *MET*-driven tumor (chromosome 7 gain / *MET* or *HGF* amplification / *MET* kinase domain mutations)*
- Measurable disease
- Karnofsky Performance Status ≥80%
- Patients could have received prior systemic treatment in the advanced setting or be treatment-naïve

Savolitinib
600 mg QD
(or 400 mg if <50 kg)

Randomized 1:1

Sunitinib
50 mg QD in 6-week cycles of 4 weeks on / 2 weeks off

RECIST 1.1 assessment every 6 weeks‡ until objective progressive disease

Approximately 360–450 patients were planned to be screened, in order to randomize ~180 patients

After external data on predicted PFS with sunitinib in patients with *MET*-driven disease became available, study enrollment was closed early

- **Primary endpoints:** PFS by BICR
- **Secondary endpoints**: OS and ORR by BICR, safety and HRQoL

Choueiri et al JAMA Oncol 2020

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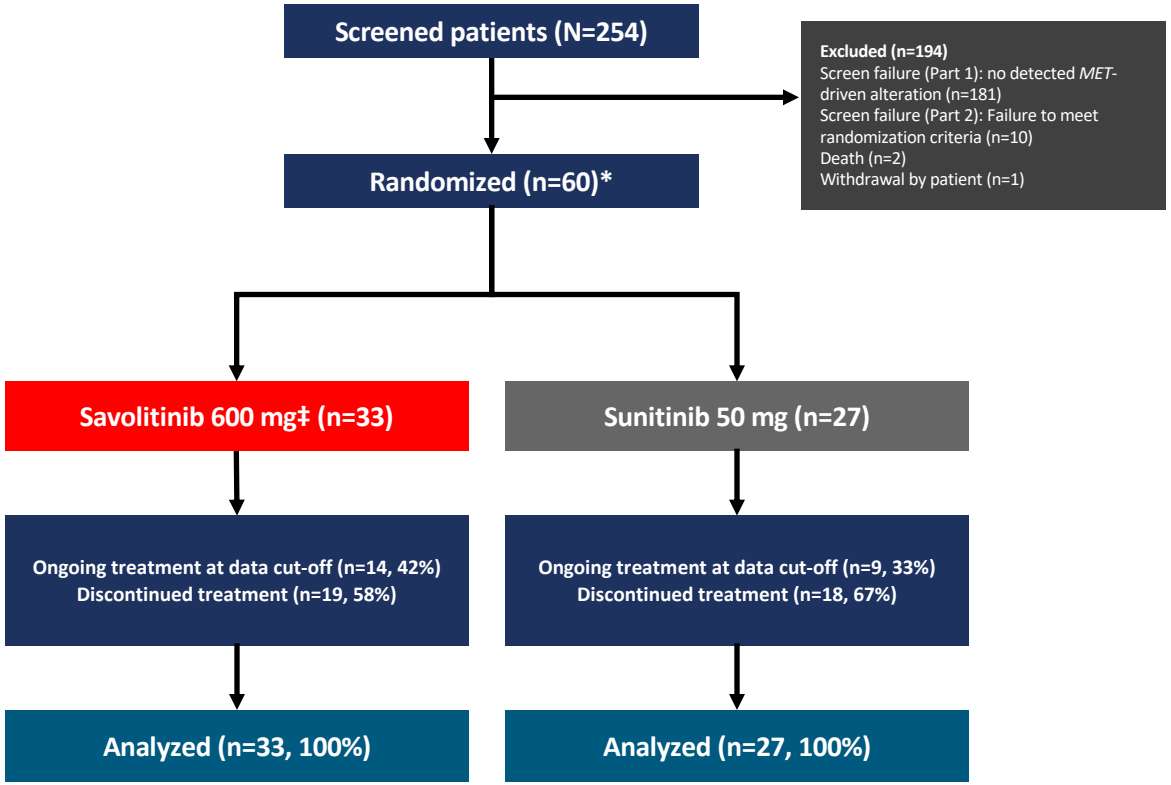
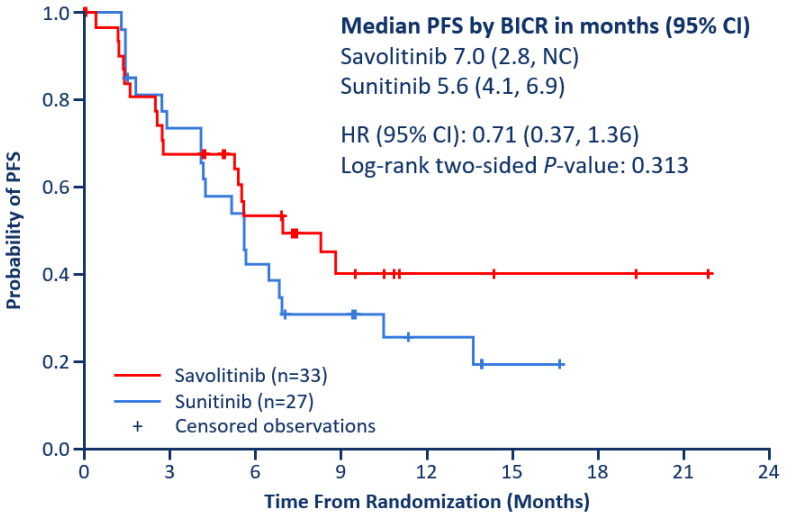
Non-Clear Cell RCC

SAVOIR





Endpoint, n (%) [95% CI]	Savolitinib (N=33)	Sunitinib (N=27)
ORR by BICR, *All partial responses*	9 (27) [13.3, 45.5]	2 (7) [0.9, 24.3]
Disease control rate by BICR		
At 6 months	16 (48) [30.8, 66.5]	10 (37) [19.4, 57.6]
At 12 months	10 (30) [15.6, 48.7]	6 (22) [8.6, 42.3]

Choueiri et al JAMA Oncol 2020

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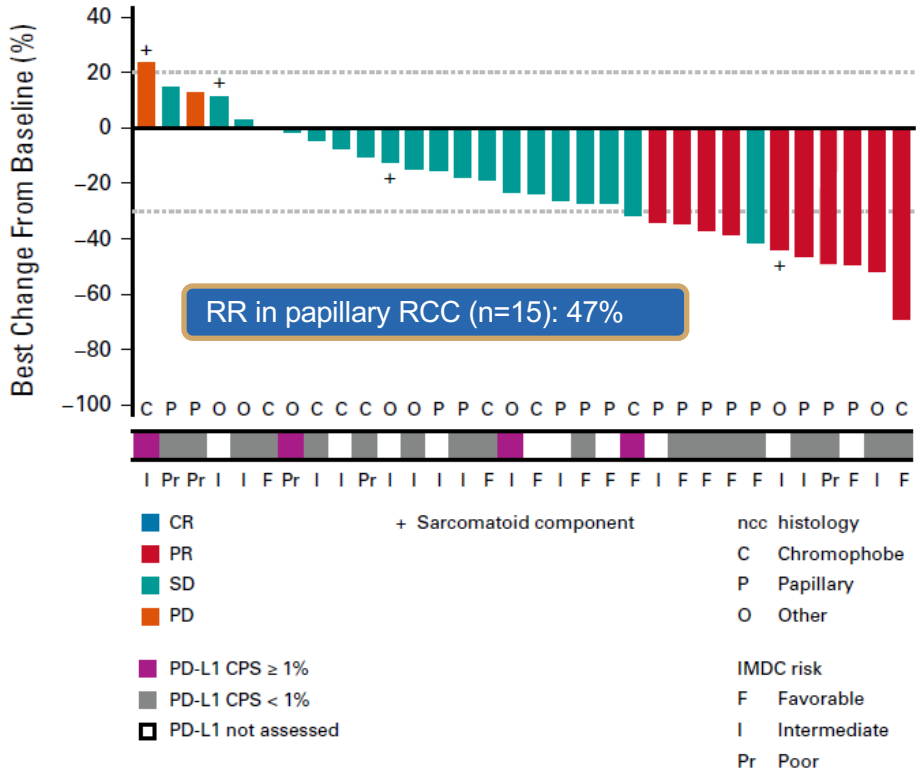
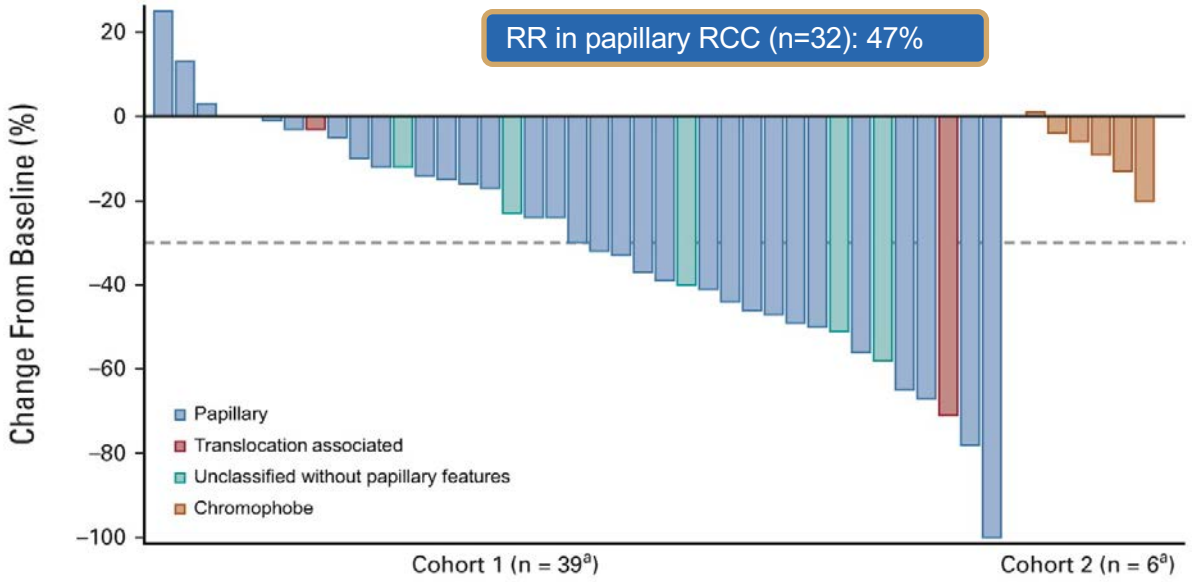
Non-Clear Cell RCC

What About Combination Therapy?

Cabozantinib/Atezolizumab



Cabozantinib/Nivolumab



Pal et al JCO 2021; Lee CH et al JCO 2022

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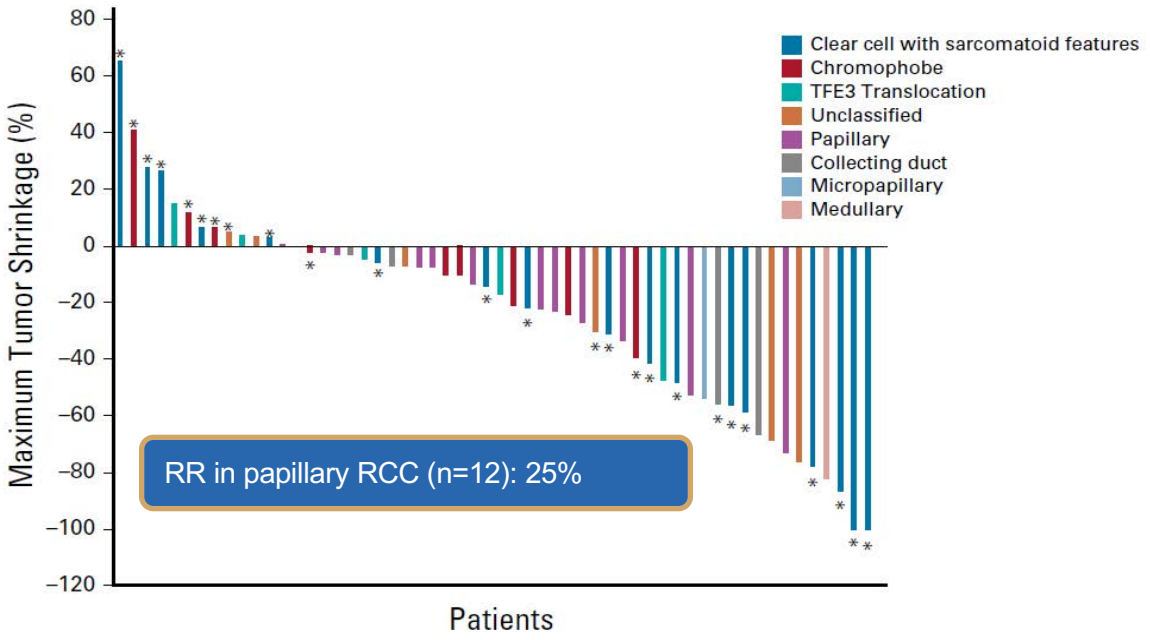
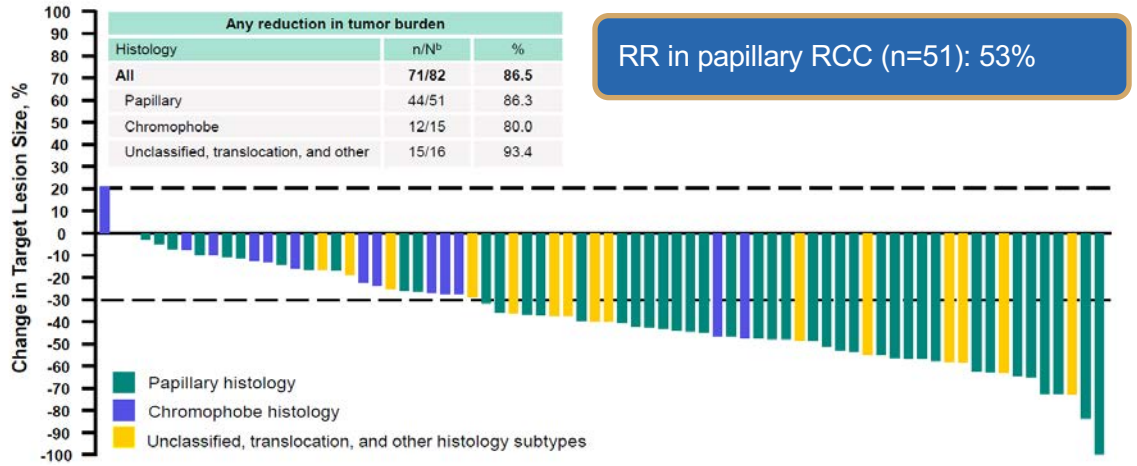
Non-Clear Cell RCC

What About Combination Therapy?

Bevacizumab/Atezolizumab



Lenvatinib/Pembrolizumab



Any reduction in tumor burden		
Histology	n/N[b]	%
All	71/82	86.5
Papillary	44/51	86.3
Chromophobe	12/15	80.0
Unclassified, translocation, and other	15/16	93.4

RR in papillary RCC (n=51): 53%

McGregor et al JCO 2019; Albiges et al ESMO 2022 (Abstr 1448O)

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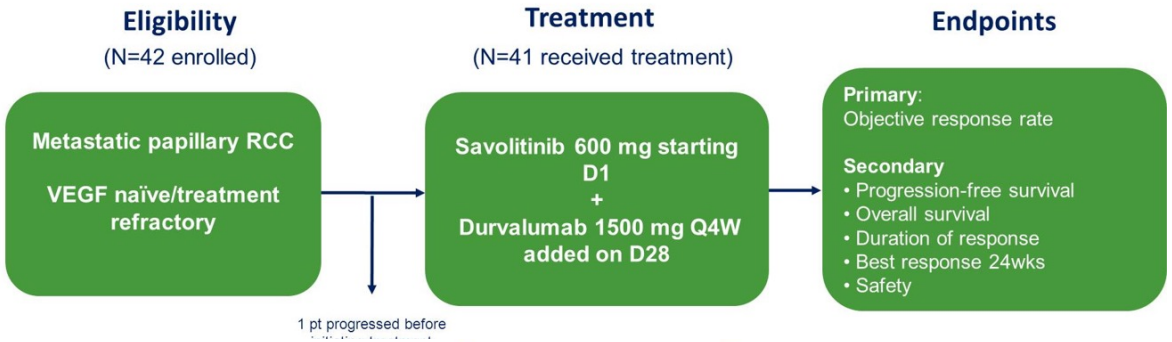
Non-Clear Cell RCC

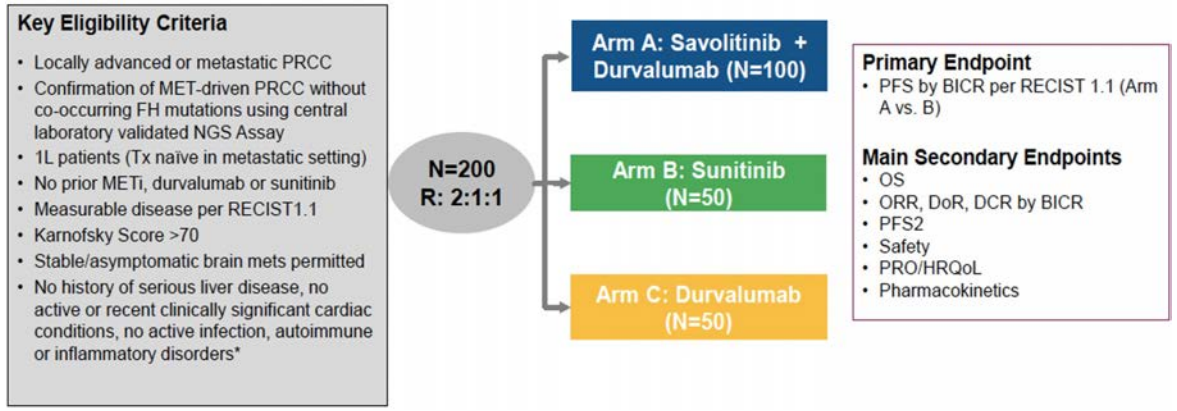
Savolitinib with Durvalumab

Phase II Data



Best overall response	All patients (N=41)		Previously untreated (N=28)	
	n (%)	95% CI for %	n (%)	95% CI for %
PR	11 (27)	(14 - 43)	9 (32)	(16 - 52)
SD	16 (39)	(24 - 55)	12 (43)	(24 - 63)
PD	11 (27)	(14 - 43)	5 (18)	(6 – 37)
NA*	3 (7)	(2 – 20)	2 (7)	(1 – 24)

Phase III SAMETA Trial



Powles et al ASCO GU 2019
Choueiri et al ASCO 2021

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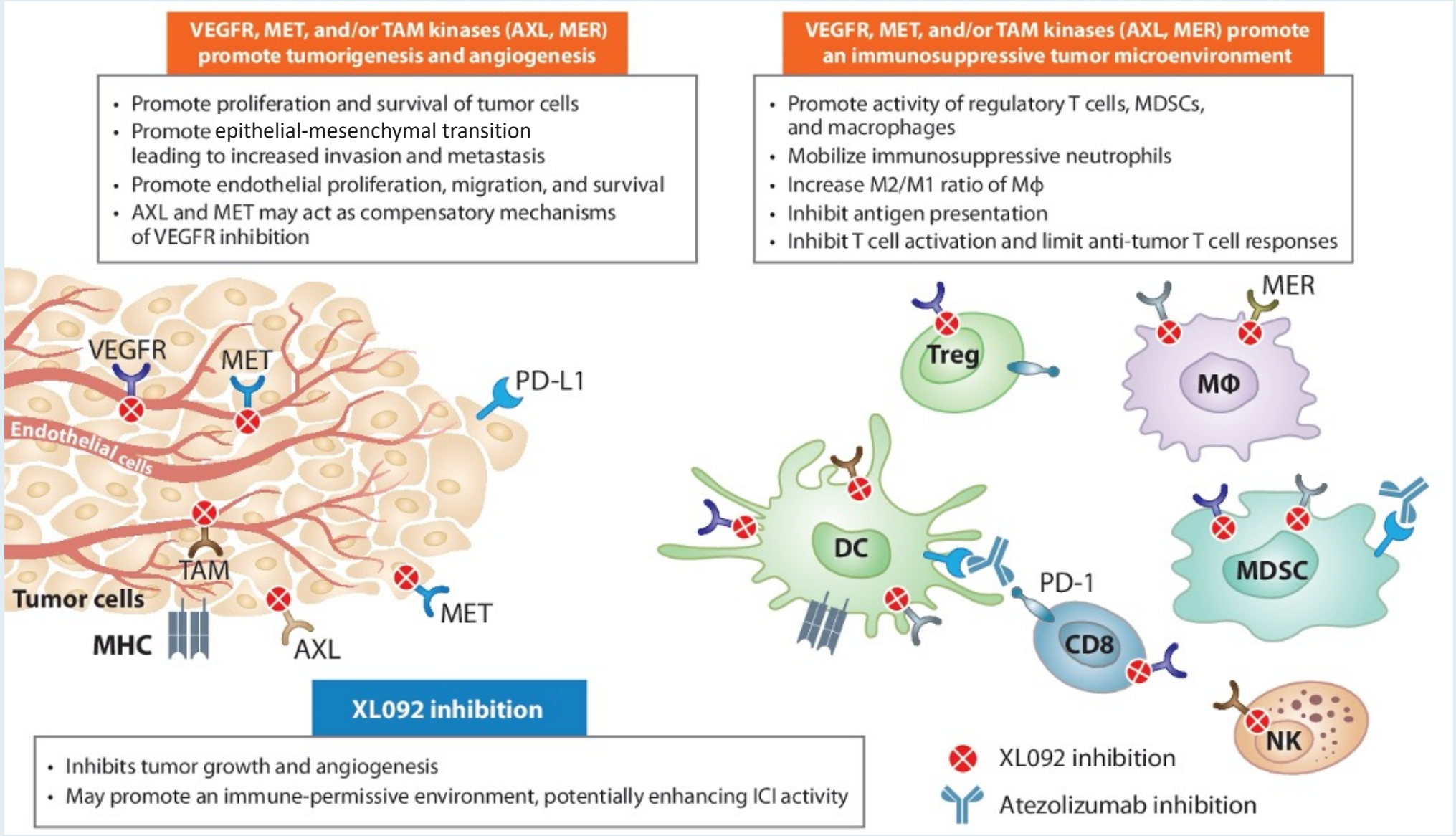
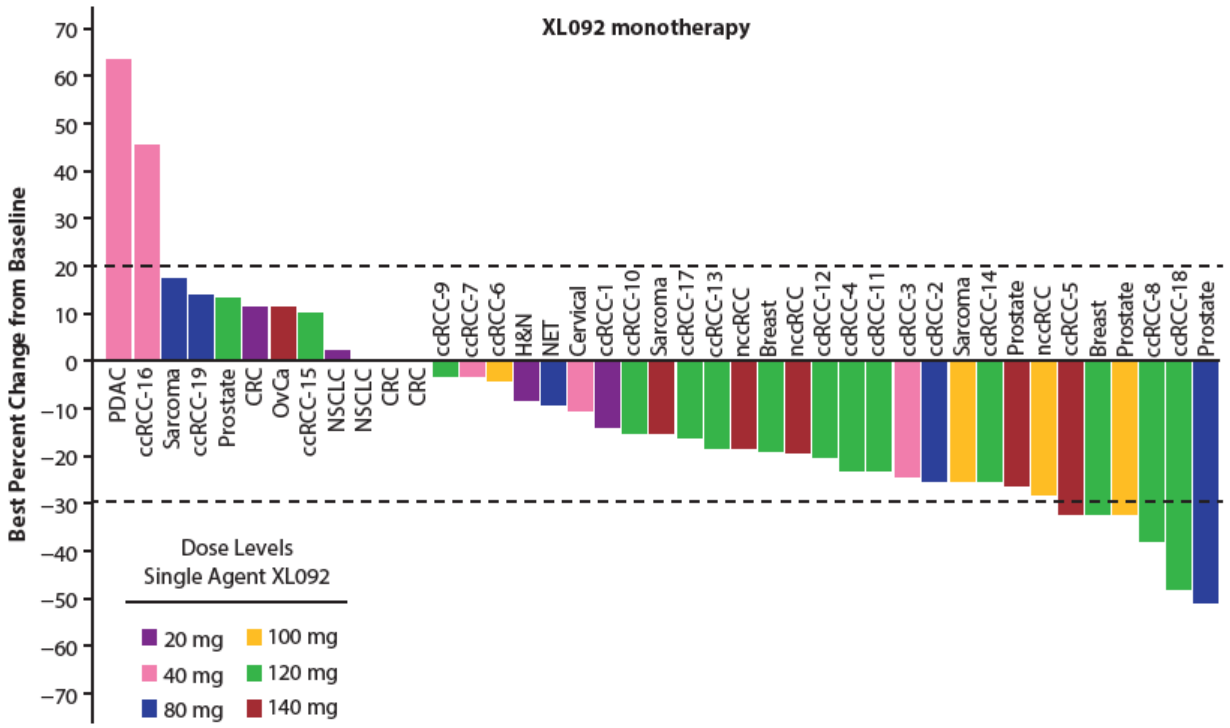
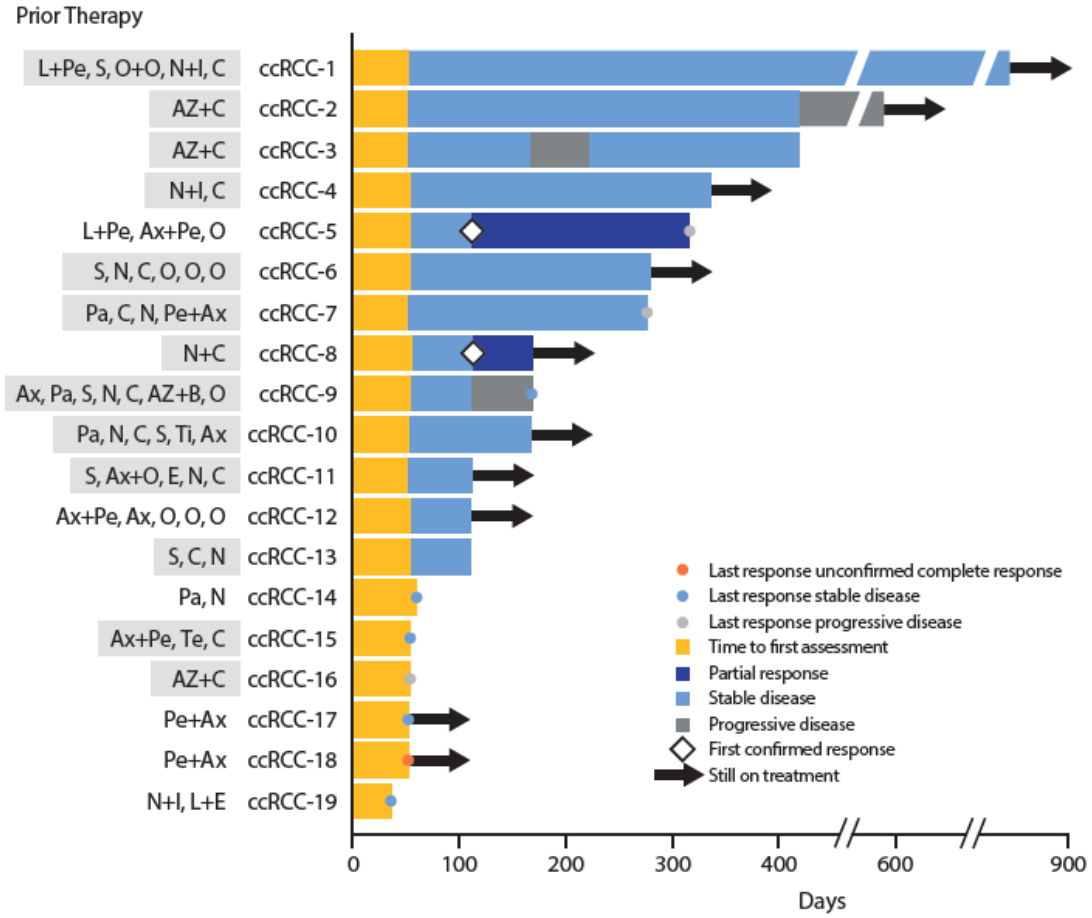
Zanzalintinib (XL092): Mechanism of Action



Hecht JR et al. Gastrointestinal Cancers Symposium 2023;Abstract TPS267.

Zanzalintinib (XL092): Targets MET, VEGFR2 & TAM (Half-life ~21 hrs)





Sharma et al ESMO 2022

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STELLAR-304

Patient Population

Advanced or metastatic nccRCC (N=291)

- Unresectable, advanced or metastatic nccRCC
- Histologic subtypes: papillary, unclassified, and translocation-associated
  - Tumor tissue required
- KPS ≥70%
- No prior treatment for nccRCC (adjuvant PD-1 allowed if >6 months ago)

2:1

Experimental
Zanzalintinib (XL092)
PO QD
+
Nivolumab
IV Q4W

Control
Sunitinib
PO QD
4 weeks on, 2 weeks off

Treatment until loss of clinical benefit, disease progression or unacceptable toxicity

Stratification
- Histologic subtype
- IMDC Risk Group

Study Endpoints
- **Primary:** PFS and ORR by BIRC
- **Secondary:** OS

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Questions from General Medical Oncologists Nonmetastatic RCC

- **Why is pembro a positive study when the other ICI studies are negative? Without OS data, is it advisable to use? Can ctDNA be used to determine if adjuvant therapy is necessary?**
- **Any role/recommendations for adjuvant Tx in non-clear cell RCC?**
- **Please review the role of adjuvant therapy after metastasectomy for patients with oligomets**
- **How to figure out benefit/detriment ratio for adjuvant therapy**
- **Is there a role for ctDNA in selecting patients for adjuvant RCC?**

Survey of US-based general medical oncologists, May 2023. N = 75

Questions from General Medical Oncologists
Non-clear Cell RCC

- **Could you elaborate on the best regimens to use in non clear cell cancer and how best to sequence them?**
- **Treatment of sarcomatoid RCC**
- **What is best therapy for cMET-mutated disease?**
- **I have a patient with an ALK1 mutation in the renal cancer. What should be used as therapy?**
- **Is there any role for adjuvant therapy in non clear cell RCC?**
- **This is a completely challenging area in management of RCC, and even though I do follow the limited guidelines we have, I have never seen any substantial response.**

Survey of US-based general medical oncologists, May 2023. N = 75

Questions from General Medical Oncologists Non-clear Cell RCC

- **What is the mechanism of action of zanzalintinib?**
- **How effective is zanzalintinib? How does it work?**
- **Will zanzalintinib work after progression on a prior multikinase inhibitor like cabozantinib?**
- **How do you interpret tivozanib data in papillary renal cell compared to clear cell carcinoma?**

Survey of US-based general medical oncologists, May 2023. N = 75

Questions from General Medical Oncologists Immune-meditated Toxicity

- **Patient treated with ipi + nivo developed hypoadrenalism and hypothyroidism; rx appropriately. However, the patient progressed. Are there any immune-related adverse events that would predict for positive response?**
- **My patient on 1st-line nivolumab/ipilimumab had Grade 4 colitis. We were able to restart nivolumab alone without recurrent colitis, but what are the data on using infliximab empirically to prevent recurrence?**
- **I had a 65-year-old male who got ipi/nivo and developed myocarditis. How would you manage this?**

Survey of US-based general medical oncologists, May 2023. N = 75

Questions from General Medical Oncologists Immune-meditated Toxicity

- **Of all the toxicity associated with checkpoint inhibitors, the most difficult for me to manage has been skin toxicities. I have found at least locally that dermatology consultations have been difficult to obtain and not overly useful in terms of providing effective measures.**
- **My biggest problem has been with itching. Do you use acetylcysteine, photodynamic therapy and naloxone in patients with refractory itching?**

Survey of US-based general medical oncologists, May 2023. N = 75

Impediments you have encountered in delivering high-quality care to patients with renal cell carcinoma

- **Finding urologists competent in giving a good opinion in the community for partial nephrectomies in early RCC**
- **For early-stage RCC, in which resection or cryoablation is appropriate, there is a significant delay in referrals to academic medical centers due to insurance denials for higher levels of care. Challenging in California to access some of the immunotherapies due to managed care plans**

Survey of US-based general medical oncologists, May 2023. N = 75

RTP RESEARCH TO PRACTICE

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Part 2 of a 3-Part Complimentary NCPD Webinar Series
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Colorectal and Gastroesophageal Cancers

Wednesday, June 14, 2023
5:00 PM – 6:00 PM ET

Faculty

Kristen K Ciombor, MD, MSCI
Amanda K Wagner, APRN-CNP, AOCNP

Moderator

Neil Love, MD

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RESEARCH TO PRACTICE

Thank you for joining us!

Please take a moment to complete the survey currently up on Zoom. Your feedback is very important to us. The survey will remain open up to 5 minutes after the meeting ends.

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