

Comparison of expert treatment recommendations vs community healthcare providers: analysis from an online decision support tool for metastatic breast cancer

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Background

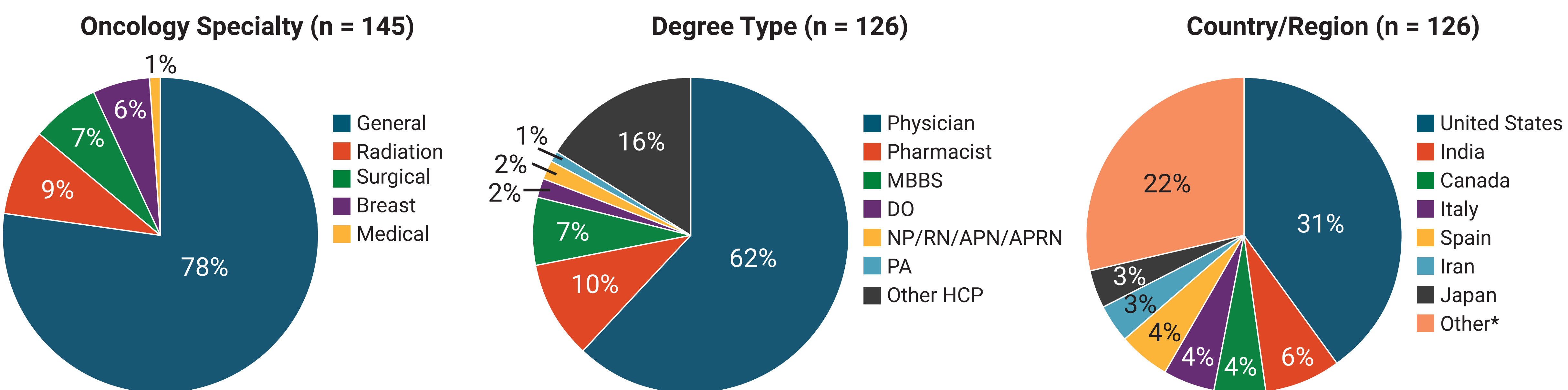
- Management of metastatic breast cancer (MBC) is quickly evolving
- Beyond hormone receptor (HR) status, a growing list of molecular markers is used to refine individualized systemic treatment¹⁻⁴
- However, the number of options increases the complexity of treatment decision-making for healthcare professionals (HCPs)²⁻⁴
- Here, we report an analysis of discordance between expert treatment recommendations and those of HCPs from an online Interactive Decision Support Tool (IDST) for advanced MBC

Tool Design and Development

- An online IDST was developed for case scenarios of patients with advanced MBC where systemic therapy is indicated
- 5 experts (Erica L. Mayer, Komal L. Jhaveri, Erika P. Hamilton, Kevin Kalinsky, and Laura Spring) identified a simplified set of key patient and disease characteristic on which they base treatment recommendations for MBC, including HR status, previous therapy, previous duration of response, and actionable biomarkers (eg, *BRCA1/2* mutation, PD-L1, HER2, AKT, PI3KCA)
 - Users were asked to enter specific patient criteria and their intended management approach for each case simulation
 - The IDST then showed the 5 expert recommendations for that specific scenario, and HCPs were asked to indicate whether the recommendations changed their intended treatment plan
 - Expert recommendations vs HCP-selected therapy for different scenarios were analyzed
- The primary objectives of this study were to determine:
 - Concordance or discordance between self-reported practice trends from HCPs who used the IDST and corresponding treatment recommendations from 5 breast oncology experts
 - Self-reported impact of the IDST on subsequent intended treatment decisions of participating HCPs

IDST Participant Demographics

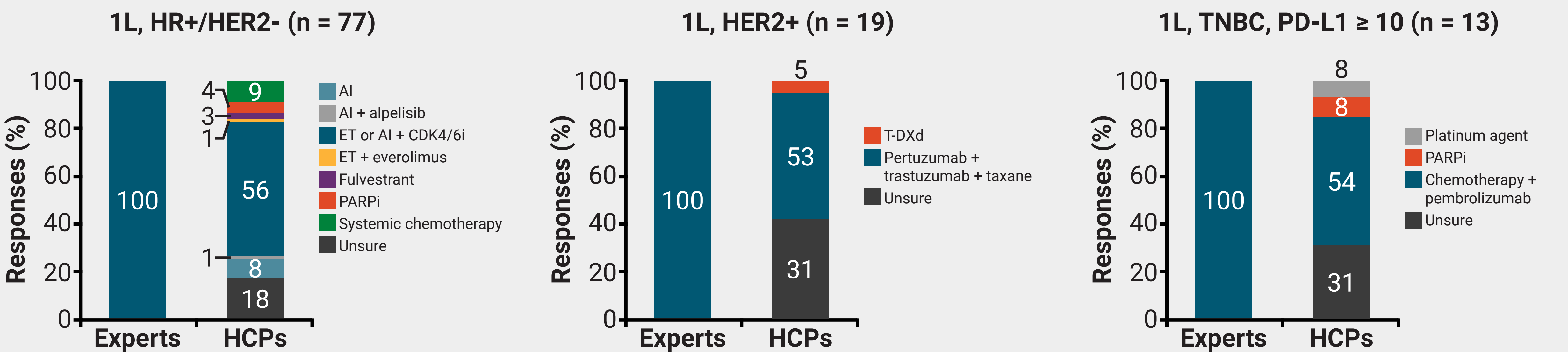
From November 21, 2023, to April 30, 2024, 145 oncology HCPs interacted with the IDST



*Other countries (≥3 cases) included Argentina, Brazil, China, Egypt, France, Hungary, Mexico, Peru, Saudi Arabia, South Africa, and United Kingdom.

Results

Summary of Treatment Choices by Experts Vs HCPs for Select Newly Diagnosed MBC



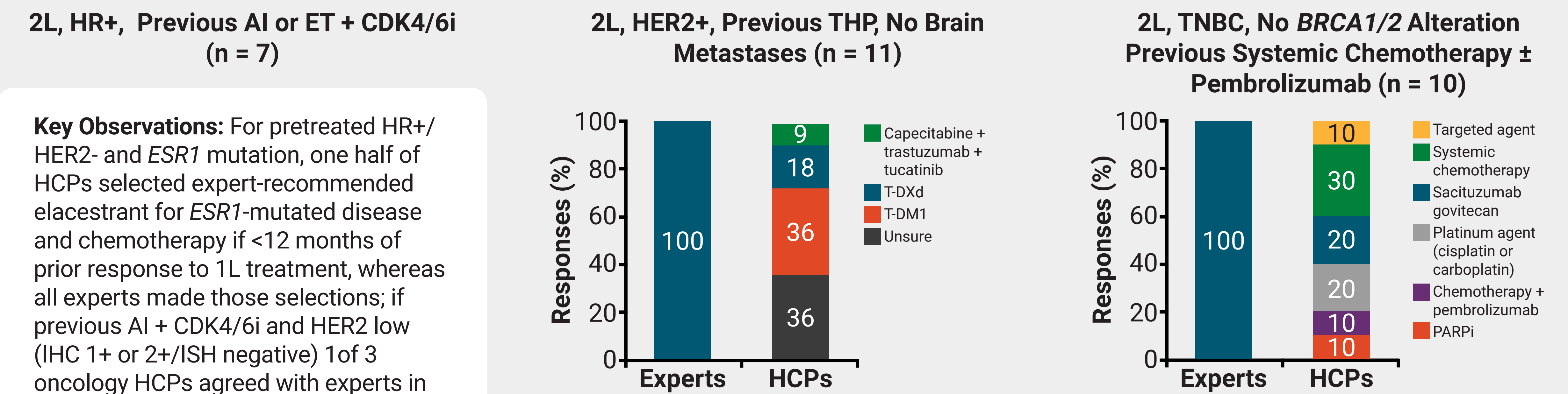
Key Observations: All experts recommended endocrine therapy with a CDK4/6i vs 56% of HCPs; of those responding to a practice change survey, 36% indicated that the expert's recommendations changed or confirmed their treatment of choice

Key Observations: A 53% concordance was observed between experts and HCPs who chose pertuzumab, trastuzumab, and taxane as their primary therapy for HER2+ MBC; 42% of responders indicated that expert's recommendations either changed or confirmed their treatment of choice

Key Observations: All experts vs 54% of HCPs chose chemotherapy plus pembrolizumab as their primary treatment for PD-L1 ≥10 TNBC, regardless of *BRCA1/2* status; based on *BRCA1/2* mutation and/or PD-L1 status, 35% of HCPs indicated they were initially uncertain of the optimal therapy in this setting

AI, aromatase inhibitor; ET, endocrine therapy; PARPi, PARP inhibitor.

Summary of Discordant Treatments Between Experts and HCPs for Select 2L Advanced MBC



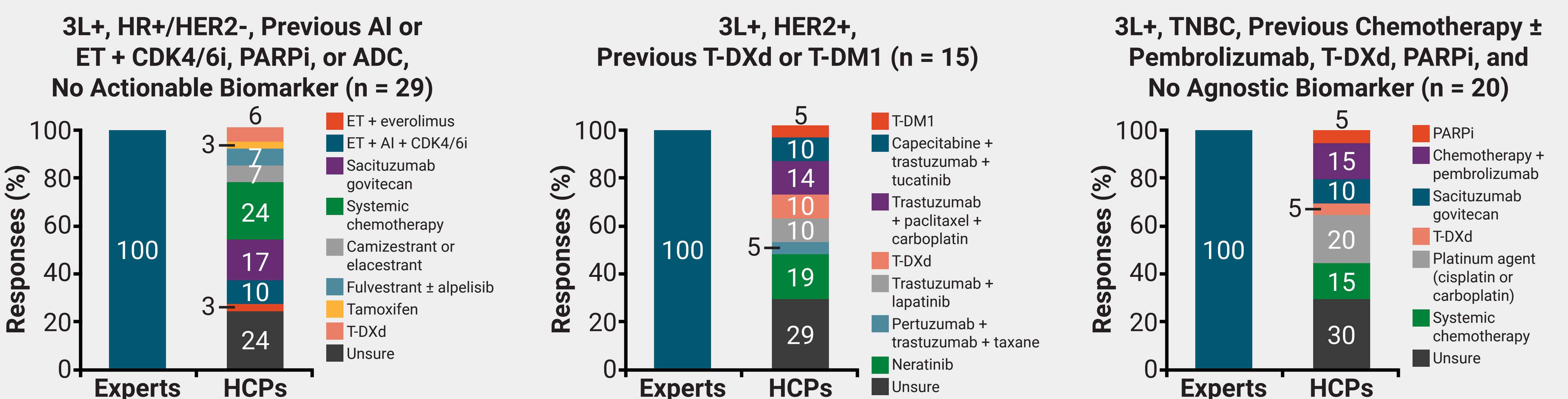
Key Observations: For pretreated HR+/HER2- and *ESR1* mutation, one half of HCPs selected expert-recommended elacestrant for *ESR1*-mutated disease and chemotherapy if <12 months of prior response to 1L treatment, whereas all experts made those selections; if previous AI + CDK4/6i and HER2 low (IHC 1+ or 2+/ISH negative) 1of 3 oncology HCPs agreed with experts in recommending T-DXd

Key Observations: All experts vs 18% of HCPs selected T-DXd if previous THP; 36% of HCPs said they were unsure of what therapy to select in this setting; if recurrent HER2+ and brain metastases, all experts would consider capecitabine, trastuzumab, and tucatinib vs 37% of HCPs

Key Observations: All experts vs 20% of HCPs selected sacituzumab govitecan; approximately 30% of HCPs opted for systemic chemotherapy

1L, first line; 2L, second line; AI, aromatase inhibitor; CDK4/6i, CDK4/6 inhibitor; ET, endocrine therapy; IHC, immunohistochemistry; ISH, in situ hybridization; PARPi, PARP inhibitor; T-DM1, trastuzumab emtansine; T-DXd, trastuzumab deruxtecan; THP, pretuzumab/trastuzumab/taxane; TNBC, triple-negative breast cancer.

Summary of Discordant Treatments Between Experts vs HCPs for Select 3L+ MBC



Key Observations: All experts recommended systemic chemotherapy vs only 24% of HCPs for heavily pretreated HR+ metastatic disease

Key Observations: All experts vs 10% of HCPs chose capecitabine, trastuzumab, and tucatinib in this setting; approximately 30% of HCPs were unsure of best therapy following THP, T-DXd, or T-DM1

Key Observations: All experts vs 10% of HCPs opted for sacituzumab govitecan in patients with pretreated TNBC and no actionable biomarker

3L, third line; ADC, antibody–drug conjugate.

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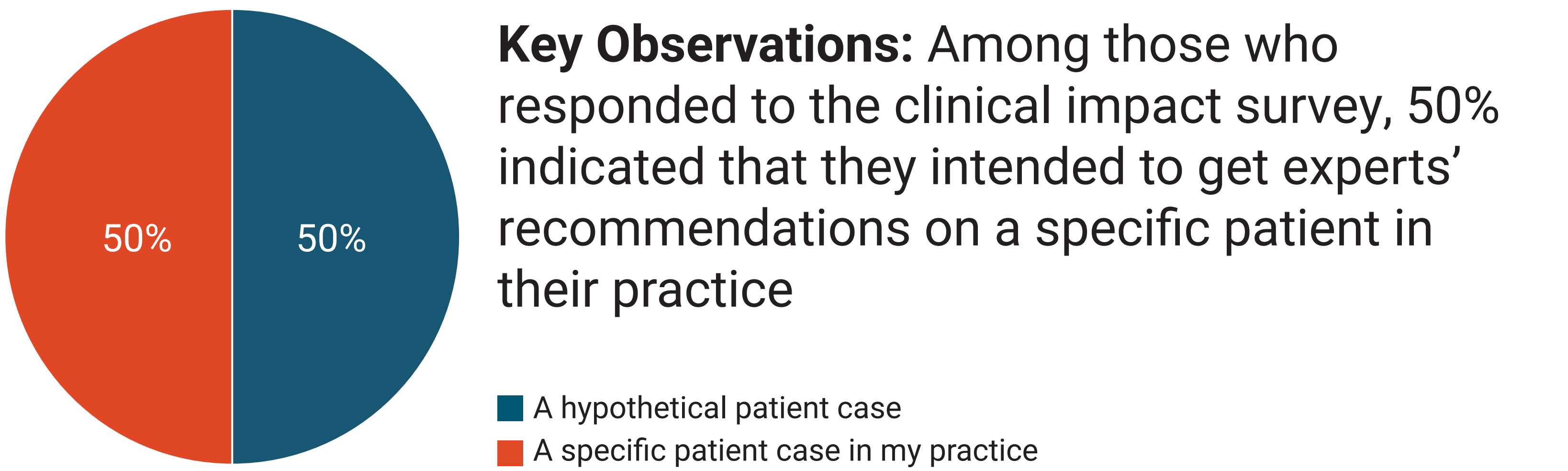
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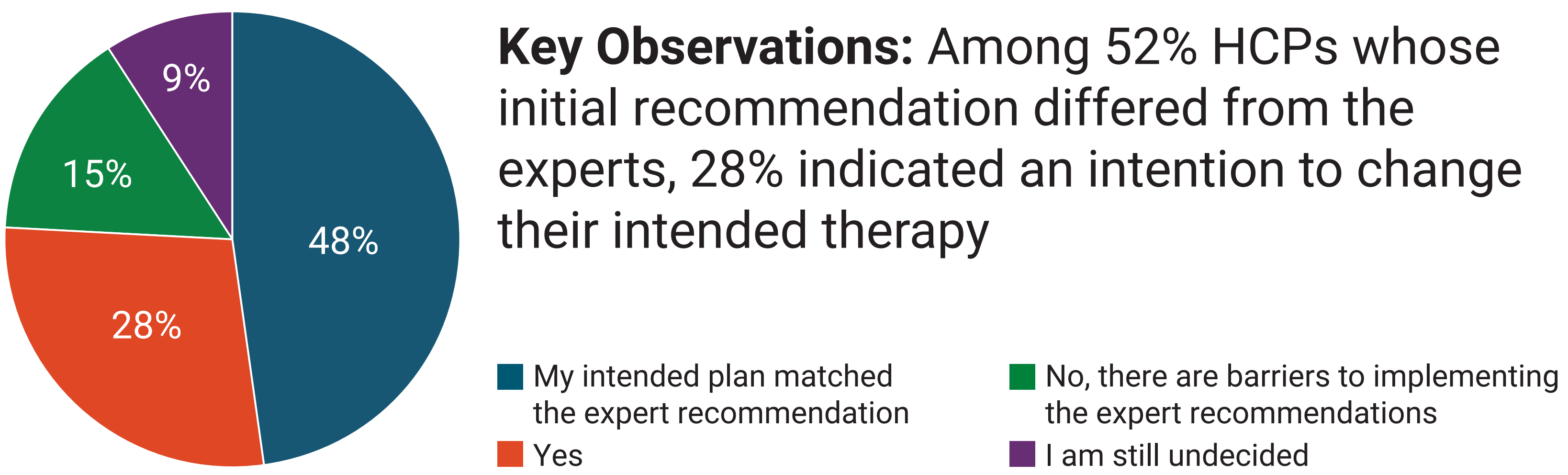
Main Takeaways

Impact of Education on Practice

I used this tool to get expert recommendations on (n = 80):



Did the expert recommendations change your initial treatment choice (n = 96)?



Conclusions

- This analysis of an online IDST showed discordance between current expert recommendations and community oncology HCP treatment choice in MBC
 - Treatment selection for recurrent MBC highlighted discordant secondary therapy selection for HR-positive, HER2-positive, and TNBC
- Expert recommendations in the IDST often reinforced or changed HCP's treatment plan, highlighting the need for ongoing education and the potential of an online decision tool to help inform optimal treatment decisions in MBC

Study Limitations

- Because this was a global population of oncology HCPs answering the survey, their responses may have been limited by their country-specific drug availability (eg, variable drug approval)
- Some HCPs may not yet have access to ADC therapy (eg, T-DXd or sacituzumab govitecan), therefore may be unable to offer this expert-recommended therapy to their patients at this time

Acknowledgements

- This educational resource was made freely available to HCPs based on support from an independent educational grant from AstraZeneca; Daiichi Sankyo; Gilead Sciences, Inc.; Lilly; Merck Sharp & Dohme Corp; Novartis Pharmaceuticals Corporation
- Educational grant supporters had no role in design or development of the IDST; in the collection, analysis, and interpretation of data; or in the development of this presentation
- We would like to thank the HCPs who used this educational resource

References

- Wolf. Cancer Cell. 2022;40:609.
- Santa-Maria. JAMC Oncol. 2015;1:528.
- Lenti. Drugs Context. 2022;11:2.
- Najjar. Virchows Arch. 2022;480:163
- NCCN. Clinical practice guidelines in oncology: breast cancer. V2.2024.