Treatment Trends and Variance Among Experts and Community Practitioners in Advanced Melanoma

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Background

- Best practices in the use of immune checkpoint inhibitors (ICIs) and targeted therapy in advanced melanoma continue to evolve. To assist with patient care and to help healthcare providers (HCPs) make informed decisions, we developed an online treatment decision support tool designed to provide community HCPs with case-specific treatment recommendations from 5 melanoma experts.
- In this study, cases entered into the tool by HCPs were analyzed to determine:
  - Variance between the planned treatment of HCPs and recommendations from melanoma experts
  - Impact of the tool on the subsequent treatment decisions of those who used it

Tool Design and Analysis

- 5 experts provided treatment recommendations in December 2018/January 2019 for 566 unique melanoma case scenarios based on key patient/disease factors defined by those experts
  - Experts: Michael B. Atkins, MD; Adil Daud, MD; Kim Margolin, MD; Michael Postow, MD; Hussein Tawbi, MD
- To use the tool, HCPs enter their patients' information and their intended treatment plan; expert recommendations for their specific patient scenario are then provided
- Tool available online at **clinicaloptions.com/MelanomaTool**

Tool Screenshot Examples
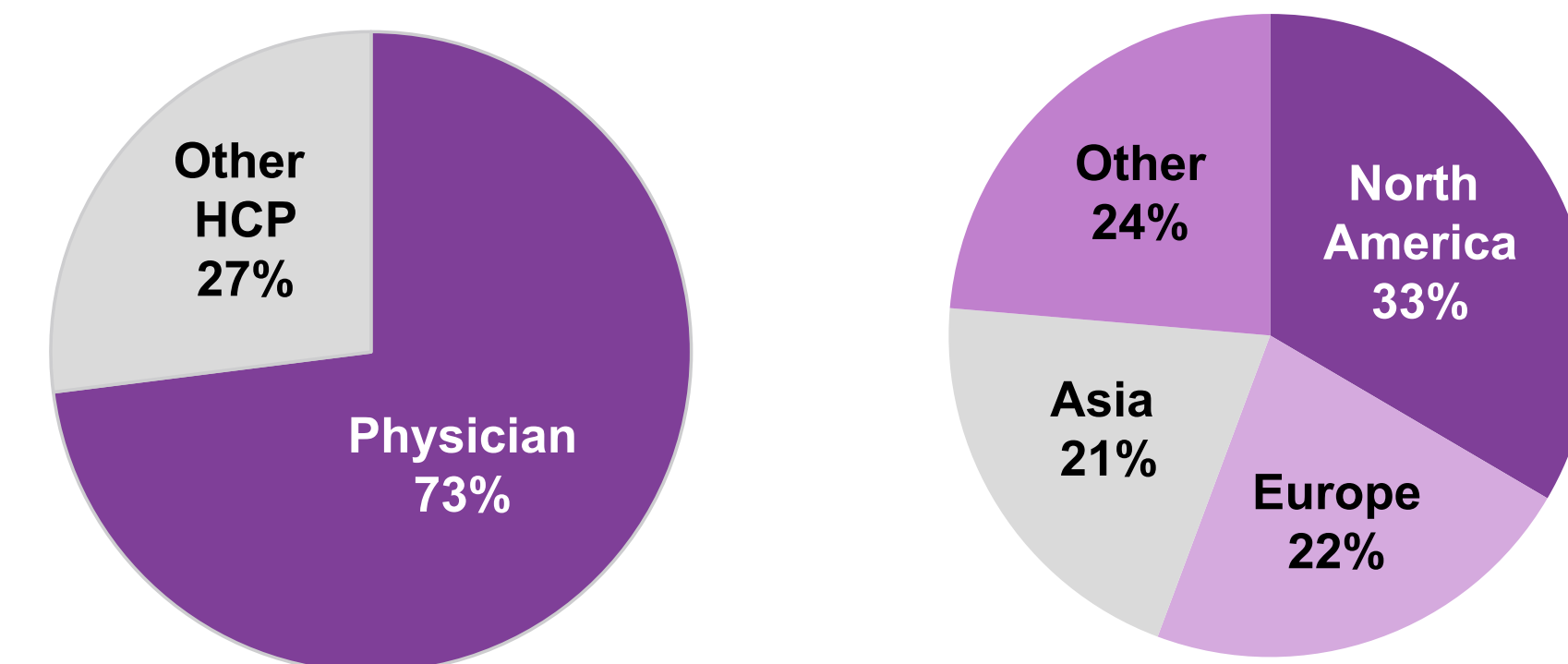

1. Entry of patient characteristics

2. Entry of intended treatment

3. Expert recommendations displayed

- This analysis compared the intended treatment of HCPs with expert recommendations for specific cases entered in the tool from February 5, 2019, through November 5, 2019
- A secondary analysis compared 2019 treatment patterns with those observed in a 2016 version of this online tool (Quill TA, et al. Pigment Cell Melanoma Res. 2017;30:134.)
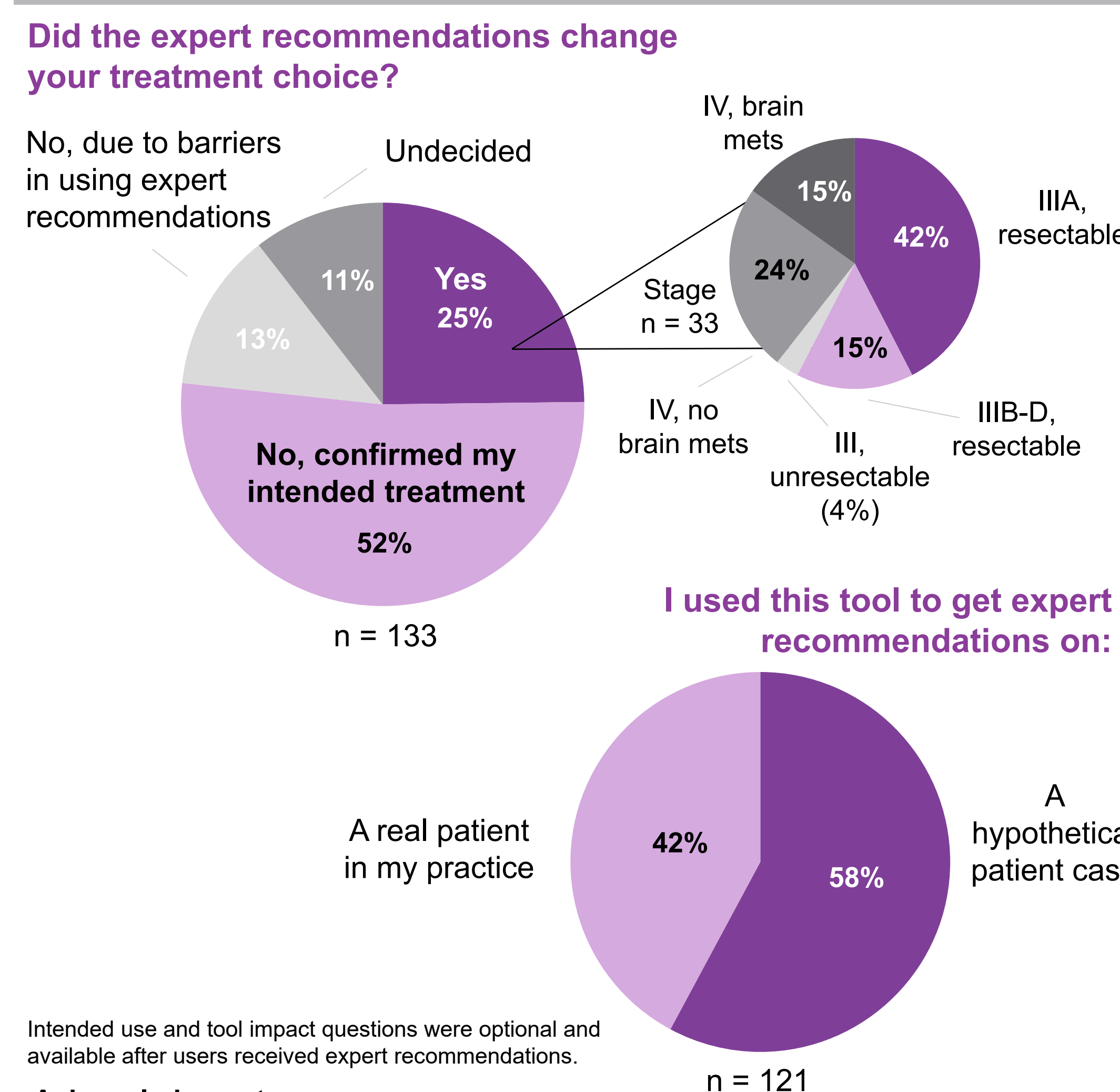
Results

Tool Participant Demographics

- 571 patient cases entered by 305 HCPs

Characteristics of Patient Cases Entered by HCPs

Case Characteristic	n (%)
Treatment setting	
▪ Adjuvant therapy for resectable disease	286 (50)
▪ Treatment for unresectable disease	285 (50)
Adjuvant setting	**286**
BRAF mutation status	
▪ Wild type	141 (49)
▪ V600 mutant	145 (51)
Significant comorbidity/ECOG PS ≥ 2	
▪ Yes	38 (13)
▪ No	248 (87)
Unresectable setting	**285**
Disease stage	
▪ Stage III	29 (10)
▪ Stage IV, no brain metastases	157 (55)
▪ Stage IV, brain metastases	99 (35)
Previous systemic therapy	
▪ None	203 (71)
▪ First line	82 (29)
BRAF mutation status	
▪ Wild type	150 (53)
▪ V600 mutant	135 (47)
Significant comorbidity/ECOG PS ≥ 2	
▪ Yes	57 (20)
▪ No	228 (80)

Use of the Tool and Impact on Treatment Plan

Did the expert recommendations change your treatment choice?
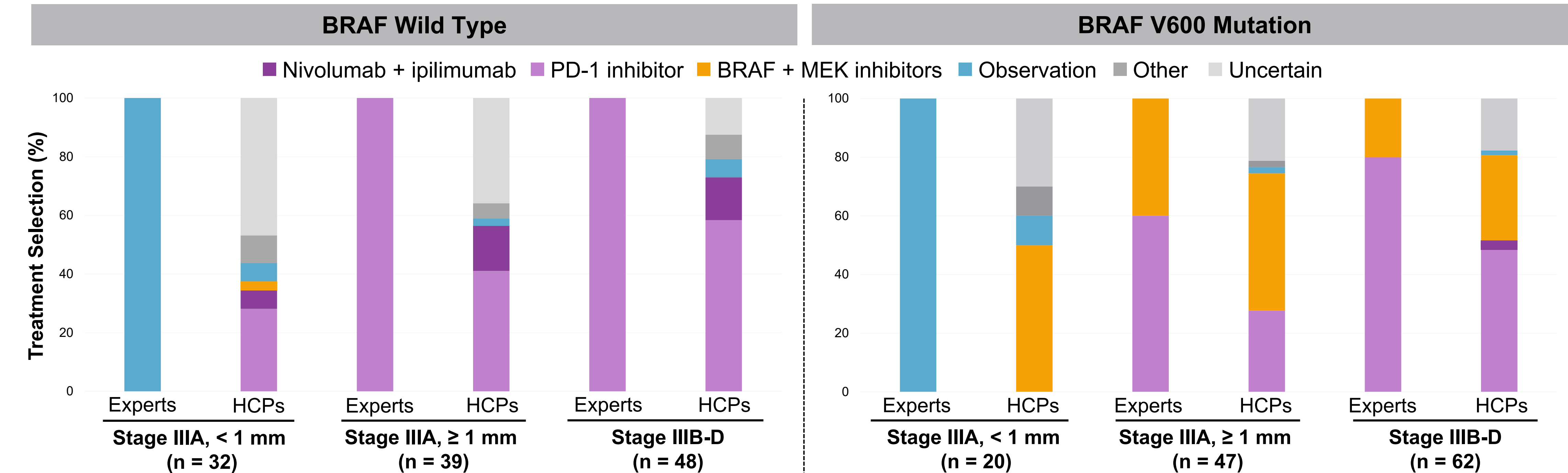

I used this tool to get expert recommendations on:

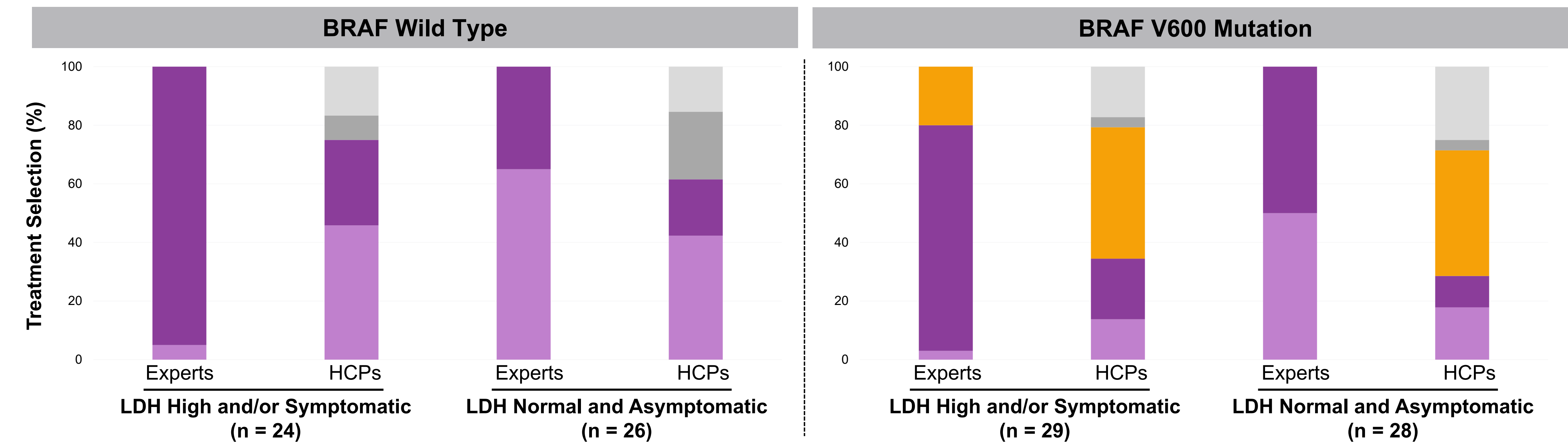Intended use and tool impact questions were optional and available after users received expert recommendations.

Adjuvant Treatment for Stage III Resectable Disease

BRAF Wild Type | **BRAF V600 Mutation**

Legend: Nivolumab + ipilimumab | PD-1 inhibitor | BRAF + MEK inhibitors | Observation | Other | Uncertain

Treatment for Unresectable/Metastatic Disease (Stage III or IV, No Brain Metastases)

BRAF Wild Type | **BRAF V600 Mutation**

Treatment for Stage IV Disease With Brain Metastases

BRAF Wild Type | **BRAF V600 Mutation**
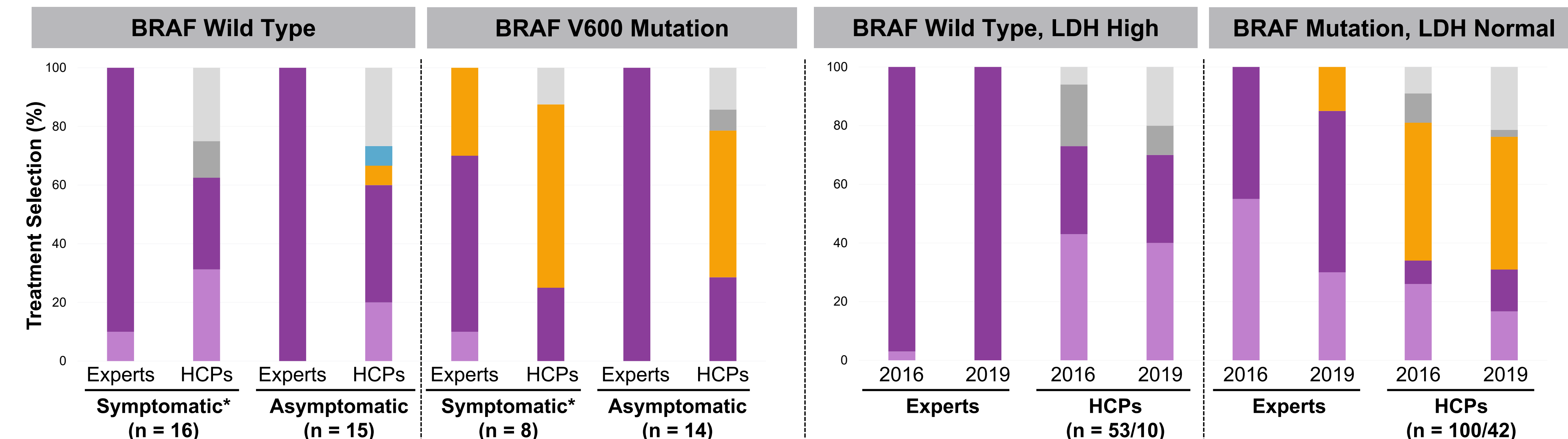
Treatment for Stage IV Disease, 2019 vs 2016

BRAF Wild Type, LDH High | **BRAF Mutation, LDH Normal**
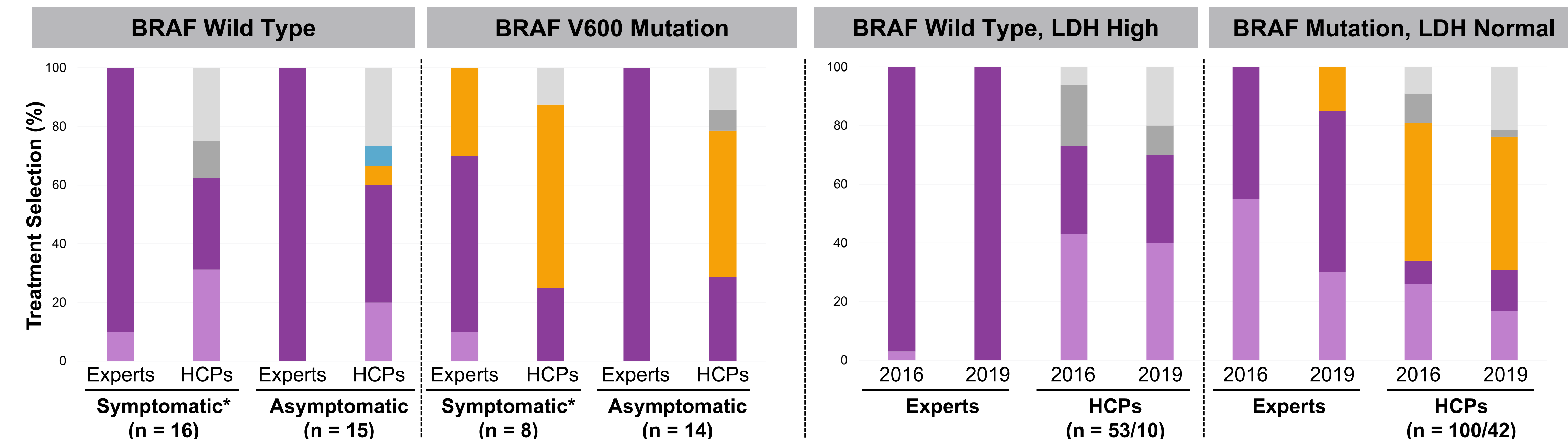
Analyzed case scenarios for which there were no significant comorbidities and ECOG performance status was 0 or 1. *Describes systemic therapy choices when these would be appropriate; per the experts, local radiotherapy would also be a consideration for some scenarios depending on patient and disease characteristics.

Conclusions

- Analysis of data from an online treatment decision support tool for melanoma revealed significant variance between expert recommendations and the intended treatment of HCPs for numerous scenarios
- *Adjuvant therapy*: Evidence of potential overtreatment by HCPs for pts with stage IIIA disease and LN metastases < 1 mm was evident; most HCPs recommended adjuvant therapy in this setting vs observation by experts; experts were more likely to recommend PD-1 inhibitor adjuvant therapy vs HCPs for pts requiring treatment
- *Unresectable disease*: Compared with experts, HCPs were less likely to recommend more aggressive combination ICI therapy for pts with symptomatic disease or those with poorer prognosis; HCPs were more likely to recommend BRAF + MEK inhibitors for all pts with BRAF mutations
  - For pts with brain metastases and BRAF mutations, HCPs were more likely to use BRAF + MEK inhibitors vs experts
- From 2016 to 2019, HCP treatment choices for select pts with metastatic melanoma were similar and consistently differed from expert recommendations, suggesting an ongoing need for education
- Online tools that provide customized, patient-specific expert advice can increase the number of clinicians who make optimal treatment decisions for pts with advanced melanoma