



Variance Between Experts and Community Practitioners in the Use of Immune Checkpoint Inhibitors for Advanced Melanoma

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Background

- Clinical practice guidelines in advanced melanoma list multiple therapeutic choices with similar levels of evidence
- However, guidelines lack specific recommendations for individual pt cases
- Multiple variables must be considered in treatment decisions including tumor- and pt-specific characteristics
- We sought to determine whether expert recommendations on advanced melanoma treatment, based on specific disease and pt characteristics and delivered via an interactive, online decision support tool, would influence the planned treatment decisions of community practitioners

Study Components

- Online decision support tool published in March 2016
- For this tool, each expert provided treatment recommendations in January 2016 for pt scenarios in previously untreated and previously treated advanced disease settings
- The tool included a total of 90 different pt case scenarios based on variations of the following criteria: histology, BRAF mutation status, extent of disease, previous systemic therapy, ECOG performance status, LDH level, and the presence or absence of an autoimmune condition
- Tool users were prompted to select pt information and then indicate their intended clinical approach
 - Recommendations from the 5 experts were displayed
 - Users were asked to indicate whether the experts' recommendation confirmed or changed their intended clinical approach
- Online tool available at:
clinicaloptions.com/MelanomaTool

Melanoma Tool Screenshots (Examples)

Entry of Pt Characteristics

Expert Guidance on Selecting Therapy for Advanced Melanoma
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Patient and Disease Characteristics

Histology? Cutaneous/mucosal

Autoimmune Condition Requiring Immune Suppression? No

BRAF Genotype? V600 mutation

Previous Systemic Therapy? None

Extent of Disease? Visceral

ECOG PS? 0/1

LDH Level? Normal

Next

Expert Recommendations

Expert Guidance on Selecting Therapy for Advanced Melanoma
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Expert Insight

Patient Summary

Expert	Recommendation
Expert 1	ipilimumab + nivolumab
Expert 2	ipilimumab + nivolumab
Expert 3	ipilimumab + nivolumab
Expert 4	Nivolumab or pembrolizumab
Expert 5	Pembrolizumab

Response

Confirmed my treatment plan (I agree with the expert recommendations)

Results

Participant Demographics

- We analyzed 489 different pt cases entered from March to October 2016 by 290 healthcare professionals with an indicated specialty of oncology or hematology/oncology

	Participants, %	
	Physicians	Midlevel
Overall (N = 290)	79	21
US (n = 67)	12	11
Non-US (n = 223)	67	10
• Europe	30	4.5
• Central/South America	15	1
• Western Asia	9	0
• Australia/New Zealand	4	< 1

Characteristics of Pt Cases Entered by HCPs

Case Characteristic	n (%)
BRAF mutation status	
• Wild type	227 (46)
• V600 mutant	262 (54)
Extent of disease	
• Regional/nodal/soft tissue	178 (36)
• Visceral	311 (64)
Disease setting	
• First line	
• BRAF wild type	162 (33)
• BRAF V600	206 (42)
• Second line	
• BRAF wild type	65 (13)
• BRAF V600	56 (11)
ECOG PS	
• 0/1	407 (83)
• ≥ 2	82 (17)
LDH level	
• Normal	270 (55)
• High	219 (45)

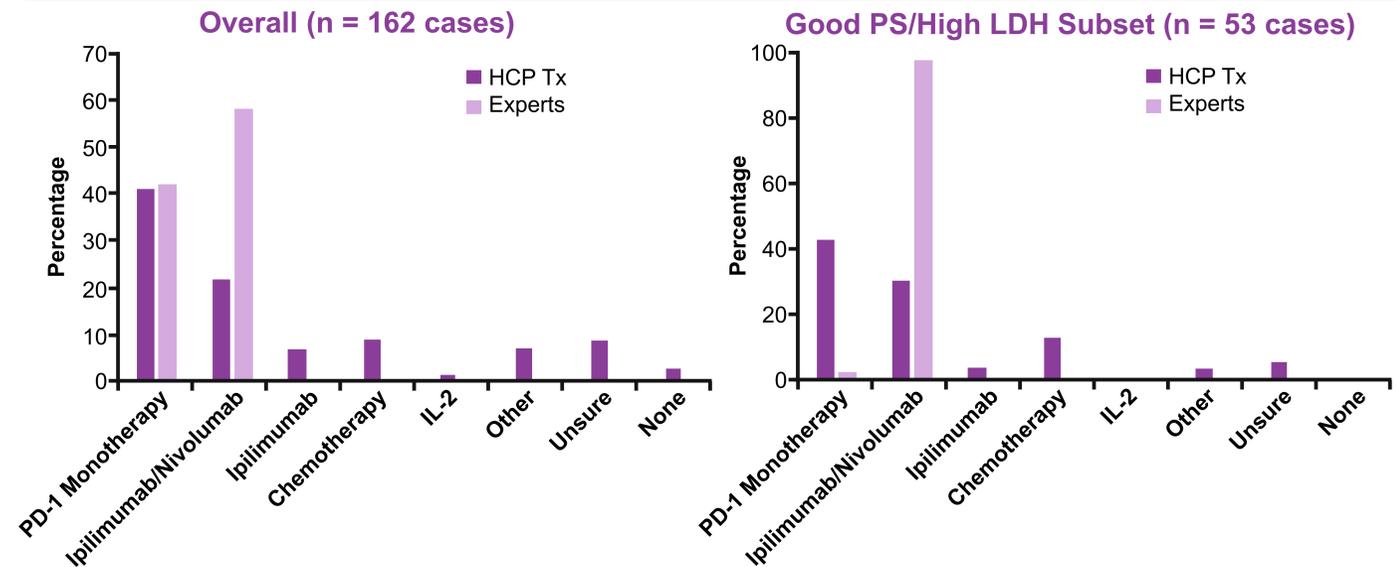
Use of the Tool and Impact on Treatment Plan

- Intended use and tool impact questions were optional and available after users received the experts' recommendation
 - Answered for 130 of 489 cases (26.6%)

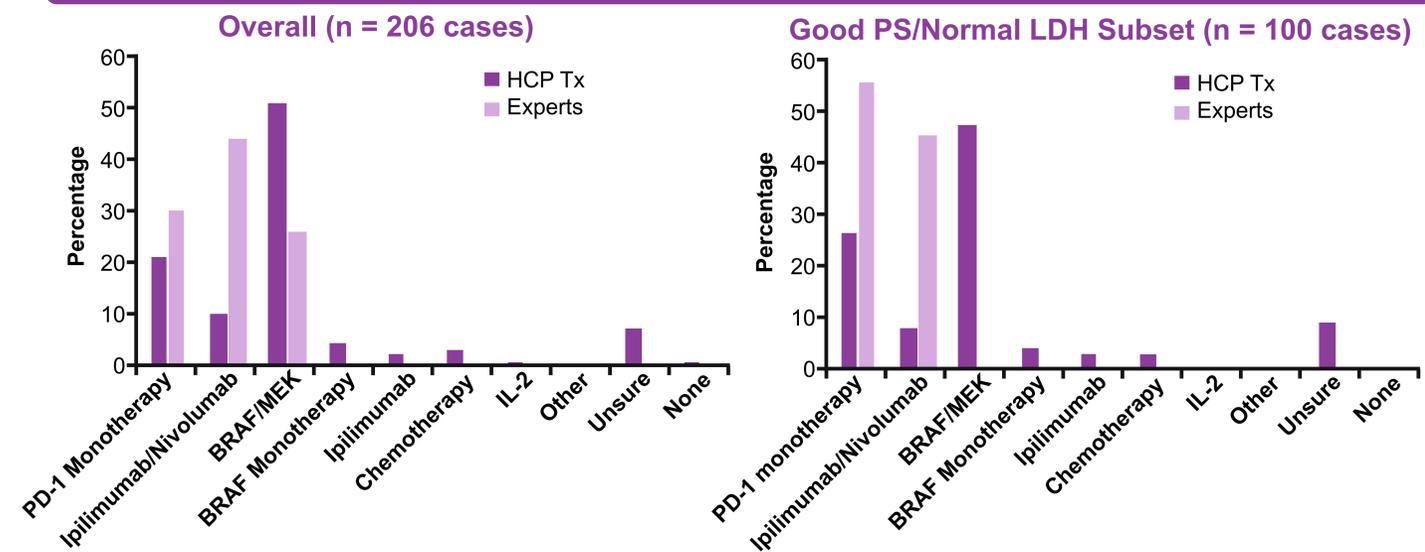
Intended Use of Tool	Cases, %
As an educational resource only; the pt case entered was hypothetical	63
The case entered was not hypothetical; I was interested in recommendations for a specific pt	37

Impact	Cases, %
Changed my treatment plan to agree with the expert recommendations (<i>among users who initially selected a different option</i>)	52
Confirmed my treatment plan (I agree with the expert recommendations)	42

Choice of First-line Therapy for BRAF WT



Choice of First-line Therapy for BRAF V600 Mutant



Conclusions

- For previously untreated advanced BRAF wild-type melanoma, the 5 experts were more likely to recommend the combination of nivolumab + ipilimumab than the online tool participants
 - Particularly in pts with a good PS and aggressive disease as indicated by elevated LDH
 - European participants were less likely to select nivolumab + ipilimumab than US participants; this trend will be monitored over time
- For previously untreated advanced BRAF V600-mutant melanoma, the 5 experts were more likely to recommend immune checkpoint inhibitor therapy than the online tool participants
 - Particularly in pts with a good PS and normal LDH
 - Experts and online participants favored combination targeted therapy in pts with a poor PS
- The ongoing EA6134 phase III trial (NCT02224781) comparing dabrafenib + trametinib followed by nivolumab + ipilimumab with the reverse therapeutic sequence in pts with advanced BRAF V600 mutant melanoma should further define standards of care
- Viewing the expert recommendations in this tool led to a change in intended treatment for 52% of cases where HCPs initially chose a treatment plan different from the expert panel
- Online tools that provide customized, pt-specific expert advice can increase the number of clinicians who make optimal treatment decisions for pts with advanced melanoma

Acknowledgments

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