KCRS22 Kidney Cancer Research Summit

Pathologic Outcomes at Cytoreductive Nephrectomy (CN) Following Immunotherapy (IO) for Patients with Advanced Renal Cell Carcinoma (RCC)

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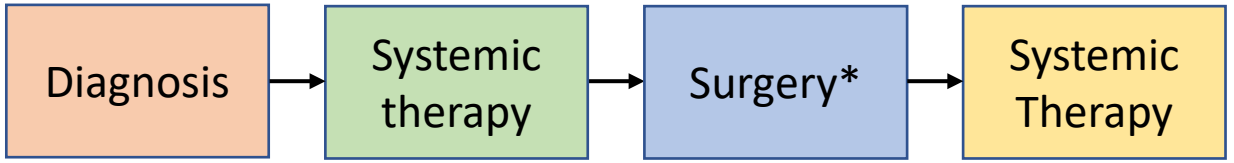
Disclosures

- I have no disclosures

Role of Cytoreductive Nephrectomy in RCC

Pre-CARMENA Treatment Paradigm

Post-CARMENA Treatment Paradigm



*Consider CN in select patients.

Study Design

Eligibility Criteria:

1. Locally advanced or metastatic disease not suited for upfront CN by urology assessment
2. Received at least one dose of a checkpoint inhibitor prior to partial or radical CN

Primary Endpoint:

Pathologic outcomes at time of CN following IO

Baseline T Stage → Degree of pathologic downstaging → Pathologic T Stage

Secondary Endpoints:

Progression-Free Survival

Therapy Initiation → Radiographic Progression or Death

Overall Response Rate

CN = Cytoreductive nephrectomy
IO = Immunotherapy
PFS = Progression-free survival
ORR = Overall Response Rate

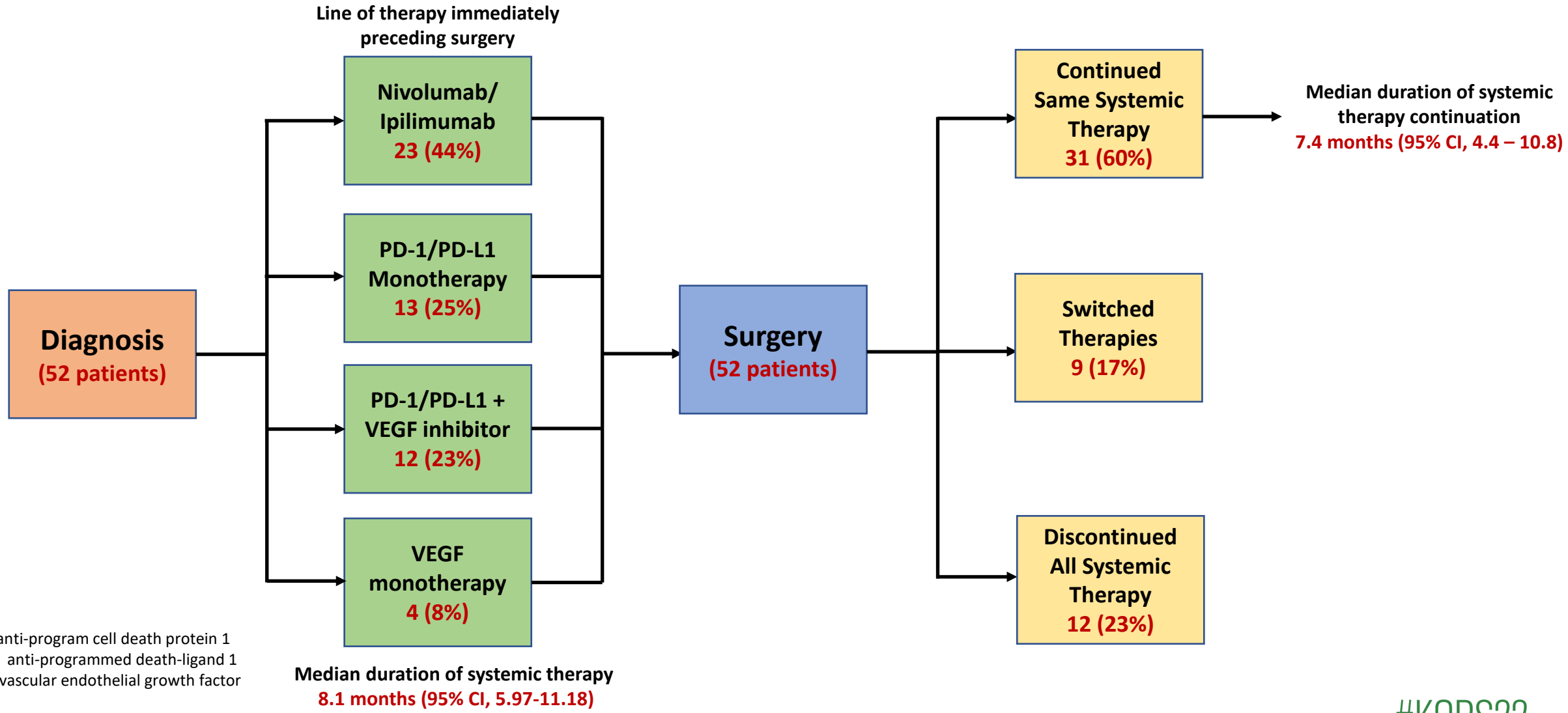
Baseline Characteristics

52 patients included in the cohort

Demographics	
Age (years)	
Median, range	63
Gender	
Male, n (%)	34 (65%)
Female, n (%)	18 (35%)
Race	
White, n (%)	38 (73%)
Black or African American, n (%)	3 (6%)
Asian, n (%)	4 (8%)
Native American/Pacific Islander, n (%)	0 (0%)
Other or Mixed Race, n (%)	7 (13%)
Ethnicity	
Hispanic, n (%)	6 (12%)
Non-Hispanic, n (%)	46 (88%)

Disease Characteristics	
Pathology	
Clear Cell RCC, n (%)	34 (81%)
Papillary RCC, n (%)	3 (6%)
Unclassified RCC, n (%)	4 (8%)
Collecting Duct RCC, n (%)	1 (2%)
XP Translocation, n (%)	2 (4%)
Metastatic Disease at Diagnosis	
De Novo, n (%)	44 (85%)
Differentiation	
Sarcomatoid Differentiation, n (%)	5 (10%)
Rhabdoid Differentiation, n (%)	5 (10%)
Baseline Metastases	
Liver, n (%)	12 (23%)
Bone, n (%)	13 (25%)
Lymph Node, n (%)	20 (38%)
Lung, n (%)	30 (58%)
IMDC Risk	
Favorable, n (%)	3 (6%)
Intermediate, n (%)	31 (60%)
Poor, n (%)	13 (25%)
Unknown, n (%)	5 (10%)

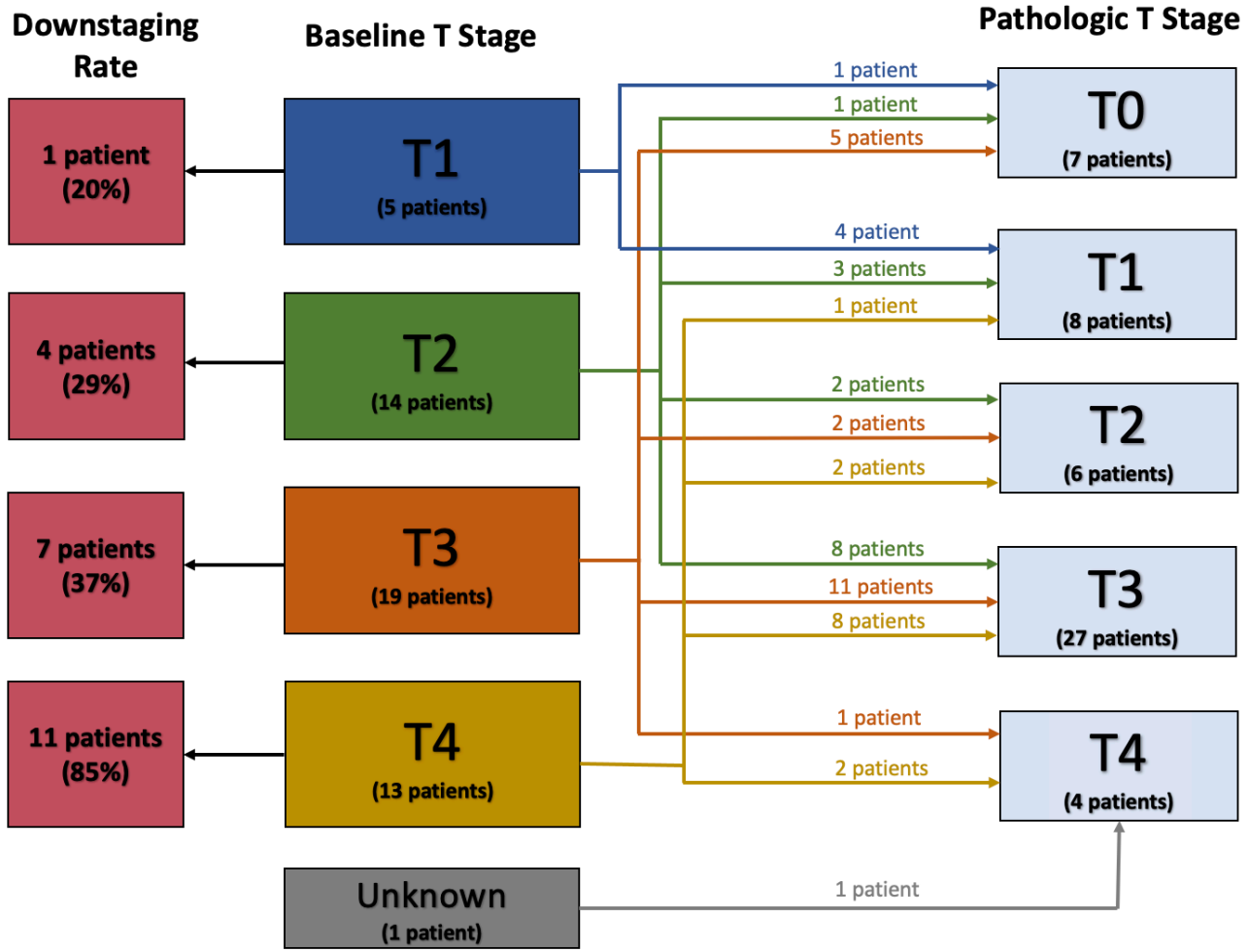
Treatment Exposure



PD-1 = anti-program cell death protein 1
PD-L1 = anti-programmed death-ligand 1
VEGF = vascular endothelial growth factor

Pathologic Outcomes

- 44% of patients experienced pathologic downstaging[1]
- 7 patients (13%) with pathologic complete response
- 8 patients (15%) had ypT1 at time of surgery, 4 of which had downstaging from baseline
- No patients with sarcomatoid and rhabdoid differentiation experienced downstaging
- Median tumor size = 6.5 cm
- 85% patients with negative margins and 75% with necrosis

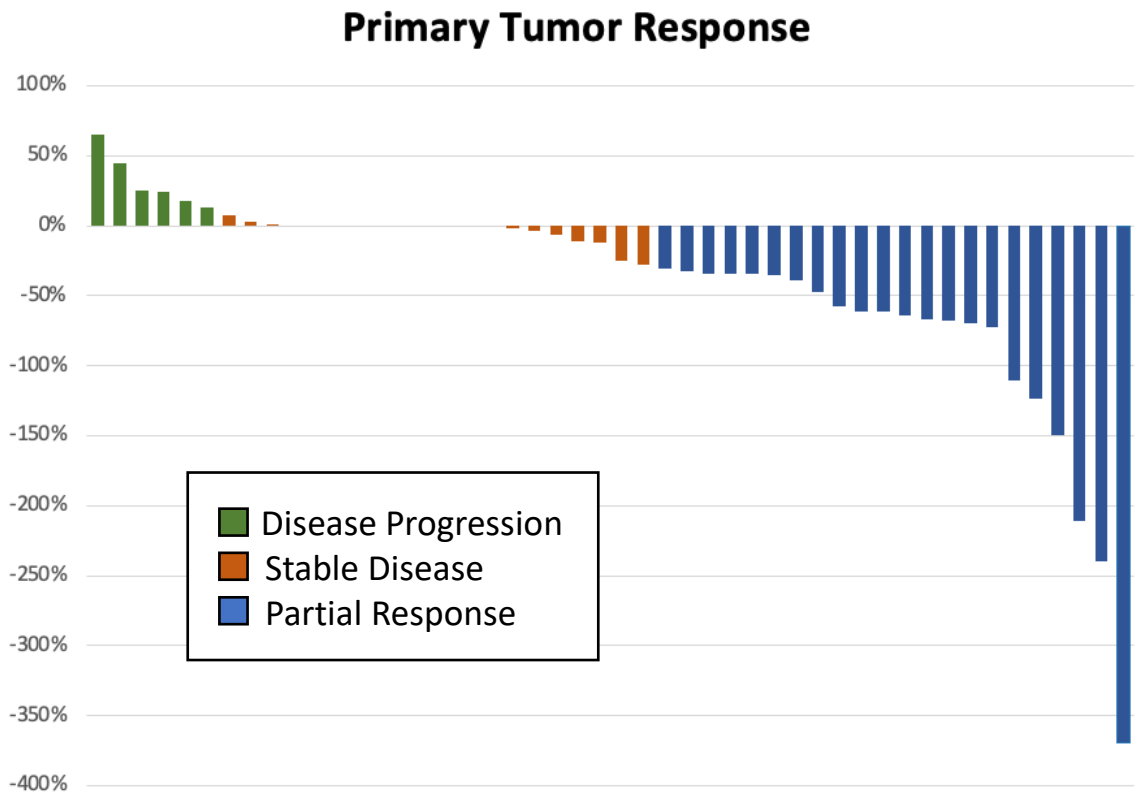


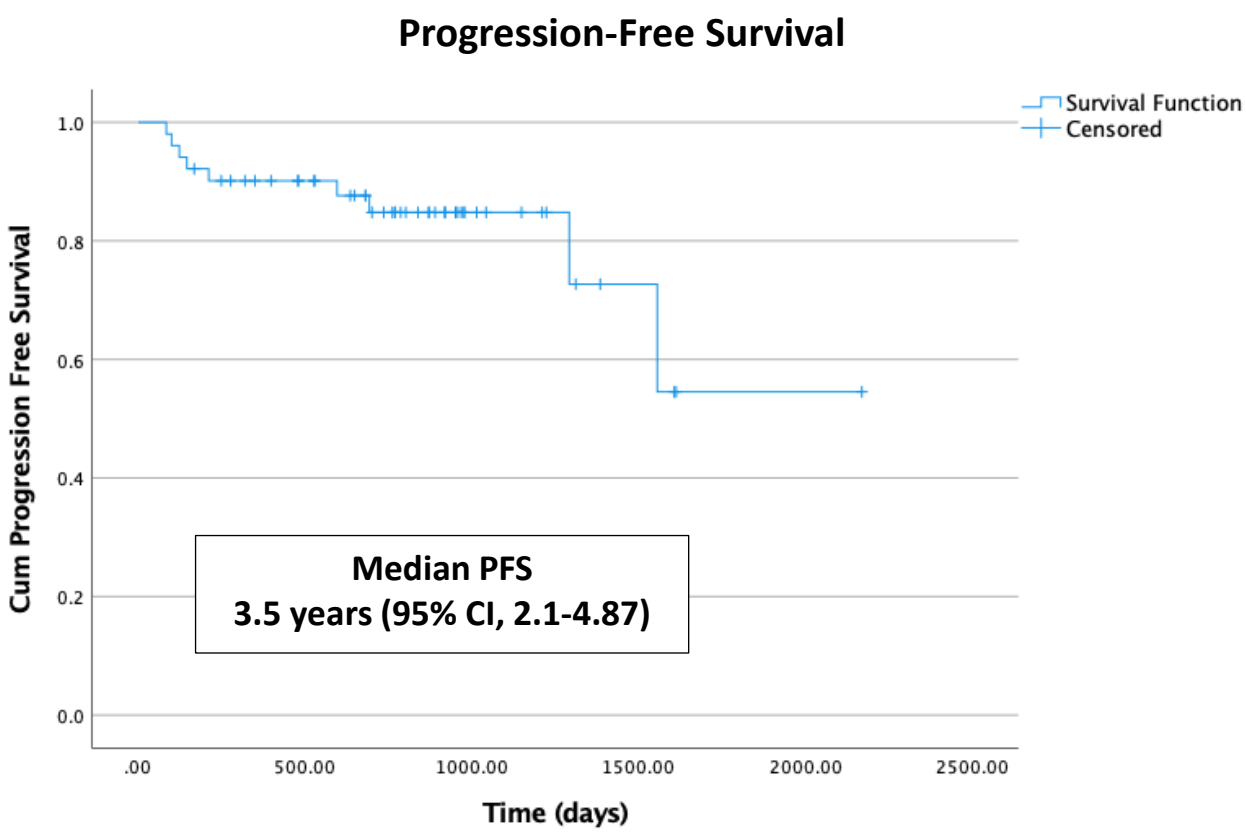
[1] When comparing clinical T stage (cT) and pathologic T stage (ypT)

Characteristics of Patients with Complete Response

Patient	Demographics				Pathology							IMDC Risk			Primary Renal Tumor				Treatment Exposure	
	Age	Gender	Race	Ethnicity	Clear Cell RCC	Papillary RCC	XP Translocation	Unknown Subtype	Sarcomatoid Differentiation	Rhabdoid Differentiation	De Novo Metastatic Disease	Favorable	Intermediate	Poor	Baseline T Stage	Pre-Treatment Size on Imaging (cm)	Pre-Surgery Size on Imaging (cm)	Post-Surgery Size on Pathology (cm)	Line of Therapy Prior to Surgery	Duration of Systemic Therapy Prior to Surgery (months)
1	50	Male	White	Non-Hispanic	X		X				X		X		3	7.8	8.4	0	Nivolumab + Ipilimumab	4.9
2	74	Male	White	Non-Hispanic				X			X			X	1	1.6	1.6	0	Nivolumab	14.7
3	73	Male	Other or Mixed Race	Hispanic	X						X		X		3	5.4	5.4	0	Nivolumab + Cabozantinib	4.3
4	58	Male	White	Hispanic	X						X		X		3	5	4.5	0	Nivolumab	10.5
5	66	Male	White	Non-Hispanic		X								X	3b	11.2	3.6	0	Nivolumab + Ipilimumab	5.5
6	65	Male	Other or Mixed Race	Non-Hispanic	X						X		X		3	9.3	7.0	0	Nivolumab	16.8
7	61	Male	White	Non-Hispanic	X						X		X		2	5.9	2.8	0	Nivolumab	13.2

Treatment Response and Survival





Conclusions

- **CN is feasible post-IO therapy in well selected patients**
  - IO associated with response and in some patients, an extreme response
- **Limitations:**
  - Retrospective analysis
  - No central review performed
  - Unable to report OS due to short follow up
- **Next steps:**
  - Genomic profiling on biopsy and nephrectomy specimens
  - Investigate markers of extreme response
- **Upcoming Trials:**
  - SWOG 1931/PROBE
  - CYTOSHRINK
  - SAMURAI

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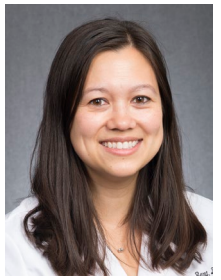

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