

Professional Practice Gaps and Barriers to Optimal Care of Renal Cell Carcinoma (RCC) Among Oncologists in the United States

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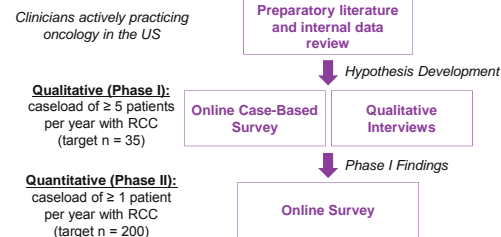
Background

New therapies for advanced RCC have improved patient outcomes while increasing the complexity of care.^[1] Treatment decisions are challenging in absence of clear evidence supporting optimal selection or sequencing.^[2] We sought to quantify practice gaps and barriers to optimal care among oncologists treating patients with RCC in the United States.

Study Objectives

- Identify factors potentially affecting clinical reasoning of medical oncologists who care for patients with RCC
- Quantify practice gaps and barriers to care among oncologists treating patients with RCC at academic and/or community centers in the US
- Contribute to the general body of knowledge to draw attention to the need for educational interventions to improve patient care

Study Design



- 2 distinct independent ethical approvals were obtained
 - Qualitative: IRB Services, Boca Raton, FL
 - Quantitative: Eisenhower Medical Center Institutional Review Board
- Qualitative data analyzed using NVivo qualitative data analysis software (QSR International Pty Ltd. Version 7, 2006)
- Quantitative data analyzed using SPSS 12.0 software (SPSS, Chicago, IL)

	Recruited, n	Noneligible or Missing Demographic Information, n (%)	Analyzed Sample, n
Qualitative	41	14 (34.1)	27
Quantitative	207	65 (31.4)	142
Total	248	79 (31.8)	169

Participant Characteristics

	Qualitative, % (n = 27)	Quantitative, % (n = 142)	Analyzed Sample, % (n = 169)
Years of practice			
10 or less	66.7	31.7	37.3
More than 20	18.5	40.1	36.7
Practice setting			
Academic medical center	33.3	36.6	36.1
Government hospital	3.7	4.2	4.1
HMO/Managed care	0	2.1	1.8
Hospital system	7.4	10.6	10.1
Group or solo practice	44.4	40.2	40.9
Nonaffiliated community hospital	7.4	4.2	4.7
Percentage of caseload being RCC			
0-1	0	2.1	1.8
1-10	70.4	91.5	88.2
More than 10	29.6	5.6	9.5
Number of RCC patients per year			
1-4	0	21.1	17.8
5-20	48.1	62.0	59.8
More than 20	51.9	16.9	22.5

Results

- Several key practice performance gaps identified from triangulation of qualitative and quantitative data
- This poster focuses on gaps indicative of medical oncologists' difficulties to adjust treatment plans based on patient responses or characteristics

Significant Practice Gaps and Challenges Identified

- Lack of knowledge of predictors of poor risk and/or short survival in RCC
- Challenges with selection of optimal treatment options for patients with poor risk RCC
- Challenges in clinical decision making on need for continuation or escalation of dose for current agent or switching to another agent based on patient response
- Challenges in rapidly integrating newly FDA-approved agents in clinical practice
- Challenges in properly recognizing nonradiologic progression and its importance in treatment decisions
- Challenges in multidisciplinary collaboration, specifically with surgeons and primary care physicians
- Lack of knowledge of QoL assessment tools and lack of skills to optimally consider QoL in formulation of a treatment plan, contributing to challenges optimizing risk-benefit balance of a treatment plan

Practice Gap 3: Not all clinicians employ optimal clinical decision making for continuation, dose escalation, or switching therapy based on patient response

- Case presented:** patient with advanced/metastatic RCC and treatment-related hypertension unresponsive to single/initial antihypertensive therapy 52.6% of respondents would maintain dose/schedule and initiate a second hypertensive agent (expert-supported answer)

How would you manage this patient? (N = 137)	Answers, %
A. Maintain dose/schedule; refer to cardiologist for further management	13.9
B. Maintain dose/schedule; initiate second antihypertension agent (expert supported)	52.6
C. Reduce dose of treatment agent	16.8
D. Stop treatment	2.9
E. Switch to a new agent	5.8
F. Adapt a "wait-and-see" approach	4.4
G. Unsure	3.6

- No difference in participant response by experience, caseload, clinical setting
- Case presented:** patient with "good-risk" metastatic RCC treated with axitinib for 4 weeks with no progression, no elevated blood pressure, and no AEs
 - Axitinib phase III trial^[3] and package insert^[4] include dose escalation to 7 mg twice daily if no AEs occur (selected by 27% of the respondents)

What would you recommend for this patient? (N = 141)	Answers, %
A. Continue treatment with axitinib at its current dose	61.0
B. Continue treatment with axitinib, but escalate dose (expert supported)	27.0
C. Discontinue treatment with axitinib and switch to another agent	2.8
D. Pause treatment with axitinib; restart when progression detected	2.8
E. Unsure	6.4

- Respondents with higher yearly caseload significantly more likely to select the recommended option (50% with caseload > 20 patients/year compared with 20% and 23% for 1-4 and 5-20 patients, respectively)
- Qualitative interviews indicated that new evidence for dose escalation for patients with good response to treatment seems counterintuitive

Practice Gap 5: Not all clinicians properly recognize nonradiologic progression and understand its importance in treatment decisions

- Case presented:** 65-year-old patient with good-risk metastatic disease is treated with pazopanib; after 2 months, alanine aminotransferase and bilirubin increased 3-4 x ULN with no clear signs of radiologic progression
 - No clear majority, with wide range of answers given by respondents

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Core Practice Gap 2 (cont'd)

What action do you take regarding treatment? (N = 140)	Answers, %
A. Continue pazopanib until clear progression	10.7
B. Switch to axitinib (expert supported)	18.6
C. Consider a clinical trial	5.7
D. Switch to temsirolimus	8.6
E. Switch to everolimus (expert supported)	7.9
F. Switch to sorafenib (expert supported)	2.1
G. Switch to sunitinib (expert supported)	11.4
H. Offer palliative therapy only	1.4
I. Stop treatment	22.1
J. Unsure	11.4

- Respondents with fewer years of experience (≤ 10 years) significantly more likely to select recommended answer compared with those with more experience (≥ 10 years) (44% vs 23%; Chi-square $P = .030$)
- Case presented:** 70-year-old patient with metastatic RCC, Hb 9.5 g/dL, and ECOG PS 2 (shortness of breath from COPD, history of heavy smoking)
 - 78% of respondents did not select expert-supported answer

What would be your choice of therapy at this stage? (N = 142)	Answers, %
A. Axitinib	7.7
B. Temsirolimus	12.7
C. Everolimus	11.3
D. Pazopanib (expert supported)	21.8
E. Sorafenib	4.9
F. Sunitinib	19.7
G. Bevacizumab/interferon	3.5
H. High-dose interleukin-2	1.4
I. No treatment	5.6
J. Unsure	11.3

- No difference in response by experience, practice setting, or caseload

Conclusions

- This study revealed clinically relevant practice performance gaps that may potentially affect delivery of care and patient health outcomes
- An understanding of relevant data, acknowledging strengths and limitations, can highlight opportunities to amend treatment strategies, leading to improved patient outcomes
- These results will support design of educational programs and performance improvement interventions

References

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