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ONCOLOGY

Contemporary Management of Advanced Hepatocellular Carcinoma: Treatment Patterns Among HCPs and Concordance With Expert Recommendations

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Background

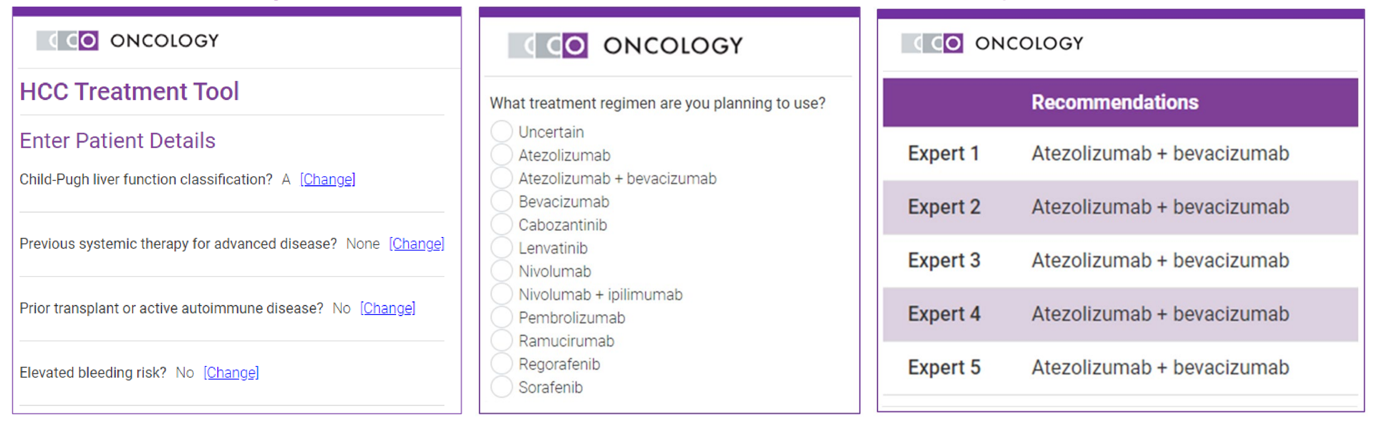
Healthcare professionals (HCPs) who manage patients with advanced hepatocellular carcinoma (HCC) are challenged to maintain a knowledge of contemporary treatment paradigms for these patients, but this field has evolved rapidly over the past few years. Prior to 2017, sorafenib was the only approved systemic therapy for advanced HCC; today, 9 regimens are approved. Given this new therapeutic landscape, we developed an online treatment decision support tool designed to provide HCPs with case-specific treatment recommendations from 5 HCC experts. Here, we report an analysis of cases entered into the tool by HCPs, comparing their planned treatment with expert recommendations.

Tool Design and Analysis

- 5 experts provided treatment recommendations in January 2021 for 71 distinct case scenarios of patients with advanced HCC who were assumed to be candidates for systemic therapy; case patients were also assumed to have good performance status
  - Case scenarios were defined by factors the expert panel considered important for treatment selection, including Child-Pugh liver function classification, the presence of key contraindications to immune checkpoint inhibitor or multikinase inhibitor therapy, AFP level, and previous treatment
  - Experts: Thomas A. Abrams, MD; Richard S. Finn, MD; Amit G. Singal, MD, MS; Mark Yarchoan, MD; Andrew X. Zhu, MD, PhD, FACP
- To use the tool, HCPs entered their patients' information and their intended treatment plan; expert recommendations for their specific patient scenario were then provided
  - **Tool is available at: clinicaloptions.com/HCCTool**
- This analysis compared the intended treatment of HCPs with expert recommendations for specific cases entered in the tool from April 1, 2021, to September 30, 2021

Tool Use and Screenshot Examples

1. Entry of patient characteristics by HCP
2. Entry of intended treatment by HCP
3. Expert recommendations displayed



Tool Participant Demographics

- 318 patient cases entered by 165 HCPs

- Of 39 responding HCPs, 77% reported treating ≤10 patients with HCC per month

Characteristics of Patient Cases Entered by HCPs, n (%)	Responses
Child-Pugh liver function	N = 318
▪ A	222 (70)
▪ B	96 (30)
Previous systemic therapy for advanced disease (Child-Pugh A)	n = 222
▪ None	146 (66)
▪ First line	56 (25)
▪ First and second line	20 (9)
First-line regimen if previous systemic therapy (Child-Pugh A)	n = 56
▪ Atezolizumab + bevacizumab	22 (39)
▪ Lenvatinib	16 (29)
▪ Sorafenib	13 (23)
▪ PD-1 inhibitor monotherapy	5 (9)

Conclusions

Analysis of data entered by HCPs into an online treatment decision support tool suggests significant differences among experts and HCPs in contemporary management of patients with advanced HCC

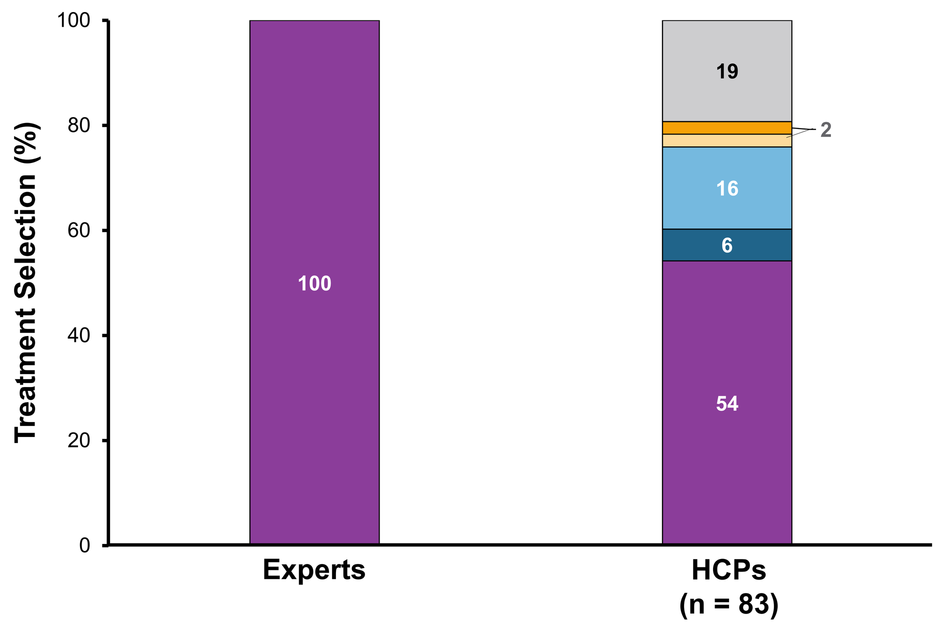
Data suggest that a decision support tool can affect HCP treatment decisions in a rapidly evolving therapeutic landscape, potentially improving patient care

Results

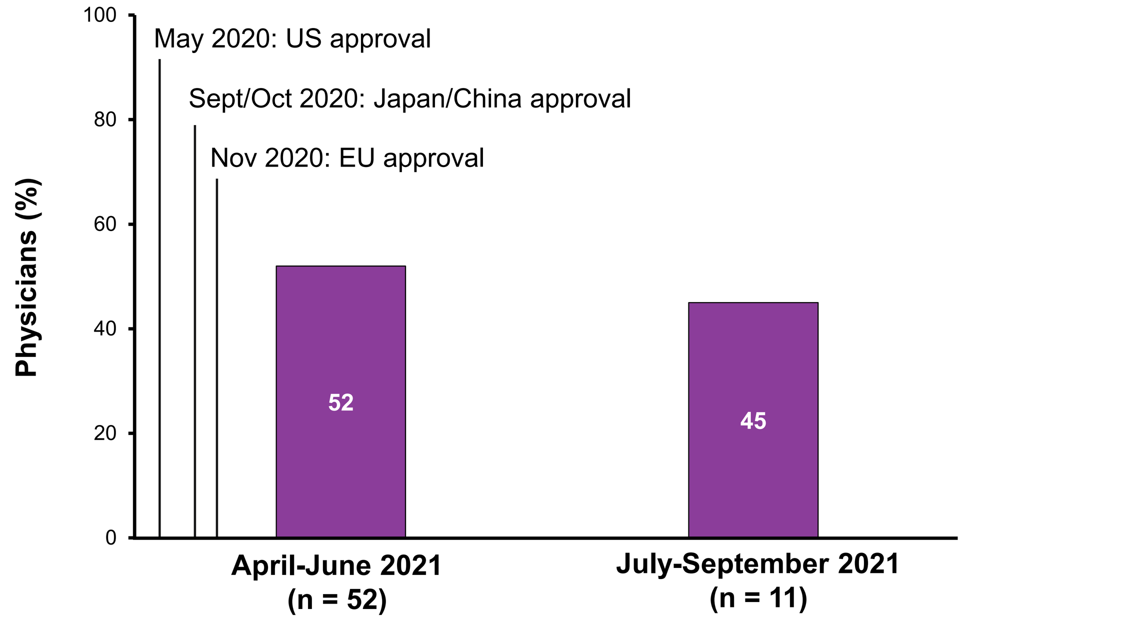
Atezolizumab + bevacizumab | Sorafenib | Lenvatinib | Cabozantinib | Regorafenib | Ramucirumab | Nivolumab | Nivolumab + ipilimumab | Pembrolizumab | Other | Uncertain

Expert and HCP Treatment Selections: No Previous Systemic Therapy

No Prior Transplant, No Bleeding Risk

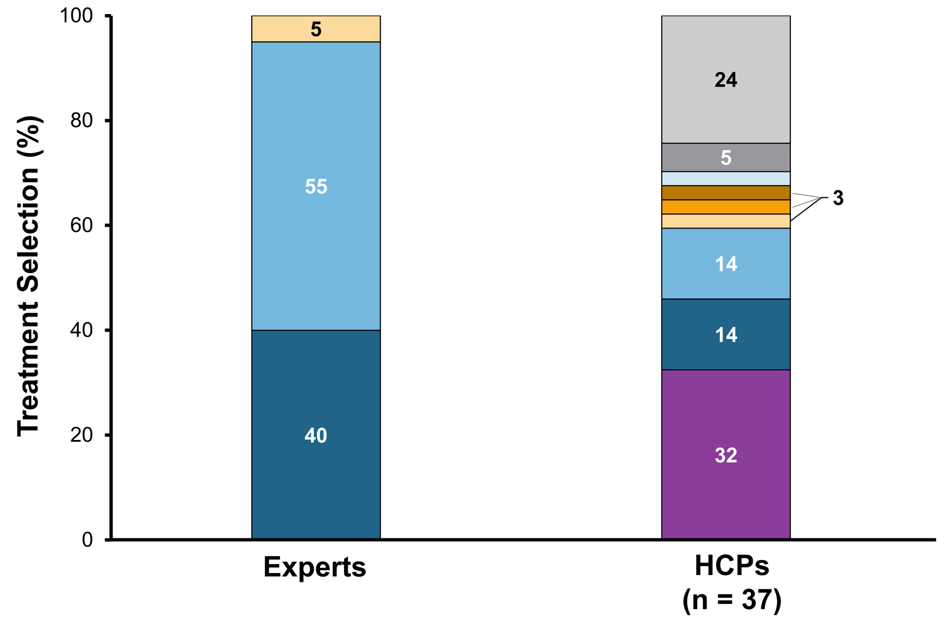


Timing of HCP Physicians Selecting Atezolizumab + Bevacizumab for Patients With No Prior Transplant, No Bleeding Risk

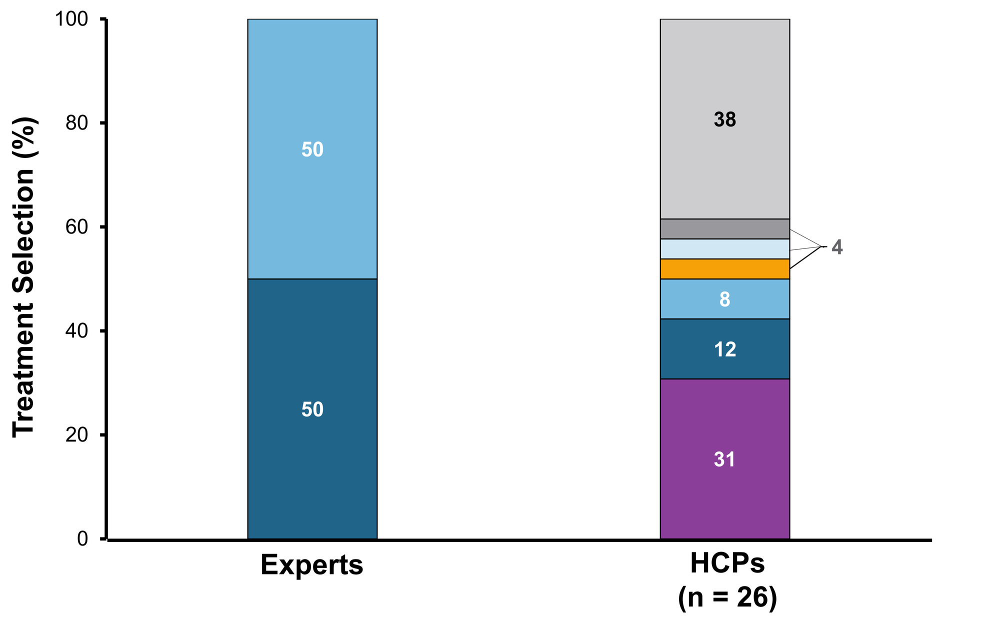


Key observations: For patients with no prior transplant or elevated bleeding risk, all experts would recommend atezolizumab + bevacizumab; HCPs planned this treatment in ~half of cases, and the proportion of physicians planning atezolizumab + bevacizumab for this population did not appear to increase over time, suggesting an ongoing educational need.

No Prior Transplant, Elevated Bleeding Risk*



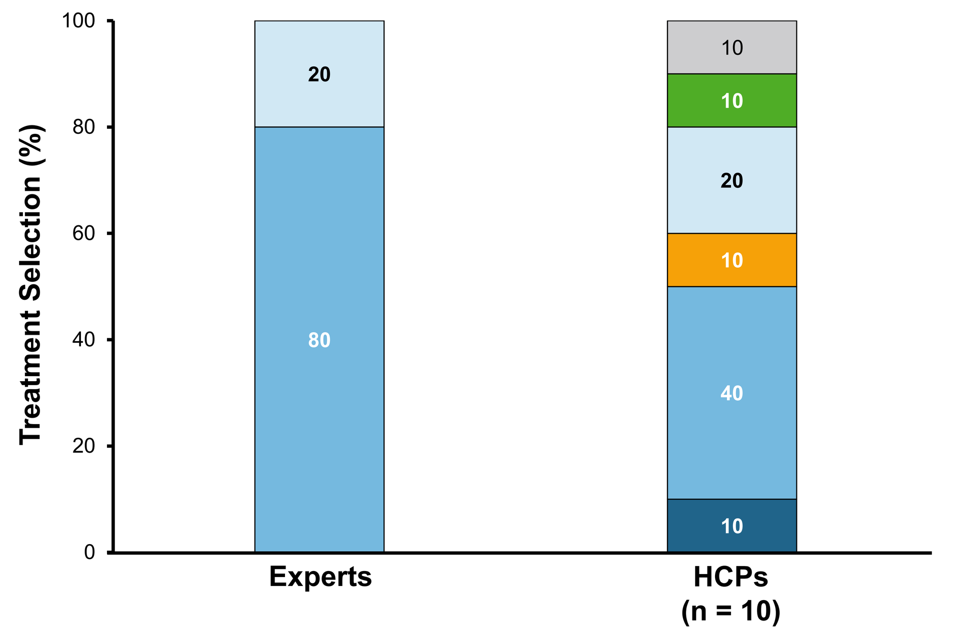
Prior Transplant†



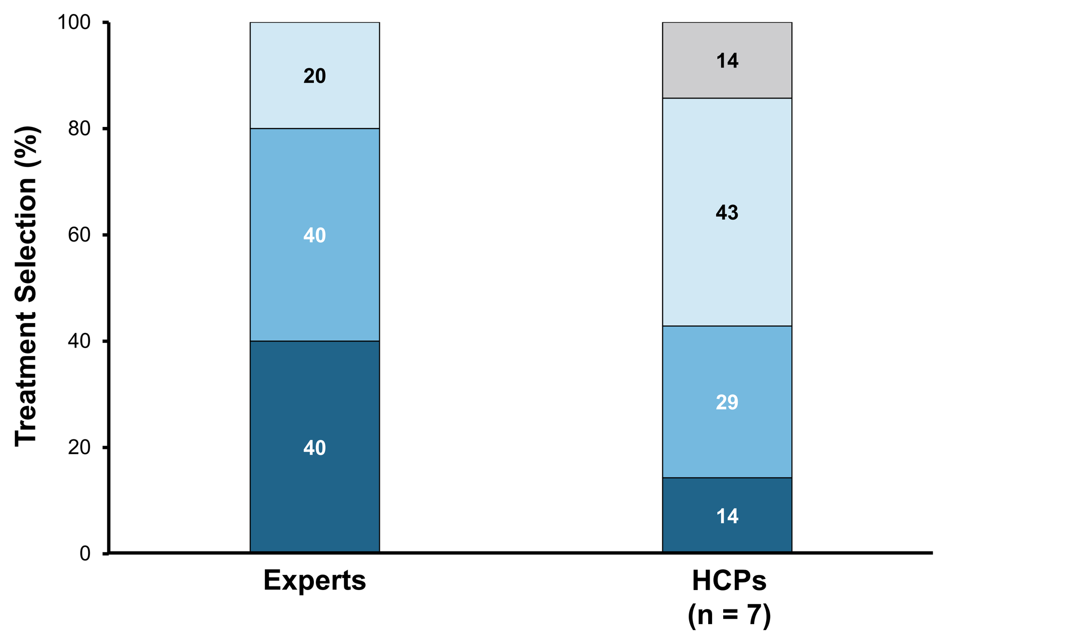
Key observations: For patients for whom the experts would not consider atezolizumab + bevacizumab to be optimal (prior transplant or elevated bleeding risk), sorafenib and lenvatinib were favored; notably, a substantial proportion of HCPs would select atezolizumab + bevacizumab for these patients, and few selected sorafenib and lenvatinib.

Expert and HCP Treatment Selections: Previous Systemic Therapy

PD With Atezolizumab + Bevacizumab, *Aggressive/Bulky Disease*, No Proteinuria/Hypertension

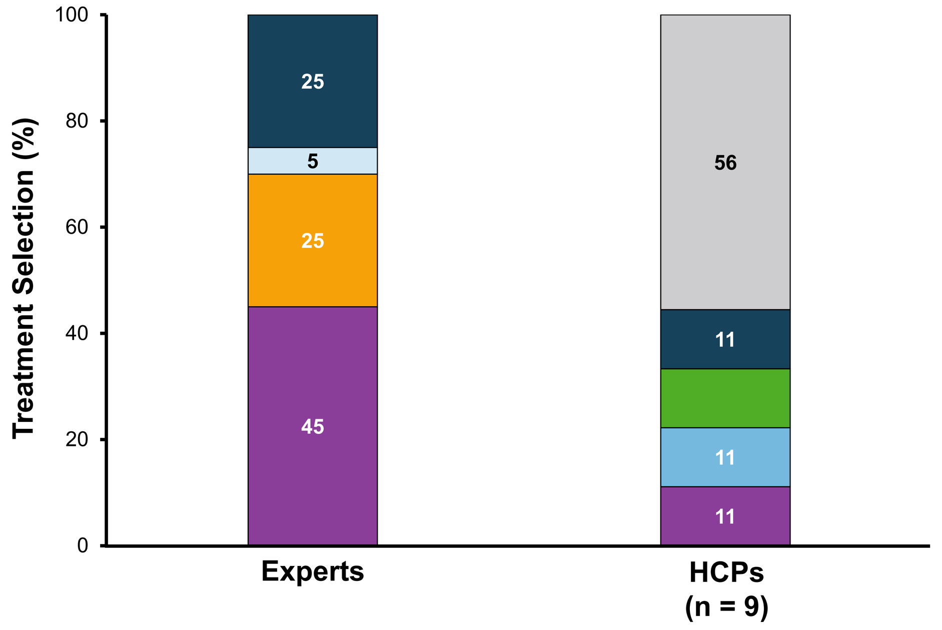


PD With Atezolizumab + Bevacizumab, *No Aggressive/Bulky Disease*, No Proteinuria/Hypertension

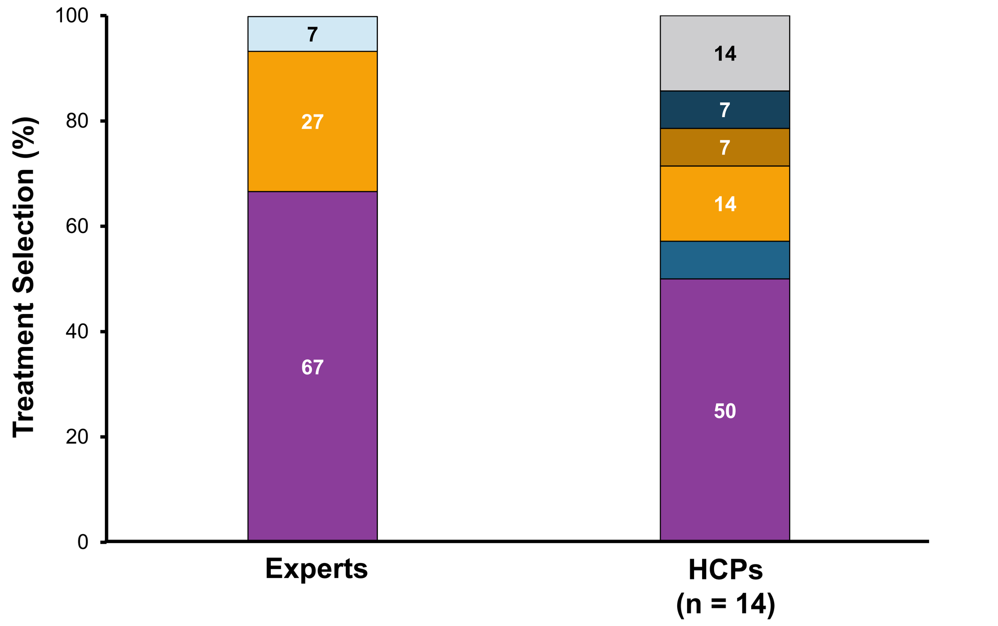


Key observations: For patients experiencing disease progression with atezolizumab + bevacizumab, experts favored lenvatinib (particularly for patients with aggressive/bulky disease). Despite low n values, the planned treatment of HCPs generally aligned with expert treatment recommendations for these patients.

PD With Sorafenib, No Prior Transplant, No Bleeding Risk, Any AFP Level



PD With Lenvatinib, No Prior Transplant, No Bleeding Risk, Any AFP Level



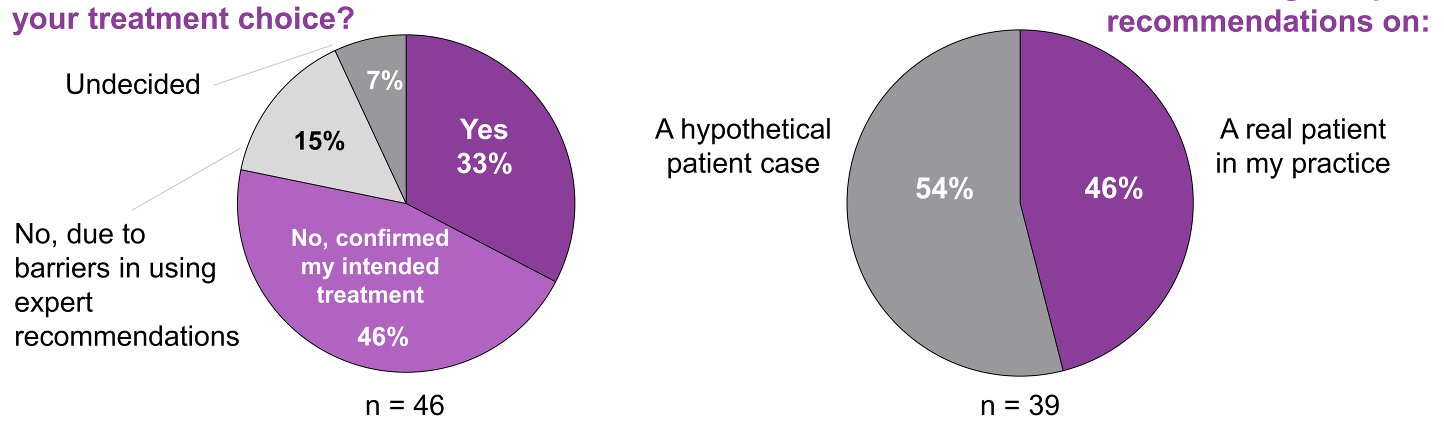
Key observations: For patients experiencing disease progression with sorafenib and lenvatinib, there was variance among experts, with atezolizumab + bevacizumab and nivolumab + ipilimumab predominantly recommended; HCPs appeared to be less certain of treatment in this setting, with low n values.

Results

Use of the Tool and Impact on Treatment Plan‡

Did the expert recommendations change your treatment choice?

I used this tool to get expert recommendations on:



Key observation: One-third of responding HCPs changed their treatment choice based on expert recommendations, suggesting that a decision support tool can affect HCP treatment decisions.

*Additional variables (yes or no) included aggressive/bulky disease, persistent significant proteinuria or hypertension, and contraindication to a VEGF-targeted TKI. †Additional variables (yes or no) included aggressive/bulky disease and persistent significant proteinuria or hypertension. Patients with an increased bleeding risk may include those with uncontrolled gastroesophageal varices or recent significant bleeding episodes or surgery. ‡Intended use and tool impact questions were optional and available after users received expert recommendations.
AFP, alpha-fetoprotein; PD, progressive disease.

Acknowledgment: The CME program that included the online treatment decision support tool was supported by unrestricted educational grants from AstraZeneca, Genentech, a member of the Roche Group, and Lilly.

Disclosures: Ryan P. Topping, PhD, and Timothy A. Quill, PhD, have no relevant conflicts of interest to report. Thomas A. Abrams, MD, has disclosed that he has received consulting fees from Eisai, Exelixis, Genentech, Lilly, Merck, and Servier, and has ownership interest in Biogen. Richard S. Finn, MD, has disclosed that he has received consulting fees from AstraZeneca, Bayer, Bristol-Myers Squibb, CStone, Eisai, Lilly, Merck, Pfizer, and Roche/Genentech. Amit G. Singal, MD, MS, has disclosed that he has received consulting fees from AstraZeneca, Bayer, Bristol-Myers Squibb, Eisai, Exact Sciences, Exelixis, Genentech/Roche, Glycotest, GRAIL, Merck, and Wako. Mark Yarchoan, MD, has disclosed that he has received consulting fees from AstraZeneca, Eisai, Exelixis, and Genentech. Andrew X. Zhu, MD, PhD, FACP, has disclosed that he has received consulting fees from Bayer, Bristol-Myers Squibb, Eisai, Exelixis, Lilly, Merck, and Roche/Genentech.