Application of Oncology Value Frameworks to the 2nd line Treatments in Renal Cell Carcinoma (2L-RCC)

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Introduction

With multiple recent approvals, substantial progress has been made in the treatment of Renal Cell Carcinoma (RCC) patients who failed the initial therapy (S1).

- Olaparib (Shapnarov)
- Cabozantinib (Cabosyn)
- Atezolizumab (Tezzima)
- Axitinib (Inlyta)
- Everolimus (Afinitor)
- Lenvima

The heterogeneity of RCC (as of 2021) and the variety of agents available provide a wide range of options for patients who have moved beyond the first-line treatment with sunitinib or sorafenib.

Primary untreated patients often undergo TKI therapy for limited benefit. As is the case with all renal cell tumors, RCC is a very heterogeneous disease.

- Well-matured methodologies, evidence considerations, and output
- Different target audience and different dates

Method

- The ASCO Value Framework
- The NCCN Value Blocks
- PCN261

- Newcomer L, Peppercorn J, Polite B
- No costs beyond price
- Visual summary of different therapies for one indication and quantitative analysis
- Allows price above the market price for all products accept AXI.

- Using a 20% discount for toxicity and a multiplier of 1.5 for other attributes yielded MSKCC.

- There is a large monthly cost difference: range 11K

- Evidence Blocks, ASCO Conceptual Framework and MSKCC
- Variations
- SOR

- The ASCO Value Framework
- Designed to guide patient-oncologist joint decision making
- Two separate frameworks: Advanced and Curative
- Compare very high-cost treatments to standards of care or placebo.

- Points are awarded through comparison of various outcome measures to the expectation of a placebo or a standard.

- Although all 3 frameworks assess therapeutic benefit, none consider differences in comparator arms and patients

- Although there are common themes among frameworks, heterogeneous methodologies and various data considerations lead to significant differences in output, recommendations.

- Further refinement of such frameworks is ongoing; however, it is clear that the use of various evidence-based sources can make a difference in clinical decision making.

Results: ASCO

- ASCO Value Framework is aligned with the NCCN guidelines for 2L-RCC treated by CAB and LEN+EVE.

- Although all products reported overall survival benefit, different comparators were not considered in the framework.
- Toxicity, health status, and overall improvement in survival were considered in the framework.
- Marrow points for improvement in the total survival outcomes substantially impact NHB score, as these are dependent on survival outcomes, risk-related factors, and clinical effectiveness.
- Quality of evidence is not considered by framework, and five Phase 3 RCTs data is treated as negative outcome.

- The methodology is not transparent.

Results: NCCN

- NMC assigns different efficacy scores to CAB, LEN+EVE and NIV.
- NMC and NCCN have similar limitations scores (NMC) despite different safety profiles
- In NCCN, LEN+EVE was assessed as the best but not the best overall quality for (NMC) despite monthly costs

Overview of ABC Framework

- ABC Framework is a decision-making tool for identifying potential value for money treatments.
- ABC Framework identifies therapies with high Net Health Benefit (NHB) and low Monthly Cost

- Comparison of BSU and BSC for CAB, LEN+EVE and NIV.

References


- www.purplesquirreleconomics.com

- NCCN Value Blocks
- ASCO Value Framework
- MSKCC

- Cost benefit approach; however, the methodology is not transparent.