

Single Agent Samba? Doublet Dance? Mambo Combo? Mastering the Rhythm of Treatment Selection and Sequencing in Renal Cell Carcinoma – Tweetorial #1 References

Tweet 3

SEER. Cancer stat facts: kidney and renal pelvis cancer. National Cancer Institute. Accessed October 6, 2021. <https://seer.cancer.gov/statfacts/html/kidrp.html>

SEER*Explorer. An interactive website for SEER cancer statistics. Surveillance Research Program, National Cancer Institute. Accessed October 7, 2021. <https://seer.cancer.gov/explorer/>

Tweet 4

SEER. Cancer stat facts: kidney and renal pelvis cancer. National Cancer Institute. Accessed October 6, 2021. <https://seer.cancer.gov/statfacts/html/kidrp.html>

National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Kidney Cancer (v2.2022). Updated September 8, 2021. Accessed September 29, 2021. https://www.nccn.org/professionals/physician_gls/pdf/kidney.pdf

Tweet 5

Heng DY, Xie W, Regan MM, et al. Prognostic factors for overall survival in patients with metastatic renal cell carcinoma treated with vascular endothelial growth factor-targeted agents: results from a large, multicenter study. *J Clin Oncol*. 2009;27(34):5794-5799. doi:10.1200/JCO.2008.21.4809

Tweet 7

Albiges L, Tannir NM, Burotto M, et al. Nivolumab plus ipilimumab versus sunitinib for first-line treatment of advanced renal cell carcinoma: extended 4-year follow-up of the phase III CheckMate 214 trial. *ESMO Open*. 2020;5(6):e001079. doi:10.1136/esmoopen-2020-001079

Tweet 8

Albiges L, Tannir NM, Burotto M, et al. Nivolumab plus ipilimumab versus sunitinib for first-line treatment of advanced renal cell carcinoma: extended 4-year follow-up of the phase III CheckMate 214 trial. *ESMO Open*. 2020;5(6):e001079. doi:10.1136/esmoopen-2020-001079

Ljungberg B, Albiges L, Bedke J, et al. EAU Guidelines on Renal Cell Carcinoma. *European Association of Urology*. 2021.

Powles T, Albiges L, Bex A, et al. ESMO Clinical Practice Guideline update on the use of immunotherapy in early stage and advanced renal cell carcinoma. *Ann Oncol*. 2021. doi:10.1016/j.annonc.2021.09.014

Tweet 12

Albiges L, Tannir NM, Burotto M, et al. Nivolumab plus ipilimumab versus sunitinib for first-line treatment of advanced renal cell carcinoma: extended 4-year follow-up of the phase III CheckMate 214 trial. *ESMO Open*. 2020;5(6):e001079. doi:10.1136/esmoopen-2020-001079

Choueiri TK, Motzer RJ, Rini BI, et al. Updated efficacy results from the JAVELIN Renal 101 trial: first-line avelumab plus axitinib versus sunitinib in patients with advanced renal cell carcinoma. *Ann Oncol*. 2020;31(8):1030-1039. doi:10.1016/j.annonc.2020.04.010

Choueiri TK, Powles T, Burotto M, et al. Nivolumab plus Cabozantinib versus Sunitinib for Advanced Renal-Cell Carcinoma. *N Engl J Med*. 2021;384(9):829-841. doi:10.1056/NEJMoa2026982

Motzer R, Alekseev B, Rha SY, et al. Lenvatinib plus Pembrolizumab or Everolimus for Advanced Renal Cell Carcinoma. *N Engl J Med*. 2021;384(14):1289-1300. doi:10.1056/NEJMoa2035716

Powles T, Plimack ER, Soulières D, et al. Pembrolizumab plus axitinib versus sunitinib monotherapy as first-line treatment of advanced renal cell carcinoma (KEYNOTE-426): extended follow-up from a randomised, open-label, phase 3 trial. *Lancet Oncol*. 2020;21(12):1563-1573. doi:10.1016/s1470-2045(20)30436-8

Rini BI, Plimack ER, Stus V, et al. Pembrolizumab (pembro) plus axitinib (axi) versus sunitinib as first-line therapy for advanced clear cell renal cell carcinoma (ccRCC): Results from 42-month follow-up of KEYNOTE-426. *J Clin Oncol*. 2021;39(15_suppl):4500-4500. doi:10.1200/JCO.2021.39.15_suppl.4500

Choueiri TK, Powles T, Porta C, et al. A phase 3 trial of lenvatinib plus pembrolizumab versus sunitinib as a first-line treatment for patients with advanced renal cell carcinoma: overall survival follow-up analysis (the CLEAR study). Presented at: Kidney Cancer Research Summit; 2021; Philadelphia, PA, USA. Accessed October 19, 2021. <https://kcrs.kidneycan.org/wp-content/uploads/2021/10/Abstracts-Book-KCRS-2021-v2-10112021.pdf>

Motzer RJ, Tannir NM, McDermott DF, et al. 661P Conditional survival and 5-year follow-up in CheckMate 214: First-line nivolumab + ipilimumab (N+I) versus sunitinib (S) in advanced renal cell carcinoma (aRCC). *Ann Oncol*. 2021;32:S685-S687. doi:10.1016/j.annonc.2021.08.057

Tweet 13

Ljungberg B, Albiges L, Bedke J, et al. EAU Guidelines on Renal Cell Carcinoma. *European Association of Urology*. 2021.

Tweet 14

Lee C-H, Shah AY, Hsieh JJ, et al. Phase II trial of lenvatinib (LEN) plus pembrolizumab (PEMBRO) for disease progression after PD-1/PD-L1 immune checkpoint inhibitor (ICI) in metastatic clear cell renal cell carcinoma (mccRCC). *J Clin Oncol*. 2020;38(15_suppl):5008. doi:10.1200/JCO.2020.38.15_suppl.5008

ClinicalTrials.gov. Phase 1b/2 trial of lenvatinib (E7080) plus pembrolizumab in subjects with selected solid tumors. NCT02501096. Updated June 14, 2021. Accessed October 21, 2021.
<https://clinicaltrials.gov/ct2/show/NCT02501096>

Albiges L, Barthelemy P, Gross-Goupil M, Negrier S, Needle MN, Escudier B. TiNivo: safety and efficacy of tivozanib-nivolumab combination therapy in patients with metastatic renal cell carcinoma. *Ann Oncol*. 2021;32(1):97-102. doi:10.1016/j.annonc.2020.09.021

ClinicalTrials.gov. Phase 1/2 study of tivozanib in combination with nivolumab in subjects with RCC. NCT03136627. Updated July 12, 2021. Accessed October 5, 2021.
<https://clinicaltrials.gov/ct2/show/NCT03136627>

ClinicalTrials.gov. Study to compare tivozanib in combination with nivolumab to tivozanib monotherapy in subjects with renal cell carcinoma. NCT04987203. Updated October 7, 2021. Accessed October 26, 2021.
<https://www.clinicaltrials.gov/ct2/show/NCT04987203?term=tivozanib&cond=Renal+Cell+Carcinoma&phase=2&draw=2&rank=1>

Pal SK, Albiges L, Suarez Rodriguez C, et al. CONTACT-03: Randomized, open-label phase III study of atezolizumab plus cabozantinib versus cabozantinib monotherapy following progression on/after immune checkpoint inhibitor (ICI) treatment in patients with advanced/metastatic renal cell carcinoma. *J Clin Oncol*. 2021;39(6_suppl):TPS370-TPS370. doi:10.1200/JCO.2021.39.6_suppl.TPS370.

ClinicalTrials.gov. A study of atezolizumab in combination with cabozantinib compared to cabozantinib alone in participants with advanced renal cell carcinoma after immune checkpoint inhibitor treatment (CONTACT-03). NCT04338269. Updated August 18, 2021. Accessed September 10, 2021.
<https://www.clinicaltrials.gov/ct2/show/NCT04338269>

Glossary

aRCC, advanced renal cell carcinoma
Axi, axitinib
Cabo, cabozantinib
CVD, cardiovascular disease
Dx, diagnosis
Dz, disease
EAU, European Association of Urology
eGFR, estimated glomerular filtration rate
ESMO, European Society for Medical Oncology
IMDC, International Renal Cell Carcinoma Database Consortium
Hb, hemoglobin
HR, hazard ratio
Hx, history
IO, immuno-oncology
I/P, intermediate/poor
ITT, intent to treat
KPS, Karnofsky Performance Scale
Len, lenvatinib
LLN, lower limit of normal
Mets, metastases
mRCC, metastatic renal cell carcinoma
NCCN, National Comprehensive Cancer Network
NE, not estimable
Nivo, nivolumab
NR, not reported
ORR, overall response rate
OS, overall survival
Pembro, pembrolizumab
PFS, progression-free survival
RCC, renal cell carcinoma
RR, response rate
SEER, Surveillance, Epidemiology, and End Results Program
TKI, tyrosine kinase inhibitor
ULN, upper limit of normal
VEGF, vascular endothelial growth factor
w/, with
yo, year old